

Loans



HELP.PYINT

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Loans

Purpose

You can use this component to enter, administer and perform payroll for company loans in the SAP system.

You can grant an employee company loans for a specific purpose, for example, to build a house or buy a car. In doing so, you grant the employee an interest rate lower than the market's usual reference interest rate. The employee's salary provides your enterprise with security.

The amount of administration is kept low as the processing of formalities, payment of the loan, repayment and interest payment by the employee, can simply be processed using *Payroll*.

Integration

Loan repayment and interest calculation are automatically processed in *Payroll* and, according to your entries, withheld from the employee's salary. The loan accounting data is saved together with the payroll results.

Scope of Function

In principal, you can choose between various **loan categories** in the SAP system, such as installment loans and annuity loans, with different repayment types.

To simplify awarding and evaluating the loan, we distinguish between various **loan types**. Loan types distinguish between loans using the purpose and the loan category, for example, *Building loan with installment repayment*.

At least one **loan condition** is assigned to a loan type. The interest rate and repayment pattern for the loan are stored in this type of loan condition.

You enter all the loan data in the *Loans* infotype (0045).

You set up loan types and their conditions in the Loans unit in *Payroll Customizing*.

Company Loans (Infotype 0045)

Definition

You use this infotype to enter all the loan data. This infotype contains information on:

- Basic data
- Conditions
- Payments

Use

During the payroll run, the data in the *Loans* infotype (0045) is used to calculate the following values:

- Loan deductions
- Loan interest calculation
- Imputed income taxation

Structure

Loan Types

The loan types are stored as subtypes in the *Loans* infotype (0045). Every loan that you create gets a sequential number. The combination of loan type and sequential number makes it possible for the system to clearly identify every loan. This makes it possible for you to create several loans of the same type for an employee.



When creating a loan, the system always proposes a sequential number. Depending on whether you create a loan of the same type for an employee or just want to change the conditions of a loan that already exists, you must either keep or change the sequential number proposed by the system:

- If you want to create a new loan and create a new infotype record for this purpose, the system suggests a new sequential number that has not been used before. We recommend that you **keep** this number.
- If you want to create a new loan and copy an existing infotype record for this purpose, the system will suggest the sequential number of the infotype record you have copied. You must **change** this number. We recommend that you first of all check the list of existing infotype records to see which sequential numbers have already been assigned to this employee. If you use an existing sequential number, the system cannot clearly assign payments to a loan.

Company Loans (Infotype 0045)

- If you want to change the conditions of a loan that already exists and copy an existing infotype record for this purpose, the system will suggest the sequential number of the infotype record you have copied. You must **keep** this number.

Tab Pages

On the *Basic data* tab page, enter the date of approval and the amount of the loan. The status of the loan is also displayed here. However, payments and special payments that you have entered after the last payroll run, are not taken into consideration.

On the *Conditions* tab page, you enter the relevant loan conditions. You also specify when repayment should begin. Regardless of this, interest payments are included in the payroll run, immediately after the loan is paid to the employee.


On the *Payments* tab page, you enter all the payments that are made by your company or employee with regard to the loan.

Payments

On the *Payments* tab page you enter outgoing payments, repayments and other payments, for example, loan charges. You can pay a maximum of the approved amount to the employee. The approved amount is occasionally paid in several partial amounts.



The approval of a loan does not automatically lead to payment. You should only allocate the loan payment on the *Payments* tab page.

Payments that have already been included in the payroll run are inactive and can not be changed, as you usually do not make changes to such payments. However, if you want to process a payment that has already been accounted, select it and choose . The payment is then released for processing.



Subsequent changes to payments trigger retroactive accounting in *Payroll*.

Payment Types

There are various payment types available for entering payments. The payment types differentiate between payments according to:

- Whether it is a case of a payment to the borrower or a repayment to the employer
- Whether the payment is made directly by check or bank transfer or is cleared with the employee's remuneration during the payroll run

Company Loans (Infotype 0045)



We recommend that you use the payment types provided by SAP as far as this is possible. However, if you require your own payment types, you can set these up in Payroll Customizing under *Loans* → *Master Data* → [Customer Payment Types \[Ext.\]](#).

Using Payment Types

Payment type	Use	Comment/Example
<i>Outgoing payment to third-party</i>	You do not want to pay out the loan to the employee, you want pay it to a third person instead.	An employee receives a building loan to build a house. You do not pay the loan to the employee, but to the contractor who builds the house.
<i>Loan payment (payroll)</i>	You want to pay the employee the total approved amount of the loan or part of this together with his/her pay.	
<i>Loan payment (external)</i>	You want to pay the employee the total approved amount of the loan or part of this by check or bank transfer.	
<i>Loan remission</i>	An employee cannot repay his/her loan or you want to release him/her from the remaining debt.	You can only close a loan in the system when the remaining loan amount has either been repaid by the borrower or remitted by the lender.
<i>Fees</i>	You want to demand fees from your employee for granting the loan.	
<i>Total repayment</i>	The employee repays the total outstanding amount of the loan by check or bank transfer.	
<i>Special repayment (payroll)</i>	The employee makes an unscheduled repayment that should be withheld from his/her pay.	
<i>Special repayment (external)</i>	The employee makes an unscheduled repayment by check or bank transfer.	
<i>Loan balance transfer</i>	You want to transfer company loans from a legacy system.	You can also use the payment type <i>Loan payment (external)</i> for transferring loans from legacy systems.

Company Loans (Infotype 0045)



The *Special Repayment (External)* and *Complete Repayment* payment types can both be used for a direct repayment by check or bank transfer. These payment types have different types of interest calculation:

- In the case of *special repayment (external)*, the day you specify as the payment date is **not** taken into consideration in interest calculation.
- In the case of *total repayment*, this day is taken into consideration in interest calculation.

If you want to enter a repayment for an employee, that leaves the company or changes company code, use the *Total repayment* payment type. This guarantees that interest is calculated for the loan even for the last day that the employee works in the company or is assigned to the old company code.



The employee Anne Lovelace leaves your company on April 30. She was granted a company loan. You want to enter an external repayment for this loan on April 30. If you enter the repayment as a *special repayment (external)* with the payment date of April 30th, no more interest is calculated for the loan for this day. If you enter the payment as a complete repayment with the payment date as April 30, interest will still accrue for this day. As Anne Lovelace is no longer an employee in your company on May 01, you can not enter the payment as a *special repayment (external)* with the payment date as May 01, so that interest can still be calculated for April 30.

Integration

The correct repayment of a loan is only guaranteed when there is a valid infotype record for the *Loans* infotype (0045). That is why *Payroll* is interrupted with an error message when there is no valid infotype record for an open loan. This can, for example, occur when the validity of a loan created was underestimated. You must therefore extend the validity of the loan in a case like this. When doing so, proceed as described in [correct incorrect entries \[Page 11\]](#).

Once the employee has completely repaid the loan, a message is displayed in the payroll log. We recommend that you delimit loans that are completely repaid in the *Loans* infotype (0045).

See also:

[Company Loans \(Infotype 0045\): National Features Great Britain \[Ext.\]](#)

[Company Loans \(Infotype 0045\): National Features Belgium \[Ext.\]](#)

[Loans \(Infotype 0045\): Features for Venezuela \[Ext.\]](#)

Creating Loans and Loan Payments

Use

An employee applies to the HR department for a loan for a certain purpose. The HR department checks whether the employee fulfills the criteria for a loan. You specify the amount of the loan, the repayment type and conditions together with the employee. You can modify this data at any time. You also specify the validity period and approval date.

Each loan is assigned to an employee and can be clearly identified using the personnel number, loan type and sequential number.



To distinguish between different loans assigned to the same employee, you use a combination of the loan type and the sequential number. For this reason, you can not use a sequential number that has already been assigned to a new loan with the same type as another loan, even if the loans do not coincide or if one of the loans has already been delimited. The system suggests the next available sequential number.

Prerequisites


- You have set up loan conditions and loan types in *Payroll Customizing*, under *Loans* → *Master Data* → [Create a Loan Type \[Ext.\]](#)
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045**, and in the *Subtype* field, enter the loan type.




If you create a new data record, you must enter the loan type as a subtype on the menu screen. The field is no longer ready for input in the *Loans* infotype (0045).

3. Choose .
4. Enter the data required and save your entries.



We recommend that you specify the payment on the *Payments* tab page.

You can also enter a note or a commentary on the loan or employee. Choose *Edit* → *Maintain Text*. When you have created a text, a  pushbutton is displayed, which you can use to call up the text.

Correcting Incorrect Entries

Use

You have created a loan and discovered incorrect entries. You must correct the incorrect loan values. You could correct the following entries:

- validity period
- external reference number
- loan condition
- repayment or annuity installment
- approval date
- approved loan amount
- payments






These type of corrections trigger a retroactive accounting run in *Payroll*. Retroactive accounting takes places until the date that is set in the *Valid* field of the *Loans* infotype (0045). If you only change payment information, the system uses the date of payment as the retroactive accounting limit.

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045** and in the *Type* field, enter the loan type to be changed.
3. Choose .
4. If several loans exist for the same loan type, select the loan to be changed using  or .
5. Correct the relevant values.
6. Save your entries.

Creating a Special Repayment

Creating a Special Repayment




Use

As well as the repayment installment that regularly incurs, an employee wants to make an additional repayment for his/her loan. This is possible using the *Special Repayment (External)* or *Special Repayment (Payroll)* payment types. The employee can pay the external special repayment by check, cash payment, and so on. He/she can use part of the available remuneration, for example, Christmas bonus or vacation bonus or other gratuities, for the special payment (Payroll).

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045** and in the *Subtype* field, enter the correct loan type.
3. Choose .
4. If several loans exist for the same loan type, select the loan to be changed using  or .
5. Choose the *Payments* tab page.
6. Enter a special repayment.



If the employee wants to repay the loan completely, you use the loan amount open, displayed on the *Basic Data* tab page.

For the *Special Repayment (Payroll)* payment type, the repayment amount should not exceed the payment amount of remuneration that the employee receives.

7. Save your entries.

Changing the Value of a Loan

Use

If the interest rate for the loan conditions or the repayment amount and/or annuity installment change, you must create a new infotype record for the *Loans* infotype (0045). The old data record is then delimited in time. If several data records exist for one loan in a payroll period, the record that is valid at the beginning of the period is evaluated within Payroll.

The loan amount and approval date are fixed elements of a loan. These values must remain constant in all the loan data records.






If there is a split in the payroll results due to a personnel action or change in the legal person, proceed as described in [Processing Loans in the Case of a Change in Company Code. \[Page 14\]](#)

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045** and in the *Subtype* field, enter the loan type to be changed.
3. Choose .
4. If several loans exist for the same loan type, select the loan to be changed using  or .
5. Choose *Edit* → *Copy*.
6. Enter the new validity period and change the loan values (for example, the repayment installment).
7. Save your entries.

Result

You have made a time-dependent change to the loan. A new data record is created and the old data record is delimited.

Processing Loans in the Case of a Change in Company Code

Purpose

If an employee changes [company code \[Ext.\]](#), for example, works for another company within your group, he can not transfer his loan to the new company code. This is due to the fact that he would no longer repay repayments to the company that awarded him the loan but to the new company.

That is why you must delimit the *Loans* infotype (0045) to the date of the change of company code. To do this, you change the end date of the infotype record so that the infotype record is only valid until the date of the change of company code.

You must also close the infotype with a complete repayment. The person, who makes this payment in whatever way, should be arranged within the company.

Finally, you create a new loan for the employee from the point in time that he belongs to the new company code.

Process Flow

1. The employee changes company code.
2. You make the following changes in the *Loans* infotype (0045):
 - You delimit the infotype record to the date of the change of company code.
 - You close the employee's loan with a complete repayment in a similar way to [leaving \[Page 15\]](#).
3. You create a [new loan \[Page 10\]](#) for the employee from the point in time that he belongs to the new company code in the *Loans* (0045) infotype.



You can link the *Loans* infotype (0045) to the dynamic action *Change of company code*. To do so, choose [dynamic actions \[Ext.\]](#) in *Personnel Administration Customizing*, under *Setting up procedures*.

Processing Loans for an Employee Who Leaves

Use

When an employee who has been granted a loan, leaves your enterprise, you must make sure that he/she has completely repaid the loan. After the employee has left your enterprise, payroll is no longer performed for him/her, making it impossible for repayment to take place via payroll. Any outstanding debts must be settled in *Financial Accounting*. We therefore recommend that you close the loan with a special repayment or complete repayment, **before** the employee leaves.



When an employee leaves the company, a message is displayed in the payroll log. The SAP System **does not** automatically settle outstanding balances.

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. In the *Infotype* field, enter 0045 and in the *Type* field, enter the loan type to be changed.
2. Choose .
3. If several loans exist for the same loan type, select the loan to be changed using or .
4. Choose the *Payments* tab page.
5. Enter a special repayment or complete repayment for the amount of the loan amount still outstanding and save your entries.

Processing Loans for Inactive Agreements




Use

If an employee does not get paid for a certain period of time, repayment of the loan should be inactive for this time.

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the Infotype field, enter **0045** and in the *Type* field, enter the loan type to be changed.
3. Choose .
4. If several loans exist for the same loan type, select the loan to be changed using  or .
5. Choose *Edit* → *Copy*.
6. In the fields *Valid ... to* (valid from and to), you enter the date, from which repayment of the loan should be inactive.
7. Choose the *Conditions* tab page and enter **0** in the *Repayment or Annuity installment field*.
8. Save your entries.

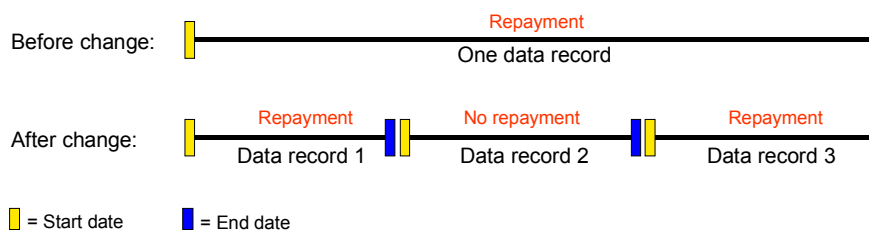
The system refers to the fact that the existing data record is split.

9. Confirm the message.

Result

There are now three data records with different start and end dates for the changed loan:

Loans Infotype (0045)



- Record 1: from the original start date to the date from which repayment should become inactive
- Record 2: from the date on which repayment should become inactive to the date from which repayment should recommence
- Record 3: from the date on which repayments should start again to the original end date

Processing Loans for Inactive Agreements

You have changed the employee's loan for a certain period in such a way that no repayments are due. After the end of the period without repayments, the repayment installment originally specified is automatically due.

Deleting Loans

Deleting Loans

Use

A loan can be deleted for the following reasons:

- an incorrect personnel number has been entered.
- the employee rejects the loan.
- the employer does not approve the loan.



If you want to delete a loan, you must first of all delete all the accompanying payments, as described below.







You cannot delete the *Loans* infotype (0045) if a loan has already been paid and the employee has not repaid it completely yet.

You cannot delete loans that have been paid back completely, and for which processing is complete.

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045** and in the *Subtype* field, enter the loan type of the loan to be deleted and choose .
3. If several loans exist for the same loan type, select the loan to be deleted using  or .
4. Choose the *Payments* tab page.
5. Select a payment and choose .
6. Repeat step 5 until you have deleted all payments.
7. Save the infotype record.
 - Depending on whether other loans exist for the same loan type, you access
 - another loan record
 - From here, you go back to the *Maintain HR Master Data* screen
 - directly to the *Maintain HR Master Data* screen
8. Choose .
9. Check whether the information displayed refers to the loan to be deleted, and choose  again.

Repayment

Use

If you have paid a loan to an employee, he/she usually repays the amount in regular partial amounts. The loan repayment is made up of a repayment share, which reduces the loan amount paid for each loan period, and an interest share.

The type of loan repayment is stored in different **loan categories**. The start of repayment and repayment pattern are stored in different **loan conditions**.

Prerequisites

In *Payroll Customizing*, under *Loans* → *Master Data* → [Create a Loan Type \[Ext.\]](#) you have

- specified the assignment of loan categories to loan types in the *Technical Attributes* view.
- specified at least one loan condition for each loan type in the *Conditions* view.

Scope of Function

The SAP system distinguishes between the following loan categories:

- Repayment in installments
In this case, the employee regularly pays a **repayment installment**. This installment contains only the repayment. The interest receivable is added on in every payroll period. The total amount that the employee must pay in every period, thus changes. As the term of the loan progresses, the amount gets less and less, as the remaining debt and also the interest receivable from the employee decrease.
- Annuity repayment
In this case, the employee regularly pays a **annuity installment**. This installment contains both the repayment and the interest. The total of repayment and interest payment thus remains constant. This type of repayment is awarded on a more regular basis, as the charge to the borrower remains constant for the complete term of the loan.
- Recurring advance
In this case, you can pay the employee a certain amount on one occasion. The recurring advance is not repaid and no interest incurs. The employee must only repay the amount when he/she leaves the enterprise.



Expenses of 1,000 euro regularly incur for an employee in the external sales force. So that the employee does not have to pay this amount from his own pocket, he/she receives a one-off recurring advance of 1,000 euro. Each time expenses are accounted at the end of a payroll period, the employee is repaid exactly the amount that he spent on expenses in this period. The recurring advance is not affected by this. On leaving, the employee must only repay the enterprise exactly 1000 euro.

Repayment

Activities

When you create a loan for an employee in the *Loans* infotype (0045), choose a loan type. This loan type has been assigned a certain loan category in Customizing. In this way, you determine the type of repayment according to which the employee must repay the loan.

Select the repayment pattern for the loan in the *Loan condition* field, on the *Conditions* tab page in the *Loans* infotype (0045). Specify the repayment amount in the *Repayment installment or Annuity installment* field.

Repayment of Installment Loans

The repayment amount that reduces the balance of the loan in each loan period remains constant. Interest accrues as an additional charge against the employee.

The expected term of the loan can be determined for this loan type.

Prerequisites

Loan amount paid out	30,000 euro
Interest rate	5 % p.a.
Repayment installment	250 euro
Interest calculation frequency	Monthly
Repayment frequency	Monthly
Repayment start date	One year after loan was paid out

Loan Calculation

- In the first twelve months, interest of 125 euro accrues monthly. As the loan balance of 30,000 euro remains unchanged in this period, the interest amount remains constant.
- Repayment, which starts after 12 months, is calculated in the following way:

$$30,000 \text{ euro} / 250 \text{ euro} = 120 \text{ months}$$
- The total term of the installment loan is eleven years.
- In the first month after repayment begins, deductions taken from the employee's remuneration are 375 euro = 250 euro repayment + 125 euro interest).
- The remaining debt after the first repayment is 29,750 euro.
- With each repayment, the amount of interest is reduced, and subsequently the amount paid by the employee is also reduced.

Example: Repayment of Installment Loans**Example: Repayment of Installment Loans**

A repayment amount is calculated, that is then deducted from the employee's pay in each loan period. This repayment amount consists of a repayment share and an interest share. The repayment amount remains constant, but the interest share decreases and the repayment share increases during the loan period.

Because of the interest deductions, the term of the loan cannot be directly deduced from the rate of repayment for this loan type.

Prerequisites

Loan amount paid out	30,000 euro
Interest rate	5 % p.a.
Annuity installment	250 euro
Interest calculation frequency	Monthly
Repayment frequency	Monthly
Repayment start date	One year after loan has been paid out

Loan Calculation

- In the first twelve months, interest accrues every month, which increases the balance of the loan and the interest. In the first month, the interest is 125 euro, in the twelfth month it is 130.31 euro, so that the loan balance increases to 31,404.02 euro before the first repayment.
- From the first annuity installment, 130.85 euro is allotted to interest and 119.15 euro to the regular repayment.
- The total term of the loan, including the first year when no repayments are made, amounts to almost 27 years.
- The amount that the employee must pay each month remains constant at 250 euro.

Repayment Plan

Use

You can create a repayment plan for a loan to obtain detailed information on the term of the loan and the charge to the employee.

Integration

You can only create the repayment plan for loans that you create in the *Loans* infotype (0045) or have already created.

Scope of Function

- You create the repayment plan for each of the employee's loans, which is identified by the loan type and the sequential number.
- You create the repayment plan in the currency of the repayment installment.
- If you have already created loan payments, this is mentioned in the repayment plan.
- When you create a loan in the *Loans* infotype (0045), you can simulate a repayment plan for an employee even if you have not yet entered any loan payments, and have not yet saved the loan.

You can enter any values for the loan amount, repayment installment, start of repayment and payment date. You can repeat the repayment plan again and again, for example, to check the effect a higher or lower repayment installment has on the term of the loan.

- You can copy the values to the infotype that you have specified when simulating the repayment plan.

If you have, for example specified a different value for the loan amount when creating the repayment plan, to the value you have entered in the *Approved loan amount* field when creating the infotype record, you can copy this change to the infotype. The system then automatically copies the changed amount from the dialogbox *Parameter for Repayment Plan* to the *Approved loan amount* field. You must not manually enter the changed amount in this field.

Example: Repayment Plan

Example: Repayment Plan**Prerequisites**

In the SAP system, the following values are stored for an employee's loan:

Personnel number	123456
Loan type	Building loan with annuity payment (0200)
Sequential number	06
Legacy data transfer	7,700 euro on June 01 1998
Special repayment	1,000 euro on December 24 1998
Annuity installment	450 euro monthly
Repayment start date	June 01 1998

Result

Using this information, the system creates the following repayment plan:

Repayment plan for *Personnel number 123456*
Loan ID *0200 06 (Building loan with annuity repayment)*
Currency *euro*

Year	Period	Balance	Repayment	Interest
1998	06	7,282.08	417.92	32.08
1998	07	6,862.42	419.66	30.34
1998	08	6,441.01	421.41	28.59
1998	09	6,017.85	423.16	26.84
1998	10	5,592.92	424.93	25.07
1998	11	5,166.22	426.70	23.30
1998	12	3,737.75	428.47	21.53
1999	01	3,303.32	434.43	15.57
1999	02	2,867.08	436.08	13.76
1999	03	2,429.03	438.05	11.95
1999	04	1,989.15	439.88	10.12
1999	05	1,547.44	441.71	8.29
1999	06	1,103.89	443.55	6.45
1999	07	658.49	445.40	4.60
1999	08	211.23	447.26	2.74

Example: Repayment Plan

1999	09	0.00	211.23	0.88
			7,700	262.11

Creating Repayment Plans

Prerequisites






You have [created a loan \[Page 10\]](#).




When you are creating a new loan, you can also create the repayment plan. You must only specify the approved loan amount and the loan condition. You can then choose any parameters for the repayment plan.

You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045** and in the *Subtype* field, enter the loan type.
3. Choose  or .
4. If several loans with the same loan type exist, select the loan for which you want to create the repayment plan, using  or .
5. Choose  (Create Repayment Plan).


You are in the *Parameter for the repayment plan* dialog box.

6. If necessary, change the data displayed and choose .

Result

The system creates the repayment plan.

To copy the values to the infotype that you have entered in the *Parameter for repayment plan* dialogbox, you proceed in the following way:

1. Go from the repayment plan back to the *Parameter for the repayment plan* dialogbox.
2. Choose  (Copy).

Displaying Conditions





Use

The *Conditions* function allows you to display detailed information on the interest amount and the interest and/or repayment pattern of the loan.

Prerequisites

- You have [created a loan \[Page 10\]](#).
- You are in [master data maintenance \[Ext.\]](#).

Procedure

1. Enter the employee's personnel number.
2. In the *Infotype* field, enter **0045** and in the *Type* field, enter the loan type.
3. Choose .
4. If several loans exist for the same loan type, select the loan to be displayed using  or .
5. On the *Conditions* tab page, choose the  function (condition overview).

Result

In the *Conditions ... for loan type* dialog box, you can see the validity date, debit interest rate, reference interest rate and, depending on the loan type, the repayment and/or interest pattern:

- In the case of an **installment loan**, the interest and repayment patterns are displayed.
- In the case of an **annuity loan**, only the repayment pattern is displayed, as the interest is due at the same time.

The repayment pattern determines when a repayment installment is due. The interest pattern determines when the cumulated interest that incurs in every payroll period is due.

Interest Calculation


Use

The SAP system calculates the interest that incurs for a loan in accordance with the specifications that you have made in Customizing for the relevant loan type.

Prerequisites

In *Payroll* Customizing, you have defined the following:

- Value date
 - You have specified at which point in time interest on loans should be calculated in your enterprise, under *Loans* → *Calculation* → [Adjust Value Date \[Ext.\]](#). In the standard system, interest is calculated at the end of the payroll period.
- Interest rate and interest calculation frequency
 - In the *Conditions* view under *Loans* → *Master Data* → [Maintain Loan Types \[Ext.\]](#), you have specified the amount and the intervals at which interest should be due.



 - If you want to award an interest-free company loan, create your own condition with debit interest of 0% for this purpose.
- Interest calculation method
 - You have the following options for determining the interest calculation method:
 - Under *Loans* → *Calculation* → [Specify Interest Calculation Method \[Ext.\]](#), you can change the standard interest calculation method provided by SAP using the INTLO feature (*HR Loans: Interest Calculation Method*). In the process, you can specify an interest calculation method for your whole system, for certain loan types or certain loan conditions. The standard interest calculation method assumes there are 30 interest days in a month and 360 interest days in a year.
 - We recommend this procedure.
 - You can specify the interest calculation method for a certain loan condition in the *Conditions* view, under *Loans* → *Master Data* → *Maintain Loan Types*. If you specify an interest calculation method here, you thus override the interest calculation method that you may have entered in the INTLO feature.
- Reference interest rate
 - You have the following options for determining the reference interest rate:
 - You can use the REFIN payroll constant (*Reference interest rate*) in table T511K (Payroll Constants) to store the reference interest rate for your whole system, under *Loans* → *Calculation* → [Check Payroll Constants \[Ext.\]](#).
 - We recommend this procedure.
 - You can specify the reference interest rate for a certain loan condition in the *Conditions* view, under *Loans* → *Master Data* → *Maintain Loan Types*. If you specify a reference

Interest Calculation

interest rate here, you thus override the reference interest rate that you may have specified with the REFIN payroll constant.



If you specify the interest calculation method and the reference interest rate with the INTLO feature and the REFIN constant, you may possibly want to prevent entries being made in the step *Maintain Loan Types*. That is why, you can hide these fields from the *Conditions* view. To do so, choose *Loans* → *Master Data* → [Adjust Screen Control \[Ext.\]](#) in *Payroll* Customizing.

Scope of Function

The date that you choose for the interest calculation of loans depends on the payment date of your payroll areas. The payment date can, for example, be at the beginning or end of the payroll period. Interest should also be calculated accordingly for an employee's loan; that is, at the beginning or end of the payroll period.

If you pay an employee's loan with the payroll run, the time of interest calculation has the following effects:

- If interest is calculated at the **start of the period**, interest is due in the payroll period in which you create the loan. The number of days for which interest is calculated depends on the calculation method that you choose for your system. In the standard system, interest is calculated for 30 days for each month.
- If interest is calculated at the **end of the period**, no interest incurs for the payment amount in this payroll period.

This case has already been created in the standard system.

Interest calculation for external payments, such as payments by check or bank transfer is for the exact day. Within the current payroll period, interest is calculated for only the days on which it actually accrues.


During the payroll run, the system calculates the interest for each payroll period and includes it, when due, as a deduction in accordance with the loan conditions.

Activities

If you create a loan in the *Loans* infotype (0045), choose a loans condition on the *Conditions* tab page. With that, you specify the rate of interest and calculation frequency for this loan. The conditions that you can select here depend on the loan type. You can specify an interest rate in the *Individual interest rate* field, which should apply for this employee.



You can also hide the *Individual interest rate* field from the infotype interface.

To display the conditions for a loan type in a detailed form, choose the  function (conditions overview) on the *Conditions* tab page.

Example: Interest Calculation

Prerequisites

In your enterprise, payroll takes place on a monthly basis. You have created a loan for an employee with the following data:

Loan type	Building loan with payment by installments
Loan amount paid out	10,000 euro
Loan payment	January 10 of the current year
Repayment start date	May 01 of the current year
Repayment installment	300 euro each month

The following values are stored in Customizing for the loan type *Building loan with repayment installment*:

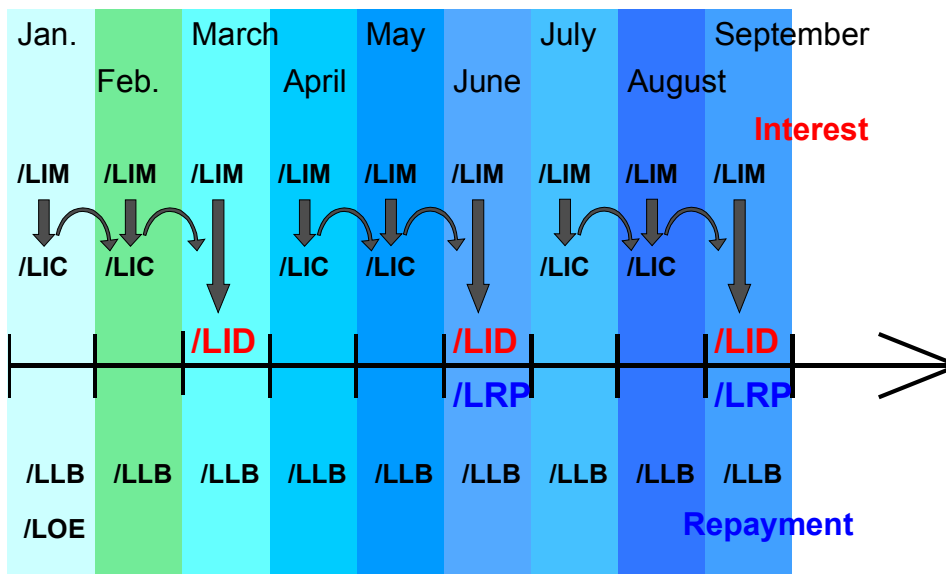
Debit interest	5 %
Interest calculation frequency	First period: 03
	Interval: 03
Repayment frequency	First period: 03
	Interval: 03

The interest for this loan is thus due in the months of March, June, September, and December.

The repayment installment for the loan type *Building loan with installment repayment* is also due in the months of March, June, September and December. However, the employee must only pay the first repayment installment for the loan on hand in June, as you specified May 01 as the start of repayment date. June is the first month, in which a repayment installment is due for the repayment pattern for this loan type after the start of repayment date on May 01.

Example: Interest Calculation

Interest Calculation



Interest is calculated for each payroll period and stored in the *Interest for current period wage type (/LIM)*. If interest is not due in the previous payroll period, it is cumulated in the *Cumulated interest wage type (/LIC)* until the next due date. When the interest is due, the *Cumulated interest wage type (/LIC)* is converted to the *Interest due wage type (/LID)*.

In the example, the loan is paid out on January 10 of the current year. This means that only 21 days of interest accrue in this month. For the first payroll period, interest of $10,000 \times 0.05 \times 21 / 360 = 29.17$ euro accrues (10,000 euro balance, 5% interest, 21 days interest, 360 days per year).

For the remaining periods up to the first repayment, interest of $10,000 \times 0.05 \times 30 / 360 = 41.67$ euro accrues (10,000 euro balance, 5% interest, 30 days interest, 360 days per year).

The interest per payroll period is cumulated and due at an interval of 3 periods.

Wage Types

The following loan wage types arise for the first six payroll periods:

Period	Wage type	Wage type text	Amount	Explanation
Period 01	/LIC	Cumulated interest	29.17	
(January)	/LIM	Interest for current period	29.17	21 days
	/LLB	Loan balance	10,000	
	/LOE	External loan payment	10,000	
Period 02	/LIC	Cumulated interest	70.84	
(February)	/LIM	Interest for current period	41.67	
	/LLB	Loan balance	10,000	

Example: Interest Calculation

Period 03	/LID	Interest due	112.51	
(March)	/LIM	Interest for current period	41.67	
	/LLB	Loan balance	10,000	
Period 04	/LIC	Cumulated interest	41.67	
(April)	/LIM	Interest for current period	41.67	
	/LLB	Loan balance	10,000	
Period 05	/LIC	Cumulated interest	84.34	
(May)	/LIM	Interest for current period	41.67	
	/LLB	Loan balance	10,000	
Period 06	/LID	Interest due	125.01	
(June)	/LIM	Interest for current period	41.67	
	/LLB	Loan balance	9,700	
	/LRP	Regular repayment	300	

Calculating Imputed Income

Use

The interest saving for a loan, which results from a particularly reasonable interest rate, can be remuneration in the form of imputed income. The SAP system automatically calculates the imputed income (or interest rate advantage), that an employee incurs from a loan. This is the result of the difference between the debit interest and the reference interest rate, as the debit interest awarded by the employer is often significantly less than the usual reference interest rate awarded by the bank.

To find out the statutory bases for imputed income, see the employment tax guidelines.

Prerequisites

The prerequisites are the same as those for [interest calculation \[Page 28\]](#). You have also selected the *Interest rate advantage* field in the *Conditions* view in *Payroll* Customizing under *Loans* → *Master Data* → [Create a Loan Type \[Ext.\]](#) .

Features

Exemption Limit for Germany

The exemption limit, which is currently 5,000 DM is automatically taken into consideration during payroll.

Example of an Imputed Income Calculation

Example of an Imputed Income Calculation

Prerequisites

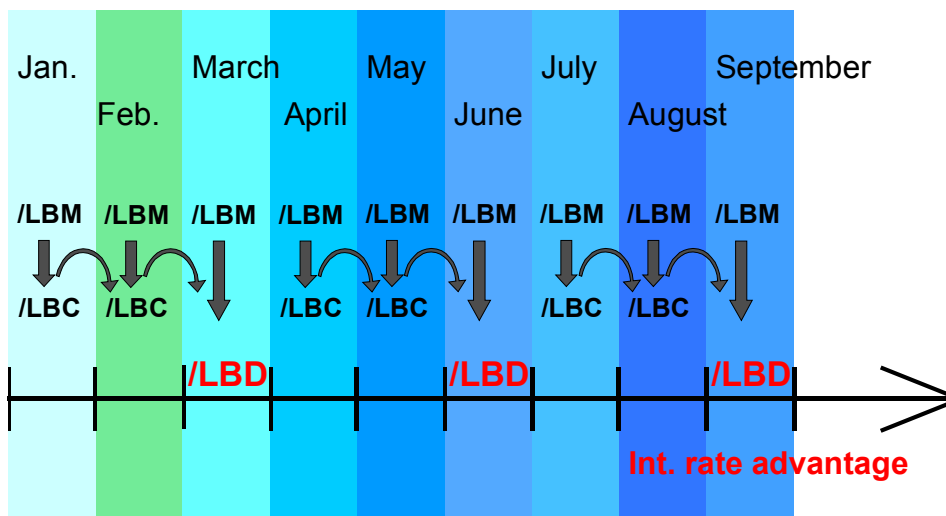
In your enterprise, payroll takes place on a monthly basis. You have created a loan for an employee with the following data:

Loan type	Building loan with payment by installments
Loan amount paid out	10,000
Loan payment	January 10 of the current year
Repayment start date	May 01 of the current year
Repayment installment	300 euro each month

The following values are stored in Customizing for the loan type *Building loan with repayment installment*:

Debit interest	5 %
Reference interest rate	6 %
Interest rate advantage	Selected
Interest calculation frequency	First period: 03
	Interval: 03
Repayment frequency	First period: 03
	Interval: 03

Calculating Imputed Income (Interest Rate Advantage)



For the first payroll period, imputed income of $10,000 \times 0.01 \times 21 / 360 = 5.83$ incurs (10,000 amount of loan, 1% interest rate advantage = 6% reference interest rate -- 5 % debit interest; for 21 days of interest, 360 days per year).

Example of an Imputed Income Calculation

For the remaining payroll periods up to the first repayment, calculation is as follows: $10,000 \times 0.01 \times 30 / 360 = 8.33$.

The interest for each payroll period is cumulated, and is due after 3 periods.

Wage Types

As well as the wage types listed in the [Example: Interest Calculation \[Page 31\]](#), the following wage types are created when calculating imputed income.

Period	Wage type	Wage type text	Amount	Explanation
Period 01	/LBC	Cumulated interest advantage	5.83	
	/LBM	Interest rate advantage/current period	5.83	21 days
Period 02	/LBC	Cumulated interest advantage	14.16	
	/LBM	Interest rate advantage/current period	8.33	
Period 03	/LBD	Taxed interest advantage	22.49	Due
	/LBM	Interest rate advantage/current period	8.33	

Evaluating a Loan

Use

You can use various forms of evaluation to check loans, which have already been included in the payroll run. You usually call up the evaluation reports described in the following documentation in the *General Report Selection* for several employees. In the Loans infotype (0045), you can also partially evaluate individual employees.

Scope of Function

The following evaluations are possible:

- Report RPCLOF00 (*Account Statement for Company Loans*)
The account statement lists all transactions and current balances for the employee's company loans. You can choose between the *Debit Memo - Credit Memo* or *Transaction - Balance* formats.
- Report RPCLOF00 (*Account Statement for Company Loans*)
The overview lists the total of all loans for each employee. The evaluation displays the results from the perspective of the evaluation period. In other words, it includes all of the changes made during the evaluation period, for example, even if they affect periods prior to the evaluation period because of retroactive accounting runs.
- Report RPCLOH00 (*Calculate Present Value for Company Loans*)
The overview lists the [present values \[Ext.\]](#) of the company loans.

Activities

To evaluate several employees, choose *Information systems* → *General report selection* → *Human resources* → *Payroll* → *Payroll <Country>* → *(Company) Loans* and call up the report you require. Enter the necessary data and execute the report.

To display an account statement or an overview of loans for an individual employee, choose *Goto* → *Account statement* or *Goto* → *Loans overview* in the *Loans* infotype (0045).

Loan Wage Types

Loan Wage Types

In *Payroll*, *loan* wage types start with /Lnn: In most of the countries that use the *Loans* component, the following wage types are used:

Wage type	Wage type text
/LBC	Cumulated interest advantage
/LBD	Taxed interest advantage
/LBM	Interest rate advantage/current period
/LCI	Interest-bearing capital
/LEE	Special repayment, external
/LEP	Special payroll repayment
/LER	Loan remission
/LEX	Complete repayment
/LFC	Cumulated interest exemption
/LFM	Interest exemption/current period
/LFP	Loan fees
/LIC	Cumulated interest
/LID	Interest due
/LIM	Interest for current period
/LLB	Loan balance
/LO3	Third-party loan payment
/LOE	External loan payment
/LOP	Loan payment - payroll
/LRP	Regular repayment (both installment and annuity loans)
/LTE	Transfer loan balance

Additional country-specific loan wage types are also used in some countries.