Employee Central: Managing Indirect Valuation of Pay Components
The recommendations in this document are based on the functionality available up to SAP SuccessFactors release mentioned above. Future functionality can impact the recommendations provided by this document. We strive to keep these recommendations up-to-date, however, in case you find that recent new functionality has not yet been considered in the latest version of this document, please reach out to your Customer Success Manager / Partner Delivery Manager or send an email to SAPSuccessFactorsIDPDoc@sap.com.

Implementation Design Principles (IDPs) for SuccessFactors solutions are delivered by SAP for helping customers and partners on how to choose the most appropriate strategy and solution architecture for SuccessFactors implementations. IDPs are compiled taking into consideration the experience of many implementation projects and addressing frequent business requirements as well as real-life implementation challenges. They are continuously reviewed and updated as product functionality evolves. In addition, the reader is advised to read and familiarize with essential and additional product-related documentation which includes Implementation Guides, SAP Notes, SAP Knowledge Base Articles, and additional assets as referenced in this document, see chapter 8.
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1 TERMINOLOGY

The following table explains some abbreviations used in this document.

<table>
<thead>
<tr>
<th>Short Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>Employee Central</td>
</tr>
<tr>
<td>ERP</td>
<td>SAP Enterprise Resource Planning often referred in the document pertains to SAP HCM on premise system</td>
</tr>
<tr>
<td>MDF</td>
<td>Meta Data Framework</td>
</tr>
<tr>
<td>RBP</td>
<td>Role Based Permissions</td>
</tr>
<tr>
<td>UI</td>
<td>User Interface</td>
</tr>
<tr>
<td>CSF</td>
<td>Country Specific</td>
</tr>
<tr>
<td>ESS</td>
<td>Employee Self-Service</td>
</tr>
<tr>
<td>MSS</td>
<td>Manager Self-Service</td>
</tr>
</tbody>
</table>

2 ABSTRACT

Managing salary structures and pay components for different groups of employees can be a complex and challenging task. This IDP explains how to automate pay components assignment and its valuation for the different employee groups and salary structures across different compensation-related processes in an effective way using MDF lookup tables, data model extensions and business rules. Examples of common requirements for the indirect valuation of pay components are: splitting the annual salary automatically into multiple pay components with period-based rates, defaulting pay components and amounts based on employee category (Employee Class, Employment etc.), pay range, or pay scale structure (for Union employees).

3 INTRODUCTION

For large customers the requirements of managing employee pay components varies with country, legal entity, collective agreements, job levels etc. Several challenges arise such as the automatic assignment of the pay scale components, splitting of annual salary into period-based/hourly pay components, managing FTE reductions, etc. Some of the requirements are listed in the business requirement section.

4 BUSINESS REQUIREMENT

4.1 Functional Requirements

To understand the requirements around managing pay components, it is worth to review some basics on the business processes related to the "Employee Basic Pay" information. Employees basic pay can be categorized into three main remuneration types:

- Tariff pay structure (pay scale structure) for unionized employees
- Job Grading and Annual Salary Pay Ranges for non-unionized employees
- Individual negotiation/contract
For the first two remuneration types there are guidelines that need to be followed, decided either by the employer or by the industry for defining the employees’ remuneration pay components and its amounts/rates. In a nutshell, for Unionized employees, the basic pay amounts are defined by union collective agreements, and usually this basic pay is composed of multiple pay components (one to three on an average). For non-union salaried employees, their basic pay is usually simple and is composed of a single “monthly” (or any other frequency/hourly rate) base salary pay component.

The pay components described above must be “indirectly valuated” based on certain dependencies. Which means, the HR Admin will not directly input these amounts (specially for the union employees) and rates into the employee’s record, but the system will automatically propose (valuate) the employees pay components. Manual intervention from the HR Admin can be controlled and minimized to a good extent.

But there is also another set of indirectly valuated pay component: those that depend on tariff/salary-range pay components. In this document they are referred as “dependent pay components”. Examples of these are grants, allowances or any recurring/one-time additional payments/deductions. These dependent pay components follow a certain rule for their value determination (they could depend on certain grades/scales or be derived as a percentage of a group of other pay components) and are not defined by the HR Admin user when hiring or promoting the employee.

In summary, the requirements covered in this document are:

1. Defaulting Pay Components during Hire Action based on Collective agreements (Pay scale structure)
2. Defaulting of Pay Components during Job Change and based on FTE changes
3. Defaulting of Pay Components for Salary-Range Employees with Valuated Amounts
4. Defaulting of Pay Components for Salary-Range Employees without Valuated Amounts
5. Automatic split of Reference Annual Salary amount into multiple monthly/hourly Pay Components
6. Valuation of dependent pay components

4.2 Technical Requirements

**System performance:** the automation required for managing the pay components should not negatively impact the system performance on UI based transactions.

**Maintainability:** it must not be necessary to adjust implementation/configuration on a regular basis. Changes to business data such as pay components and amounts to be used should not require re-implementation of business rules.

5 SOLUTION OVERVIEW AND CONCEPT

In general, there is no unique way to solve all the various requirements that comes with assigning or valuating pay components in Employee Central. Solutions for the different requirements will be explained in the “detailed design” chapter. The design takes into consideration the following aspects:

- Current capability of the product;
- Easy maintenance of the objects;
- Avoid hard-coding of pay components and business data in the Business Rule;
- System performance.

To understand the solution design approach presented in this document, it is necessary to differentiate between the two ways HR processes can be performed on the system: UI-based processes and background processes.

- **UI-based processes** are processes that require a step-by-step user interaction, from triggering the change on employee master data, until the review and commit (save) of these changes. Also, dialog processes are system-performance sensitive. In HR terms, examples of such processes are: Hiring an employee, promoting an employee, changing the FTE of an employee, etc.

- **Batch/background processes** are tasks performed by the system, without a direct user interaction. These tasks are usually scheduled to run recurrently in the system, and usually at night, or at times in which system usage is minimum, and usually will update a large set of employees at once. HR Admins
will review the results of these processes by means of reports/output logs. A variety of HR processes can be automated with such tasks, such as: performing automated grade step progression (pay scale level jumps), adjusting employee’s salary to pay scale changes. Adjusting employees’ salaries to inflation adjustments, etc.

Indirect valuation of pay components must of course occur in both UI based and background processes. The following table shows how indirect valuation requirements are covered for UI-based HR processes (more specifically, Hire and Job change), for the diverse types of employees and remuneration types:

<table>
<thead>
<tr>
<th>Remuneration type / employee category</th>
<th>Hourly paid employee / Period (wage-worker. Ex: assembler) / blue collars</th>
<th>Salaried employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union (non-exempt) employee</td>
<td>• Default pay components: via pay scale structure.</td>
<td>• Default pay-components: via pay scale structure.</td>
</tr>
<tr>
<td></td>
<td>• Default amounts / hourly rate: via pay scale structure.</td>
<td>• Default amounts: via pay scale structure.</td>
</tr>
<tr>
<td></td>
<td>• Default Performance supplement pay-component: optional defaulting, such pay components can be added manually by HR Admin (these can be dependent-valuated pay components, such as percentage based).</td>
<td></td>
</tr>
<tr>
<td>Non-union (exempt) employee</td>
<td>• Default pay components: via custom lookup table and business rules.</td>
<td>• Default pay-components: via custom lookup table and business rules. (If there is a set rule and not negotiated)</td>
</tr>
<tr>
<td></td>
<td>• Default amounts: optional, via the pay range mid-point using business rules. It is however a common practice to standardize the hourly rates for blue collar workers, depending on the job function / location, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Annual salary breakdowns into pay components and hourly/monthly/period rates: achievable via custom lookup tables and business rules.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Annual salary breakdowns into pay components and hourly/monthly/period rates: achievable via custom lookup tables and business rules.</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Indirect valuation requirements for UI-based processes

The following table shows how indirect valuation requirements are covered for Background-based HR processes for the diverse types of employees and remuneration types:
### Remuneration type / employee category

<table>
<thead>
<tr>
<th>Union (non-exempt) employee: All types of employees groups: Hourly paid / monthly wage blue collars / salaried employees.</th>
<th>HR Process (via batch/background job)</th>
<th>Requirements / solutions</th>
</tr>
</thead>
</table>
| Grade step progression (pay scale level jump) | • Default pay-components: via pay scale structure.  
• Default amounts / hourly rate: via pay scale structure. |
| Salary adjustment due to pay scale / Tariff changes | • Default pay-components: via pay scale structure.  
• Default amounts / hourly rate: via pay scale structure. |

**Table 2: Indirect valuation requirements for background-based HR Process**

The first two processes related to union employees in the “Table 2” also involve “indirect valuation”. From a technical perspective, the solution for indirect valuation for UI based processes and for background processes is very similar. **This document focuses solely in the indirect valuation for UI based HR processes (Table 1).** For the background processes, refer to the corresponding IDPs:

- Employee Central: Managing Pay Scale Salary Increase;
- Employee Central: Managing Pay Scale Progression

### 5.1 Amounts reduction based on FTE and special rounding rules

Another common and important requirement related to the management of the employee compensation information is the co-relation between the base-salary and “Employee capacity utilization” (FTE). Part-time employees are usually remunerated less than 100% of their full-time equivalent salary range/pay scale level. The question arises on how to manage the reduction of the base salary (full-time equivalent) and how to distribute this information to the downstream payroll system(s). This point requires attention towards the existing payroll implementation. There are two ways how payroll can be set up to deal with Base-salary reduction: payroll may expect the reduced (part-time) amounts to be present in infotype 0008, or payroll may expect the full-time equivalent (100% FTE) of the amounts to be present in infotype 0008 and reduce the amounts itself (in payroll driver) proportional to employee FTE.

Note that global companies, running payroll in multiple countries may have a combination of the options above, with the options varying by country, and since it is difficult to perform a harmonization on an existing payroll implementation (in addition to a big re-configuration effort, side-effects with retro-calculation and reporting would likely occur) it is recommended to implement EC in a way it can replicate the expected amount variant to infotype 0008 (taking into consideration country variations if needed).

From a technical perspective, the following scenarios are possible in EC:

**Scenario 1:** Base salary is reduced/adjusted in EC to match the FTE proportion, whenever the employees’ FTE changes. Replication to Payroll system replicates the exact calculated amount for base salary. This scenario can be visualized in the figure below:
From a process perspective, scenario 1 would offer the benefit that the effective gross payment is available in EC and is therefore reportable in EC. There could be a few challenges with scenario 1 as the following could be depend on legal entity country, employee grouping etc.

- Reduction rules based on work-schedule /tariff agreement working hours.
- Different rounding adjustments rules.
- Validation / consistency checks between salary and FTE.

Such existing implemented logic in infotype 0008 must be reviewed and implemented accordingly in EC for the relevant employee groups, to avoid side-effects in payroll. In the detailed solution approach, it is explained how to cover the amount reduction via business rules.

Scenario 2:
Current payroll implementation requires base-salary components always at 100% plus FTE information; base-salary reduction is performed in payroll driver. This approach requires the base-salary pay components to be present at 100% in EC (also for part-time employees) and the replication to the payroll system must send therefore the 100% (full time equivalent) amounts (along with the FTE percentage) to be stored in infotype 0008. This scenario can be visualized in the figure below:

This approach brings however an additional complexity: in EC, the comap-ratio and range penetration calculation (as well as the integration with SuccessFactors Compensation module) depends on the standard FTE field (in job info record) and depends on the "reduced" amounts (reflecting the part-time equivalents):

\[
\text{Compa Ratio} = \frac{\text{Annualized Salary} \times 100}{\text{Midpoint} \times \text{FTE}}
\]

\[
\text{Range Penetration} = \frac{\text{(Annualized Salary} - \text{Min Pay} \times \text{FTE}) \times 100}{(\text{Maximum Pay} \times \text{FTE} - \text{Minimum Pay} \times \text{FTE})}
\]

Therefore, this scenario requires two amounts to be present per pay component in EC: the full time equivalent (for payroll replication- "PC Monthly PY-Salary" as in the table below) and the part-time equivalent (for EC standard functionality to be supported – "PC Monthly EC Salary" as in the table below).

<table>
<thead>
<tr>
<th>Pay-component / Employee type</th>
<th>Full-time employee</th>
<th>part-time employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PCG Annualised Salary</td>
<td>120.000,00</td>
<td>60.000,00</td>
</tr>
<tr>
<td>PC Monthly EC Salary</td>
<td>10.000,00</td>
<td>5.000,00</td>
</tr>
</tbody>
</table>
The payroll relevant amount may be stored in EC in two ways:

- As a custom (additional) field in the original pay component
- In a separate (additional) pay component, like the “PC monthly PY-salary” in the above table. The advantage of this approach is that this amount might then be incorporated into Pay Component Groups in EC.

Other scenarios: it is not recommended to deviate from the above-mentioned approaches. An example of a non-recommended approach is the following: the base salary is always considered as 100% in EC, and the replication to Payroll system replicates an FTE pro-rated amount. The scenario can be visualized in the figure below:

The business logic should not reside on the integration, therefore, options like the above are to be avoided.

Note: Employee Central customers leveraging SAP HCM ERP for Payroll processes might be tempted to replicate the 100% base salary from EC into Infotype 0008 with the assumption that the “reduction method” (See table V_T511) of the wage type configuration would automatically reduce the replicated amount based on FTE/work-schedule and store in Infotype 0008 the reduced amount (achieving a final state similar to the above scenario).
Wage type configuration in SAP HCM ERP and reduction method.

However, the “reduction method” functionality of wage types in Infotype 0008 only works if the indirect valuation for that wage type is active and the amount is evaluated by infotype 0008. Since in this case, Infotype 0008 is not valuating these wage types, but receiving the amounts from the EC replication, the reduction will not take place.

5.2 Technical Solution Approach

The solution design approach from a technical perspective will take into consideration:

**System performance:** The indirect valuation is achieved through business rule in EC. The rules are attached to “onInit” or “onSave” events depending on the HR Process. The number of rules should be limited as much as possible.

**Maintainability:** This means, no hardcoded elements within the business rules, supporting a customizable framework. In other words, a system Admin without any implementation know-how should be able to set up and maintain the distinct types of indirect valuation.

6 DETAILED SOLUTION

6.1 Defaulting Pay Components During Hire for Tariff/Collective Agreement Employees

To legally comply with the collective agreement, employers need to adjust their workforce’s compensation according to the rates stated by the collective agreements. In EC a collective agreement structure is represented by a pay scale structure. Pay scale structure consists of four objects: pay scale type, pay scale area, pay scale groups and pay scale level. Pay components are assigned at the pay scale level. Therefore, when hiring an employee, and assigning an employee to a tariff/pay scale structure, the system can assign the corresponding pay components to the employee.

6.1.1 Hire Process – Tariff Employee

The assignment of payscale pay components to employees during the hire process occurs immediately after the user has filled in the Job Info data, and before the compensation information is displayed (and therefore also before the data is saved). This is achieved by registering business rules for the indirect valuation on the “Pay Component Recurring Portlet” with event type “onInit”. The diagram below shows a summary of the configuration enhancements needed to accomplish the indirect valuation (left box) and the involved Dialog Process steps for the HR Admin user.
Figure 1: Hire process steps involved in the indirect valuation for a tariff employee

6.1.1.1 Hiring Process Example

The following figures illustrate the above steps from the user interface perspective:

1. HR Admin assigns employee to a pay scale structure during the hire process or the pay scale fields are defaulted from position:
2. Pay components defaulted by the system as per the pay scale level structure:

Figure 3: Compensation – Recurring Pay Components portlet

Figure 4: Compensation – Recurring Pay Components portlet

3. HR Admin User may enter additional pay components manually, review data and save.

6.1.2 Configuration

6.1.2.1 Enhancing the Pay Scale Level Object

Following enhancements should be done on the pay scale level object to make it possible for business rules support configurable values (pay component IDs). This is also explained in the IDP “Employee Central: Managing Pay Scale Salary Increase”.
Figure 5: pay scale level object with enhancements

Custom Fields:

- This is based on number of pay components that are added in the Pay Scale Level components. This is used in the business rules as a condition to create/update the required number of pay components in the compensation portlet serving as a technical solution for reducing the amount of business rules required for the pay increase process and contributing to system performance.

Total Amount:

*Please refer to the pay scale increase IDP document as this field is not used for the purposes explained in this document*

- The field is used as the Total annualized amount (sum of the individual amounts of the pay components listed in the pay scale level component object) and is useful for business rules calculation. This is used for the automated Pay Scale Increase.

Percentage Increase (Employee specific pay components):

*Please refer to the pay scale increase IDP document as this field is not used for the purposes explained in this document*

- This is to indicate the percentage increase to be applied to employee specific pay component. This is used for the automated Pay Scale Increase.

Sequence Number in the Pay Components Assignment objects:

- To loop through the pay components in the Pay scale level the sequence numbers are used. This helps us to select the right pay component without hard coding the pay component itself.

6.1.2.2 Business Rule for Indirect Valuation During Hire Event

Business rules are required to perform the indirect valuation of pay components. For the tariff employee hire scenario, the business rules will read the pay scale structure and the pay components configured there and will assign these to the employee. The base object for the rules is “Employee Information” and the rules must be assigned to the “Pay Component Recurring Portlet”, on the event “onInit”.

---

**Pay Scale Level: Versicherung BJ 12. 13. (DEU/BUKRS 0001/Versicherung Angestellter/TG 8/Versicherung BJ 12. 13.)**

<table>
<thead>
<tr>
<th>Pay Scale Level</th>
<th>Versicherung BJ 12. 13.</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Name</td>
<td>Versicherung BJ 12. 13.</td>
</tr>
<tr>
<td>Effective Start Date</td>
<td>11.01.2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Pay Components</th>
<th>Total Amount</th>
<th>Percentage Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>63,636</td>
<td></td>
</tr>
</tbody>
</table>

**Pay Component Assignment**

<table>
<thead>
<tr>
<th>Sequence Number</th>
<th>Pay Component</th>
<th>Amount</th>
<th>Currency</th>
<th>(More)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TG8 BJ1213 (TG8BJ1213)</td>
<td>4,983</td>
<td>EUR (EUR)</td>
<td>Details</td>
</tr>
<tr>
<td>2</td>
<td>VZ100TG8 (VZ100TG8)</td>
<td>320</td>
<td>EUR (EUR)</td>
<td>Details</td>
</tr>
</tbody>
</table>

*Pay Scale Group: Versicherung TG8 (DEU/BUKRS 0001/Versicherung Angestellter/TG 8)*

*Versicherung*
This business rule creates the pay component in the pay component recurring portlet. Notice that the sequence number is used as a lookup key, and no pay component is hard coded in the rule. The “Pay scale relevant” field (custom field in the pay component recurring portlet) is used to delete the existing tariff related pay-components out of employee’s compensation before valuating the new ones coming from the Pay scale level. This is to make sure we do not modify the pay components that are not related to pay scale changes and allows for replacement of pay-components in the pay scale level configuration.

Limitation of having one rule per pay component is removed as 1902. This means that a single rule can create any number of pay components.
6.2  Defaulting of Pay Components During Job Change – Pay Scale Level and FTE changes for Tariff Employees

During the employment lifecycle there will be situations when there is a transfer/Job Change or Promotion which involve a change in the pay scale, pay scale level and employee FTE. These Job Information changes have an impact on the pay components values. When the Pay scale level of a tariff worker is manually changed or when the employee FTE is changed, a business rule can automatically update the compensation portlet during “onSave” of the Job Information record.

6.2.1  Job change process for tariff employees

In contrast to the hire event, in which the pay components are assigned to the employee before the user gets to the compensation information screen, during a job change, the indirect valuation can only occur after the user saves the employee data. This is mainly due to limitations on the “onChange” events between the portlets.

Here is a summary of the “onChange” event interaction and limitations with business rules relevant to compensation changes:

- Compensation Rules attached to “onChange” event on job-info: will get executed if triggered by “take action” menu and explicitly chosen the check-box “change compensation” data. These rules will not be executed for any changes on job-info via the “history edit” function.

- There is a field property available for job information fields called “Refresh Compensation required”, which triggers the update event (onChange) for compensation when the value of that field is changed, and this also updates cross-portlet (Compensation Info and Recurring Pay). Note that the “refresh” event only takes place if the action was initiated via “Take Action” menu. For the refresh to take place, the “change compensation” checkbox does not need explicitly to be selected. The refresh event will not be triggered while changing data via “history edit” function. Also note that rules with delete statements are not supported in the “onChange” event. The deletion of “old” pay components is important in some job change events like pay scale re-assignment or other Employment changes (example: changing employee from hourly-paid to salaried).

Therefore, to make sure that the business rules will be processed for any relevant job-change event, it is required to register the business rules on the “onSave” event.

The figure below describes from a process perspective, how the user will carry out the job change and validate the assigned pay components:

Figure 7: Job Change process for tariff employees
6.2.2 Configuration – Business Rule for Job Change

For indirect valuation due to job changes, it is important that the business rule first check if there was a change on a compensation relevant field. The rule will then delete any existing pay components (as of the transfer date) as the pay components can change with transfer etc. Then the new pay components are added to the employee.

Rule example:
Base Object: Job information Model
Event Type: “onSave”

```plaintext
Variables
var_FTEValue = Job Information Model.FTE.Value
var_PayScaleLevelValue = Job Information Model.Pay Scale Level.Value
var_PayScaleLevelPreviousValue = Job Information Model.Pay Scale Level.Previous Value
var_FTEPreviousValue = Job Information Model.FTE.Previous Value
var_EventDataValue = Job Information Model.Event Data.Value

If

var_PayScaleLevelPreviousValue is not equal to var_PayScaleLevelValue

or

var_FTEValue not equal to var_FTEPreviousValue

and

var_PayScaleLevelValue.Number of Pay Components = 2

Then

Delete  Job Information Model.Employment Details Model.Compensation
Select  Job Information Model.Employment Details Model.Compensation where...
    Pay Scale Relevant. is equal to Yes (4431)
```
In the above example pay component amount depends on the FTE value. Note that the “Pay Scale Relevant” field is a custom field in compensation portlet to indicate that this pay component is relevant for Pay Scale. The delete statement is used to remove pay components which are no longer relevant, this is done to make sure that pay components that are related to the previous pay scale level are removed and those relevant for the new pay scale level are created.

This part is used to reduce the pay component amount based on the FTE value.

6.2.3 Assignment of Business Rule (country specific)

If the pay scale objects are country-specific and not applicable for all countries, then the business rules should be added to the respective country in the CSF data model, as this can improve the performance. Avoid adding the country specific rules on the Job Info (Add it to the country specific Job Info).
6.2.4 Defaulting Pay Components for Salaried Employees with Amounts from the Pay Range during Hire

Salaried employees have an associated pay grade and pay range instead of a pay scale structure. Employee base salary can be defaulted based on the midpoint of their pay range. To achieve this, a business rule can be used to get the information from the pay range (mid-point salary) and from a custom lookup table which stores the pay component for the combination of Employment Type, Employee class and Legal Entity.

![Diagram showing Defaulting Pay Components process]

**Figure 9: Default pay components for salaried employees.**

6.2.5 Configuration

6.2.5.1 Lookup table for Pay component default

Very often, pay components need to be differentiated between different employee groups and remuneration types. The pay component for the base salary of blue-collar worker will technically not be the same pay component for the base salary of a salaried employee. In addition, different geographical areas and legal entities may demand further differentiation on pay components even for the same type of employee. To automate the assignment of the right pay component for the specific salaried workers groups, it is required to map these into the system. For this mapping, we use a custom lookup table (MDF) as follows (please refer to the guide "MDF Developer's Guide" to check how an MDF object is created):

```
PayCompDefault: BestRun Germany Employee (1000_DE_M_U41)
```

* Effective as of: 01/01/1900
* externalCode: 1000_DE_M_U41
* externalName: BestRun Germany Employee
* Legal Entity: BestRun Germany (1000)
* Employee Class: Employee (M)
* Employment Type: Salaried staff (U4)
* Sequence Number: 1
* PayComponent: Base Salary Germany (BASESAL.DE)
* frequency: Monthly (MON)
* Currency: EUR
* Annualising Factor: 1.2

**Figure 10: Look up table to default pay component for salaried employees**

Description of the essential fields:
- **Legal Entity:** This is required in the business rule lookup function as a parameter to filter the records.
• Employee Class: This is required in the business rule lookup function as a parameter to filter the records.
• Employment Type: This is required in the business rule lookup function as a parameter to filter the records.
• Sequence Number: This is required in the business rule lookup function as a parameter to filter the records and to have generic rules and not to hard code the pay component in the Rule.

6.2.5.2 Business Rule Configuration

Base Object: Employee information
Event Type: "onInit"

Variables:
- var_Position = Employee Information.Job Information.Position
- var_EventDate = Employee Information.Job Information.Event Date
- var_EmployeeClass = Employee Information.Job Information.Employee Class
- var_EmploymentType = Employee Information.Job Information.Employment Type
- var_Company = Employee Information.Job Information.Company

If

- var_EmployeeClass is equal to Employee (30004)
- var_EmploymentType is equal to Salaried staff (3631)
Figure 11: Business rule for defaulting pay components for salaried employees

This rule defaults the pay component as defined in the lookup-table. The amount is taken from the midpoint of the pay range. The pay range holds the annualized value of the amount; therefore, this is divided by annualizing factor that is defined for the pay component in the lookup table. The pay range is derived from the Function – “Get Pay Range by position”. Make sure to set the rule context appropriately.

6.3 Defaulting pay components for Salaried Employees Independent from Pay Range during hire

Alternative to the process described in the previous chapter, it might be required to assign pay components to the employees but not necessarily assign any amount (leaving up to the HR Admin to enter the amount) or to default an amount not derived from the pay range. In general, the process steps involved here are very similar to the ones described earlier, the difference being on defaulting the amount and the quantity of pay components (multiple pay components, instead of one). The diagram below illustrates the process steps during hire:

Figure 12: Illustrates the process steps during hire for assigning pay components to salaried employees
6.3.1 Lookup table for Pay component default

Analog to the configuration presented in chapter 5.3 a lookup table is needed. In this case, the only difference is the additional and optional field “Default Amount”, as can be seen in the picture below:

![Figure 13: Lookup table used to default pay components](image)

Description of the essential fields:

- **Legal Entity**: This is required in the business rule lookup function as a parameter to filter the records
- **Employee Class**: This is required in the business rule lookup function as a parameter to filter the records
- **Employment Type**: This is required in the business rule lookup function as a parameter to filter the records
- **Sequence Number**: This is required in the business rule lookup function as a parameter to filter the records and to have generic rules and not to hard code the pay component in the rule
- **Default amount**: This is optional as the same table can be used for defaulting the pay component amounts if this is not based on the pay range.
6.3.2 Business Rule configuration

Base Object: Employee information  
Event Type: “onInit”

Figure 14: Rule to default pay components independent of pay range

If there are multiple pay components that needs to be defaulted, it is possible to add more rules and just change the sequence number to 2, 3 and so on. The number of rules will be equal to the maximum number of pay components that have to be defaulted (For any Legal entity, Employee Class and Employment Type parameters).

Note: From release 1902 only one rule is necessary for creating multiple pay components.
6.4 Splitting Annual Salary to Individual Pay Components for Salaried Employees.

Alternatively, to the processes described in the two previous chapters (defaulting pay components / amounts to salaried employees during hire), it may suit better to some organizations (or some legal entities / employee groups of organizations) to derive pay components based on the employee’s annual salary value. This value is also in many cases originating from Recruiting or Compensation planning module. The annual salary can then be split into multiple pay components, typically these pay components are fixed percentages of the annual salary and depend on the employees pay frequency. The diagram below exemplifies the process steps during the hire process or job change process for splitting the annual salary:

Figure 15: Process for splitting reference annual salary into multiple pay components

6.4.1 Configuration

6.4.1.1 Pay component for Annual Salary

Create a pay component called “annual salary” which will serve as a reference value in the employee’s compensation information and will be used for calculating (with possible rounding issues) the monthly (or any other frequency) pay components as display-only. The monthly pay component can then be replicated for Payroll purposes. Compensation Planning and compa-ratio calculation should be based on the annual salary reference pay component and/or a pay component group based on the reference annual salary.

The figure below shows the basic configuration for such annual salary pay component. Notice that the annual salary pay component can be well made as a “target” pay component, which then causes it to be displayed at the bottom of the screen in compensation information in the “target earnings” portion of the screen.
6.4.1.2 Lookup Table to Store the Split Percentages

A look up table is required for storing the percentage split of the annual salary. This table can have additional attributes like Employee class, Employment type and Legal Entity which form the parameters to query inside a business Rule. Attributes like frequency, currency, Annual factor, Percentage are used for filling the compensation portlet parameters.
6.4.1.3  Business Rule Configuration

Base Object – Compensation Model
Event Type – OnSave
Portlet – Payment recurring

Figure 17: Lookup table to split the annual salary

```plaintext
var_PayComponent = Compensation.Model.Compensation.Pay Component
var_EmployeeClass = Compensation.Model.Employment Details Model.Job Information.Employee Class
var_EmploymentType = Compensation.Model.Employment Details Model.Job Information.Employment Type
var_EventDateValue = Compensation.Model.Event Date.Value
var_AmountValue = Compensation.Model.Amount.Value
var_PreviousAmountValue = Compensation.Model.Amount.Previous Value

If
  var_PreviousAmountValue not equal to var_AmountValue
  var_EmployeeClass is equal to Employee (30094)
  var_EmploymentType is equal to Salaried staff (3531)
  var_PayComponent is equal to Annual Salary (ANSAL)
end
```
Rule design – Part 1:

Figure 18: Business Rule (part 1) to split annual salary to several pay components

Rule design – Part 2:

Figure 193: Business Rule (part 2) to split annual salary to several pay components

It is also possible to copy the same "create statement" into 4 or 5 statements and change only the sequence number field. Therefore, if annual salary must be split into 4 pay components, you need to copy the create statement 4 times and change the sequence number to 2, 3 and 4. The advantage of this approach is that you could have one rule that caters to combinations of legal entity, employee class and employment Type. The changes are only visible after save.
6.4.2  Process Example

1. HR Admin enters the amount for the annual salary during hire

   ![Edit History of Compensation Information](image)

   - **Amount:** 120,000
   - **Currency:** INR
   - **Frequency:** Annual (ANN)
   - **Pay Scale Relevant:** No Selection
   - **Number Of Unit:**
   - **Unit of Measure:**
2. The annual salary is split into pay components based on the values of the look table.

![Table of compensations](image)

Figure 24: Screen shots of the pay components after the split from annual salary

### 6.5 Handling job changes for salaried employees

Analog to the handling of indirect valuation during job changes for tariff works, it is also required to handle indirect valuation during job changes for salaried employees. Examples of job changes that affect salaried employees compensation are: FTE change and promotion to a new salary grade.

It is recommended to use the same solution approach described in chapter 5.2 adapting it to the salaried employees. Configuration samples for this scenario are not offered in this document, to avoid similar repetitive information.

### 6.6 Dependent pay components and Percentage-based Pay Components

The management of dependent pay components is a common requirement. This topic has been explained form a business perspective in chapter 3.1 (functional requirements) and is also illustrated in Table 1, in chapter 4: "...Default Performance supplement pay-component: optional defaulting, such pay components can be added manually by HR Admin (these can be dependent-valuated pay components, such as percentage-based) ...

In case it is required to automate the proposal of such pay components, a solution approach via lookup tables can be derived (Similar to what is proposed in chapter 5.3.). Attention is required here, since for tariff employees, it will be required to have two sets of rules for indirect valuation: one for assigning the pay scale structure pay components, and the other set for assigning the dependent pay components according to a business key (usually based on legal entity, employment type, class etc.).

Regarding to the valuation of the dependent pay component, which is most cases is a percentage-based pay component, this achievable via simple configuration and is explained below
6.6.1 Dependent Pay component configuration

It is possible to define a pay component that is dependent as a percentage of a base pay component. The example below illustrates the “Provident fund pay component” as an example. This is pay component is based on the Base Pay component for India. Providing a pay component value is optional. If the value is provided, then only this number (percentage) can be entered in the compensation portlet. If any other number is entered the system will raise an error message. Below is an example of a percentage base pay component. Note here that the pay component value is 12. This means that in the compensation portlet when this pay component is entered only 12 % can be entered.

Figure 205: Configuration of a simple percentage-based Pay component

6.6.2 Representation on compensation Portlet

Based on the configuration, only 12% can be added in the below portlet. If in the configuration the pay component value is blank, then any percentage value is possible.
Figure 26: Screen shot of a base pay component and a percentage-based pay component

There is a standard field that can be enabled known as the calculated amount. This shows the calculated amount of the percentage-based pay components. In the above example the base is 10000 and the percentage is 12 of the percentage-based pay components. Therefore, the calculated amount is 1200.

**IMPORTANT**: For Employee central customers replicating to SAP ERP Infotype 0008: it is necessary to replicate the calculated amount in addition to the percentage into infotype 0008, because indirect valuation should be switched off for all pay components in infotype 0008, which also means, percentage-based pay components will not be re-evaluated in infotype 0008.

7 **ASSUMPTIONS AND EXCLUSIONS**

- **Important Note**: Pay component groups are not evaluated between the business rules execution. Please note if you have many rules that affects pay component groups, do not use these as conditions/variables in the rule (in case you have a sequence of rules) as the Pay component groups is only calculated after the execution of all the rules.
- Reproducing the logic of SAP ERP indirect valuation modules PRZNT and SUMME are not included in this document. Alternative approaches have been presented in chapter 5.7.
- Grade step progression is not covered in this document
- Automated pay scale Increase is not covered in this document

8 **REFERENCES**

**SAP Help Portal**

- Employee Central Master Implementation guide.
- Implementing and Configuring Employee Compensation Data in Employee Central
- Implementing The Metadata Framework