

# **Manual Accruals:** **Migration to new Accrual Engine,** **New Features** **And** **Incompatible Changes.** **Deep Dive, Full Version**

**May 2018, last updated in March 2023**

Product Version / LoB:

SAP S/4HANA, on-premise edition 1809 ~ 2022 LoB Finance

E2E Solution/Solution Capability:

Financial Accounting and Close

# Agenda

- Motivation: Migration of Manual Accruals in Rel. 1809
- Migration Activities
  - Migration of Customizing
    - Migration of Account Determination
    - Incompatible Changes Compared to Old Accrual Engine
  - Posting and Reversal of Accruals incl. Customizing
  - Details of Migration of Customizing
  - Migration of Transactional Data
    - Mass Data Project for Migrating Accrual Objects and Postings
    - Migration of Accrual Engine Postings: Technical Details
    - Exchange Rate Handling in Migration

Yellow: Some changes in rel.  
1909 (and downported to 1809  
SP3)

Blue: New in rel. 2020 FPS1  
(and downported to 2020 SP0,  
1909 and 1809)

# Agenda

- [Customizing the S/4HANA Accrual Engine](#)
- [New Features of Manual Accruals in Rel. 1809](#)
  - [EXCEL Upload of Accrual Objects and Period Data](#)
  - [Attachments to Accrual Objects](#)
  - [New Functions \*\*Pause\*\*, \*\*Suspend\*\* and Resume](#)
  - [Improved Display of Time-Dependency](#)
  - [Optional Review and Approval Process for Periodic Accrual Amounts \(Period End Closing Activity\)](#)
  - [Utilization and Release of Accruals](#)
    - [Postings with Reference to Accrual Object](#)
    - [Possible Scenarios](#)
    - [Customizing the Accrual Item Types](#)
    - [Online or Offline – With Examples](#)
    - [Meaning and Usage of Accrual Value Date](#)
    - [Meaning and Usage of Accrual Closing Frequency](#)
    - [Release of Accruals](#)
    - [Additional Account Assignments in Utilization and Release Postings](#)
  - [Cross-Company Code Postings](#)
  - [Posting Run Features](#)
  - [Fiori Apps](#)
  - [Reporting](#)
  - [Legacy Data Transfer](#)
  - [Archiving](#)
  - [Accrual Object Subcategory](#)
  - [Dynamic Selection in Tree UI Selection Screen](#)

Improved with rel. 1809 SP3  
and 1909 SP1

Yellow: New in rel. 1909  
(and downported to 1809 SP3)

Blue: New in rel. 2020  
(some of them downported to  
1909 and 1809)

Green: New in rel. 1909. and  
2020

Light Blue: New in rel. 2022

Orange: New in rel. 2021

# Agenda

- [Tips and Tricks](#)
  - [Invoice Deferral with Short- and Long-Term Deferrals: Shift Operator](#)
  - [Exchange Rate in Invoice Deferral](#)
  - [Group Tax Item and Supplier Line Item in Invoice Deferral](#)
- [Manual Accruals and Accrual Management](#)

Yellow: New in rel. 1909  
(and downported to 1809 SP3)

New in rel. 2020 FPS1  
(and downported to 2020 SP0,  
1909 and 1809)

**Motivation:**

**Migration of Manual Accruals**

**to**

**S/4HANA Accrual Engine**

# Manual Accruals Needs to be Migrated

- From release S/4HANA 1809 on the (new) **S/4HANA Accrual Engine** is available.
- The programs of application Manual Accruals have been switched from the old Accrual Engine to the S/4HANA Accrual Engine.
- As a consequence the data and customizing settings of Manual Accruals need to be **migrated** from old Accrual Engine to the S/4HANA Accrual Engine by the customer after the customer upgraded to release S/4HANA 1809.
- If the customer has been using Manual Accruals before the upgrade and wants to use Manual Accruals also after the upgrade, this migration is a **mandatory** activity.
- Note that in S/4HANA 1809 besides Manual Accruals there is also a new application *Purchase Order Accruals* available for the new S/4HANA Accrual Engine. This application is delivered for the first time with release 1809; so for *Purchase Order Accruals* there are no data in the Accrual Engine that would need to be migrated.

# Some Other Applications Stay on Old Accrual Engine

- The old Accrual Engine still exists in release S/4HANA 1809.
- There are some applications based on the old Accrual Engine that have **not** been switched to the (new) S/4HANA Accrual Engine by SAP development.
- For example
  - RE Real Estate Management,
  - GMA Grants Management,
  - IPM Intellectual Properties Management,
  - IPMO IPM: Provisions for Outgoing Royalties.
- These applications remain on the old Accrual Engine:  
**No migration** is required for those applications.
- Only the application *Manual Accruals* was switched to the (new) S/4HANA Accrual Engine and hence requires a migration of its data.

# Motivation: Advantages of (New) S/4HANA Accrual Engine

## The S/4HANA Accrual Engine

- Is optimized for S/4HANA
  - It is fully integrated into the General Ledger:
    - All currencies of General Ledger are supported.
    - The Accrual Engine postings are stored only as line items of the universal journal entry, in table ACDOCA.
    - The fiscal year variant of the G/L ledgers are supported.
    - Standard FI reversal, e.g. using transaction FB08 or F.80 is supported.
  - There is no redundant storage of the postings as original document.
    - No reconciliation effort any more with G/L:  
Transaction ACACTRANSFER 'Transferral of ACE Docs to Accting' is obsolete.
  - There are no summary records in the Accrual Engine:
    - No limitation of the number of fields in reporting.
    - No separate balance carry forward run required. The G/L balance carry forward is sufficient.  
Transaction ACACCARRYFORWARD is obsolete.
- Enables Complex Postings
  - More than two line items are possible by customer-defined of posting schemas.
- Allows optional review and/or approval of periodic accruals at period end.

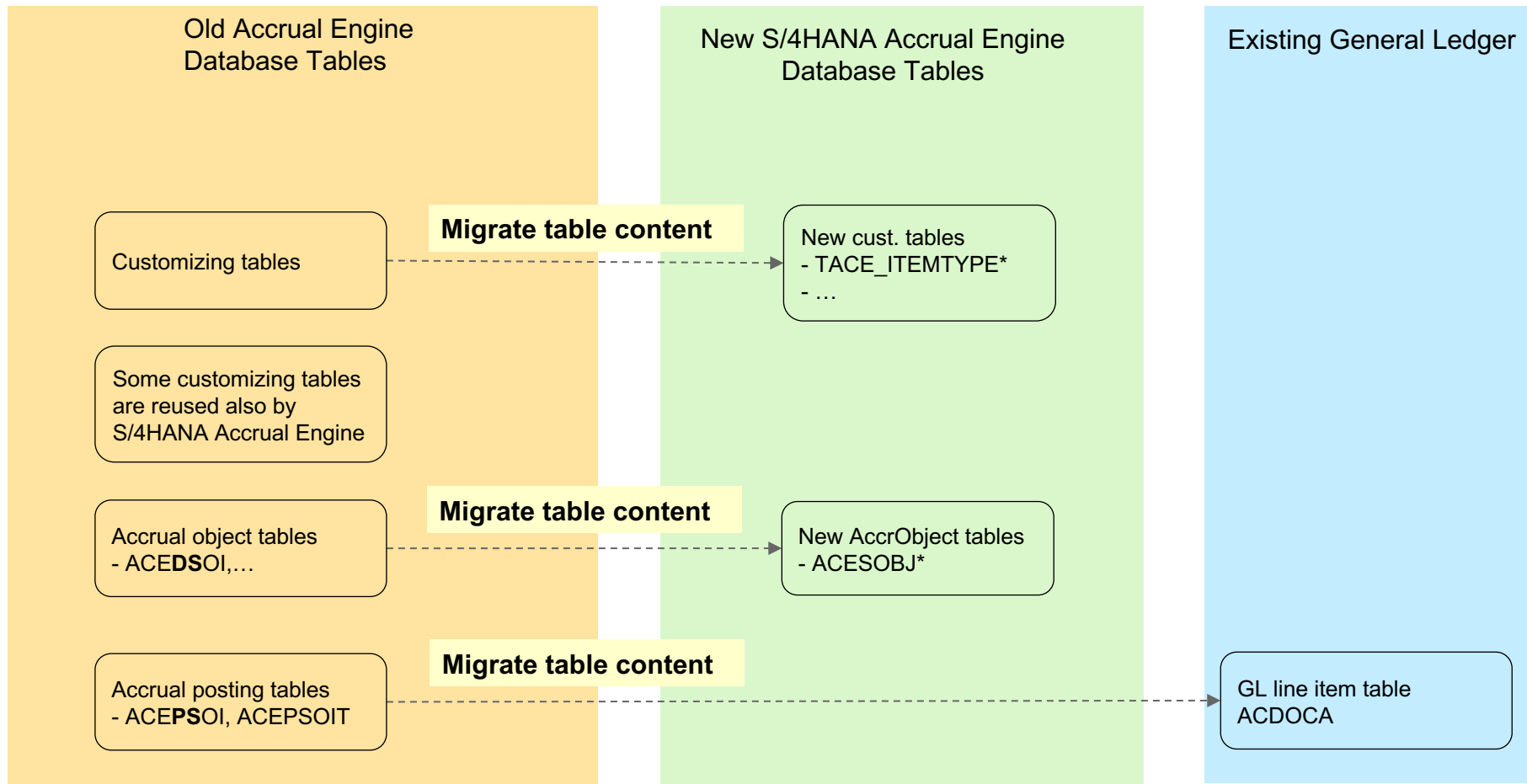


# Migration Activities

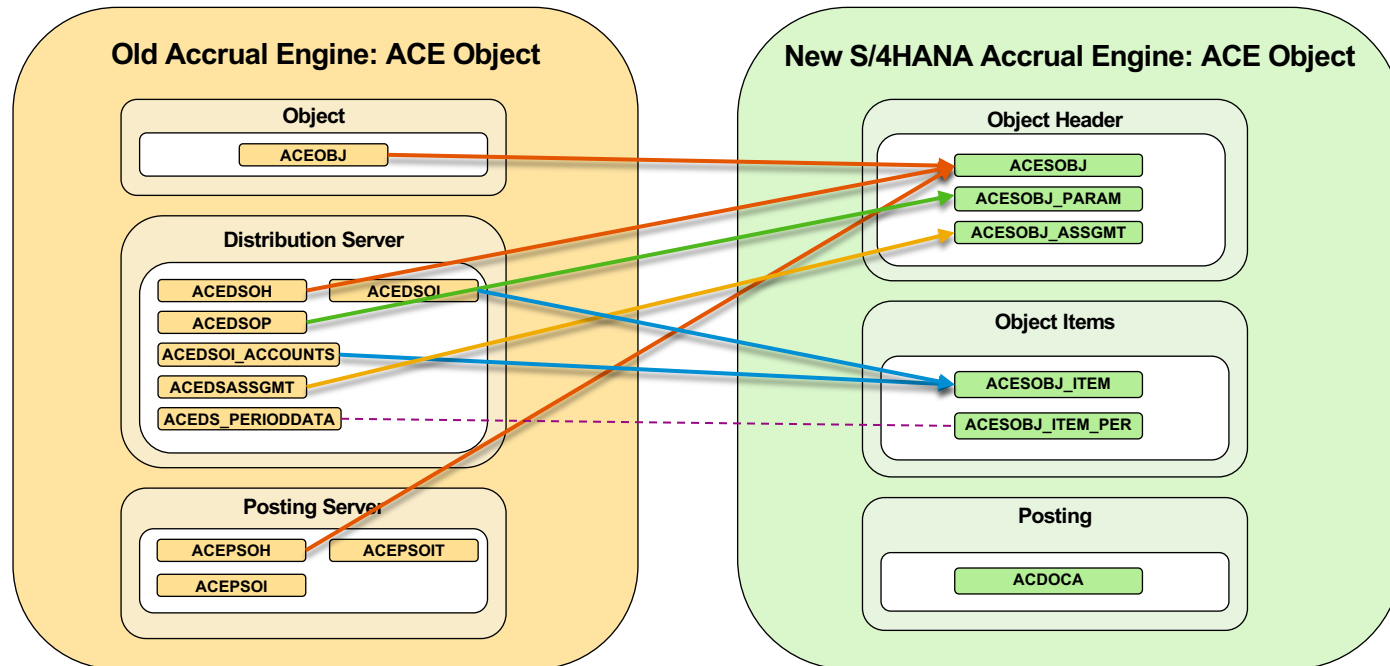
# Migrate Customizing and Transactional Data

- The data model of customizing **and** transactional data of the (new) S/4HANA Accrual Engine have changed compared to the old Accrual Engine.
- Several of the old tables have been replaced by new tables.
- As a consequence, both type of tables, customizing and transactional data need to be migrated after the customer has upgraded/converted from to S/4HANA 1809 or higher.
- This migration is necessary after an upgrade from
  - a ,classic‘ ERP release,
  - an S/4HANA Finance (aka sFIN) release,
  - an S/4HANA release < 1809.
- Note: The transactional data of the Accrual Engine consist of
  - Accrual **Objects** and
  - Accrual **Postings**.

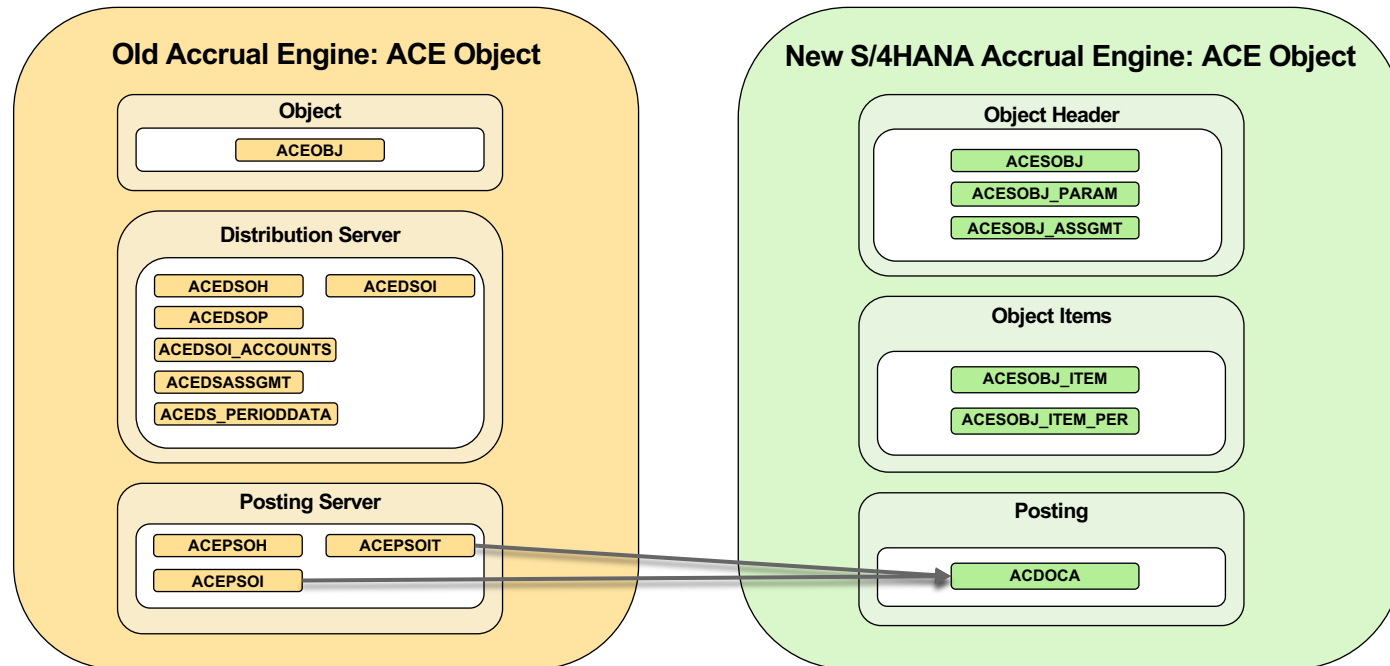
# Old Accrual Engine Versus (New) S/4 HANA Accrual Engine: Required Migrations



# Migration of Accrual Object Data: Mapping of Data



# Migration of Accrual Postings: Mapping of Data



# Activities in Implementation Guide (IMG)

The customizing activities that need to be performed in order to prepare and execute the migration of the Accrual Engine data can be found in the IMG (transaction SPRO) in two separate folders:

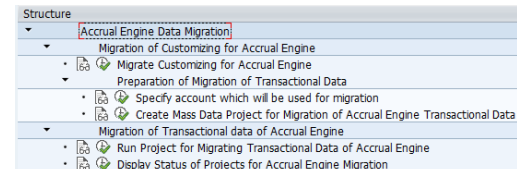
- Migration of Accrual Engine Customizing:  
*Conversion of Accounting to SAP S/4HANA -> Preparations and Migration of Customizing -> Preparations and Migration of Customizing for Accrual Engine.*
- Migration of Accrual Engine Transactional Data (= accrual objects and accrual postings):  
*Conversion of Accounting to SAP S/4HANA -> Activities **after** Migration -> Migration of Accrual Engine Data.*
- In other words, the migration of the Accrual Engine transactional data can be performed after the migration of all other postings in the system: The migration of the Accrual Engine is technically independent from the migration of the other postings like FI or CO postings. Advantages of this separate migration are:
  - It is possible to use the system and perform all kinds of postings already despite the Accrual Engine was not yet migrated; only applications that are using the Accrual Engine will not work until the Accrual Engine was migrated.
  - The Accrual Engine can be migrated at a different point in time, for example on a separate weekend, in case the other migration activities are so time-consuming that the additional migration of the Accrual Engine would not fit into the same weekend.
- Technically, the migration of Accrual Engine transactional data is based on a separate tool compared to the migration of other postings: It uses the mass data processing cockpit which is an SAP standard tool for mass data processing.

# IMG Activities for Customers Upgrading from S/4HANA Finance or From S/4HANA Releases < 1809

- Customers upgrading from a release
  - S/4HANA < 1809 or
  - S/4HANA Finance

to release 1809 also need to migrate the Accrual Engine data for appl. Manual Accruals, but such customers have already completed the conversion to S/4HANA.

- Such customers would in general not enter the IMG folder *Conversion of Accounting to SAP S/4HANA* any more.
  - To inform such customers that they need to perform the migration of the Accrual Engine, a corresponding error message will be raised by the system as soon as the old Accrual Engine is used for Manual Accruals.
  - The IMG activities for migrating the Accrual Engine are splitted into two separate folders in the IMG:
    - migration of Customizing migration and
    - migration of transactional data.
- This is not intuitive for such customers: It is hard to find these two folders.
- To overcome these splitted IMG activities, an additional transaction is offered that bundles all activities for the migration of the Accrual Engine, transaction **ACEMIGIMG**. This transaction is not available in the IMG.



# Interplay of Customizing Migration and Transactional Data Migration

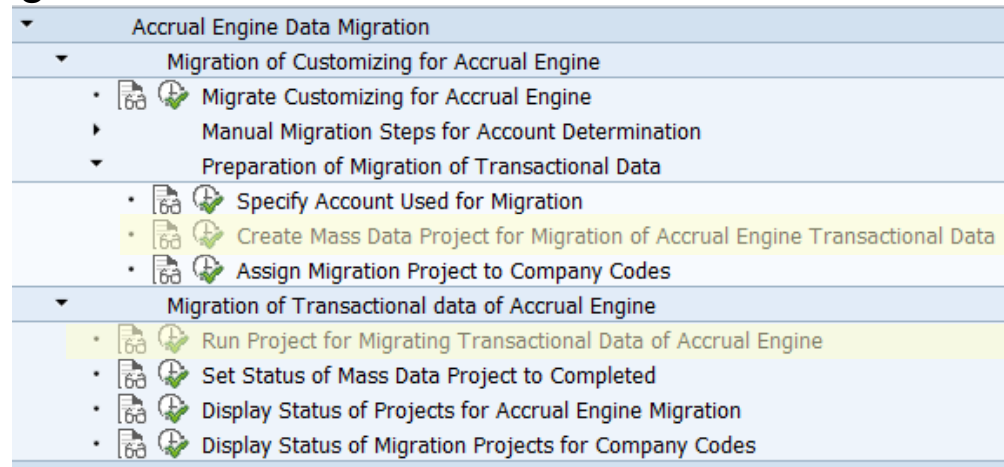
There is an important difference between the migration of Customizing compared to the migration of transactional data:

- The content of Customizing tables is migrated in the Customizing system. Afterwards, the result of this migration is **transported** into the productive system.
- In contrary to Customizing table content, the content of application tables (= transactional data), that is, the postings and accrual objects, need to be migrated **in each system separately!**  
This is required, because postings and accrual objects are of course not transported.
- The migration of the transactional data evaluates the Customizing.  
As a consequence it is important to migrate the Customizing first.
- Before the migration of is started in the productive system, the migrated Customizing must be imported there first.
- For customers that upgraded from an older release, the creation of accrual objects and accrual postings is only allowed after both types of migration have been finished!  
A corresponding check is performed by the system.

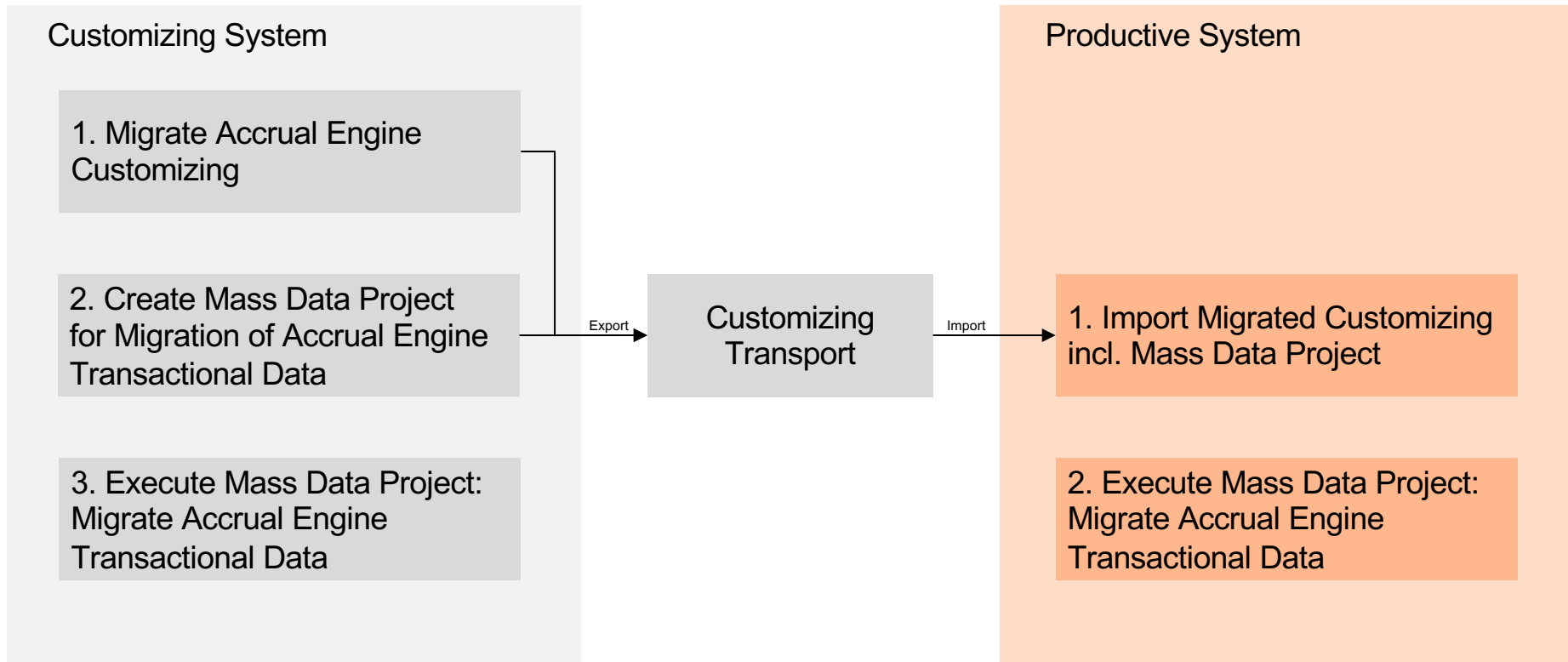


# Transactional Data Migration: Mass Data Project

- The migration of the transactional data (accrual objects and accrual postings) of the Accrual Engine is performed by creating and executing a mass data project (project type = 70).
- The mass data project is created in the Customizing system.
- This mass data project definition itself is a **Customizing** entity: The project is transported to the productive system like the migrated Customizing.
- After importing the mass data project in the productive system, this project can be executed there.
- Once the execution of the mass data project has been completed, the migration was done and the Accrual Engine can be used again for creation of new accrual objects and performing accrual postings etc.

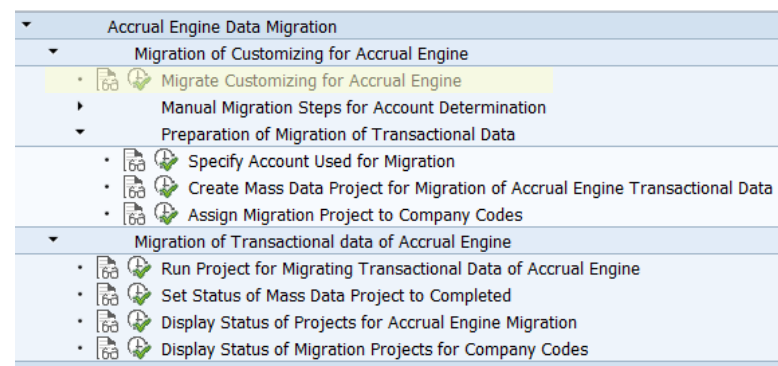


# Accrual Engine Migration: Activities in Customizing and Productive System



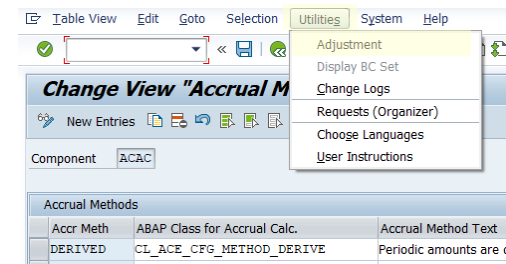
# Which Customers Must Migrate Manual Accruals?

- The migration of the Accrual Engine customizing for Manual Accruals is mandatory only for those upgrade customers who have been using the Manual Accruals already before the upgrade.
- But also for upgrade customers that are planning to start using Manual Accruals in release 1809 for the first time, it can be reasonable to perform the customizing migration of the Accrual Engine:
  - In upgraded systems, in clients <> 000 the SAP-delivered default customizing for the S/4HANA Accrual Engine is not available.
  - If the customizing of the old Accrual Engine exists in clients <> 000, this existing customizing can be migrated there into the new Accrual Engine:
    - The table TACE\_ACRTYPE is a customizing table of the old Accrual Engine. If it contains table entries, such a migration is possible.
    - Otherwise the default customizing of the new Accrual Engine can be imported from client 000. This is the recommended approach. See next slide for details.



# SAP-Delivered Default Customizing for Manual Accruals

- Use-Case: The customer system was upgraded to release S/4HANA 1809 or higher – and after the upgrade the customer wants to use Manual Accruals for the first time.
- You can find the default customizing settings for the S/4HANA Accrual Engine in client 000.
  - After upgrade from a former release to release S/4HANA 1809 or higher, you will find the default customizing only in client 000 but not in other clients, because newly delivered customizing is only imported into client 000 during the upgrade.
- There are several ways to import the default customizing from client 000 into the productive client (in the customizing system):
  - You can logon to client 000 and add the purchase order accruals customizing into a customizing transport:
    - Start all IMG activities of Accruals Management, transaction ACEIMG in client 000 one by one and
    - perform in each IMG activity the function *Table View* -> *Transport* for all table entries.
    - Afterwards, logon to the productive client and start transaction **SCC1** in order to import the customizing transport from client 000.
  - Alternatively you can logon to the productive client in your customizing system and directly copy the default customizing from client 000 for each IMG activity one by one:
    - Start the IMG activities of Accruals Management, transaction ACEIMG in the productive client (of your customizing system).
    - In each IMG activity use the function **Utilities** -> **Adjustment** and then the *Adjust* and then the *Add Entry* button to copy the entries from client 000.



# Data Model in the Accrual Engine

The data in the Accrual Engine consist of the following types of data:

- **Customizing data**
  - The Accrual Engine is a flexible tool that is used by different applications to post accruals. As a consequence the Accrual Engine offers several customizing settings.
- **Accrual Object data**
  - Accrual Objects consist of time-independent and of time-dependent data. They represent contract-like data for which accruals shall be calculated and posted. Accrual Objects have a hierarchical structure:
    - Accrual Objects consist of one or several Accrual Subobjects.  
When thinking in terms of contracts, the Accrual Subobjects can be regarded as representation of contract items.
    - Accrual Subobjects have one or several Accrual Items.  
An Accrual Item contains the total amount to be accrued and the calculation algorithm (accrual method).  
When thinking in terms of contracts the Accrual Items represent the amounts that are to be accrued for a contract item, for example revenue, bonus, interest, discount,..
- **Postings**
  - From release S/4HANA 1809 on, the postings of the Accrual Engine are stored in table ACDOCA.  
Note: Before this release, the postings were stored not only in FI (as Accounting Document), but in addition they were stored as original documents within the Accrual Engine (in table ACEPSOIT).

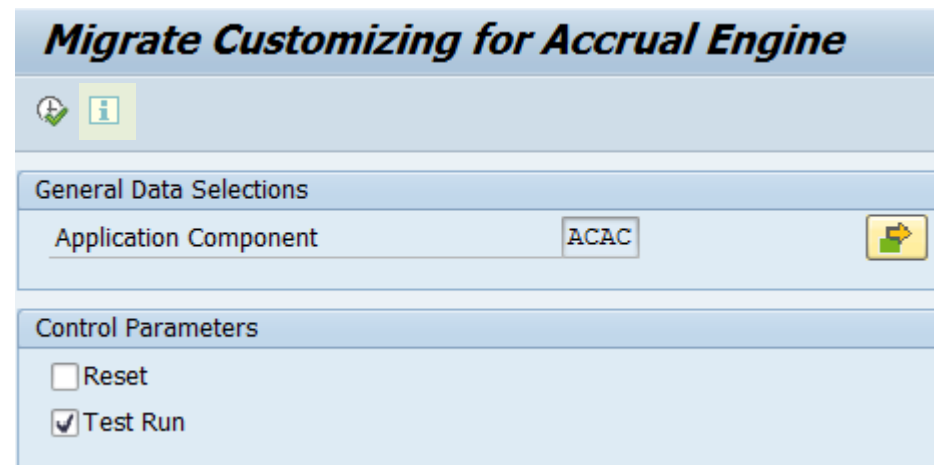
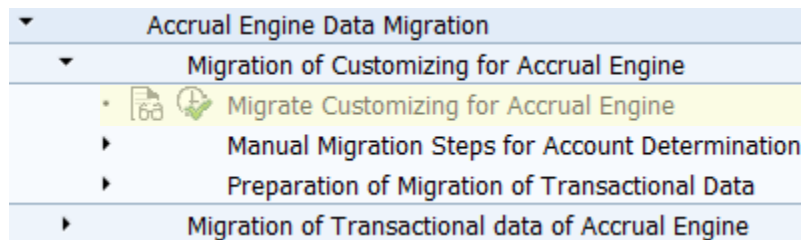
After upgrading to S/4HANA 1809, all three types of data need to be migrated: Accrual Objects and Postings are migrated within the same migration program, but the customizing data need to be migrated separately.

# **Migration of Customizing**

# IMG activity for Customizing Migration

You can perform the migration of Accrual Engine customizing with the IMG activity Migrate Customizing for Accrual Engine. This is transaction ACE\_MIGRATE\_CUST.

- You can find this transaction in the IMG, transaction SPRO in folder *Conversion of Accounting to SAP S/4HANA -> Preparations and Migration of Customizing -> Preparations and Migration of Customizing for Accrual Engine*.
- As an alternative you find this transaction also in the separate IMG, transaction ACEMIGIMG.
- This transaction has a documentation as info button and the fields on the selection screen have a documentation that can be viewed using the F1 button.



# Reasons for Customizing Migration

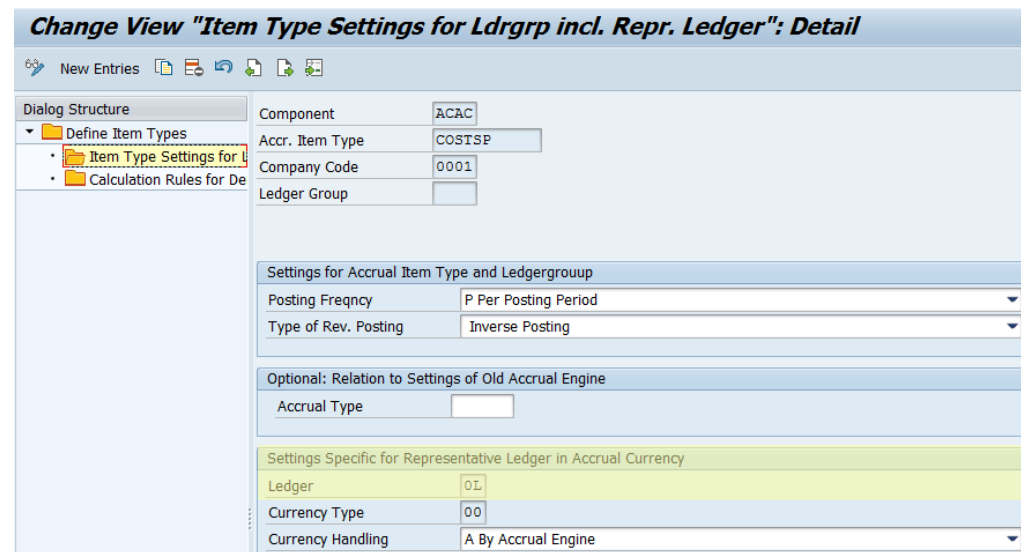
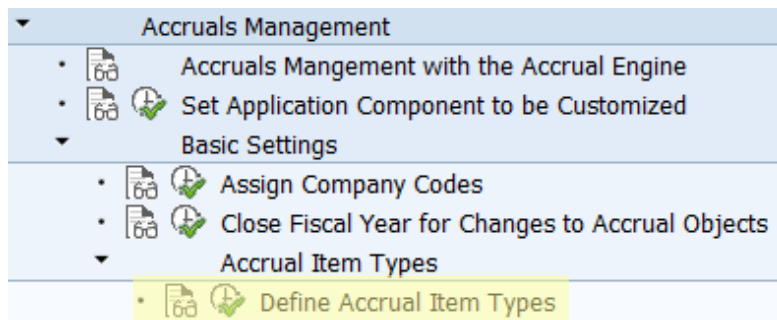
- The customizing of the old Accrual Engine is mainly based on the entities
  - Accrual Type and
  - Accounting Principle.
- Both fields are replaced in the (new) S/4HANA Accrual Engine:
  - **Accrual Type** (length char6) is replaced by the new field **Accrual Item Type** (length char11) .
  - **Accounting Principle** is replaced
    - By the field **Ledger** in the database tables of the accrual objects, for example in table ACESOBJ\_ITEM.  
The ledger is the representative ledger of this ledgergroup to which the Accounting Principle is assigned, see IMG activity *Financial Accounting (New) -> Financial Accounting Global Settings (New) -> Ledgers -> Parallel Accounting -> Assign Accounting Principle to Ledger Groups* (view V\_FAGL\_TRGT\_LDGR).
    - By the field **Ledgergroup** in the screens like transaction ACACTREE02 instead of the ledger.  
But also in the screens the field Ledger is available as hidden. The ledger is the representative ledger of this ledgergroup.
- Several of the customizing tables of the old Accrual Engine could not be reused by the (new) S/4HANA Accrual Engine customizing tables as a consequence.  
Also big parts of the source code of the old Accrual Engine, incl. BAdIs etc. could not be reused by the S/4HANA Accrual Engine.



# Current Restriction: Representative Ledger

In release 1809 the S/4HANA Accrual Engine has the following restrictions:

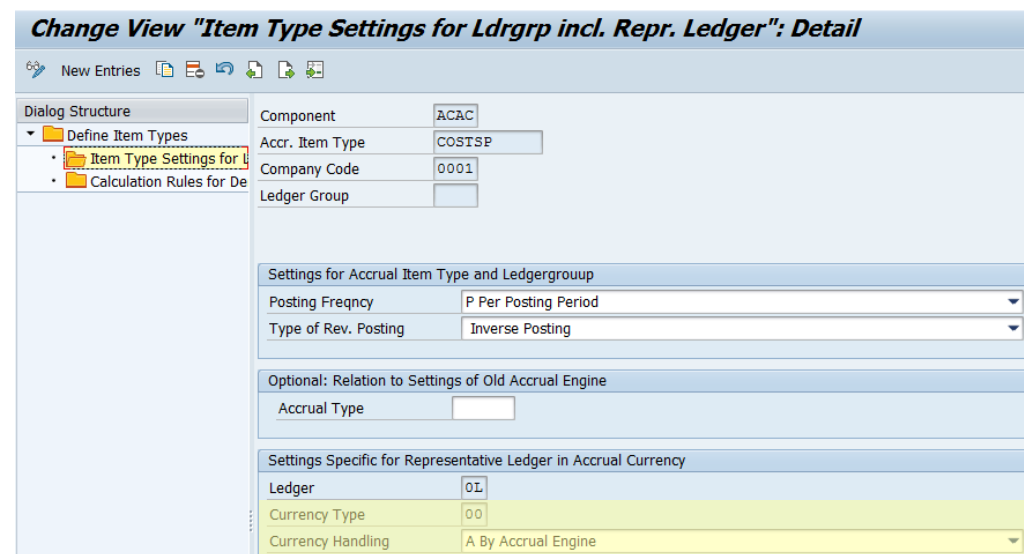
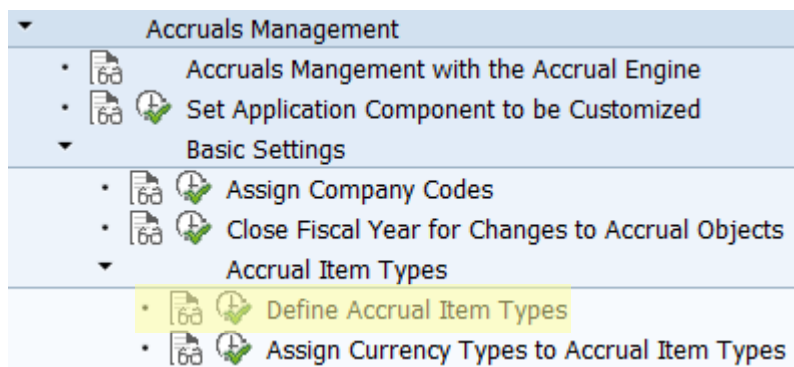
- Accruals are only calculated only for the **representative ledger** of the ledgergroup that is assigned to the accrual item type in IMG activity “Define Accrual Item Types”.
  - To save memory in the database, accrual items are stored only for the representative ledger of the ledgergroup (table ACESOBJ\_ITEM).
  - Note: For ledgergroup <space> the leading ledger 0L is the representative ledger.



# Current Restriction: Transaction Currency

In release 1809 the S/4HANA Accrual Engine has the following restrictions:

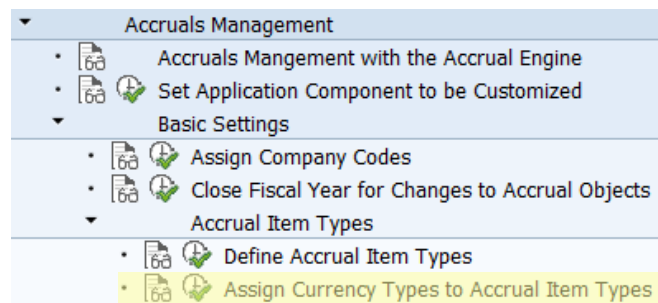
- Accrual amounts are handled only in **transaction currency** (currency type 00).
- This means: Only currency type 00 can be customized as handled *by Accrual Engine* in the IMG activity *Define Accrual Item Types*.
- The setting **By Accrual Engine** for the currency handling of currency type 00 means that
  - The S/4HANA Accrual Engine calculates the accrual amounts in this currency type.
  - The amounts can be edited/changed by a user in this currency type.
  - The amounts in other currency types are read-only in the screens of the Accrual Engine, for example in transaction AACTREE02.



# Current Restriction: Additional G/L Currencies

In release 1809 the S/4HANA Accrual Engine has the following restrictions:

- Settings can be defined for additional currency types  $\neq$  00 in the Accrual Engine, but only **transaction currency** (currency type 00) can be defined as handled *by Accrual Engine*:
  - This means that the S/4HANA Accrual Engine is currently restricted to calculate accruals only in transaction currency.
- Additional currencies are only enabled to be calculated by either by General Ledger currency conversion logic – or set to zero.
- You can create new entries in this IMG activity **only** for the **representative** ledger that is assigned to the accrual item type in the other IMG activity *Define Accrual Item Types*.
  - This means that the S/4HANA Accrual Engine is currently restricted to calculate accruals only for the representative ledger.
  - If the accrual item type is assigned to several ledgergroups, for each representative ledger entries for currency types can be maintained in *Assign Currency Types to Accrual Item Types*.



**Change View "Accrual Item Type Settings for Currency Type": Overview**

Component: ACAC

Accr. Item Type	Company Code	Ledger	Crcy Type	Currency Handling
COSTSP	0001	0L	10	G Calculated by General Ledger (by Curr. Conversion)
RVNUEP	0001	0L	00	A By Accrual Engine
RVNUES	0001	0L	00	A By Accrual Engine

# Customizing Migration: Migration Logic for Accrual Item Type and Ledger

The migration program will behave as follows to determine the values for the new fields:

- Concerning **Accrual Item Types**:
  - The accrual types of the old Accrual Engine are migrated to accrual item types.
  - In case several accounting principles are posted into the same ledger, the accrual item type values are generated by the migration as a concatenation of accrual type and accounting principle.
- Concerning **Ledgers**:
  - The old Accrual Engine has posted the same accrual amount into all ledgers that belong to the ledgergroup of the Accounting Principle (view V\_FAGL\_TRGT\_LDGR).
  - In the S/4HANA Accrual Engine the representative ledger of this ledgergroup will be used to calculate the accrual amounts.  
Note: The calculation of accrual amounts is done for the ledger because the currencies are defined on the level of ledger and company code in General Ledger, see transaction FINSC\_LEDGER.
  - All other ledgers (of this ledgergroup) will inherit the accrual amounts like before release 1809.

# Customizing Migration: Migration Logic for Multiple Currencies

- The S/4HANA S/4HANA Accrual Engine, beyond ledgers also multiple currencies are available – in contrast to the old Accrual Engine.
  - Additional Customizing is offered in order to enable the customer to define the usage of additional currency types in the Accrual Engine.
- The migration program will behave as follows with respect to **multiple currencies**:
  - The migration program for the Customizing migration will **not** activate the multiple currencies feature in the S/4HANA Accrual Engine – this way the migration program makes sure that the S/4HANA Accrual Engine will behave after the migration in the same way as the old Accrual Engine did.

# Customizing: List of Obsolete Tables (1)

- In the following list of tables, the term 'obsolete' means that this table is not used by the (new) S/4HANA Accrual Engine.
- In the old Accrual Engine these tables are still used, that is, they are not obsolete.

Obsolete table	Reason for being obsolete	New table that replaces obsolete table
TACE_ACRTYPE	Accrual Type is replaced by Accrual Item Type. In rel. 1809 SP3 the fields XPOST* are moved to table TACE_ITEMTYPES, see separate slide.	TACE_ITEMTYPE and TACE_ITEMTYPES
TACE_ACRTYPET	Accrual Type Text: Same as for Accrual Type.	TACE_ITEMTYPET
TACE_ACRTYPE_OPN	Fields Accrual Type and Accounting Principle are key fields.	TACE_ITEMTYPED
TACE_DS_CALC	Fields Accrual Type and Accounting Principle are key fields.	TACE_ITEMTYPE and TACE_ITEMTYPEEC
TACE_PS_POST	Fields Accrual Type and Accounting Principle are key fields.	TACE_ITEMTYPEEL and TACE_ITEMTYPES
TACE_VSR_001	Field Accounting Principle is key field.	Replaced by BAdI
TACE001T	Text for Company Code is defined in table T001.	T001

## Customizing: List of Obsolete Tables (2)

Obsolete table	When is it obsolete?	New table that replaces obsolete table
TACEPSRULE	New Account Determination based on fixed table. For more flexibility a BAdI can be used.	TACAC_ACCDETS4
TACEPSRULET	Same as above (table TACEPSRULE).	Same as above (table TACEPSRULE).
TACEPSSYM	Same as above (table TACEPSRULE).	Same as above (table TACEPSRULE).
TACEPSSYMT	Same as above (table TACEPSRULE).	Same as above (table TACEPSRULE).
TACE_COMBINATION	It is obsolete (=not used any more) by app. components ACAC (Manual Accruals) and POAC (Purchase Order Accruals).	G/L customizing, table FINSC_LD_CMP_AP.

# **Migration of Customizing:** **Account Determination**

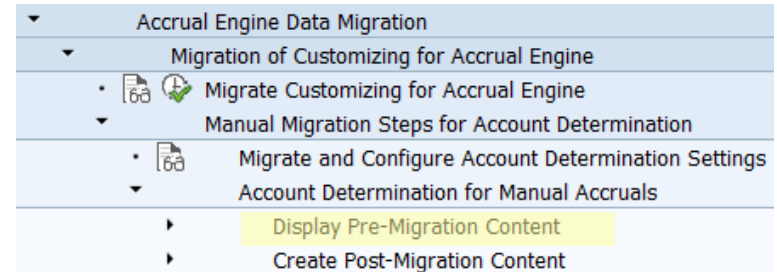


# Migration: Account Determination

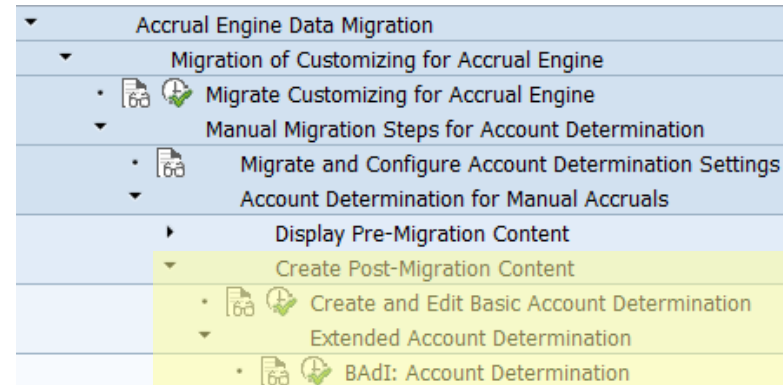
- In the old Accrual Engine, the account determination for *Manual Accruals* was based on a **flexible** tool:
  - As a first step, the customer could define the fields on which the accrual and P&L accounts shall depend. The system has generated corresponding tables behind the scenes.
  - In a second step, the customer could maintain the entries in these generated tables.
- In the (new) S/4HANA Accrual Engine the account determination is done differently:
  - SAP delivers a customizing table with a **fixed** set of fields where the customer can only maintain entries. A customer cannot influence the set of fields on which the accrual and P&L account depends. The corresponding IMG activity is *Create and Edit Basic Account Determination*.
  - If the SAP-delivered fixed table does not meet the customer requirements, the **BAdI** `BADI_ACE_DOCUMENT_ACCDET_CUST` can be used to determine the accounts.
- Since the concepts are so different between old and new Accrual Engine, the migration of the account determination content must be done **manually** by the customer: No automated migration can be offered by SAP.
  - Because transaction type Change of the Inception (U) and Transfer of Periodic Recognition (C) are not used in S/4HANA Accrual Engine, it's not necessary to migrate account determination for them.

# Account Determination: Manual Migration Steps

- You can display the content of the account determination of old Accrual Engine using transaction ACEMIGIMG in folder *Display Pre-Migration Content*.



- Afterwards you can maintain the account determination of the (new) S/4HANA Accrual Engine in folder *Create Post-Migration Content*.



# Account Determination Migration: Split Entries

- The IMG activity *Create and Edit Basic Account Determination* of the S/4HANA Accrual Engine is based on a fixed table that SAP delivers. The customer can maintain entries in this table.
- The new table is different compared to the table used in the *Simple Account Determination* of the old Accrual Engine:
- If the customer used the simple account determination in the old Accrual Engine, he needs to enter two rows in the account determination of the S/4HANA Accrual Engine for each row of the account determination of the old Accrual Engine:
  - In the simple account determination in the old Accrual Engine each row contained a **start-** and a **target account** –
  - whereas the account determination of the S/4HANA Accrual Engine contains only one single account in each row.
- Example for periodic accrual postings:
  - In the account determination of the old Accrual Engine the start account is usually a profit account and the target account is the accrual account.
  - In the account determination of the S/4HANA Accrual Engine the customer needs to create two rows:
    - one row for the accrual account; it has symbolic account PER\_ACCR\_ACCNT assigned.
    - This account must be a balance sheet account, because its balance must be carried forwarded to the next fiscal year if the lifetime of the accrual object is longer than one year. **[The statement is invalid anymore, see remark in next page]**
    - a separate row for the profit account; it has symbolic account PER\_OFFSTNG\_ACCNT assigned.
  - In general, the this account can be a profit or a balance sheet account.

**Accrual Engine - Account Determination: Change Rule Values**

Derivation rule test

No value filter active

E Accounting Principle	Chart of Accounts	Accrual Type	Company Code	A...	Start Account	Target account	Document type
IFRS	INT	COSTSP	0001		100000	211000	SA

Old Accrual Engine: 1 entry in account determination table.

**New Entries: Overview of Added Entries**

Account Determination for Manual Accruals

Company Code	Accr Object Cat	Accr Item Type	Symbolic Account	G/L Account
0001		COSTS	PER_ACCR_ACCNT	100000
0001		COSTS	PER_OFFSTNG_ACCNT	211000

S/4HANA Accrual Engine: 2 entries in account determination table.

# Basic Account Determination: Value <SPACE>

- In each field of the account determination table it is allowed to enter the value <space>.
- The value <space> means “valid for all”.
- Important:** For the symbolic accounts ...ACCR\_ACCNT a **balance sheet** account must be entered.
  - Reason is that this symbolic account is used in the posting schema of the (new) S/4HANA Accrual Engine where the corresponding line item has a value between 9001-9006 in field Subledger-Specific Line Item Type: The line items with those values 9001-9006 must be **carried forward** by the G/L balance carry forward run, transaction FAGLVTR: The (new) S/4HANA Accrual Engine calculates the already posted accruals by evaluating those line items in table ACDOCA in the **current** year!
  - Remark:** With Note 2838716 (Rel. 1909 FPS1 and 1809 SP3), balance carry forward is not required for Accrual Postings, which means the symbolic accounts ...ACCR\_ACCNT don't have to be a balance sheet account in releases 1909 FPS1 and 1809 SP3 onwards.

Empty value means: This is the default entry, if there is no entry with a value <> space.

Usage of Symbolic Accounts is the new concept that replaces the old Accrual Engine concept of start- and target account and transaction type.

## Change View "Account Determination for Manual Accruals": Overview

Account Determination for Manual Accruals					
Company Code	Acc Object Cat.	Accr. Item Type	Symbolic Account	G/L Account	
0001		COSTS	FIN_ACCR_ACCNT	211000	
0001	ORENTING	COSTS	FIN_ACCR_ACCNT	211000	
0001	ORENTING	COSTS	FIN_OFFSTNG_ACCNT	470700	
0001	ORENTING	COSTS			
0001	ORENTING	COSTS			
0001	ORENTING	COSTS			
0001	ORENTING	COSTS			
0001	ORENTING	COSTSP			
0001	ORENTING	COSTSP			
0001	ORENTING	RVNUEP			
0001	ORENTING	RVNUEP			
0001	ORENTING	RVNUES			
0001	ORENTING	RVNUES			
0001	ORENTING	RVNUES			
0001	ORENTING	RVNUES			

Application for Posting Schema ACE	
Symbolic Account	Symbolic Account Description
FIN_ACCR_ACCNT	Accrual Account for Final Posting
FIN_OFFSTNG_ACCNT	Offsetting Account for Final Posting
INC_ACCR_ACCNT	Accrual Account for Opening Posting
INC_OFFSTNG_ACCNT	Offsetting Account for Opening Posting
PER_ACCR_ACCNT	Accrual Account for Periodic Posting
PER_OFFSTNG_ACCNT	Offsetting Account for Periodic Posting

### Accrual Engine Data Migration

#### Migration of Customizing for Accrual Engine

##### Migrate Customizing for Accrual Engine

#### Manual Migration Steps for Account Determination

##### Migrate and Configure Account Determination Settings

#### Account Determination for Manual Accruals

##### Display Pre-Migration Content

##### Create Post-Migration Content

##### Create and Edit Basic Account Determination

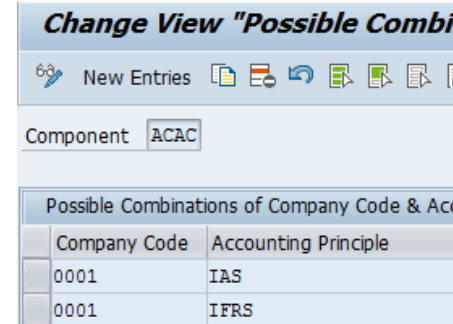
#### Extended Account Determination

##### BAdI: Account Determination

# **S/4HANA Accrual Engine:** **Incompatible Changes** **Compared to** **Old Accrual Engine**

# Obsolete: Define Combinations of Company Code and Accounting Principle

- In the old Accrual Engine the combinations of company codes and Accounting Principles had to be defined in the Accrual Engine with IMG activity: Transaction ACEC -> *Basic Settings* -> *Accounting Principles* -> *Assign Accounting Principle to Company Code* (view V\_TACE\_COMBINATN, table TACE\_COMBINATION).
- In the S/4HANA Accrual Engine this feature is not evaluated any more, since the Accounting Principle has been replaced by Ledger and ledgergroup.
- Note: In General Ledger, the assignment of company codes to ledgers is defined in the IMG activity *Financial Accounting (New)* -> *Financial Accounting Global Settings (New)* -> *Ledgers* -> *Ledger* -> *Define Settings for Ledgers and Currency Types* (transaction FINSC\_LEDGER, table FINSC\_LD\_CMP).



The screenshot shows the SAP transaction ACEC interface. At the top, there is a title bar 'Change View "Possible Combinations of Company Code & Accounting Principle"'. Below it, there is a toolbar with icons for 'New Entries', 'Print', 'Refresh', 'Back', 'Forward', 'Find', and 'Help'. A 'Component' field is set to 'ACAC'. Below this, a table titled 'Possible Combinations of Company Code & Accounting Principle' is displayed. The table has two columns: 'Company Code' and 'Accounting Principle'. It contains two rows of data: one for company code '0001' with accounting principle 'IAS', and another for company code '0001' with accounting principle 'IFRS'.

Company Code	Accounting Principle
0001	IAS
0001	IFRS

# Posting without Accounting Principle

- In the old Accrual Engine postings were performed using the Accounting Principle:
- During the accrual posting, in the accounting interface a ledgergroup was derived from the Accounting Principle. So the accrual postings are always performed to a ledgergroup, not to single ledgers.
- But with the new S/4HANA Accrual Engine, a long term goal is to enable manual postings to accrual objects in the app *Post General Journal Entries* (and transaction FB01 for example): Such postings can be done to any ledger or ledgergroup: A user cannot enter an Accounting Principle in those apps/transactions.
- So using the Accounting Principle in the S/4HANA Accrual Engine could lead to unexpected results – or restrictions, for example: Manual postings would only be allowed to the same ledgergroup that is assigned to the Accounting Principle that is used in the Accrual Engine. Such restrictions are avoided with the new posting logic:
- The S/4HANA Accrual Engine can post without ledgergroup, that is, with ledgergroup = <space>.

# Replaced: Validation During Creation or Change of an Accrual Object

- In the old Accrual Engine the customer could activate a **validation** in the Accrual Engine in order to validate the data of an accrual object during it's creation or change:
  - Application Area AC, call-up point 1 and call-up point 2, see transaction GGB0.
- This validation was using the field Accounting Principle in its DDIC structure ACEVSR\_VAL\_PAR.
- Also the activation of the validation was done on the level of Accounting Principle in table TACE\_VSR\_001.
- Since the Accounting Principle was replaced by ledger and ledgergroup in the Accrual Engine, this validation cannot be used any more: In the new Accrual Engine the BAdI BADI\_ACE\_MDO\_CHECK\_CUST is offered instead. In release 1809 this BAdI is available with note 2695554.



# Accrual-Methods are ABAP Class-Based

- In the old Accrual Engine the customer could develop his own accrual methods by programming/developing corresponding function modules that were entered in the IMG activity *Define Accrual Methods* (customizing view V\_TACE\_ACCMETHOD, transaction SM30).
- In the new S/4HANA Accrual Engine function modules are not supported anymore. Instead, accrual methods are using ABAP classes instead of function modules.
- If a customer had developed his own function modules (used in accrual methods, view V\_TACE\_ACCMETHOD), he needs to re-develop the logic of these function modules as ABAP classes.
  - If customer needs to develop ABAP classes, he can have a look at the source code of the other classes, for example class CL\_ACE\_CFG\_METHOD\_LINEAR\_P1.
  - The ABAP class(es) must include the interface IF\_ACE\_CFG\_METHOD.
- This „manual migration“ of the accrual methods is described in the IMG activity Transform Customer-Developed Accrual Methods into ABAP Classes (see transaction ACEMIGIMG).
  - This IMG activity is available from release S/4HANA 1809 SP3.
  - The SAP-delivered standard accrual methods are automatically migrated to ABAP classes, that is, the customizing migration program enters an ABAP class in the affected accrual methods.
  - Only customer-developed function modules cannot be migrated automatically.

# Changed: Fiscal Year Variant Determination

- The old Accrual Engine has always used the fiscal year variant from the master data of the company code (leading ledger, table field T001-PERIV) for all Accounting Principles.
- The S/4HANA Accrual Engine reads the fiscal year variant from the General Ledger configuration which is based on the combination of ledger and company code, see transaction FINSC\_LEDGER, customizing table FINSC\_LD\_CMP, field PERIV.
- Consequence: In the S/4HANA Accrual Engine the accrual postings are reported in the fiscal year of the ledger and company code (table FINSC\_LD\_CMP, field PERIV). This is the correct way to report accruals, but different compared to the logic in the old Accrual Engine where the accrual postings were always reported in the fiscal year of the company code, table T001, ignoring the fiscal year variant of the ledger.
- The benefit is that when posting accruals into non-leading ledgers, different fiscal year variants can be used compared to the leading ledger.

# Some Application Tables Have Been Replaced

- The data model of the S/4HANA Accrual Engine has changed significantly compared to the old Accrual Engine:  
Several tables with delivery class “A” (Application) have been replaced: They not updated or evaluated any more after migration. Affected tables:
  - ACEOBJ
  - ACEDSOH
  - ACEDSOI
  - ACEPSOH
  - ACEPSOI
  - ACEPSOIT
- The above tables have been replaced by the new tables
  - ACESOBJ
  - ACESOBJ\_ITEM
  - ACDOCA.
- CDS views have been developed which emulate the content of the old tables, but due to the strongly changed data model, the result is not 100% identical with the old table content, for example the fields ACEDSOH-UNAME etc. could differ.
- Read-access to the replaced tables has **not** been re-directed to the new tables by those compatibility views: In transaction SE11 for the old tables there is no replacement object, see menu choose *Extras - > Replacement Object*.

# Some Customizing Tables Have Been Replaced

- Also the Customizing of the S/4HANA Accrual Engine is significantly different:
- Several Customizing tables of the old Accrual Engine have been replaced: They are not evaluated by the S/4HANA Accrual Engine.
- Affected tables:
  - **TACE\_ACRTYPE** and TACE\_ACRTYPEP “**Accrual Type**”  
These tables have been replaced by the new tables **TACE\_ITEMTYPE** and TACE\_ITEMTYPEP “**Accrual Item Type**”, see corresponding slide.
  - **TACE\_ACRTYPE\_OPN** “Calculation Rules for Derived Accrual Types”  
Since it contains the obsolete field Accounting Principle, it had to be replaced by **TACE\_ITEMTYPED**. Note: As a consequence no cross-Accounting Principle operations are possible any more. Note: For upgrade customers this will be not a problem, because the combinations of Accrual Type + Accounting Principle are migrated to unique values of the new field Accrual item Type anyway.
  - **TACE\_COMBINATION** “Possible Combinations in the Accrual Engine”  
The allowed combinations of company code and Accounting Principle is replaced but not fully obsolete, see corresponding slide.
  - **TACE\_DS\_CALC** “Distribution Server: Accrual Type Settings”  
Since it contains the obsolete fields Accounting Principle and Accrual Type, it had to be replaced by table **TACE\_ITEMTYPEL**.
  - **TACE\_PS\_POST** “Posting Server: Posting Control”  
Since it contains the obsolete fields Accounting Principle and Accrual Type, it had to be replaced by table **TACE\_ITEMTYPEL**.
  - **TACE\_VSR\_001** “Assignment of Validations”  
Since it contains the obsolete field Accounting Principle it had to be replaced; See corresponding slide.
  - **TACE001T** “Texts for Company Codes in the Accrual Engine”  
The texts for the company codes are now retrieved from the company code master data, table **T001**.

# Replaced: BAdIs in Accrual Engine for Posting

The two BAdIs

- ACEPS\_BAPIPREDOC\_MOD “Change Document Before Summarization” and
- ACEPS\_BAPIDOC\_MODIFY “Change Document After Summarization”

are not called by the S/4HANA Accrual Engine for several reasons:

1. The BAdIs operate on BAPI structure, but in the S/4HANA Accrual Engine the postings are performed without using the BAPI BAPI\_ACC\_DOCUMENT\_POST. Instead the function module AC\_DOCUMENT\_CREATE is called “directly”, bypassing the BAPI.
  2. Since the FI document is at the same time also the original document, not all fields of the FI document may be changed by the new BAdI: For example the accrual object reference may not be changed (fields ACCIT-ACR...)
- In the S/4HANA Accrual Engine the new BAdI BADI\_ACE\_DOCUMENT\_SCHEMA\_CUST can be used instead: This BAdI allows to modify some fields of the journal entry line item before it is posted. This BAdI is available in release 1809 with note 2769936.

# Restriction: *Key Date for Accruals* is Identical to *Document Date*

- In the S/4HANA Accrual Engine, the Document Date in the FI document (BKPF-BLDAT) could be modified by BAdI ACEPS\_BAPIDOC\_MODIFY, so that it contained a different date than the key date for which the accruals were calculated (field ACEPSOIT-EFFDATE).
- Before support package 3 of release S/4HANA 1809 this is not possible anymore after migration to ACDOCA: In ACDOCA there is **no** separate field EFFDATE. Instead, only the Document Date (ACDOCA-BLDAT) is available.
  - For postings from the Accrual Engine, ACDOCA-BLDAT must always contain the key date for which the accruals were calculated.
  - In other words, the content of field BLDAT may not be modified by any exit during posting because
  - ACDOCA-BLDAT is used by the Accrual Engine to determine which accrual amount has been posted for which key date - and
  - ACDOCA-BLDAT is used by the compatibility views to emulate the content of field ACEPSOIT-EFFDATE.
- With SAP note 2800148 in support package 3 of release S/4HANA 1809 the field ACRVALDAT "Accrual Value Date" was added as new field in the journal entry table ACDOCA.
  - This field is the successor of the old field EFFDATE of the old Accrual Engine.
  - The S/4HANA Accrual Engine uses this new field instead of the document date (field BLDAT).
  - So BLDAT can be filled now again with some different value if needed.

# New Business Transaction ACEA

- The S/4HANA Accrual Engine performs the postings of accruals using a new business transaction **ACEA**.
- The old Accrual Engine uses business transaction **RFBU**.
- The business transaction is technically the database field BKPF-GLVOR.
- That is, after the migration to the new S/4HANA Accrual Engine the application Manual Accruals posts with business transaction ACEA instead of RFBU.
- Consequence: If you are using special ledgers (FI-SL), you need to **manually** assign the business transaction ACEA to your special ledger in the ledger configuration.
  - You can do this assignment using transaction GCL2 -> Assign Activity.

Screen-shot  
from transaction  
GCL2.

**Change Ledger: Assign Activity**

Activity groups... Choose activities... Field movement Ledger selection Activities like G/L

Ledger  Cost of Sales Accounting Ldgr

Only Transactions Assigned to Ledger (Valid for All Company Codes)

Tra...	Text	Field movement	Posting indic...	Check in...	W.	R
ACEA	ACE Accruals postings	0F00	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CFIP	CF: PCA internal posting	0F00	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CFPP	CF: PCA periodic posting	0F00	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

# New Reference Transaction ACES4

- The S/4HANA Accrual Engine performs the postings of accruals using the new reference transaction **ACES4**.
- The old Accrual Engine uses business reference transaction **ACE**.
- The reference transaction is technically the database field BKPF-AWTYP.
- That is, after the migration to the new S/4HANA Accrual Engine the application Manual Accruals posts with reference transaction ACES4 instead of ACE.

Screen-shot  
from transaction  
FB03.

**Display Document: Data Entry View**

63 64 65 66 67 68 Display Currency General Ledger View

Data Entry View

Document Number 5100000612 Company Code 0001 Fiscal Year  
Document Date 31.05.2018 Posting Date 31.05.2018 Period  
Reference  
Currency

Document Header: 0001 Company Code

Document Type SA G/L Account Document  
Doc.Header Text  
Tax Reporting D  
Reference  
Document Date 31.05.2018  
Posting Date 31.05.2018  
Currency USD / EUR  
Exchange Rate 0,55000  
Posting Period 05 / 2018  
Translation dte 31.05.2018  
Ref. Transactn ACES4 S/4 Accrual Engine  
Reference Key 510000061200012018 Log.System ER9CLNT500  
Created By HULINA  
Entry Date 11.05.2018 Time of Entry 09:47:58  
TCode ACEPOSTINGRUN

Item	Key	SG	CoC
1	50		000
2	40		



# New Authorization Checks

The S/4HANA Accrual Engine uses new authorization objects compared to the old Accrual Engine:

- **F\_ACES\_DST** - *Accrual Engine in S4: Accrual Objects*  
It contains the ledger instead of accounting principle.
- **F\_ACES\_PST** - *Accrual Engine in S4: Accrual Postings*  
It contains the appl. component (values ACAC or POAC) and activity.  
It does not contain the company code, because the during posting the additional authorization object **F\_FAGL\_LDR** is checked which contains the company code and ledger.  
The purpose of the authorization object F\_ACES\_PST is to restrict the posting authorization to single appl. components of the Accrual Engine.
- **F\_ACES\_PER** - *Accrual Engine in S4: Periodic Accrual Amounts*  
This authorization object is used to grant the authorization to perform the adjustment, review and/or approval of periodic accrual amounts.

Note: The old Accrual Engine used the different authorization objects

- **F\_ACE\_DST** - *Accrual Engine: Accrual Objects*
- **F\_ACE\_PST** - *Accrual Engine: Accrual Postings*

# Derived Accrual Types: No Cross-AccPrinciple Calc. Rules

- When using derived accrual types, in the old Accrual Engine it was possible to define derivation rules that are cross-accounting principle, see screen-shot: The accrual value in accounting principle IAS is calculated from the values given in the other accounting principle USAP.
- The corresponding IMG activity is V\_TACE\_ACRTYPE\_OPN "Define Calculation Rules for Derived Accrual Types".
- Such cross-accounting principle calculations are not supported in the new S/4HANA Accrual Engine.
- Note that derived accrual types are not available at all for Manual Accruals in the official IMG tree, transaction SPRO or transaction ACACIMG. But an experienced consultant might have found the corresponding IMG activity using the generic IMG tree of the Accrual Engine, transaction ACEC.

**Change View "Calculation Rules for Derived Accrual Types": Overview**

New Entries

Component

Accounting principle is different from Referenced accounting principle. This is not supported in the S/4HANA Accrual Engine.

Calculation Rules for Derived Accrual Types

Accrual Type	Accounting Princip	Sort nu...	Operator	Refd Accrual Type	Referenced Acctng Princ.
PROFIT	IAS	10	Transfer Only	RVNUEP	USAP
PROFIT	IAS	20	- Subtract Values	COSTS	USAP

# Program ACAC\_DATA\_TRANSFER\_EXAMPLE

- The sample program ACAC\_DATA\_TRANSFER\_EXAMPLE does not work for the new S/4HANA Accrual Engine.
- The program ACAC\_DATA\_TRANSFER\_EXAMPLE is obsolete.
  - It has not been adopted to the new S/4HANA Accrual Engine, because the changes would have been too big.
- Instead of adopting this program, the new program ACAC\_D\_TRANS\_EXAMPLE\_S4 was developed.
- The new program ACAC\_D\_TRANS\_EXAMPLE\_S4 is available with release 1809, support package 2.
  - In earlier support packages 0 and 1 you can apply the note 2755562 to get this program.
- The new program ACAC\_D\_TRANS\_EXAMPLE\_S4 requires that object category 0VENDORINV has self-defined number range.
  - In old accrual engine, the program ACAC\_DATA\_TRANSFER\_EXAMPLE can create accrual object with object number in form of 'DocumentNumber/FiscalYear/CompanyCode' even that an internal number range is assigned to the company code. This is not possible in the S/4HANA Accrual engine.
  - If customer has the situation that accrual objects with the same object category contains both internal number and number in form of 'DocumentNumber/FiscalYear/CompanyCode', and wants to achieve that, after migration, accrual objects with internal number range can use an object category with internal number range, and accrual objects with object number in form of 'DocumentNumber/FiscalYear/CompanyCode' can use another object category with self-defined number range, method ACCRUAL\_CATEGORY\_MAPPING in BAdI BADI\_ACE\_MIG could be used for the same. Note 2961681 needs to be applied.

**Posting**

**of**

**Periodic Accrual Amounts**

# Posting of Periodic Accrual Amounts: Transactions

- In the S/4HANA Accrual Engine, transaction **ACEPOSTINGRUN** can be used for posting the accrual amounts at period end.
- This transaction can be used to post the periodic accrual amounts for all applications that are using the Accrual Engine:
- In the selection screen there is a field „Application Component“:
  - If the accruals for manual accruals shall be posted, you enter the value **ACAC** in this field.
- The content of fields *Accrual Object* and *Accrual Subobject* depend on the application component:
  - For Manual Accruals, the accrual object is the concatenation of the accrual object category and accrual object number. You can and should use the **input help (F4)** to enter a value into this field.
  - The accrual subobject field is not used by Manual Accruals: It is always filled with the dummy value 1.

The screenshot shows the SAP transaction selection screen for 'Restriction of Accrual Objects'. The 'Accrual Object' and 'Accrual Subobject' fields are visible. The 'Control Data' section includes options for 'Display Application Log', 'Display Result List' (selected), and 'Test Run'. The 'Parallel Processing' section shows 'Server Group'. A 'Restrict Value Range' dialog is open, showing the 'Manual Accruals' tab. The 'Component' field is set to 'ACAC'. The 'Company Code' field is highlighted. The 'Acc Object Cat.' and 'AObject Number' fields are empty. The 'Text' field is empty. The 'Person Responsible' field is empty. The 'Identifier AccObj.' field is empty. The 'Restrict Number To' field is set to '500'.

# Accrual Object **ID** Versus Accrual Object **Number**

- In some transactions, for example the *Accrual Posting Run*, there is the field *Accrual Object* available. This field is the identifier (ID) of the accrual object, the *Accrual Object ID*.
- The *Accrual Object ID* is a generic field of the S/4HANA Accrual Engine. It has a technical length of 32 characters.
- The way how this *Accrual Object ID* is filled is different in each application component:
- For application component *Manual Accruals (ACAC)* the *Accrual Object ID* contains the
  - *Accrual Object Category* in the first 10 characters and
  - *Accrual Object Number* in the other 22 characters of the *Accrual Object ID*
  - In other words, the two fields *Accrual Object Category* and *Accrual Object Number* are specific for *Manual Accruals*.
- Note: For application component *Purchase Order Accruals (POAC)* the *Accrual Object ID* is filled differently: It contains the *Purchasing Document Number*.
- There are F1 helps available for field *Accrual Object ID* and *Accrual Subobject ID*.

Restriction of Accrual Objects

Accrual Object      ORENTING 12130001 to

Accrual Subobject

Control Data

☐ Display Application Log

☒ Display Result List

Comp	CoCd	AccrObjCat	Accrual Object Number
ACAC	0001	ORENTING	12130001

The ID is a concatenation of the category and number!

The value help shows the single fields (category and number) of which the ID consists.

# Posting of Accruals: Define Posting Schema

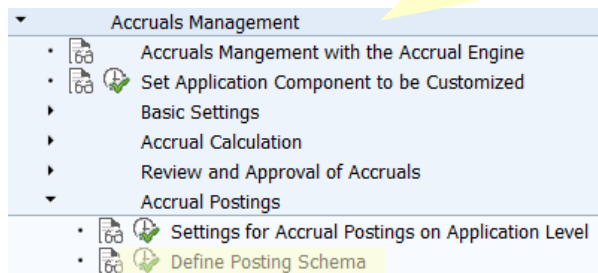
- The posting schema defines
  - How many lines an accrual posting shall contain.
  - Which (symbolic) G/L accounts shall be used in which line item.
  - Which type each line item has:

The posting schema used for periodic postings must contain one line item that has line item type 9003.

**Important:** The line item with type **9003** must be posted to a **balance sheet** account (accrual account), because this line must be carried forward into the next fiscal year: The Accrual Engine determines the already accrued amount by selecting all line items of the **current** fiscal year that were posted with line item type 9003! **[This statement is invalid anymore, see remark in page 36]**

The line item with type 9000 can be posted to any account. Usually this is the expense account.
- SAP delivers some standard posting schemas like SAP\_ACE\_PP. But a customer can create his own posting schemas in IMG activity *Define Posting Schema*.

Screen-shot from IMG, transaction ACEIMG



The screenshot shows the 'Define Posting Schema' dialog box. The 'Post Scheme Appl' dropdown is set to 'ACE Accrual Engine'. The 'Posting Schema' dropdown is set to 'SAP\_ACE\_PP'. The 'Posting Schema Items' table is displayed below.

PostS Item	Symbolic Account	SLALITY
1	PER_ACCR_ACCNT	9003
2	PER_OFFSTNG_ACCNT	9000

# Posting of Accruals: Assign Posting Schema

- Each accrual item type that performs accrual postings must be assigned to posting schema(s).
- This is done in IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
- Accrual item types that are customized to perform
  - All** postings must be assigned to three posting schemas, one for each type of posting (field ACE TType): Opening posting (IP), periodic posting (PP) and final posting (FP).
  - Only Periodic Postings** must be assigned to only one posting schema for ACE TType = PP.
- Each posting schema must contain a line item with type 9003.
- In this IMG activity also the document type is assigned that shall be used in the accrual posting.

▼	Accruals Management
•	Accruals Management with the Accrual Engine
•	Set Application Component to be Customized
▶	Basic Settings
▶	Accrual Calculation
▶	Review and Approval of Accruals
▼	Accrual Postings
•	Settings for Accrual Postings on Application Level
•	Define Posting Schema
•	Assign Accrual Item Types to Journal Entry Types and Posting Schemas
▶	Account Determination
▶	Applications of the Accrual Engine

Change View "Assignment of Accrual Item Types to Posting Schemas"					
New Entries					
Component ACAC					
Assignment of Accrual Item Types to Posting Schemas					
Accrual Item Type	Company Code	ACE TType	Doc. Type	Posting Schema	
COSTS	0001	FP	SA	SAP_ACE_FP	
COSTS	0001	IP	SA	SAP_ACE_IP	
COSTS	0001	PP	SA	SAP_ACE_PP	
COSTSP	0001	PP	SA	SAP_ACE_PP	



# Posting of Accruals: Define Which Postings Shall Be Done

- In the old Accrual Engine and in the S/4HANA Accrual Engine before support package 3 in release 1809 the accrual (item) type defines which type of postings the Accrual Engine shall perform.
- In the IMG activity *Define Accrual (Item) Types* the field *AccrPs* defines which type postings will be performed. The following values are possible:
  - *All*  
An Opening Posting, periodic postings and a final (=release) posting will be performed.
  - *Only Periodic*  
No opening posting, but only periodic postings at the end of each period.
  - *Opening Posting Only*.
- The field *AccrPs* is redundant to the assignment of accrual item types to posting schemas.
- **Important:** In the S/4HANA Accrual Engine from support package 3 in release S/4HANA 1809 onwards this redundancy was removed:  
The field *AccrPs* and the indicators “... Post Deltas” are **obsolete**:
  - They are replaced by assignment of the accrual item type to posting schemas in IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*, see next slides for details.
  - In support packages 0-2 in release S/4HANA 1809 the field *AccrPs* needs to be maintained redundantly to IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.

Define Accrual Type				
Accr Type	AccrPs	Opening Entry: Post Deltas	Period Posting: Post Deltas	
COSTS	1 All	<input type="checkbox"/>	<input type="checkbox"/>	
COSTSP	None	<input type="checkbox"/>	<input type="checkbox"/>	
RVNUEP	1 All	<input type="checkbox"/>	<input type="checkbox"/>	
RVNUES	2 Only Periodic	<input type="checkbox"/>	<input type="checkbox"/>	
	3 Opening Posting Only	<input type="checkbox"/>	<input type="checkbox"/>	

# Accrual Item Type Settings for Postings – since 1809 Support Package 3

- In the old Accrual Engine the setting *Define Accrual Type* determined which type of postings shall be performed.
- In the (new) S/4HANA Accrual Engine this setting has been replaced by the posting schema concept:
  - Assigning an accrual item type to an accrual engine transaction type (IP, PP, FP, ...) and its corresponding posting schema, this assignment defines that the corresponding posting shall be performed.
  - This assignment is done in the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*. Technically this is customizing view V\_TACE\_ITEMTYPES, C-table TACE\_ITEMTYPES.
- Examples:
  - You assign the accrual item type to no accrual engine transaction type at all.  
This means that the accrual engine will perform no postings for this accrual item type.
  - You assign the accrual item type to accrual engine transaction type PP (periodic posting) and enter the posting schema SAP\_ACE\_PP.  
This means that the Accrual Engine will perform only periodic accrual postings for this accrual item type.
  - You assign the accrual item type to three accrual engine transaction types, IP, PP and FP and enter the posting schemas SAP\_AC\_IP, SAP\_ACE\_PP and SAP\_ACE\_FP.  
This means that the Accrual Engine will perform these postings: Opening posting when the accrual object is created, periodic postings and a final posting in case the accrual object is terminated prematurely.

# Accrual Item Type Settings for Postings – since 1809 Support Package 3: Example with Screen-Shots

- The formerly “horizontal” settings in the IMG activity *Define Accrual Types* (in old Accrual Engine) and in IMG activity *Define Accrual Item Types* (in new S/4HANA Accrual Engine, in rel. 1809 SP0) have been moved to the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas* as “vertical” settings, see screen-shots.
- From 1809 SP3 on this change happens automatically during the customizing migration.

**Change View "Define Item Types": Overview**

New Entries

Dialog Structure

- Define Item Types
  - Item Type Settings for I
  - Calculation Rules for Der

Component ACAC

Define Item Types

Accrual Item Type	AccrPs	OpEntry: Deltas	Closing Entry: Deltas	Period Postg: Deltas
COSTS	1 All	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COSTSP	2 Only Periodic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The columns AccrPs, OpEntry: Deltas etc. are obsolete from 1809 SP3 on. They are invisible now!

The value "All" in field AccrPs for COSTS means: Perform opening, periodic and final posting.

**Change View "Assignment of Accrual Item Types to Posting Schemas": Overview**

New Entries

Component ACAC

Assignment of Accrual Item Types to Posting Schemas

Accrual Item Type	Company Code	ACE TType	Doc. Type	Posting Schema	Post Deltas	Post Online	Post Periodically	Inactive
COSTS	0001	FP	SA	SAP_ACE_FP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COSTS	0001	IP	SA	SAP_ACE_IP	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COSTS	0001	PP	SA	SAP_ACE_PP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COSTSP	0001	PP	SA	SAP_ACE_PP	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

New settings: For example for COSTS the setting "All" in field AccrPs was transformed into three entries: All three ACE transaction types, IP, PP and FP are assigned to accrual item type COSTS.

# Accrual Item Type Settings for Postings – Upgrade from 1809 SP0-2 to SP3

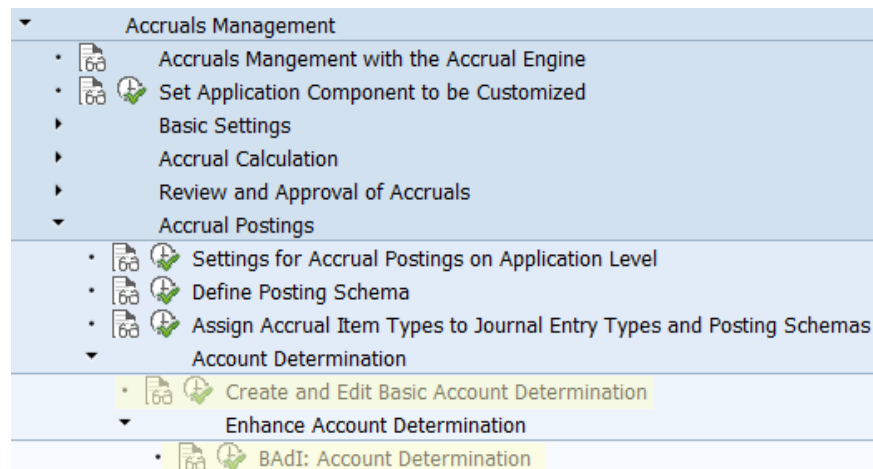
- Systems in which the customizing migration was already performed in 1809 SP0 or SP1 will automatically be corrected: During upgrade to SP3 a so-called XPRA program will be automatically executed that performs the necessary updates of the settings in the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
- The name of the XPRA program is ACE\_XPRA\_TACE\_ITEMTYPES\_1905.
- This program sets the indicators Post Deltas, Post Online, Post Periodically in the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas* (table TACE\_ITEMTYPES).
  - For this purpose, the XPRA program evaluates the indicators *Op. Entry: Deltas* etc. of IMG Activity *Define Accrual Item Types*.
  - In the IMG activity *Define Accrual Item Types* the obsolete indicators *Op. Entry: Delta* etc. are invisible from rel. 1809 support package 3 onwards because they are now obsolete.

# Additional Transaction Types from Release 1809 SP3: UP, UL and RP, RL

- With release S/4HANA 1809 SP3 or after applying the note 2800607, additional transaction types are available in the Accrual Engine:
- UP Utilization Posting  
This type of posting occurs of a posting of actual costs, for example posting of an invoice, leads to a reduction of the accruals.
- UL Late Utilization Posting  
Same as UP, but the posting of actual costs utilizes accruals that were posted in a former Accrual Closing Period, typically in a former year.
- RP Manual Release Posting  
This type of posting occurs if a user manually releases accruals.
- RL Late Manual Release Posting  
Same as RP, but in this case the accruals that are released were posted in a former Accrual Closing Period, typically in a former year.

# Posting of Accruals: Account Determination (1)

- The posting schema contains the symbolic accounts that shall be used in the accrual posting.
- After determining the posting schema that shall be used, as a second step, the real G/L account needs to be determined from the symbolic account.
- For determining the G/L account the following possibilities are offered by the system:
  1. Simple account determination using a predefined configuration table. This is the IMG activity *Create and Edit Basic Account Determination*.
  2. If the options given in the predefined configuration table are not sufficient, because the accrual account shall be determined on a more fine-granular level, the BAdI ES\_ACE\_DOCUMENT\_ACCDET\_CUST can be used.



# Reversal of Accrual Postings

# Reversal of Accrual Postings: Exceptional Case!

- The Accrual Engine can be customized to perform full or *delta postings*.
- *Full postings* means that in the current period the Accrual Engine first creates an inverse posting that “reverses” the accruals that have been posted in the former periods.
- Afterwards it posts the accrual amount that was calculated for the current period.
- As a consequence it is not required to manually perform a reversal of accrual postings:
  - If full postings are customized then the automatically performed inverse posting achieves this
  - If delta postings are customized then the reversal is obviously not desired.
- Full or delta postings can be customized in the IMG activity Define Accrual Item Types, viewcluster VC\_TACE\_ITEMTY.
- The need to perform a manual reversal of accrual postings should be an exceptional case!



# Excursus: Full Postings: Details About the Inverse Posting




The reversal posting that is done by the accrual posting run in case of full postings works in the following way:




- It is not a real reversal posting: Instead it is an **inverse** posting:
  - The accrual engine selects the last accrual posting and inverts the amounts, that is, it changes the sign of the posted amounts and creates a new posting with those inverted amounts.
  - As a consequence no reversal reason is required to be entered in these inverse postings.
- To perform the inverse postings, the accrual engine first determines the balance for the accrual object by aggregating the accrual postings to the accrual account of the **current** fiscal year, including the **G/L balance carry forward** (transaction FAGLVTR).
  - **Remark:** With Note 2838716 (Rel. 1909 FPS1 and 1809 SP3), balance carry forward is not required for Accrual Postings. The accrual engine will determine the balance for the accrual object by aggregating the accrual postings to the accrual account of **all available** fiscal years.
- Then it selects the accrual postings that were done in former periods incl. postings from former fiscal years:
- If an accrual posting is found that was not yet inverted and if its amount matches the balance of the accrual object, this posting will be inverted in order to bring the accruals to zero in the current period.
  - The accrual engine uses the posted line items incl. their G/L accounts and inverts the sign of the amounts.
  - The account assignment is derived anew nevertheless for technical reasons.
- Otherwise, if no single matching posting is found, the accrual engine builds-up the inverse posting anew: G/L accounts, posting schema (->number of line items) etc. are derived like for a usual accrual posting, but with inverted signs.
  - This case occurs after migration: The first regular posting run will only find migrated line items to be inverted. But these migrated line items consist of only one line item for each accrual object; so these are no balancing postings that could be inverted.
  - In this case it can occur that the inverse posting does not fully invert the original posting.

# Reversal of Periodic Accrual Postings: FB08 and F.80








- Postings that were done by the S/4HANA Accrual Engine can be reversed in several ways:
  1. If the accrual item type is customized to perform full postings (not delta postings), then the last periodic postings are automatically reversed if the periodic accrual posting run is executed for the next period.
  2. All postings that were done by the S/4HANA Accrual Engine can be reversed using the reversal transactions **FB08** (reverse a journal entry) and **F.80** (mass reversal of journal entries):
    - The postings can be identified by Reference Transaction = ACES4.

**Mass Reversal of Documents: Initial Screen**

Company code	0001	to		
Document Number		to		
Fiscal Year	2018	to		
Ledger	0L			

General selections

Document type		to		
Posting date	30.04.2018	to		
Entry date		to		
Reference number		to		
Reference Transaction	ACES4	to		
Reference key		to		
Logical system		to		

Reverse posting details

Reason for reversal	01
---------------------	----

# Reversal of Accrual Postings: Single Accrual Object Postings

- Reversing a whole journal entry using transaction FB08 or F.80 is sometimes not desired, because one journal entry can contain accrual postings from several accrual objects.
- If you want to reverse the accrual posting of only a single accrual object, you can do this using the display transaction for the accrual object, for example transaction POACTREE03 for Purchase Order Accruals or ACACTREE02 for Manual Accruals:
- In the *Postings* tab there is an icon for performing the reversal: First mark an entry in the list of postings and then click on the *Reverse* icon, see screen-shot. This will trigger the reversal posting.
- Important: The reverse button performs an inverse posting, not a real reversal.
  - This is posting the amounts with inverted sign.
  - No need to enter a reversal reason as consequence.

**Display Accrual Object**

Company Code/Purchasing Doc./POItem...  
 J001 China testing  
 4500034313  
 00010/01 Test Lean service

Life  
 Start of Life: 12.06.2018  
 End of Life: 31.12.2018  
 Lifecycle Status: P In Process

Item Data

Accr Item	Type	Item Type Text	Ledger Group	Total Accr Amt	TCrCy	Transaction Currency	Total Qty to Accrue	Unit of Measure	Accrual/DeferralMeth
JS4MAF	Actual costs	0L		120.000,00	CNY		12	PC	ACT_COSTS
JS4MAF	Actual costs	F1		120.000,00	CNY		12	PC	ACT_COSTS
JS4MNF	Accruals	0L		0,00	CNY		0	PC	PLN-ACT
JS4MNF	Accruals	F1		0,00	CNY		0	PC	PLN-ACT
JS4MPF	Planned costs	0L		120.000,00	CNY		12	PC	PLN_DELSCH
JS4MPF	Planned costs	F1		120.000,00	CNY		12	PC	PLN_DELSCH

Calculated Accrual | **Postings** | Posted Totals

Year	Peri...	Posting Date	Document Date	DocumentNo	ACE TType	Type	Amount in Transaction Currency	TrCry
2018	6	30.06.2018	30.06.2018	100000341	PP	SA	20.000,00	CNY
							20.000,00	CNY

# Migration of Customizing: Details

# Parallel Ledgers Versus Parallel Accounts

Typical situations at Customer are the following examples:

- Parallel accounting using **parallel ledgers**:  
In General Ledger there are two ledgers:
  - The leading ledger 0L. It is assigned to Accounting Principle IFRS
  - A non-leading ledger 1L. It is assigned to Accounting Principle USGAAP
- Parallel accounting using **parallel G/L accounts**:  
In General Ledger there is only one ledger:
  - The leading ledger 0L. It is assigned to two Accounting Principles: IFRS and USGAAP

# Parallel Ledgers Versus Parallel Accounts: Accrual Item Before Migration

- Formerly, in the old Accrual Engine for each Accounting Principle a separate accrual item was created because the Accounting Principle was a key field in the accrual item (table ACEDSOI).
- In the example two accrual items were created:

Screen-shot from  
transaction  
ACACTREE02  
(Manual Accruals: Edit  
accrual object)

Accrual Type	Accounting Principle	Total Amt to Accrue	Accrual Item Cr...	Acc. / Defer. Method
COSTSP	GAAP	12.000,00	USD	LINEAR_DAY
COSTSP	IFRS	12.000,00	EUR	LINEAR

- Both cases, *Parallel Ledger* and *Parallel Accounts* solution are considered by the migration programs.

# Challenges of the Field *Ledger* in the Accrual Engine

- In order to integrate the S/4HANA Accrual Engine seamlessly with General Ledger, it was necessary to replace the field Accounting Principle by Ledger.
- But the usage of the ledger within the Accrual Engine has the following **challenge**:
- In the **Parallel Accounts** solution, several Accounting Principles are assigned to the **same** ledger:
  - Simply replacing Accounting Principle by ledger during migration is **not** possible in this case. Instead, two accrual item types have to be used in future:
  - The customizing migration program generates several accrual item types for each accrual type:
  - For each combination of Accounting Principle and accrual type a separate value for the accrual item type is generated as concatenation of accrual type with Accounting Principle.
- Example:
  - In the old Accrual Engine customizing the accrual type COSTSP is used.
  - Two Accounting Principles IFRS and USGAAP are assigned to the company code in the old Accrual Engine.
  - As a consequence the customizing migration program will generate the two accrual item types in the (new) S/4HANANA Accrual Engine:
    - COSTSP\_IFRS and
    - COSTSP\_USGAAP.

# Accrual Item: Result of Migration for Parallel **Accounts** Solution

- After migration, the accrual items are stored in table ACESOBJ\_ITEM instead of ACEDSOI.
  - The new table has the fields **Ledger** and **Accrual Item Type** as key fields instead of Accounting Principle and Accrual Type.
  - The new field Item Type (type = char11) replaces the old field Accrual Type (type =char6) in order to support the Parallel Accounts solution, see next slides for more details!
- Parallel Account Solution means that several Accounting Principles are assigned to the same ledger.
  - In the example below, both Accounting Principles are assigned to the same ledger 0L.
  - The postings for different Accounting Principles are done to different G/L accounts.
- As a consequence the accrual type needs to be **split** into several new values (in the new field Accrual Item Type) by the customizing migration program:

Before migration:  
Content of table  
ACEDSOI

Accrual Type	Accounting Principle	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP	IFRS	12.000	EUR	LINEAR_PER
COSTSP	GAAP	12.000	USD	LINEAR_DAY

After migration:  
Content of table  
ACESOBJ\_ITEM

Accrual Item Type	Ledger	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP_IFRS	0L	12.000	EUR	LINEAR_PER
COSTSP_USGAAP	0L	12.000	USD	LINEAR_DAY



# Accrual Item: Result of Migration for Parallel Ledger Solution

- Ledger solution means that each Accounting Principle is assigned to one (or several) different ledgers. In the below example:
  - Accounting Principle IFRS is assigned to ledgergroup 0L, that is, to the single ledger 0L.
  - Accounting Principle GAAP is assigned to ledgergroup 1L, that is, to the single ledger 1L.
- Also for the parallel ledger solution, the migration of the accrual objects splits the Accrual Type into a separate Accrual Item Type value for each Accounting Principle
  - Also for parallel ledger solution, the customizing migration program concatenates the accrual type and Accounting Principle and uses this concatenated value as accrual item type in the new S/4HANA Accrual Engine.
  - Especially if there is only one Accounting Principle used, then the customizing migration program can use the Accrual Type as Accrual Item Type: The concatenation of Accrual Type with Accounting Principle is actually not required.
  - Technically this concatenation would not be required; only for the parallel account solution it is really necessary. But the migration program does not distinguish between the two cases parallel accounts and parallel ledgers: In both cases the customizing migration program performs the concatenation.

Before migration:  
Content of table  
ACEDSOI

Accrual Type	Accounting Principle	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP	IFRS	12.000	EUR	LINEAR_PER
COSTSP	GAAP	12.000	USD	LINEAR_DAY

After migration:  
Content of table  
ACESOBJ\_ITEM

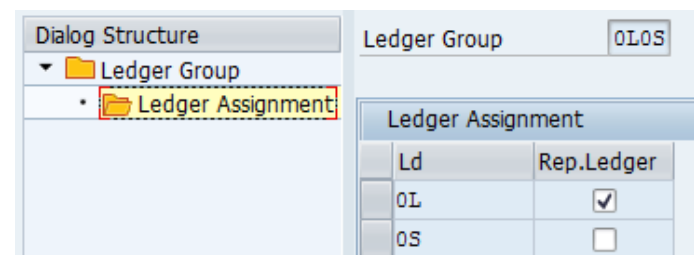
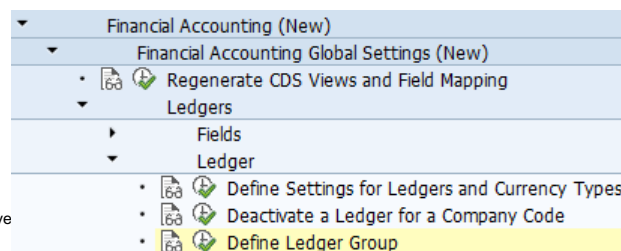
Accrual Item Type	Ledger	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP_IFRS	0L	12.000	EUR	LINEAR_PER
COSTSP_USGAAP	1L	12.000	USD	LINEAR_DAY

# Complex Case: Accounting Principle is Assigned to Several Ledgers

A more complex situation at Customer is the following:

- Parallel accounting using **parallel ledgers** is used:  
But for one of the Accounting Principles, a ledgergroup is assigned that contains **two** ledgers (in view V\_FAGL\_TRGT\_LDGR):
  - Accounting Principle **IFRS**: The two ledgers **0L and 0S** (S as abbreviation for *Shifted*) are assigned: In view V\_FAGL\_TRGT\_LDGR the ledgergroup 0LOS is assigned. The ledger 0S has a shifted fiscal year variant compared to ledger 0L. 0S is the non-representative ledger.
  - Accounting Principle **USGAAP**: Only one ledger **1L** is assigned, technically the ledgergroup 1L is assigned to it.

Note: Ledgergroups and their representative ledgers are defined in IMG activity “Define Ledger Group” (viewcluster VC\_FAGL\_LDGRPMAP, tables FAGL\_TLDGRP, FAGL\_TLDGRP\_MAP):



# Accounting Principle Assigned to Several Ledgers: Result of Migration

- The result of the migration for the complex case is the same as in the simple case where each ledgergroup contained only one ledger:
- That is, there is **no entry** created in the S/4HANA Accrual Engine for the accrual item (table ACESOBJ\_ITEM) for the ledger **0S** for accrual item type COSTSP\_IFRS.
- The reason is that the accrual amounts in the old Accrual Engine were the same in both ledgers 0L and 0S because the old Accrual Engine calculated the amounts on the level of Accounting Principle:
- So it is compatible with the old Accrual Engine that the S/4HANA Accrual Engine calculates the amounts only for the representative ledger 0L and posts these amounts into **both** ledgers 0L and 0S using ledgergroup 0L0S during posting.

**Before**  
migration:  
Content of  
table  
ACEDSOI

Accrual Type	Accounting Principle	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP	IFRS	12.000	EUR	LINEAR_PER
COSTSP	GAAP	12.000	USD	LINEAR_DAY

**After**  
migration:  
Content of  
table  
ACESOBJ\_IT  
EM

Accrual Item Type	Ledger	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP_IFRS	0L	12.000	EUR	LINEAR_PER
COSTSP_USGAAP	1L	12.000	USD	LINEAR_DAY

# Accounting Principle Assigned to Several Ledgers: Fiscal Year Variant

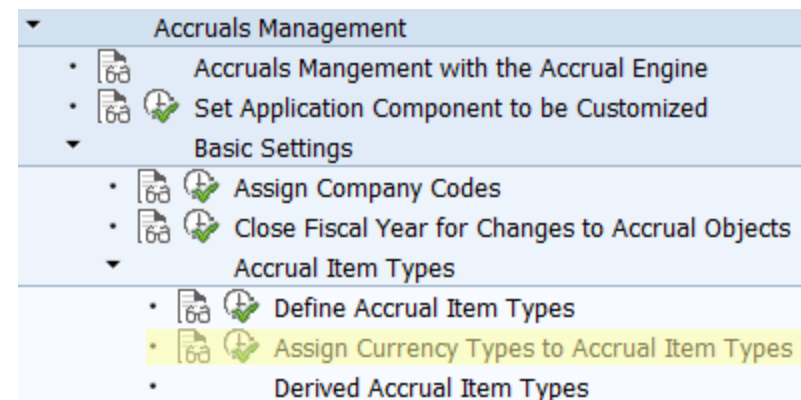
- Note that in this example, for item type COSTSP\_GAAP the Accrual Engine will use the fiscal year variant of ledger 1L the calculation of the accrual amounts. This is different to the old logic from before release S/4HANA 1809: There, the Accrual Engine always used the fiscal year variant of the company code (table T001, field PERIV).

After  
migration:  
Content of  
table  
ACESOBJ\_IT  
EM

Accrual Item Type	Ledger	Total Amount To Accrue	Transaction Currency	Accrual Method
COSTSP_IFRS	0L	12.000	EUR	LINEAR_PER
COSTSP_USGAAP	1L	12.000	USD	LINEAR_DAY

# Accrual Item: Technical Aspects

- The new field (Accrual) Item Type has a length of 11 char. This length makes it possible to concatenate the content of the old field Accrual Type (6 char) and the Accounting Principle (4 char) separated by an underscore (1 char):  $6+4+1 = 11$ .
- The migration does **not** activate the multiple currencies feature: Multiple currencies can –optionally- be activated in Customizing after migration if required, see IMG activity *Assign Currency Types to Accrual Item Types* in transaction ACEIMG.



# **Migration of Transactional Data**

# Transactional Data Migration:

- As a **prerequisite** before starting to migrate the transactional data of the Accrual Engine, the migration of the Accrual Engine **customizing** must have been performed.
  - All activities contained in folder
    - *Migration of Customizing for Accrual Engine*
    - including the activities in folder *Preparation of Migration of Transactional Data* of transaction ACEMIGIMG must have been performed.
- The transactional data of the Accrual Engine need to be migrated in **each system and client separately**, because transactional data are not transported.
- The migration of transactional data is done by executing a **mass data project** of project type 70.
- The transactional data consist of
  - accrual objects and
  - accrual postings:Both type of data are migrated together by the same mass data project.
- Before starting the migration of transactional data in the **productive system**, you must transport the migrated customizing into the productive system.

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# BAdI in Transactional Data Migration:

















- BADI\_ACE\_MIG
  - ACESOBJ\_ASSGMT\_MAP - Account Assignment Mapping
    - If account assignment from old Accrual Engine table ACEDSASSGMT need to be updated when migrating to table ACESOBJ\_ASSGMT in S/4HANA Accrual Engine, this BAdI method could be used.
  - MODIFY\_LINE\_ITEM - Modify Line Items
    - If postings from old Accrual Engine table ACEPSOIT need to be updated when migrating to table ACDOCA in S/4HANA Accrual Engine, this BAdI method could be used. **Remark:** This method is available in S/4HANA On Prem 2020. Key fields, transaction currency, amount in transaction currency and accrual relevant fields can't be changed.
  - IS\_CUST\_COMP\_MIG\_RELEVANT - Custom Component Relevant or Not
    - This BAdI method can be used to indicate whether a component other than ACAC needs to migrate customizing data.
  - IGNORE\_MESSAGES - Ignore Messages
    - For some error messages, they can be ignored in some cases. To suppress them and get a clean migration result list, this BAdI method can be used. **Remark:** Note 2958269 needs to be applied in releases lower than S/4HANA On Prem 2020 FPS1, and Note 2954283 needs to be applied until release S/4HANA On Prem 1809 SP5/1909 SP3.

# BAdI in Transactional Data Migration:

- BADI\_ACE\_MIG
  - REDEFINE\_EXCHANGE\_RATE\_DATE - Redefine Exchange Rate
    - For many deferral cases, accrual amounts on currencies other than transaction currency should have the same exchange rate in opening postings and periodic postings. In S/4HANA Accrual Engine, this is ensured by filling total accrual amounts on other currencies with correct exchange rate, and later the opening postings and periodic postings will have correct accrual amounts using the correct exchange rate. During migration, two things need to be done. One is the total accrual amounts on accrual items should use a correct exchange rate, the other is the technical postings generated out of ACEPSOIT should use a correct exchange rate. This BAdI method can be used to feed correct exchange rate to migration process. **Remark:** Note 2954228 needs to be applied in releases lower than S/4HANA On Prem 1809 SP5/1909 SP4. Note 2958269 needs to be applied in releases lower than S/4HANA On Prem 2020 FPS1. Note 2985097 needs to be applied in releases lower than S/4HANA On Prem 1809 SP6/1909 SP4/2020 FPS1.
  - ACCRUAL\_CATEGORY\_MAPPING - Accrual Object Category Mapping
    - In Manual Accruals of old Accrual Engine, accrual objects with self-defined number can be created by transaction ACACTRANSFER or a program referred to sample transfer program ACAC\_DATA\_TRANSFER\_EXAMPLE, even if the company code has been assigned with an internal number range. In S/4HANA Accrual Engine, this is not possible. If customer wants to create an accrual object with self-defined number, an object category has to be defined with self-defined number range. Customer may not want to change existing number range definition, but still want to have accrual objects created by transaction ACACTRANSFER or a program referred to sample transfer program ACAC\_DATA\_TRANSFER\_EXAMPLE with self-defined number, e.g. 'DocumentNumber/FiscalYear/CompanyCode' for vendor invoices, this BAdI method can be used to change accrual object category when migrating them into S/4HANA Accrual Engine, with that, accrual objects created by transaction ACACTRANSFER or a program referred to sample transfer program ACAC\_DATA\_TRANSFER\_EXAMPLE (in S/4HANA the program is ACAC\_D\_TRANS\_EXAMPLE\_S4) will have the same object category, no matter they were created in old Accrual Engine or S/4HANA Accrual Engine. **Remark:** Note 2961681 needs to be applied in releases lower than S/4HANA On Prem 1809 SP5/1909 SP3/2020 FPS1.

# Steps in Customizing System

- After you migrated the customizing incl. the account determination, the IMG activities in folder *Preparation of Migration of Transactional Data* must be performed.
- These activities create entries in customizing tables that need to be transported: The assignment of a dummy G/L account and the project definition of the mass data project.
- Note: The status of the mass data project, the execution logs etc. are not transported: Because this information is specific for each system and client where the mass data project is executed.

▼	Accrual Engine Data Migration
▼	Migration of Customizing for Accrual Engine
•	  Migrate Customizing for Accrual Engine
▶	Manual Migration Steps for Account Determination
▼	Preparation of Migration of Transactional Data
•	  Specify Account Used for Migration
•	  Create Mass Data Project for Migration of Accrual Engine Transactional Data
•	  Assign Migration Project to Company Codes
▼	Migration of Transactional data of Accrual Engine
•	  Run Project for Migrating Transactional Data of Accrual Engine
•	  Set Status of Mass Data Project to Completed
•	  Display Status of Projects for Accrual Engine Migration
•	  Display Status of Migration Projects for Company Codes

# Activity: Specify G/L Account Used for Migration

















- For the migration of postings of the old Accrual Engine the system requires a dummy G/L account.
- The mass data project will generate line items in the universal journal using this G/L account.
- These generated line items are of technical nature: They balance to zero and do not increase the balance of this G/L account. With Note 2927920 and 2928964 (Rel. 1909 SP3 and 1809 SP5), the generated lines items will have 0 balance in both side of credit and debit in each period.
- The only purpose of these generated line items is to bring the reference to accrual objects into the universal journal:
- Important:** The dummy G/L account must be a **balance sheet** account, because the balance carry forward must carry forward these line items. With Note 2838716 (Rel. 1909 FPS1 and 1809 SP3), balance carry forward is not required for Accrual Postings.









▼	Accrual Engine Data Migration
▼	Migration of Customizing for Accrual Engine
•	603  Migrate Customizing for Accrual Engine
▶	Manual Migration Steps for Account Determination
▼	Preparation of Migration of Transactional Data
•	603  Specify Account Used for Migration
•	603  Create Mass Data Project for Migration of Accrual Engine Transactional Data
•	603  Assign Migration Project to Company Codes
▼	Migration of Transactional data of Accrual Engine
•	603  Run Project for Migrating Transactional Data of Accrual Engine
•	603  Set Status of Mass Data Project to Completed

Display View "G/L Account for Legacy Data Transfer and Migration":		
603		
G/L Account for Legacy Data Transfer and Migration		
Component	Company Code	Acct Legacy & Mig.
ACAC	0001	89000

# Activity: Create Mass Data Project

- In order to be able to migrate the transactional data of the Accrual Engine you need to create a mass data project of project type 70.
- The mass data project is stored in a customizing table.
- It must be created in the customizing system: When creating the project it will be added automatically to a customizing transport.
- You can give the project any project id as you like, for example MIG\_ACAC.
- Note: You will need to execute the mass data project in each system and client which contains transactional data in the Accrual Engine for the appl. *Manual Accruals*, see corresponding IMG activities in folder *Migration of Transactional data of Accrual Engine*.

▼	Accrual Engine Data Migration
▼	Migration of Customizing for Accrual Engine
•	  Migrate Customizing for Accrual Engine
▶	Manual Migration Steps for Account Determination
▼	Preparation of Migration of Transactional Data
•	  Specify Account Used for Migration
•	  Create Mass Data Project for Migration of Accrual Engine Transactional Data
•	  Assign Migration Project to Company Codes
▼	Migration of Transactional data of Accrual Engine
•	  Run Project for Migrating Transactional Data of Accrual Engine
•	  Set Status of Mass Data Project to Completed
•	  Display Status of Projects for Accrual Engine Migration
•	  Display Status of Migration Projects for Company Codes

Change View "Mass Data Project for Accrual Engine Migration to S/4HANA"		
  New Entries      		
Mass Data Project for Accrual Engine Migration to S/4HANA		
Project ID	Type	Description
MIG_ACAC	70	Migrate appl. Manual Accruals

# Activity: Assign Migration Project to Company Codes

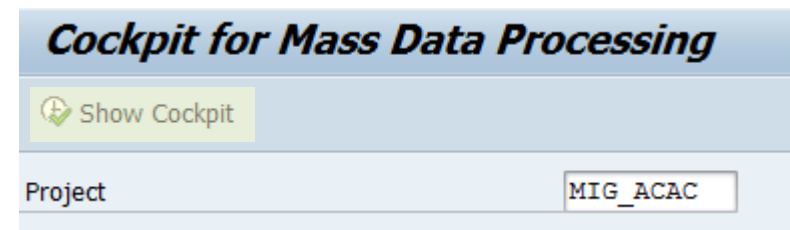
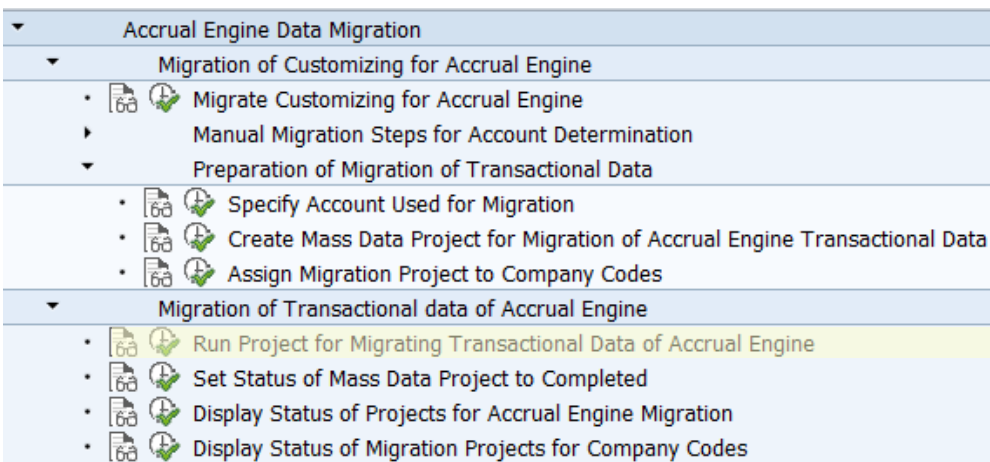
- You need to assign the mass data project that you have created to one, several or all company codes.
- This way you can migrate the single company codes separately, for example if you want to test the procedure first with one company.
- The checkbox *Migration Needed* indicates whether in the current system and client there are data that need to be migrated.
  - Note that in the productive system there could be data to be migrated despite in the customizing system there are none.  
If so, you need to assign the project to the company code despite in the customizing system the checkbox is not set.

▼	Accrual Engine Data Migration
▼	Migration of Customizing for Accrual Engine
•	Migrate Customizing for Accrual Engine
▶	Manual Migration Steps for Account Determination
▼	Preparation of Migration of Transactional Data
•	Specify Account Used for Migration
•	Create Mass Data Project for Migration of Accrual Engine Transactional Data
•	Assign Migration Project to Company Codes
▼	Migration of Transactional data of Accrual Engine
•	Run Project for Migrating Transactional Data of Accrual Engine
•	Set Status of Mass Data Project to Completed
•	Display Status of Projects for Accrual Engine Migration
•	Display Status of Migration Projects for Company Codes

Change View "Assign Migration Mass Data Project ID to Company				
Assign Migration Mass Data Project ID to Company Codes				
Component	Company Code	Mig. Project ID	Description	Migration Needed
ACAC	0001	MIG_ACAC	Migrate appl. Manual Accruals	<input checked="" type="checkbox"/>

# Run Project for Migrating Transactional Data of Accrual Engine

- After you assigned the mass data project to all company codes where a migration is needed, you can perform the migration of transactional data by running the mass data project
- You can do this using the IMG activity  
*Run Project for Migrating Transactional Data of Accrual Engine.*
- Enter the mass data project and press button *Show Cockpit.*



# Cockpit for Accrual Engine Migration: Overview

- In the cockpit you can see a tree with several activities:
  - ACE\_OREC1
  - ACE\_REC1
  - ACE\_OMIG
  - ACE\_OREC2
  - ACE\_MIG
  - ACE\_REC2
- You start the migration of transactional data by pressing the button **Execute**.
  - The cockpit will then process the activities in a sequential order.

Cockpit: Accrual Engine Migration				
<div>▶ Execute   ▾ Stop   ◀ Reset   ↻ Refresh   📄 Errors   📄   📄   📄</div>				
Activities	Description	Status	Number of Errors and ..	
▼ 🏠 MIG_ACAC Migrate appl. Manual Accruals		◆	0 Errors , 0 Warnings	
• 📄 ACE_OREC1	ACE: Reconcile accrual objects before migration	◆	0 Errors , 0 Warnings	
• 📄 ACE_REC1	ACE: Reconcile accrual postings before migration	◆	0 Errors , 0 Warnings	
• 📄 ACE_OMIG	ACE: Migrate accrual objects	◆	0 Errors , 0 Warnings	
• 📄 ACE_OREC2	ACE: Check accrual objects after migration	◆	0 Errors , 0 Warnings	
• 📄 ACE_MIG	ACE: Migrate accrual postings	◆	0 Errors , 0 Warnings	
• 📄 ACE_REC2	ACE: Check accrual postings after migration	◆	0 Errors , 0 Warnings	



# Cockpit for Accrual Engine Migration: Execute & Reset

- The meaning of the single activities are explained by their description, see screen-shot below, column *Description*.
- Errors that occur during the processing of the single activities will be logged but they will not stop the processing: If you pressed the *Execute* button, all activities will be processed.
  - For example if errors occur during the check activities ACE\_OREC1 and ACE\_REC1, the system will nevertheless continue with ACE\_OMIG etc. and perform the migration!
  - Reason: Errors for a few single objects shall not prevent the migration of the other objects.
  - The result of the migration can be revoked/deleted by pressing the **Reset** button.

Cockpit: Accrual Engine Migration				
<div>▶ Execute   ▾ Stop   ◀ Reset   ↻ Refresh   📄 Errors   📄   📄</div>				
Activities	Description	Status	Number of Errors and ..	
▼ 🏠 MIG_ACAC Migrate appl. Manual Accruals		◆	0 Errors , 0 Warnings	
• 📄 ACE_OREC1	ACE: Reconcile accrual objects before migration	◆	0 Errors , 0 Warnings	
• 📄 ACE_REC1	ACE: Reconcile accrual postings before migration	◆	0 Errors , 0 Warnings	
• 📄 ACE_OMIG	ACE: Migrate accrual objects	◆	0 Errors , 0 Warnings	
• 📄 ACE_OREC2	ACE: Check accrual objects after migration	◆	0 Errors , 0 Warnings	
• 📄 ACE_MIG	ACE: Migrate accrual postings	◆	0 Errors , 0 Warnings	
• 📄 ACE_REC2	ACE: Check accrual postings after migration	◆	0 Errors , 0 Warnings	

# Cockpit for Accrual Engine Migration: Execute To

- You have the possibility to run the project only up to a certain activity by using the context menu that is available using the right mouse button, see screen-shot.
- By using the **Execute To** function you can for example execute only the checks before migration.

The screenshot displays the 'Cockpit: Accrual Engine Migration' interface. At the top, there is a toolbar with buttons for 'Execute', 'Stop', 'Reset', 'Refresh', 'Errors', and icons for adding, saving, and deleting. Below the toolbar is a table with two columns: 'Activities' and 'Description'. The 'Activities' column contains a tree view where 'MIG\_ACAC' is expanded, showing a list of activities. A context menu is open over the 'ACE\_REC1' activity, showing 'Execute To' and 'Details' options. The 'Description' column provides details for each activity.

Activities	Description
▼ MIG_ACAC Migrate appl. Manual Accruals	
• ACE_OREC1	ACE: Reconcile accrual objects before migration
• ACE_REC1	ACE: Reconcile accrual postings before migration
• ACE_	ACE: Migrate accrual objects
• ACE_	ACE: Check accrual objects after migration
• ACE_MIG	ACE: Migrate accrual postings
• ACE_REC2	ACE: Check accrual postings after migration

# Cockpit for Accrual Engine Migration: Packaging

- Running a mass data project will trigger batch jobs: Once you pressed the *Execute* or *Execute To* button, the system schedules these jobs.
- By pressing the **Refresh** button you will see the progress of the project.
- After pressing the *Execute* or *Execute To* button, the system will first generate packages of data that will be processed in parallel and then process these packages.

In this example, pressing the *Refresh* button shows that the project execution

- has processed all packages of the activities ACE\_OREC1 to ACE\_OREC2,
- is currently processing some packages in activity ACE\_MIG and
- did not yet start processing the last activity ACE\_REC2.

Cockpit: Accrual Engine Migration

▶ Execute

▼ Stop

◀ Reset






















↻ Refresh

⚠ Errors

📄

📄

📄

Activities	Description	Status	Number of Errors and ...	Processing Status	Processing Details
▼  MIG_ACAC Migrate appl. Manual Accruals			636 Errors , 0 Warnings		1280 of 1356 Packages finished
▶  ACE_OREC1	ACE: Reconcile accrual objects before migra...		0 Errors , 0 Warnings		57 of 57 Packages finished
▶  ACE_REC1	ACE: Reconcile accrual postings before migr...		410 Errors , 0 Warnings		877 of 877 Packages finished
▶  ACE_OMIG	ACE: Migrate accrual objects		0 Errors , 0 Warnings		55 of 55 Packages finished
▶  ACE_OREC2	ACE: Check accrual objects after migration		220 Errors , 0 Warnings		75 of 75 Packages finished
▶  ACE_MIG	ACE: Migrate accrual postings		6 Errors , 0 Warnings		216 of 292 Packages finished
•  ACE_REC2	ACE: Check accrual postings after migration		0 Errors , 0 Warnings		No Packages currently available

## Cockpit for Accrual Engine Migration: Messages & Log

- You can display the list of messages that have occurred during the processing of the single activities using the context menu that is available by pressing the right mouse button, see screen-shot.

### Cockpit: Accrual Engine Migration

▶ Execute
⏏ Stop
⏮ Reset
🔄 Refresh
🔍 Errors
📄
📄
📄

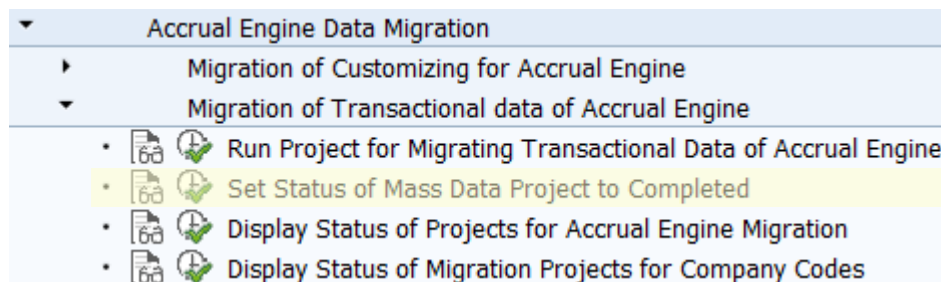
Activities	Description	Status	Number of Errors and ...
<div>  MIG_ACAC Migrate appl. Manual Accruals </div>			1005 Errors , 0 Warnings
▶  ACE_OREC1	ACE: Reconcile accrual objects before migration		0 Errors , 0 Warnings
▶  ACE_REC1	ACE: Reconcile accrual postings before migration		410 Errors , 0 Warnings
▶  ACE_OMIG	ACE: Migrate accrual objects		0 Errors , 0 Warnings
▶  ACE_OREC2	ACE: Check accrual objects after migration		220 Errors , 0 Warnings
<div>  Run 00000 </div>			220 Errors , 0 Warnings
•  ACAC0001 000000			0 Errors , 0 Warnings
•  ACAC0001 000000			0 Errors , 0 Warnings
•  ACAC0001 000000			0 Errors , 0 Warnings
•  ACAC0001 000000			0 Errors , 0 Warnings
•  ACAC0001 000000			0 Errors , 0 Warnings
•  ACAC0001ACCRL IAS 000000			208 Errors , 0 Warnings
•  ACAC0001ACCRL IFRS000000			0 Errors , 0 Warnings
•  ACAC0001ACTCSTIAS 000000			0 Errors , 0 Warnings
•  ACAC0001ACTCSTIFRS0000003			0 Errors , 0 Warnings

# Set Status of Mass Data Project to Completed

- After the project has finished and
  - either no errors have occurred
  - or the errors could be solved
  - or the errors could be ignored, for example because they affect postings in old years or objects that were created only for testing,

Then you can set the status of the project to *Completed*:

- Setting the status of a project to *Completed* is a manual activity in the IMG, see screen-shot: You need to press the **Complete** button.
  - Note: After the project status was set to *Completed*, some functions in the cockpit are not allowed anymore, for example you cannot reset the migrated data any more.
  - In case you have set the status to *Completed* by mistake, you can revoke this by pressing the button Reset in this IMG activity: This **Reset** button will only change the status of the project back to In Process – but it will not reset the migrated data! Resetting (=deleting) migrated data is only possible within the cockpit.



# Display Status of Projects for Accrual Engine Migration

- The IMG activity *Display Status of Projects for Accrual Engine Migration* shows a list of projects and their respective statuses.
- By default the list screen shows only a few columns, but you can fade-in additional columns. This way you can display some more administrative data of the project execution. You do this using the *Change Layout* button.

**Project Status Overview**

Project Status: 34 Entries found

Action Log	Project	Description	Project Completed	Proj. Completed b	Project Comple	Project Comple
	MIG_ACAC	Migrate appl. Manual Accruals	<input type="checkbox"/>			

**Change Layout**

Column Selection | Sort Order | Filter | View | Display

Displayed Columns

Column Name
Action Log
ID of Project
Description
Project Completed
Proj. Completed by User
Project Completion Date
Project Completion Time









Column Set




Column Name
Data Transfer Started
Data Transfer Completed
Project Type
Start Date
Start Time
End Date
End Time
Start User
End User

Save As... Reset

# Display Status of Migration Projects for Company Codes

- In the IMG activity *Display Status of Migration Projects for Company Codes* you can display the status of the mass data project on the level of company codes.

▼	Accrual Engine Data Migration
▶	Migration of Customizing for Accrual Engine
▼	Migration of Transactional data of Accrual Engine
•	  Run Project for Migrating Transactional Data of Accrual Engine
•	  Set Status of Mass Data Project to Completed
•	  Display Status of Projects for Accrual Engine Migration
•	  Display Status of Migration Projects for Company Codes

Display View "Status of Migration to S/4 Accrual Engine for Company						
  						
Status of Migration to S/4 Accrual Engine for Company Codes						
Component	Company Code	Project ID	Description	Migration Needed	Migration Completed	
ACAC	0001	MIG_ACAC	Migrate appl. Manual Accruals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

# Execute G/L Balance Carry Forward Again

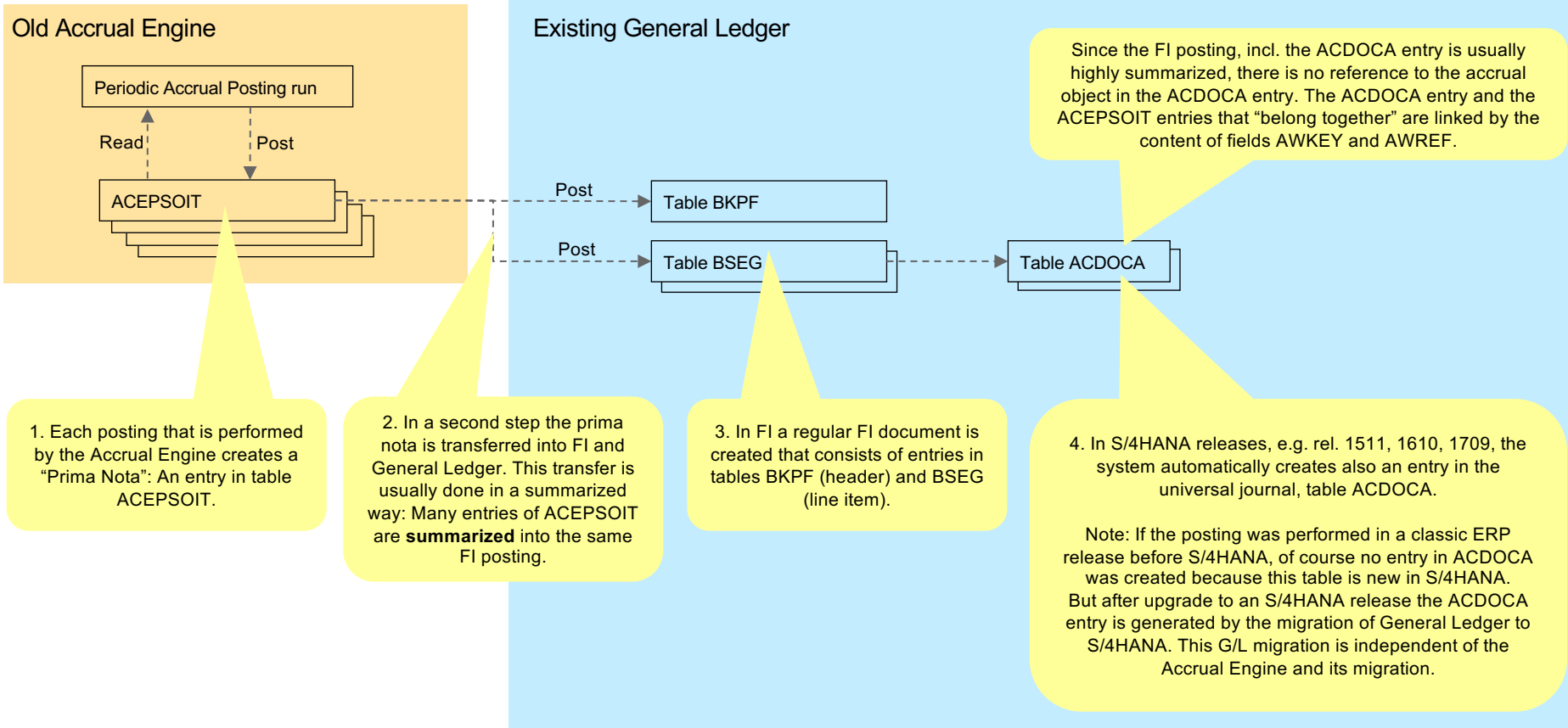
- In case you had executed the G/L balance carry forward before the migration of the transactional data of the Accrual Engine, you need to repeat the balance carry forward.
- Example:
  - You have executed the G/L balance carry forward from year 2018 to year 2019.
  - Afterwards you performed the migration of the transactional data of the Accrual Engine.
  - This migration has migrated accrual postings in the old year 2018: Entries in table ACDOCA were generated with RYEAR = 2018 and MIG\_SOURCE = D.
  - In order to achieve that the Accrual Engine will calculate and post correct values in fiscal year 2019, the balance carry forward must be repeated from year 2018 to year 2019:
  - By repeating the balance carry forward, the new balances in ACDOCA in year 2018 that result from the migrated postings, will be carried forward to 2019.
- **Remark:** With Note 2838716 (Rel. 1909 FPS1 and 1809 SP3), balance carry forward is not required for Accrual Postings, which means there is no need to execute the above steps.



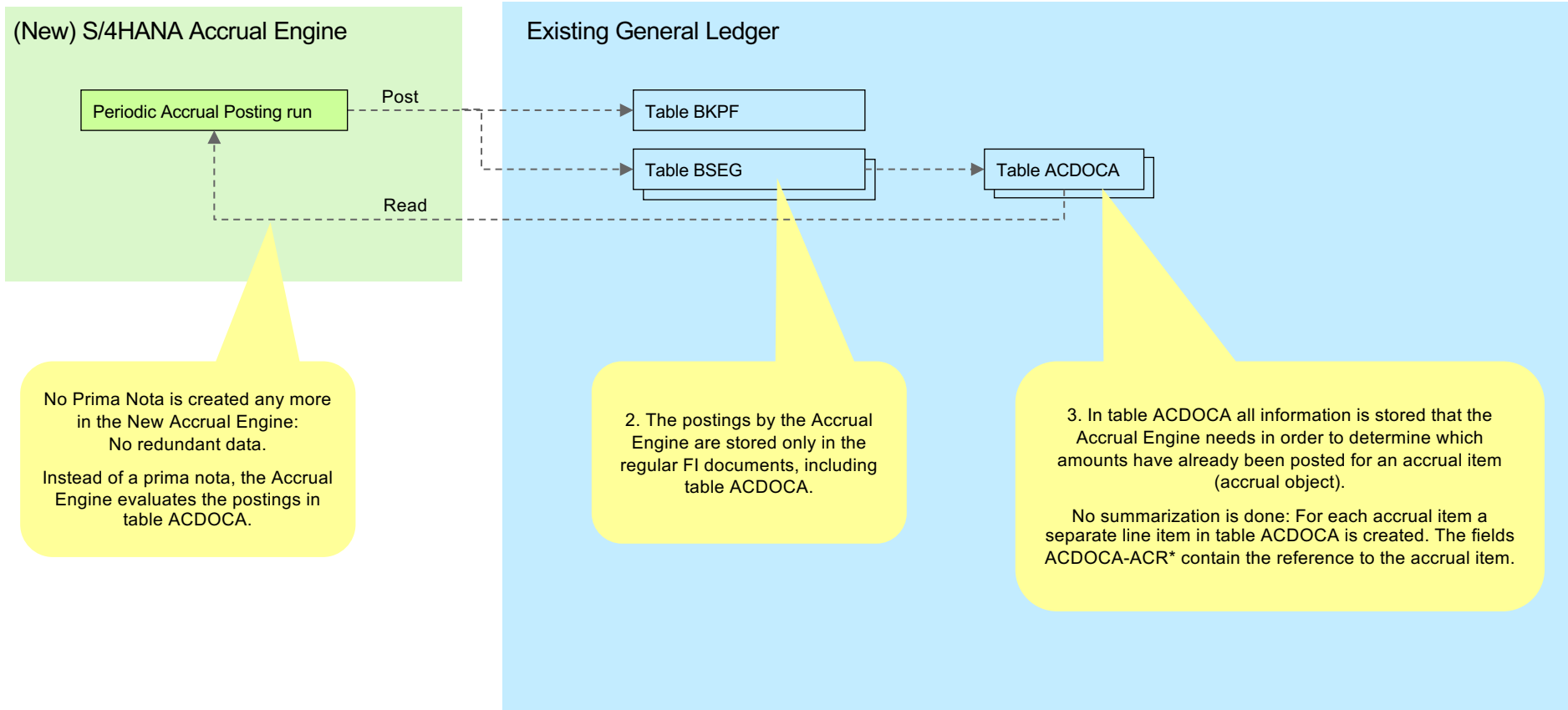
# **Migration of Accrual Engine Postings:**

## **Technical Details**

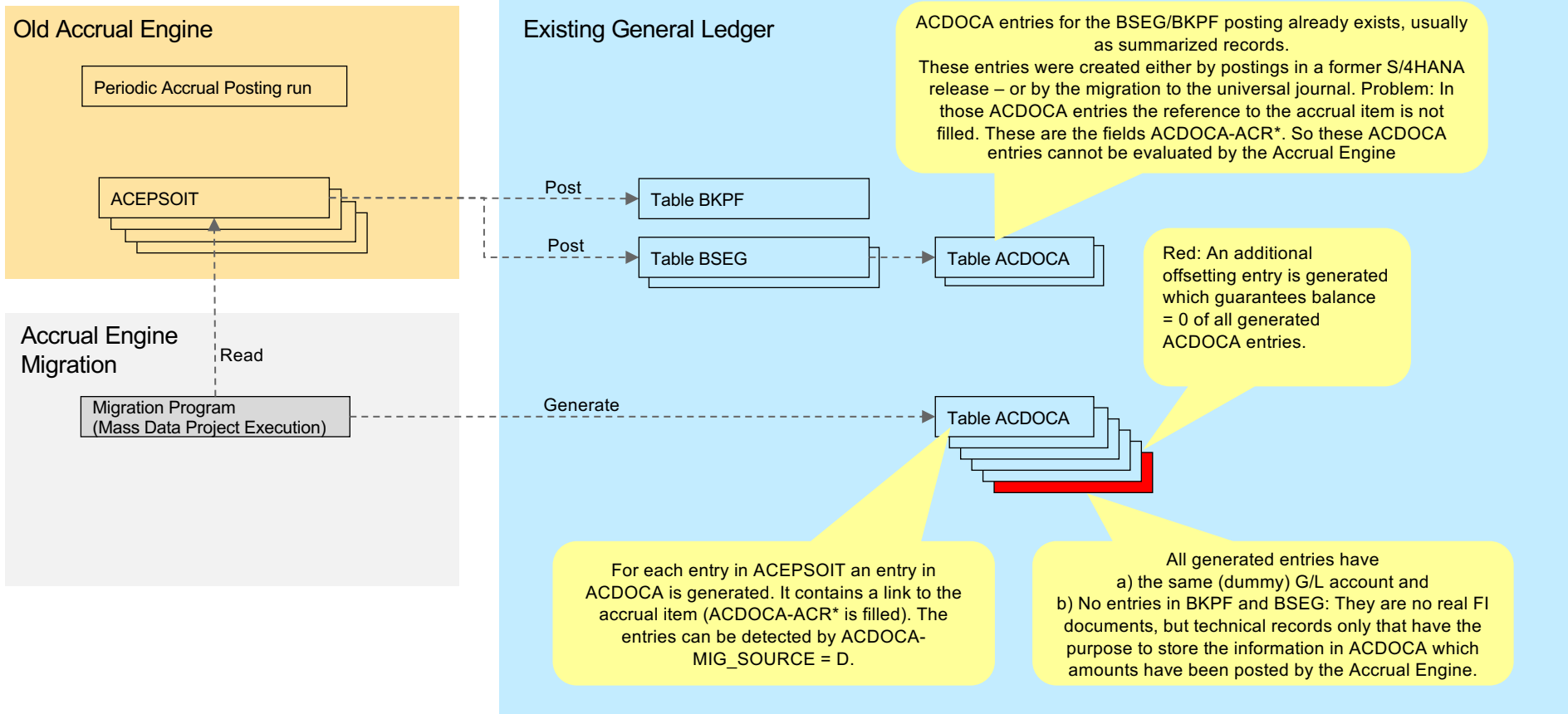
# Old Accrual Engine **Before** S/4HANA 1809: Posting Logic



# After Migration to (New) S/4HANA Accrual Engine **From** Rel. 1809: Posting Logic



# Migration of Accrual Engine Postings to ACDOCA



# Exchange Rate Handling in Migration

# Exchange Rate for Accrual Postings

- Accrual postings in old accrual engine are persisted in table ACEPSOIT where only amount in transaction currency is available.
- When migrating accrual postings from ACEPSOIT to ACDOCA, life start date of accrual object is used to determine the exchange rate for amounts in other currencies.
- In some deferral cases, a certain currency conversion date should be used, for e.g. invoice deferral where the currency conversion date should be the posting date of the invoice. This can be achieved by implementing method REDEFINE\_EXCHANGE\_RATE\_DATE of BAdI BADI\_ACE\_MIG. Details about how the BAdI works can be found in page [BAdI in Transactional Data Migration](#).

# Exchange Rate for Total Amount in Accrual Items

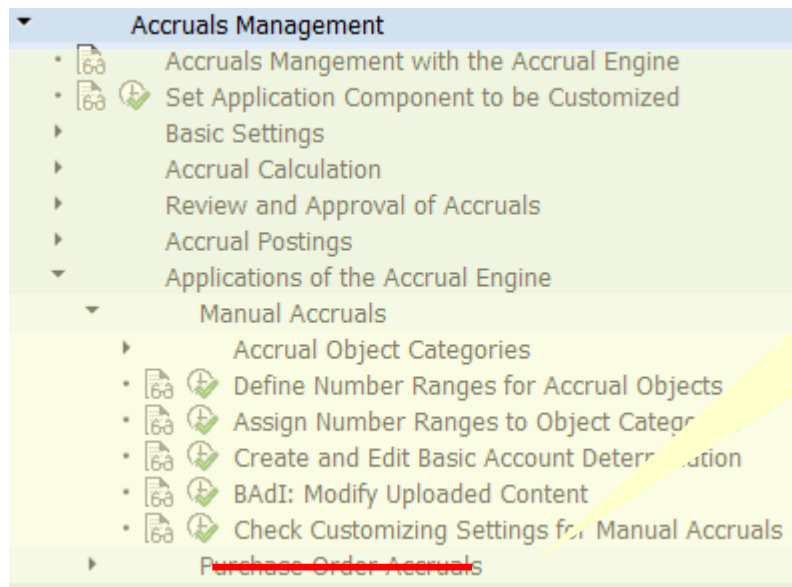
- Accrual items in old accrual engine are persisted in table ACEDSOI where only total amount in transaction currency is available.
- When migrating accrual items from ACEDSOI to ACESOBJ\_ITEM, if total amount in currencies other than transaction currency should be filled, life start date of accrual object is used to determine the exchange rate.
- In some deferral cases, a certain currency conversion date should be used, for e.g. invoice deferral where the currency conversion date should be the posting date of the invoice. This can be achieved by implementing method REDEFINE\_EXCHANGE\_RATE\_DATE of BAdI BADI\_ACE\_MIG. Details about how the BAdI works can be found in page [BAdI in Transactional Data Migration](#).

# Customizing the S/4HANA Accrual Engine

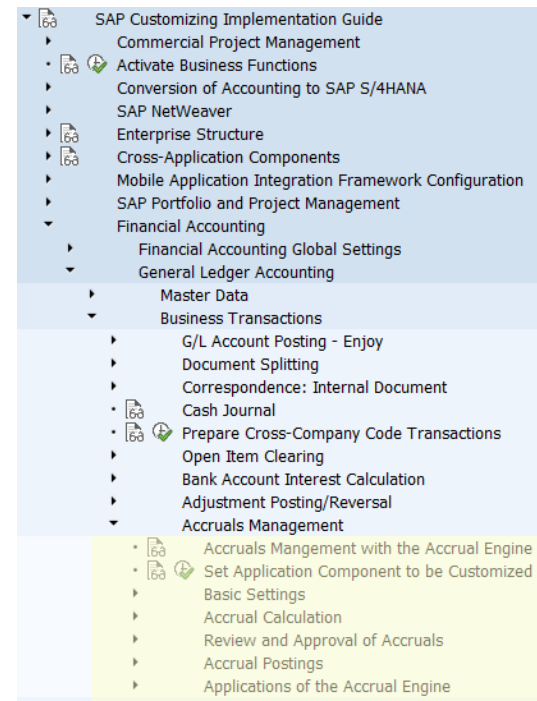


# Customizing for Manual Accruals

- Before you can create accrual objects and perform accrual postings, you need to make specific Customizing settings. Amongst others, the Customizing settings will determine the following behavior:
  - Which type of accruals will be calculated and posted?
  - Which algorithms shall be used?
  - Which accrual accounts will be used in the accrual postings?
- You can make the relevant Customizing activities using the **Accruals Management IMG** tree, transaction ACEIMG or in the IMG tree, transaction SPRO:



*Purchase Order Accruals is an independent application: The related customizing activities are not required if you want to use only manual accruals.*

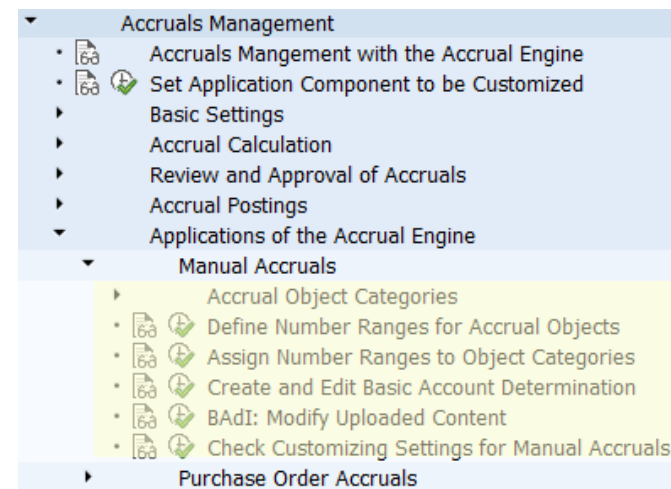
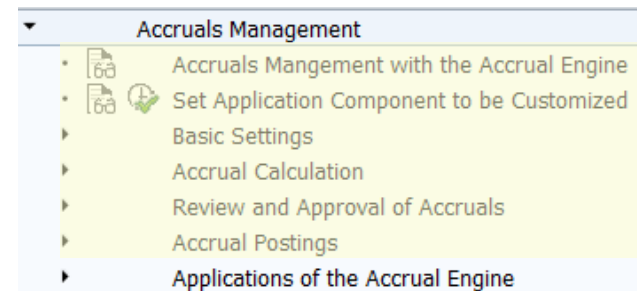


# Customizing for Manual Accruals (incl. Accrual Engine)

The customizing settings for Manual Accruals consist of two main parts:

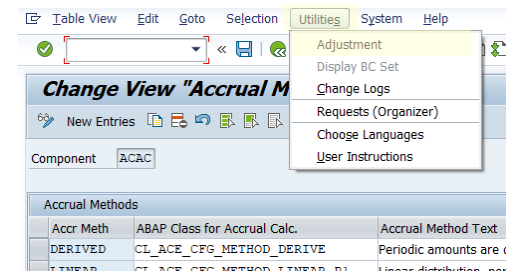
1. Customizing settings for the **Accrual Engine**:  
Since the application Manual Accruals is based on the Accrual Engine, these settings are prerequisite for the customizing settings of purchase order accruals.  
Important: The Accrual Engine is a generic tool.  
**Not all available customizing settings are relevant** if you want to use the Accrual Engine only for purchase order accruals.
2. Customizing settings that are specific for the application **Manual Accruals**.

Both steps are contained in transaction “Accruals Management - IMG” (ACEIMG).



# SAP-Delivered Default Customizing for Manual Accruals

- SAP delivers default customizing for purchase order accruals.
- You can find this default customizing settings in client 000.
  - If you upgraded from a former release to release S/4HANA 1809 or higher, you will find the default customizing only in client 000 but not in other clients, because newly delivered customizing is only imported into client 000 during the upgrade.
- There are several ways to import the default customizing from client 000 into your productive client:
  - You can logon to client 000 and add the purchase order accruals customizing into a customizing transport:
    - Start all IMG activities of Accruals Management, transaction ACEIMG in client 000 one by one and
    - perform in each IMG activity the function *Table View* -> *Transport* for all table entries.
    - Afterwards, logon to the productive client and start transaction **SCC1** in order to import the customizing transport from client 000.
  - Alternatively you can logon to the productive client in your customizing system and directly copy the default customizing from client 000 for each IMG activity one by one:
    - Start the IMG activities of Accruals Management, transaction ACEIMG in the productive client (of your customizing system).
    - In each IMG activity use the function **Utilities** -> **Adjustment** and then the *Adjust* and then the *Add Entry* button to copy the entries from client 000.



# New in Release S/4HANA 1809 Support Package 3

- With note 2800607, in support package 3 of release S/4HANA 1809 the settings which postings shall be performed for which accrual item type have been moved from the IMG activity *Define Accrual Item Types* into the other IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*:
  - By assigning an accrual item type to a transaction type and posting schema in this IMG activity, it is defined that postings with this transaction type shall be performed.
  - No redundant setting in IMG activity *Define Accrual Item Types* (field XPOST) is needed any more.
  - Also the indicator *Post Deltas* that defines whether delta postings shall be performed for the have been moved into this IMG activity.

**Manual Accruals:**

**New Features**

**Since Release S/4HANA 1809**

# EXCEL Upload: Use-Cases + Templates

- In the S/4HANA Accrual Engine, Manual Accruals offers the possibility to upload accruals.
- There are three EXCEL templates available for three different purposes:
  1. **Upload of accrual objects**

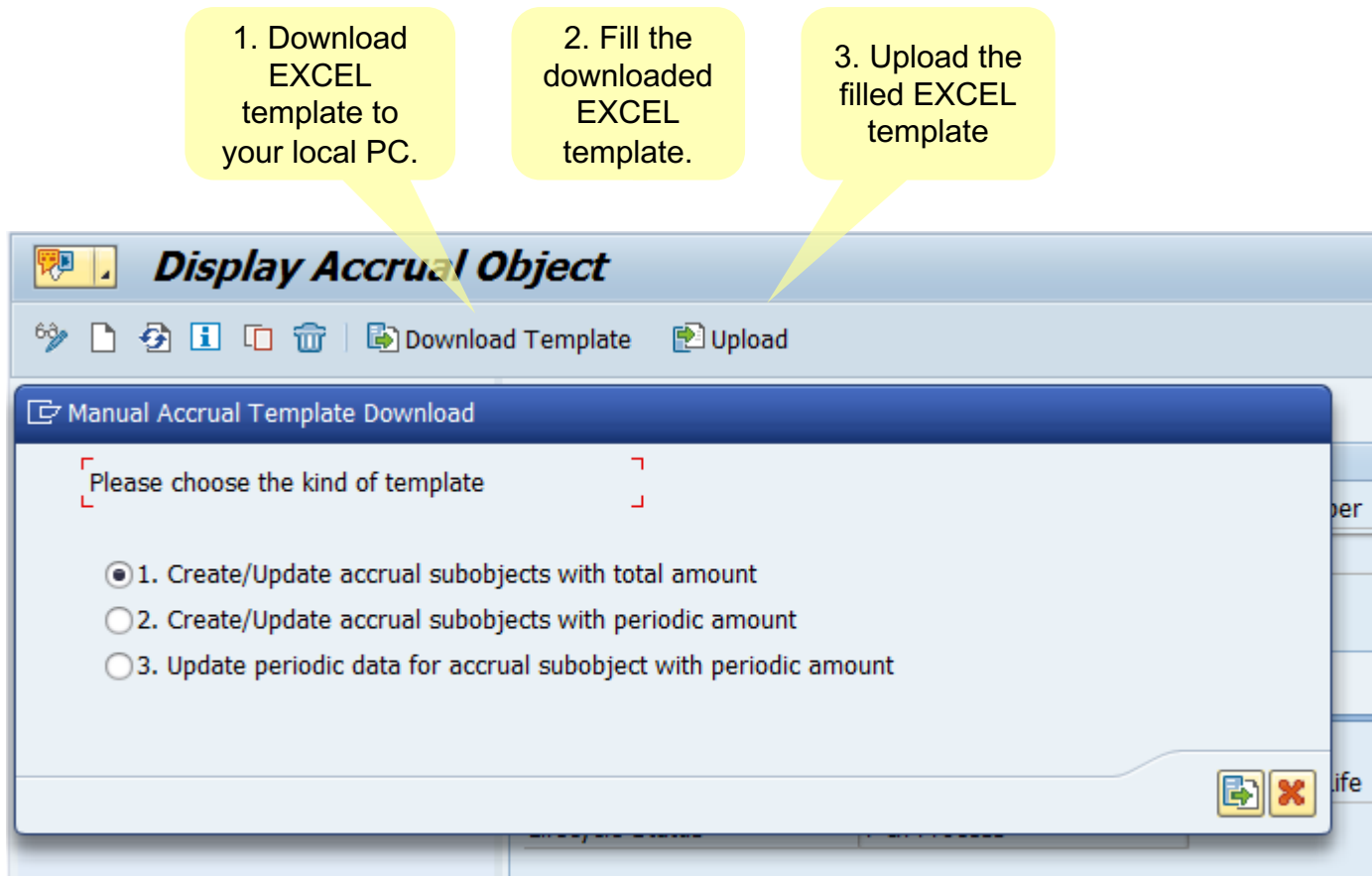
With a total amount and an accrual method how this total amount shall be distributed over periods.
  2. **Upload of pre-calculated accrual amounts with creation of accrual objects**

Accrual amounts are uploaded for the single periods.  
If the accrual object does not yet exist, the system will create it automatically.  
Otherwise the existing accrual object is just updated: The amounts for the periods are uploaded and added to this accrual object.
  3. **Upload of pre-calculated accrual amounts for some periods**

For already existing accrual objects the amounts are uploaded for the single periods.  
The accrual amounts have been calculated “somewhere” outside the system and just being uploaded so that the Accrual Engine will post these amounts.

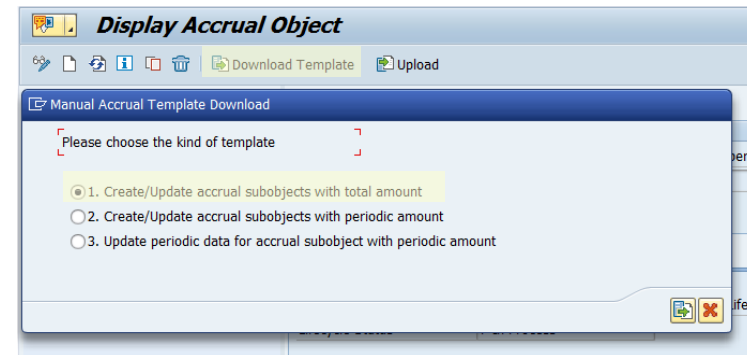
# EXCEL Upload: Download Templates

- The EXCEL templates for the different use-cases can be downloaded in transaction ACACTREE02, see screen-shot.



# EXCEL Upload: Upload Accrual Object

- The accrual engine offers the possibility to upload an accrual object from EXCEL instead of entering the data manually in the system.
- As a first step you need to download the corresponding EXCEL template in transaction ACACTREE02, see screen-shot:



- The following EXCEL contains sample data that can be used for the upload:

Company Code	Accrual Object Category (1)	Accrual Object Number (22)	*Start of Life	*End of Life	*Accrual Item Type (11)	Accrual/Deferral Method	Accrual Amount in Transaction Currency	Cost Center (10)
BUKRS	ACAC_OBJTYPE	ACAC_OBJNUMBER	LIFE_START_DATE	LIFE_END_DATE	ITEMTYPE	ACRSMETHOD	DTAL_ACCR_AMNT_W RWCUR	KOSTL
0001	OVENDORINV	4711-10	01.01.2018	31.12.2018	COSTSP	LINEAR	12000 EUR	1



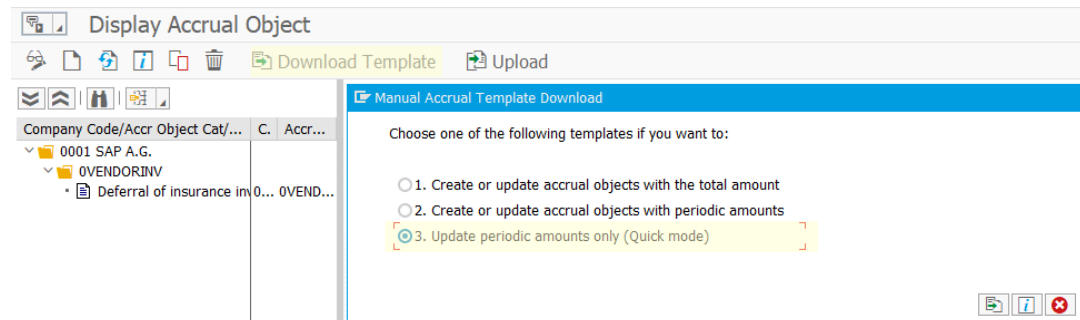
Microsoft Excel  
Worksheet

- This sample file contains only one row, but of course you can enter several rows.



# EXCEL Upload: Uploading Periodic Accrual Amounts for an Already Existing Accrual Object

- The accrual engine offers the possibility to upload pre-calculated accrual amounts for each period.
  - The accrual object(s) must already exist: With this EXCEL template you just upload periodic amounts for the single periods into this/these accrual object(s).
- This means that instead of using an algorithm like linear distribution of a total amount, you upload for each period the amount from an EXCEL.
- You need to download the corresponding EXCEL template in transaction AACTREE02, see screen-shot:



# EXCEL Upload: Uploading Periodic Accrual Amounts: Required Customizing

- The accrual engine offers the possibility to upload pre-calculated accrual amounts for each period.
- This means that instead of using an algorithm like linear distribution of a total amount, you upload for each period the amount from an EXCEL.
- There are some prerequisites:
  1. In the customizing you must set the indicator “Upload Allowed” in the corresponding accrual item type. This is done in IMG activity *Accruals Management -> Basic Settings -> Accrual Item Types -> Define Item Types*
  2. In the same IMG activity you also need to uncheck the indicator “No zero amount”, because you want to upload amounts for the single periods instead of entering a total amount:  
The total amount is zero in this case.

Note that the accrual item type COSTSP\_UPL that is used in this example is not contained in the standard customizing delivery. You can manually create such an accrual item type in this IMG activity.

**Change View "Define Item Types": Overview**

Dialog Structure

- Define Item Types
  - Item Type Settings for Ldrgrp incl. Repr. Ledger
  - Calculation Rules for Derived Item Types

Component: ACAC

Define Item Types		
Accrual Item Type	Derived	Upld Allwd
COSTSP	<input type="checkbox"/>	<input type="checkbox"/>
COSTSP_UPL	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Change View "Item Type Settings for Ldrgrp incl. Repr. Ledger": Detail**

Dialog Structure

- Define Item Types
  - Item Type Settings for Ldrgrp incl. Repr. Ledger
  - Calculation Rules for Derived Item Types

Component: ACAC

Accr Item Type: COSTSP\_UPL

Company Code: 0001

Ledger Group:

Settings for Accrual Item Type and Ledgergroup

Posting Frequency: P Per Posting Period

Closing Frequency:

Reversl Posting Type: Inverse Posting

Optional: Relation to Settings of Old Accrual Engine

Accrual Type:

Settings Specific for Representative Ledger in Accrual Currency

Ledger: 01

Currency Type: 00

Currency Handling: A By Accrual Engine

☒ No Zero Amount

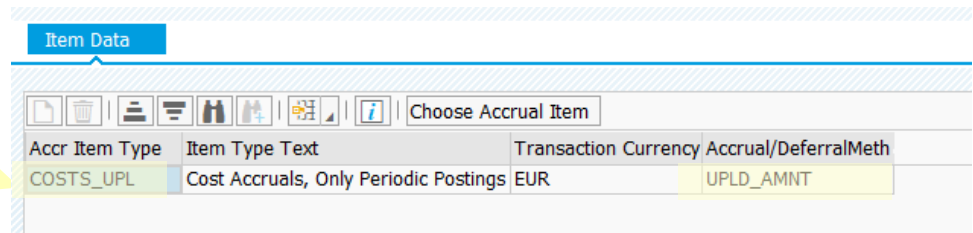
# EXCEL Upload: Uploading Periodic Accrual Amounts: Only Periodic Postings

- The possibility to upload the periodic accrual amounts using an EXCEL, is intended for periodic accrual postings.
- In general you will configure the corresponding accrual item type (in the example: COSTS\_UPL) for periodic postings, but not for opening postings.
  - In IMG activity Assign Accrual Item Types to Journal Entry Types and Posting Schemas you assign only the transaction type PP (Periodic Posting) to a posting schema, but not transaction types IP.
- Reason: The opening is done by the Accrual Engine when the accrual object is created or changed.
- The opening posting posts the total amount to be accrued as opening posting.
  - If you upload the periodic amounts not during the creation of the accrual object but later, then during the creation of the accrual object no opening posting will be done: The total amount is zero, so no opening posting is done.

# EXCEL Upload: Uploading Periodic Accrual Amounts: Required Accrual Method

- You need to create the accrual object before you can upload periodic amounts for it.
- When creating the accrual object in transaction ACACTREE02 you need to enter the accrual method UPLD\_AMNT.  
Note: You can create also your own accrual method with a different name, but you must assign it to the ABAP class CL\_ACE\_CFG\_METHOD\_ITEM\_PER in IMG activity  
*Accruals Management -> Accrual Calculation -> Define Accrual Methods.*
- The amounts for the single periods can be uploaded from EXCEL, but unfortunately they cannot be manually edited in transaction ACACTREE02.

Screen-shot  
from  
transaction  
ACACTREE02



Item Data			
Choose Accrual Item			
Accr Item Type	Item Type Text	Transaction Currency	Accrual/DeferralMeth
COSTS_UPL	Cost Accruals, Only Periodic Postings	EUR	UPLD_AMNT

# EXCEL Upload: Uploading Periodic Accrual Amounts: Example

- The following EXCEL can be used to upload different amounts for each period for the already existing accrual object with Accrual Object Category = ORENTING and Accrual ObjectNumber = 1000072.

// Short Documentation how to fill this template:  
 // A comment must start with '//'. Otherwise it reports errors when you upload the spreadsheet.  
 // Descriptions of fields:  
 // Required fields are marked with '\*'.  
 // When you update existing accrual objects, fill in the Overwrite Allowed field with 'X' so that your changes will take effect in the system.  
 // If you leave the ledger group, accruals are posted to all ledgers.  
 // Depending on the customizing of the accrual object category, an accrual object number can be either an internal or external number.  
 // For an internal accrual object number, if you try to create one accrual object with multiple items, make sure that you add prefix '\$\$' for the temporary number you enter. For example, you can enter '\$\$1000072'.

*Company Code (4)	*Accrual Object Category (10)	*Accrual Object Number (22)	*Last Day of Period	*Accrual Item Type (11)	Ledger Group (4)	Accr. Amount in Transac.	Transaction Currency	Overwrite Allowed (1)
BUKRS	ACAC_OBJTYPE	ACAC_OBJNUMBER	KEYDATE	ITEMTYPE	LDGRP	JPOADED_ACCR_AMNT_WSI	RWCUR	OVERWRITE_ALLOWED
0001	ORENTING	1000072	31.01.2018	COSTS_UPL		850	EUR	X
0001	ORENTING	1000072	28.02.2018	COSTS_UPL		800	EUR	X
0001	ORENTING	1000072	31.03.2018	COSTS_UPL		840	EUR	X
0001	ORENTING	1000072	30.04.2018	COSTS_UPL		860	EUR	X
0001	ORENTING	1000072	31.05.2018	COSTS_UPL		980	EUR	X
0001	ORENTING	1000072	30.06.2018	COSTS_UPL		870	EUR	X
0001	ORENTING	1000072	31.07.2018	COSTS_UPL		1100	EUR	X
0001	ORENTING	1000072	31.08.2018	COSTS_UPL		1150	EUR	X
0001	ORENTING	1000072	30.09.2018	COSTS_UPL		1200	EUR	X
0001	ORENTING	1000072	31.10.2018	COSTS_UPL		1050	EUR	X
0001	ORENTING	1000072	30.11.2018	COSTS_UPL		1300	EUR	X
0001	ORENTING	1000072	31.12.2018	COSTS_UPL		1000	EUR	X

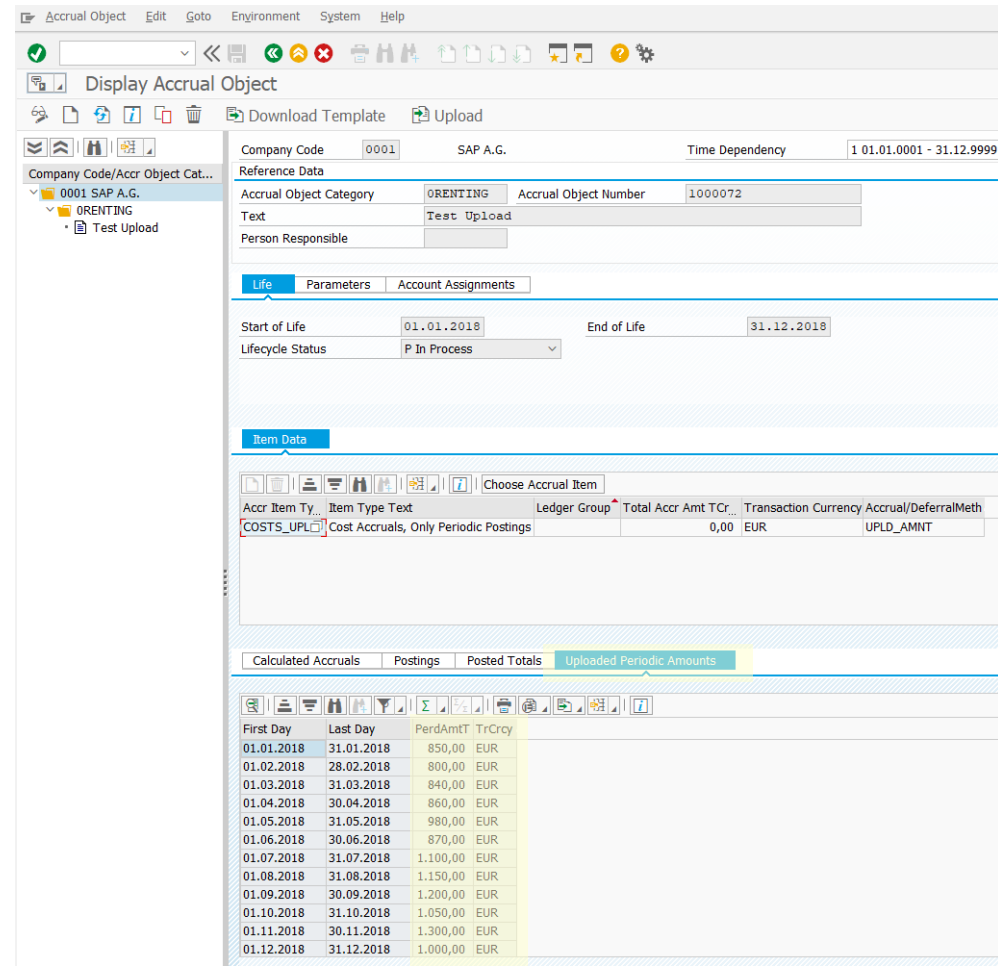
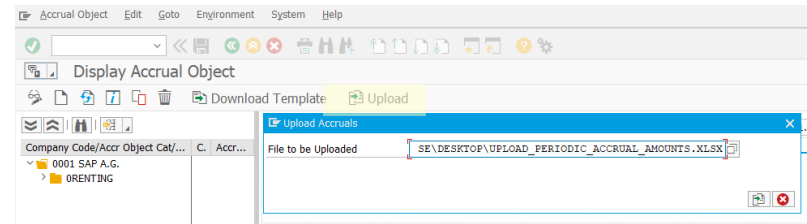
- Note that for pure numeric values like company code 0001 you might need to enter an apostrophe as first character, that is, '0001 in the corresponding EXCEL cell. Otherwise EXCEL might convert your entry from value 0001 to 1 – which would be wrong. This conversion depends on the formatting of the EXCEL cell.



Microsoft Excel  
Worksheet

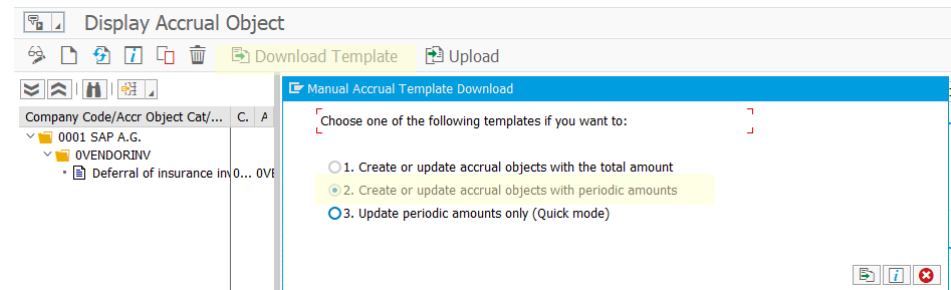
# EXCEL Upload: Uploading Periodic Accrual Amounts: Example (continued)

- Copy the EXCEL to your desktop and click the *Upload* button in transaction AACTREE02 to start the upload of the periodic amounts.
- After the upload finished successfully you can see the uploaded amounts in the tab “Uploaded Periodic Amounts” at the bottom.
- The periodic accrual posting run will then post in each period the amount that was uploaded for this period, for example in 03/2018, posting date 31.03.2018, the system will post 840 EUR.



# EXCEL Upload: Upload Accrual Object with Periodic Accrual Amounts

- This is the combination of the other two EXCEL templates:
  - You upload the accrual object
  - together with accrual amounts for the single periods.
- You need to download the corresponding EXCEL template in transaction ACACTREE02, see screen-shot:



- The following EXCEL contains sample data that can be used for the upload:

Company	Object	Category	Object Number	*Last Day of Period	*Start of Life	*End of Life	*Accrual Item Type (11)	Periodic Accr. Amount in Transaction Currency	Cost Center (10)
BUKRS	ACAC_OBJTYPE	ACAC_OBJNUMBER	KEYDATE	LIFE_START_DATE	LIFE_END_DATE	ITEMTYPE	JPLOADED_ACCR_AMNT_WS	RWCUR	KOSTL
0001	OVENDORINV	4711-20	31.01.2018	01.01.2018	31.12.2018	COSTS_UPL	500 EUR		1
0001	OVENDORINV	4711-20	28.02.2018	01.01.2018	31.12.2018	COSTS_UPL	450 EUR		1



Microsoft Excel  
Worksheet

# EXCEL Upload: Upload Accrual Object with Periodic Accrual Amounts

- The result of the uploaded sample EXCEL file in transaction ACACTREE02, see screen-shot.
- The upload has created the accrual object 4711-20 and uploaded accrual amounts for two periods.

The screenshot displays the SAP ACACTREE02 transaction interface. The left pane shows the navigation tree with '0001 SAP A.G.' and 'OVENDORINV' selected. The right pane shows the 'Display Accrual Object' screen with the following data:

Company Code: 0001, SAP A.G., Time Dependency: 1 01.01.0001 - 31.12.9999

Reference Data:

- Accrual Object Category: OVENDORINV
- Accrual Object Number: 4711-20
- Text: Upload with periodic amounts
- Person Responsible: TESTER

Life Parameters:

- Start of Life: 01.01.2018
- End of Life: 31.12.2018
- Lifecycle Status: P In Process

Item Data:

Choose Accrual Item

Accr Item Ty...	Item Type Text	Ledger Group	Transaction Currency	Accrual/DeferralMeth
COSTS_UPL	Cost Accruals, Only Periodic Postings		EUR	UPLD_AMNT

Calculated Accruals:

Accr Item Type	Last Day	BalAmtT	TrCrcy
COSTS_UPL	31.01.2018	500,00	EUR
COSTS_UPL	28.02.2018	450,00	EUR
COSTS_UPL	31.03.2018	0,00	EUR
COSTS_UPL	30.04.2018	0,00	EUR
COSTS_UPL	31.05.2018	0,00	EUR
COSTS_UPL	30.06.2018	0,00	EUR
COSTS_UPL	31.07.2018	0,00	EUR
COSTS_UPL	31.08.2018	0,00	EUR
COSTS_UPL	30.09.2018	0,00	EUR
COSTS_UPL	31.10.2018	0,00	EUR
COSTS_UPL	30.11.2018	0,00	EUR
COSTS_UPL	31.12.2018	0,00	EUR



# EXCEL Upload: BAdI to Enrich Uploaded EXCEL Data

- The BAdI BADI\_ACE\_UPLD\_DATA\_MODIFY is called during upload of an EXCEL file into the Accrual Engine.
- You can use this BAdI to enrich the uploaded data, that is, fill some columns that the users did not fill manually.
  - This way you can simplify the EXCEL template that users need to fill: Some columns can be deleted in the EXCEL template because they are filled automatically by the BAdI during the upload.

Example for a  
BAdI  
implementation.

Method **IF\_ACE\_UPLD\_DATA\_MODIFY\_BADI~CHANGE\_UPLOAD\_CONTENT** active

```
1  METHOD if_ace_upld_data_modify_badi~change_upload_content.  
2  * purpose of this method:  
3  *   The table ct_upload_content contains the content of the uploaded EXCEL file.  
4  *   With this BAdI some columns in this table can be filled.  
5  *   This way it is achieved that the user can leave some columns empty because  
6  *   they are filled automatically in this BAdI implementation during upload.  
7  *   The EXCEL template can be simplified for the users accordingly: Some columns  
8  *   can be deleted in the EXCEL template.  
9  
10 *  
11 LOOP AT ct_upload_content ASSIGNING FIELD-SYMBOL(<ls_upload_content>).  
12   <ls_upload_content>-acac_objtype = 'WN_COST'.  
13 ENDLOOP.  
14 ENDMETHOD.
```

# BAdIs Available for Accrual Objects

- **BADI\_ACE\_MDO\_CHECK\_CUST:** Define customer specific checks for an accrual object.
- **BADI\_ACE\_SUBOBJECT\_AUTH\_CHECK:** Defines customer specific authorization check when accessing an accrual object
- **BADI\_ACE\_SUBOBJECT\_MODIFY:** Modify the accrual object before it is saved to database.
- **ACE\_UI\_NAVIGATION\_S4:** Define customer specific logic for where to navigate when clicking on manual accrual subobject reference information in transaction ACACTREE02.
- **BADI\_ACE\_SUBOBJ\_GET\_PRICE:** Get price for an accrual item if quantity based accruals is configured.

# BAdIs Available for Accrual Objects

- **BADI\_ACE\_UI\_ASSGNMT\_FLD:** If an account assignment field is added into custom include `CI_ACESOBJ_ASSGMT_ATTRIBUTES`, it will be available for all application components. But if this field should be used only in one or few application components, this BAdI needs to be implemented to claim the available application components for customer added account assignment fields.
- **BADI\_ACE\_DOC\_FIELDS\_MAPPING:** Custom fields added in custom include `CI_ACESOBJ_ASSGMT_ATTRIBUTES` or `ACCRPOSTING_INCL_EEW_PS` may have different field names from the ones in `ACDOCA`, this BAdI needs to be implemented to map custom fields to the ones in `ACDOCA`.

# Attachments to Accrual Objects

- In the accrual object display, for example transaction ACACTREE02 you can add attachments and/or notes to the accrual object.
- For example you can add an EXCEL file or some document that explains why you created this accrual object.

Click here to  
add attachments  
or notes.

The screenshot displays the SAP 'Display Accrual Object' (ACACTREE02) interface. The top menu bar includes 'Accrual Object', 'Edit', 'Goto', 'Environment', 'System', and 'Help'. Below the menu is a toolbar with various icons, including a green checkmark, a dropdown arrow, and icons for navigation and document management. The main title bar reads 'Display Accrual Object'. Below this, there is a toolbar with icons for adding attachments (a folder with a plus sign), deleting, and downloading templates. The left sidebar shows a tree structure for 'Company Code/Acc Object Cat./AObj...'. The selected path is '0001 SAP A.G.' > 'ORENTING' > 'Accruals for Contract 4711'. The right pane displays the 'Reference Data' section, which includes fields for 'Company Code' (0001), 'SAP A.G.', 'Accrual Object Category' (ORENTING), 'Accrual Object Number', 'Text' (Accruals for Contract 4711), and 'Person Responsible' (TESTER). Below this, there are tabs for 'Life', 'Parameters', and 'Account Assignments'. The 'Life' tab is active, showing 'Start of Life' (01.01.2018), 'End of Life', and 'Lifecycle Status' (P In Process).

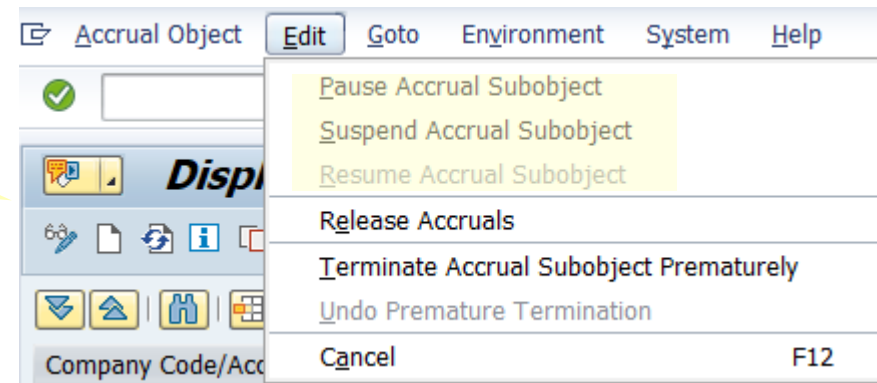
Reference Data	
Company Code	0001
SAP A.G.	
Accrual Object Category	ORENTING
Accrual Object Number	
Text	Accruals for Contract 4711
Person Responsible	TESTER

Life	
Start of Life	01.01.2018
End of Life	
Lifecycle Status	P In Process

# Pause, Suspend and Resume Action

- In the transaction *Display Accrual Object* the functions
  - Pause Accrual Subobject
  - Suspend Accrual Subobject and
  - Resume Accrual Subobjectare available in addition to the actions
  - Terminate Accrual Subobject Prematurely
  - Undo Premature Termination.

Screen-shot  
from transaction  
ACACTREE02.



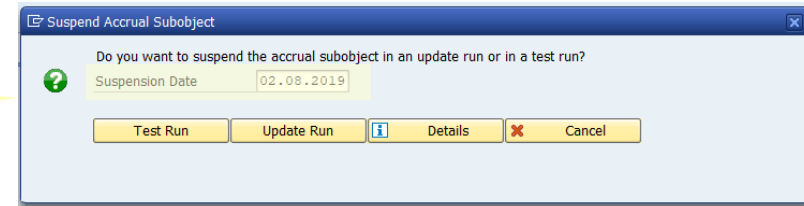
# Pause, Suspend and Resume Action: Improved Usability

- With the following support packages and SAP note 2816562, the usability and features of the actions *Pause*, *Suspend*, *Resume*, *Terminate Accrual Subobject Prematurely* have been improved:
  - Release S/4HANA 1809 SP3
  - Release S/4HANA 1909 SP1
- What has changed in these support packages (note 2816562):
  - The action *Pause* and its status *Paused* is new.
  - The action *Suspend* was changed:
    - The Suspend action performs now a release posting.  
Before this support package it did not perform the release posting. So this is an incompatible change. If the release posting is not desired, the *Pause* action can be used instead of *Suspend*.
    - The Suspend action requires now to enter a Suspension Date.
  - The Suspension (and Pause) Date is displayed in the transaction that displays the accrual object, for example transaction ACACTREE02 or POACTREE03.

# Pause, Suspend and Resume Action: Purpose

- The purpose of *Pause* and *Suspend* action is to prevent that in future additional accrual are posted.
  - The action changes the status of the accrual subobject to *Paused* or *Suspended*.
  - Both actions require a **date** from which the status *Paused* or *Suspended* is valid.

For example in the *Suspend* action popup the user needs to enter a Suspension Date. This is the date from which the new status *Suspended* is valid.



- Both actions have similar effect:
- The difference between the two actions *Pause* and *Suspend* is that
  - Suspend triggers a **release posting**: After this action was performed, the accrual balance of this accrual subobject is zero.
  - Pause does **not** trigger a release posting: The accrual balance stays.
- Paused and Suspended are intended to be used as temporary status.
  - The user plans to **resume** the accrual subobject again at some later point in time.

# Pause, Suspend and Resume Action: Display of Date And Status

Screen-shot from transaction ACACTREE02:  
After for example the *Pause* action was executed,  
the new status *Paused* and the corresponding  
*Pause Date* are saved in the accrual object.

Life Parameters Account Assignments			
Start of Life	01.02.2019	End of Life	30.11.2019
Lifecycle Status	U Paused		
Pause Date	02.08.2019		

Similar for status *Suspended* and *Prematurely Finished*.

Life Parameters Account Assignments			
Start of Life	01.02.2019	End of Life	30.11.2019
Lifecycle Status	S Suspended		
Suspension Date	02.08.2019		

Life Parameters Account Assignments			
Start of Life	01.02.2019	End of Life	30.11.2019
Lifecycle Status	F Prematurely Finished		
Premtr Finish Date	02.08.2019		



# Pause and Suspend: Difference to Terminate Prematurely

- Status *Paused* and *Suspended* are intended to be used as **temporary** status values.
  - The user plans to resume the accrual subobject again at some later point in time.
- Whereas status *Prematurely Finished* is intended as a final status.
  - From a business point of view this accrual subobject is finished.
  - No further accruals shall be posted.
  - The accrual balance is set to zero with a release posting.
    - Same behavior as *Suspend* action.
  - Of course also this status can be revoked if needed.
    - Revoke from status *Prematurely Finished* to *In Process* is possible with action *Undo Premature Termination*.
- Technically, the actions *Suspend* and *Terminate Prematurely* behave almost identical.
  - The difference is the meaning and purpose: *Suspended* is intended as temporary status whereas *Prematurely Finished* is intended as final status.

# Utilization and Release Postings After Pause, Suspend and Terminate Prematurely

- If an accrual subobject has one of the status values
  - *Paused*
  - *Suspended*
  - *Prematurely Finished*then there will be no additional accruals posted after the corresponding date (suspension date, pause date, premature finish date).
- But still utilization and release postings can occur.
  - See next slides.

# Status Paused: Utilization and Release Postings

- If the status of the accrual subobject is *Paused*, the remaining accruals were not released:
- There can be still accruals left that can be
  - either utilized by actual cost postings
  - or manually released using the function *Edit -> Release Accruals* in transaction ACACTREE02.

# Status Suspended and Prematurely Finished: Utilization Postings

- If the status of the accrual subobject is *Suspended* or *Prematurely Finished*, the balance of the accrual subobject is zero:
  - After the corresponding date (Suspension Date or Premature Finish Date) there are no accruals left.
- The remaining accruals were released when the status was changed.
- Nevertheless, despite the accrual balance is zero, utilization postings can still occur!
  - If actual costs are posted with a posting date after the *Suspension Date* or *Premature Finish Date*, then the corresponding amount of the release posting will be reversed and this amount is posted as utilization instead.
  - In other words: Utilization has higher priority than release of accruals:
  - The system regards the former release posting as mistake – because later it turned out that the accruals would actually be needed to cover the actual costs.

# Use-Case for Actions Pause and Terminate Prematurely

Example for Pausing an accrual subobject:

- An accrual (sub)object was created for a contract.
- Accruals of 1.000 USD have been posted for this accrual (sub)object.
- But starting next month, Aug 2019, the contract is on hold.
- No further accruals shall be posted.
- The existing accruals shall be kept because likely the contract will continued.
- To achieve this, the user executes the *Pause* action in transaction ACACTREE02 and enters Pause Date = July 31<sup>st</sup> 2019.
- Later, on August 15<sup>th</sup> 2019 an invoice of 800 USD for this contract is posted.
  - This invoice posting will lead to a utilization posting of 800 USD.
- On August 20<sup>th</sup> it turns out that the contract needs to be ended on August 31<sup>st</sup> 2019. The remaining accruals shall be released.
- To achieve this the user executes the action *Terminate Accrual Subobject Prematurely* in transaction ACACTREE02 and enters *Premature Finish Date* = August 31<sup>st</sup> 2019.
  - This will lead to a release posting of the remaining 200 USD accruals.

# Use-Case for Action Suspend

Example for Suspending an accrual subobject:

- An accrual (sub)object was created for a contract.
- Accruals of 1.000 USD have been posted for this accrual (sub)object.
- But starting next month, Aug 2019, the contract is on hold.
- No further accruals shall be posted.
- The existing accruals shall be released because likely the contract will be canceled.
- To achieve this, the user executes the *Suspend* action in transaction ACACTREE02 and enters Suspension Date = July 31<sup>st</sup> 2019.
  - A release posting of 1.000 USD is performed.
- Later, on 15. August 2019 an invoice of 800 USD for this contract is posted.
  - This invoice posting will lead to the following postings in the Accrual Engine:
    - Release posting of - 800 USD (i.e. partial reversal of the original release posting)
    - Utilization posting of + 800 USD

# Special Use-Case for Actions Suspend and Terminate Prematurely

Example for the Special Case of an accrual subobject:

- An accrual (sub)object was created for a contract on May 1<sup>st</sup> 2020.
- The accrual (sub)object has life start on July 1<sup>st</sup> 2020.
- Accruals of 1.000 USD have been posted for this accrual (sub)object.
- But on June 1<sup>st</sup> 2020, the contract is on hold.
- No further accruals shall be posted.
- The existing accruals shall be released because likely the contract will be canceled.
- To achieve this, the user executes the *Suspend* or *Terminate Accrual Subobject Prematurely* action in transaction ACACTREE02 and enters Suspension Date / Premature Finish Date = June 1<sup>st</sup> 2020.
  - A release posting of 1.000 USD is performed.
- Note: This feature is supported in rel. 2020 and downported into rel. 1809 SP5 and 1909 SP3 by Note 2932777.

# Time-Dependency of Accrual Objects

- Accrual objects have a time-dependency: If you can change the content of field of the accrual object, this change is valid from a certain date “Valid From” on: Before this date, the old content of this field is valid.
- If such changes have been done, the corresponding drop-down listbox offers a separate date-interval in which the different contents are valid: Each change will lead to a new time-slice.
- Note: Time-dependency was already available in the old Accrual Engine, but is now displayed in a more usable way as drop-down listbox.

The screenshot displays the 'Display Accrual Object' window in SAP. The title bar reads 'Display Accrual Object'. Below the title bar is a toolbar with icons for navigation and actions, including 'Download Template' and 'Upload'. The main area is divided into several sections. On the left, a tree view shows the hierarchy: 'Company Code/Acc Object Cat./AObj...' > '0001 SAP A.G.' > 'ORENTING' > 'Accruals for Contract 4711'. The main content area is divided into two tabs: 'Life' (selected) and 'Parameters'. The 'Life' tab contains the following fields: 'Company Code' (0001), 'SAP A.G.', 'Time Dependency' (1 01.01.0001 - 31.12.9999), 'Reference Data', 'Accrual Object Category' (ORENTING), 'Accrual Object Number' (0000000000000001000063), 'Text' (Accruals for Contract 4711), and 'Person Responsible' (TESTER). The 'Parameters' tab contains the following fields: 'Start of Life' (01.01.2018), 'End of Life' (31.12.2018), and 'Lifecycle Status' (P In Process).

Field	Value
Company Code	0001
SAP A.G.	
Time Dependency	1 01.01.0001 - 31.12.9999
Reference Data	
Accrual Object Category	ORENTING
Accrual Object Number	0000000000000001000063
Text	Accruals for Contract 4711
Person Responsible	TESTER
Start of Life	01.01.2018
End of Life	31.12.2018
Lifecycle Status	P In Process



## Time-Dependency of Accrual Objects: Example

Example:

- Using transaction ACACTREE02 the total amount to be accrued is changed from 12.000 USD to 18.000 USD.
- This change shall be valid from 01.07.2018
- As a consequence two date-intervals exist now:
  - 01.01.2018 to 30.06.2018 with total amount of 12.000 USD
  - 01.07.2018 to 31.12.2018 with total amount of 18.000 USD

Two date intervals exist now.

Company Code: 0001 SAP A.G. Time Dependency: 2 01.07.2018 - 31.12.9999

Reference Data

Accrual Object Category: ORENTING Accrual Object Number: 00000000000001000000 2 01.07.2018 - 31.12.9999

Text: Accruals for Contract 4711

Person Responsible: TESTER

Life Parameters Account Assignments

Start of Life: 01.01.2018 End of Life: 31.12.2018

Lifecycle Status: P In Process

Item Data

Choose Accrual Item

Accr. Item Type	Item Type Text	Ledger Group	Ttl Accr. Amt TCry	Transaction Currency	Total Qty to Accrue	Unit of Measure	Acc. / LINEAR
COSTSP	Cost Accruals, Only Periodic Postings		18.000,00	USD			

In the selected time-interval 01.07.2018 – 31-12-2018 the total amount is 18.000 USD.

In the selected time-interval 01.07.2018 – 31-12-2018 the total amount is 18.000 USD.

## Time-Dependency of Accrual Objects: Example

The accrual calculation considers the time-slices:

- Before 01..07.2018 the monthly amount is 1.000 USD.
- From 01.07.2018 onwards, the monthly amount is 1.500 USD.
- On 31.07.2018 the balance of  $7/12 \cdot 18.000$  USD = **10.500** USD is calculated.
- Since up to 30.06.2018 only  $6/12 \cdot 12.000 = 6.0000$  USD were calculated, the missing delta of  $10.500 \text{ USD} - 6.000 \text{ USD} =$  **4.500** USD is calculated on 31.07.2018.

## Change Accrual Object

Check and Simulate
 Download Template
 Upload

Company Code/Acc Object Cat./AOBj...

- 0001 SAP A.G.
- 0RENTING
- Accruals for Contract 4711

Company Code 0001

SAP A.G.

Reference Data

Accrual Object Category 0RENTING

Accrual Object Number 0000000000000001000063

Text Accruals for Contract 4711

Person Responsible TESTER

Life
Parameters
Account Assignments

Start of Life 01.01.2018

End of Life 31.12.2018

Lifecycle Status P In Process

Validity of the change  
 Valid from 01.07.2018

Item Data

Choose Accrual Item

Accr. Item Type	Item Type Text	Ledger Group	Ttl Accr. Amt TCry	Transaction Currency	Total Qty to Accrue	Unit
COSTSP	Cost Accruals, Only Periodic Postings		18.000,00	USD		

Calculated Accruals
Postings
Posted Totals
Accounts

First Day	Last Day	Balance Accrual Amount in Transac. Cry	Delta Accrual Amount in Transac. Cry
01.01.2018	31.01.2018	1.000,00	1.000,00
01.02.2018	28.02.2018	2.000,00	1.000,00
01.03.2018	31.03.2018	3.000,00	1.000,00
01.04.2018	30.04.2018	4.000,00	1.000,00
01.05.2018	31.05.2018	5.000,00	1.000,00
01.06.2018	30.06.2018	6.000,00	1.000,00
01.07.2018	31.07.2018	12.000,00	6.000,00
01.08.2018	31.08.2018	13.500,00	1.500,00
01.09.2018	30.09.2018	15.000,00	1.500,00

1000 USD in periods before 01.07.2018

1000 USD in  
periods before  
01.07.2018

1500 USD in  
periods after  
01.07.2018

# Change History of Accrual Objects: Example

The time-dependency is something different compared to a change history:

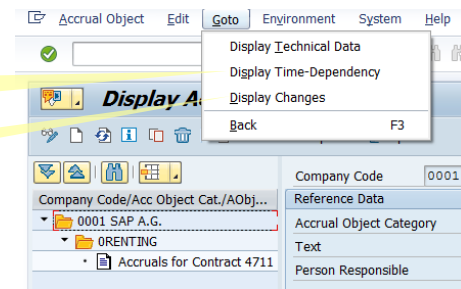
- The **time-dependency** expresses which values/field contents are to be used in which date intervals.
  - The time dependency can be displayed user-friendly using the drop-down listbox or
  - Also a table-based technical view of the time-dependency is possible via menu, see screen-shot below.
- The **change history** explains which user has changed the content of which field at which point in time.
  - The change history can be displayed via the menu, see screen-shot below.
- Example:

A user changes the total amount to be accrued two times and both changes are done with the same *Valid From* date:

  - First he changes the total amount from 12.000 to 18.000, valid from 01.07.2018 and
  - Afterwards he changes the total amount again from 18.000 to 24.000, also valid from 01.07.2018.
  - Consequence: The second change completely overwrites the first change! After the second change there are still only two time-slices: 01.01.2018 to 30.06.2018 and 01.07.2018 to 31.12.2018.
  - But the change history shows all changes.

Table-based technical view of the time-dependency.

Displays the change history.



# Review And Approval of Periodic Accrual Amounts

- In the she S/4HANA Accrual Engine a review and/or approval process can be activated for the periodic accrual amounts.
- This feature was introduced for the other application Purchase Order Accruals.
- For Manual Accruals such a review and/or approval of the accrual amounts at the end of each period is usually not required.
- If you need to activate the review and/or approval nevertheless for Manual Accruals, you can do so using the IMG activity *Define Accrual Item Types* (see transaction ACEIMG).
- There are F1 helps available for the corresponding fields in the IMG activity, see screen-shot below.
- Review means: A reviewer can adjusted the periodic accrual amounts that are proposed by the system. If no user performs the review, the system will post the proposed amounts.
- Approval means: An approver can approve or reject the periodic accrual amounts that are proposed by the system. If nobody approves the amount, the system will post no accruals for this accrual object.

**Change View "Item Type Settings for Ldrgrp incl. Repr. Ledger": O**

63 New Entries

Dialog Structure

- Define Item Types
  - Item Type Settings for L
  - Calculation Rules for De

Component ACAC

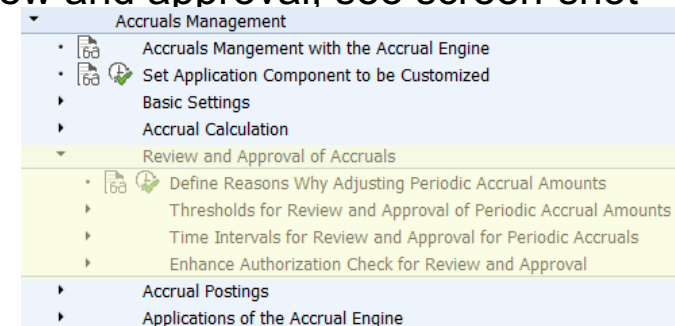
Accr Item Type COSTSP\_IAS

Item Type Settings for Ldrgrp incl. Repr. Ledger

CoCd	Ledger Grp	Review Act	Apprvl Rqd	Intvl Var.	ThrshldVar
0001	IAS	<input type="checkbox"/>	<input type="checkbox"/>		

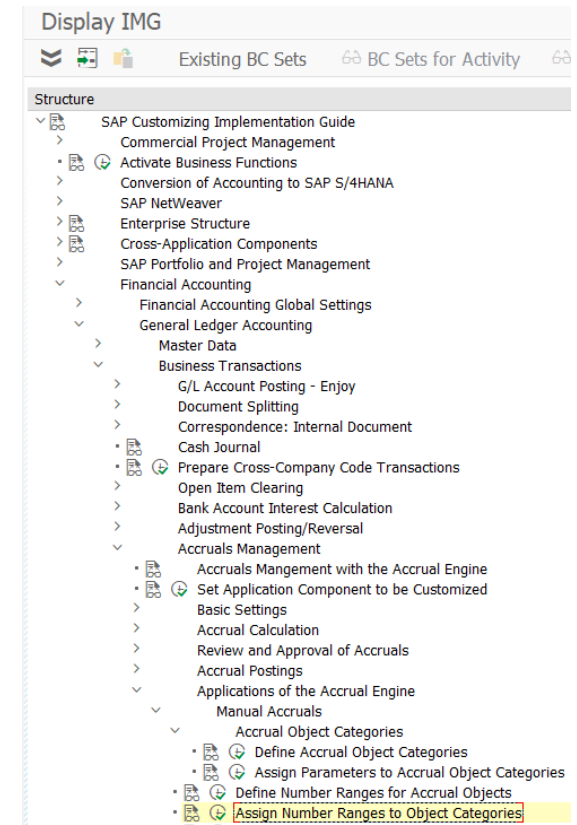
# Review And Approval: Process Steps

- If you activate a review and/or approval of the periodic accrual amounts, you need to execute the following additional steps during period end closing:
  1. Execute the accrual **proposal** run, transaction ACEPROPOSALRUN.  
This will store the accrual amounts that the system calculates for the single accrual objects in a database table. These accrual amounts represent the proposal that will appear in the review and/or approval transactions:
  2. The **reviewers and/or approvers** need to start their corresponding transactions:
    - Controllers can use the transaction FACRARVWCO to review the accruals  
Note: Also G/L accountants can use this transaction, but this transaction checks the authorization to perform CO reporting on the corresponding CO objects like costs center or profit center.  
You can adopt the authorization checks to your needs using the IMG activity Enhance Authorization Check Logics which is the BAdI BADI\_FACRA\_AUTH\_CHECK.  
Selection parameters in selection screen can be enhanced with enhancement spot ES\_FACRA\_RVW\_APPRV\_SEL.
    - G/L accountants can use the transaction FACRAAPPRVGL to approve accruals.  
Selection parameters in selection screen can be enhanced with enhancement spot ES\_FACRA\_APPROVAL\_SEL.
    - Below BAdIs are available for both transactions FACRARVWCO and FACRAAPPRVGL.  
BADI\_FACRA\_ADJUST\_RESULT: Adjust the selection result before they are shown to end user.  
BADI\_FACRA\_UI\_NAVIGATION: Define the navigation target when clicking on a field in the worklist.  
BADI\_FACRA\_ADJMT\_TOL\_CHECK: Check whether the adjustment of accrual amount is acceptable and whether attachment is provided.
  3. Finally the accrual **posting** run, transaction ACEPOSTINGRUN can be executed to post the reviewed and/or approved accrual amounts.
- There are additional features available for supporting review and approval, see screen-shot of corresponding folder in transaction ACEIMG:
  - You can define thresholds to avoid review/approval for small amounts for example,
  - You can define time intervals in which the review/approval has to take place.



# New Customizing Activity: Different Number Ranges Depending on Accrual Object Category

- In S/4HANA it is possible to use different number range intervals for the different accrual object categories.
  - This way, gaps in number ranges can be avoided: For each accrual object category a different interval of numbers can be used, see example in next slide.
  - The corresponding IMG activity is *Assign Number Ranges to Object Categories*.
  
- Selecting the checkbox *Self-Def.* can be reasonable if you want to manually enter the accrual object number when creating a new accrual object (using transaction AACTREE02):
  
- If you select the checkbox *Self-Def.* the system will accept any accrual object number that you enter.
  - Note that the checkbox *Ext. (external number range)* in the other IMG activity *Define Number Ranges for Accrual Objects* has a slightly different effect: When selecting this checkbox the system accepts only accrual object numbers that are within the number range interval.



Change View "ACAC Assignment of Object Types

New Entries

ACAC Assignment of Object Types and Number Range

AccrObjCat	CoCd	No	Self-Def.
ORENTING	0001	01	<input type="checkbox"/>
OVENDORINV	0001	02	<input type="checkbox"/>

# New Customizing Activity: Different Number Ranges Depending on Accrual Object Category: Example

Example:

- The two accrual object categories 0RENTING and PROVISIONS are assigned to two different number range intervals 01 and 02.
- As a consequence, accrual objects that are created with the two different accrual object categories will get their numbers from two different number range intervals:
- In other words: Creating an accrual object with category 0RENTING will not create a “gap” in the numbers of accrual objects that are created with category PROVISIONS.

The screenshot displays the SAP Customizing Activity 'Edit Intervals: ManAccs Object Number, Object ACAC\_OBJ, Subobject 0001'. It shows the 'ACAC Assignment of Object Types and Number Range' table, which maps accrual object categories to specific number ranges. Red arrows highlight the assignments for 0RENTING and PROVISIONS.

AccrObjCat	CoCd	No Self-Def.	No	From No.	To Number	NR Status	Ext
0RENTING	0001	01	01	0000000001	0999999999	296	
PROVISIONS	0001	02	02	1000000000	1999999999	1000000001	
			03	W000000001	W099999999	0	
			04	2000000000	2999999999	0	

Below the table, two 'Display Accrual Object' windows are shown. The left window displays the details for an accrual object with category 'PROVISIONS' and number '1000000001'. The right window displays the details for an accrual object with category '0RENTING' and number '296'. Red arrows indicate the mapping from the table to these objects.

# Utilization And Release of Accruals



# Utilization Postings: Available as of Release 1809 SP3

- Utilization (and release) postings are supported from release S/4HANA 1809 support package 3 onwards.
- If you are using an earlier support package (0-2) you need to apply SAP note [2800607](#).
- The note 2800607 contains a downport of several new features of the Accrual Engine.
  - That's why this note contains many program corrections.

# Utilization Postings

- The Accrual Engine supports the process that postings with reference to an accrual object automatically reduce the accruals that have been posted before.
  - When posting a supplier invoice or a manual G/L journal entry the reference to an accrual object can be entered on line item level.
  - The idea is that the reference to an accrual object is entered in the line item that represents costs.
  - The accrual engine generate two line items: Credit the cost account and debit the accrual account.
    - In other words: The invoice is posted into costs as usual. It does not post to the accrual account! Instead, the Accrual Engine generates the utilization posting by posting a credit to the cost account and debit the accrual account. This way, in effect, the invoice does not post costs if sufficient accruals have been posted before. Otherwise, only a partial amount of the costs is covered by the utilization posting.
- This process is called *Accrual Utilization*.
  - Of course this process is valid for provisions as well: You can use the Accrual Engine not only to post accruals but also for provisions.
- Accrual Utilization Postings are line items in journal entries that can be identified as utilization of accruals.
  - The field *Subledger-specific Line Item Type Code*, ACDOCA-SLALITTYPE can for example be evaluated for this purpose.
- If not all accruals are utilized and/or not needed any longer, the remaining accruals can be released.
  - The Accrual Engine offers for example the possibility to manually release accruals in transaction AACTREE02 with the function *Edit -> Release Accruals*.
  - Either the full or a partial amount of the accruals can be released.

# Utilization Postings: Process in a Nutshell

## 1. Post accruals using the Accrual Engine

For posting the accruals there are different scenarios:

1. Post accruals as opening posting when the accrual object is created, for example with transaction ACACTREE02.  
This is the *Standing Accruals* scenario.
2. Post accruals as periodic postings.  
This is done by the periodic accrual posting run.  
There are different possibilities for calculating the periodic accruals: Either simple periodic postings calculated for example by a linearization of a total amount – or according to the *Plan Minus Actual* approach.

## 2. Post actual costs in FI

For example with transaction FB01.

The cost line item of this posting must contain a reference to the accrual object.

This reference is the field Accrual Object.

When this posting is done, it will lead to a reduction (=utilization) of the accruals.

The utilization will take place either online or offline.

- Online means that additional line items are generated in the posting of the actual costs.
- Offline means that the periodic accrual posting run will post the utilization of accruals as separate journal entry at the end of the fiscal period.

## 3. Finish the Accrual Object

If the last actual cost posting was done, the status of the accrual object can be changed to Prematurely Finished (“F”) using the action *Edit -> Terminate Accrual Subobject Prematurely* in transaction ACACTREE02. The name of this status value is not nice, but it does the job.

- If some accruals are left after the last actual cost posting, they are released automatically by this action.

# T-Accounts for Utilization Postings: Example

D	Cost Account	C	D	Accrual Account	C
(ACR)	1000				1000 (ACR)
(SIV 1)	800	800 (UTL 1)	(UTL 1)	800	
(SIV 2)	500	200 (UTL 2)	(UTL 2)	200	

Events that perform the above postings:

1. Accruals are posted (ACR) by the Accrual Engine.
2. Supplier invoice 1 is posted (SIV 1). The supplier invoice posts costs “as usual”. Supplier and tax account are not shown here.
3. Since the cost item of the supplier invoice 1 has a reference to the accrual object, the Accrual Engine generates a utilization posting (UTL 1). In this example sufficient accruals exist, so the full costs that are posted by the invoice are posted as utilization. Otherwise only a partial amount of the costs would be covered by utilization.
4. Supplier invoice 2 is posted (SIV 2) with 500 EUR.
5. The posting invoice 2 also leads to a utilization (UTL 2) of the remaining accruals of 200 EUR: The costs of 500 EUR posted by this invoice are higher than the remaining accruals of 200 EUR, so only the partial amount of 200 EUR can be utilized.

# T-Accounts for Utilization and Release Posting: Example

D	Cost Account	C	D	Accrual Account	C
(ACR)	1000				1000 (ACR)
(SIV)	800	800 (UTL)	(UTL)	800	
		200 (REL)	(REL)	200	

Events that perform the above postings:

1. Accruals are posted (ACR) by the Accrual Engine.
2. A supplier invoice is posted (SIV). The supplier invoice posts costs "as usual". Supplier and tax account are not shown here.
3. Since the cost item of the supplier invoice has a reference to the accrual object, the Accrual Engine generates a utilization posting (UTL). In this example sufficient accruals exist, so the full costs that are posted by the invoice are posted as utilization. Otherwise only a partial amount of the costs would be covered by utilization.
4. No further invoice is expected: An accountant decides that the remaining accruals are not needed any more:
5. He manually releases the remaining accruals: A release posting (REL) of 200 EUR is performed by the Accrual Engine.

# Utilization Postings: Basic Customizing Options

- *Accrual Utilization* can be customized to take place
  - *Online*, i.e. during the posting of the actual costs.  
In this case the Accrual Engine will add the utilization posting as **additional line items** in the journal entry of the actual cost posting, for example in the supplier invoice.
  - *Offline*, that is at the end of the period by the periodic accrual posting run.  
In this case the **periodic accrual posting run** will perform the utilization posting.  
The corresponding indicator in customizing is called *Periodically* instead of *Offline*.
- The usage of an *Accrual Closing Frequency* enables to differentiate between
  - utilizations of accruals from **last** fiscal year and
  - utilization of accruals from **current** fiscal year accruals.
  - The differentiation can be done using different
    - journal entry types
    - G/L accounts: Post to different cost account and/or accrual account
    - additional account assignment: Post the utilization to a different cost center. This requires a BAdI implementation.

# Accrual Object as Field in Coding Block

- When posting journal entries, the reference to an accrual object can be entered in the coding block.
- The accrual object reference field are available in screens for posting
  - manual journal entries, transactions FB01, FB50 and
  - supplier invoices, transaction MIRO.
- The visibility of the accrual object fields in the coding block depends on the field status of the G/L account.
- **Purpose** of the field *accrual object* in the Coding Block:
  - By entering a reference in the invoice item, the accrual engine can **automatically reduce** the accruals for the corresponding accrual object.
  - This reduction is called **utilization** of accruals.

# Accrual Object in Journal Entries: Example: Invoice Posting with Transaction FB01

- The line item of the invoice that represents the costs has a reference to the accrual object.
- That's why the accrual engine considers this line item as "Actual Costs" - and reduces the provisions by this amount.

**Display Document: Line Item 1**

Additional Data Procurement Report

G/L Account 430000 Salaries  
Company Code 0001 SAP A.G.

Doc. No. 100211553

Line Item 1 / Debit entry / 40  
Amount 4.000,00 EUR

**Account Assignments**

Cost Center 2 Order  
WBS Element  
Real Estate Obj  
Sales Order 0 0  
Asset More

**Coding Block**

Asset  
Cost Center 2  
Order  
Profit Center SAP-DUMMY  
WBS Element  
Sales Order 0  
Material  
Accrual Object

**Accrual Object**

Accrual Object Type ACAC  
Accr Object Cat 0LITIGATN  
AObject Number 4711-110  
Accrual Object 0LITIGATN 4711-110  
Accrual Subobject 1



# Accrual Object in Journal Entries: Example: Invoice Posting with Transaction MIRO

- The line item of the invoice that represents the costs has a reference to the accrual object.
- That's why the accrual engine considers this line item as "Actual Costs" - and reduces the provisions by this amount.

**Enter Incoming Invoice: Company Code 0001**

Show PO structure Show worklist Hold Simulate Messages Help NF

Transaction 1 Invoice Balance 11.000,00- EUR  
Diff. Posting Not Applicable

Basic Data Payment Details Tax Withholding tax Amount ...

Inv. recpt date 28.05.2019  
Invoice date 28.05.2019 Reference TESTSAP1234  
Posting Date 28.05.2019  
Amount 1.000,00 EUR  
Tax amount Calculate Tax  
Text Test V0 V0 (No tax procedure)  
Paymt terms 14 Days 2 %, 30 Days net

Vendor 0000100118  
Agency22  
201203 SHANGHAI  
CHINA  
SWIFT AAAA5678  
Bank acct 112234333  
eileen bank for customer11111111

PO Reference G/L Account Material Contract Reference Asset

Layout

St...	G/L acct	Short Text	D/C	Amount in doc.curr.	WrkItem ID	Srv...	ServiceDoc	SrvDo...	Accrual Object
✓	430000	Insurance	S De...	1.000,00					
			S De...						
			S De...						
			S De...						
			S De...						
			S De...						
			S De...						
			S De...						
			S De...						
			S De...						

Accrual Object

Accrual Object Type ACAC Manual Accruals  
Accr Object Cat 0LITIGATN  
AObject Number 4711-010  
Accrual Object 0LITIGATN 4711-010  
Accrual Subobject 1

# Accrual Object in Journal Entries: Account Field Status

- The accrual object can be made available in the posting screens by configuring this field as optional or mandatory in the field status of the G/L account.
  - This is done in transaction OB14 in section *Additional account assignments*.
  - OB14 requires the field status variant. This is defined in the company code master data, customizing view V\_001\_B “Enter Global Parameters”.
- Note: When entering a journal entry (or an invoice) the field status is determined by the combination of
  - The field status group entered in the G/L account master, transaction FS00.
  - The field status entered in the posting key configuration, transaction OB41.

## Maintain Field Status Group: Overview

Subgroup list

### General Data

Field status variant 0001    Group G004  
Cost accounts

### Select Group

General data  
Additional account assignments  
Materials management

Screen-shots from  
transaction OB14.

## Maintain Field Status Group: Additional account assignments

Field check

### General Data

Field status variant 0001    Group G004  
Cost accounts

Page 1 / 2

### Additional account assignments

	Suppress	Req. Entry	Opt. entry
Settlement period	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Accrual Object	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Material number	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Cost center	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

# Utilization of Accruals: Possible Scenarios

The Accrual Engine supports the following scenarios how accruals can be posted and utilized:

## 1. Utilization of Standing Accruals

- *Standing* accruals means that the full accrual amount is posted once at the beginning, when the accrual object is created.
- The accrual amount is posted by the Accrual Engine as an *opening* posting, accrual transaction type IP.
- Later, postings that have a reference to the accrual object will lead to utilization postings which reduce the accruals.

## 2. Utilization of Periodic Accruals.

- The accrual amount is posted gradually: In each period the accrual method calculates the amount that shall be posted as accrual. The accruals are posted by the periodic accrual posting run with accrual transaction type PP.
- Later, postings that have a reference to the accrual object will lead to utilization postings which reduce the accruals.
- This scenario can be used, but it is recommended to use **not** to use it. The drawbacks are described in a separate slide. Instead, rather use the other scenario “Plan Minus Actual”:

## 3. Plan Minus Actual approach:

- This approach is based on periodic postings.
  - It is technically the same approach as in the other application Purchase Order Accruals (POAC).
- Accruals are calculated as planned costs minus actual costs.
  - The planned costs are calculated by the accrual method.
  - The actual costs are the postings that have a reference to the accrual object.
- The accruals are posted by the periodic accrual posting run.
- In contrary to scenario 2, utilization postings can only occur for accruals that were posted in former periods, because actual costs of the current period “just” reduce the accrual amount of the current period.

# Utilization of Accruals: Not Supported Scenarios

The following scenario does **not** support utilization postings:

- Opening Posting and Periodic Postings
  - The accrual item type is configured to perform an opening posting **and** also periodic postings:
  - That is, the two transaction types IP (Opening Posting) and PP (Periodic Posting) are both assigned to a posting schema in the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
  - In this case it does not make sense to have utilization postings in addition: It would be not clear for the system which of the two amounts (opening or periodically posted amount) shall be reduced by the utilization posting:
    - Do not assign the transaction type UP (Utilization Posting) or UL (Late Utilization Posting) to a posting schema for this accrual item type.

# Utilization of Standing Accruals

- Accruals are posted by an **opening posting** when the accrual object is created.
- Subsequently utilization postings of the accruals occur due to posting of costs with reference to the accrual object.
- Use case for opening posting and later utilization:
  - The accrual amount is already known and shall be posted in full immediately as accrual.
  - One or several invoices are expected to be posted in future. The invoices shall then automatically reduce the accruals.
  - The invoices are posted into costs (as usual): They do not to post to the accrual account directly.

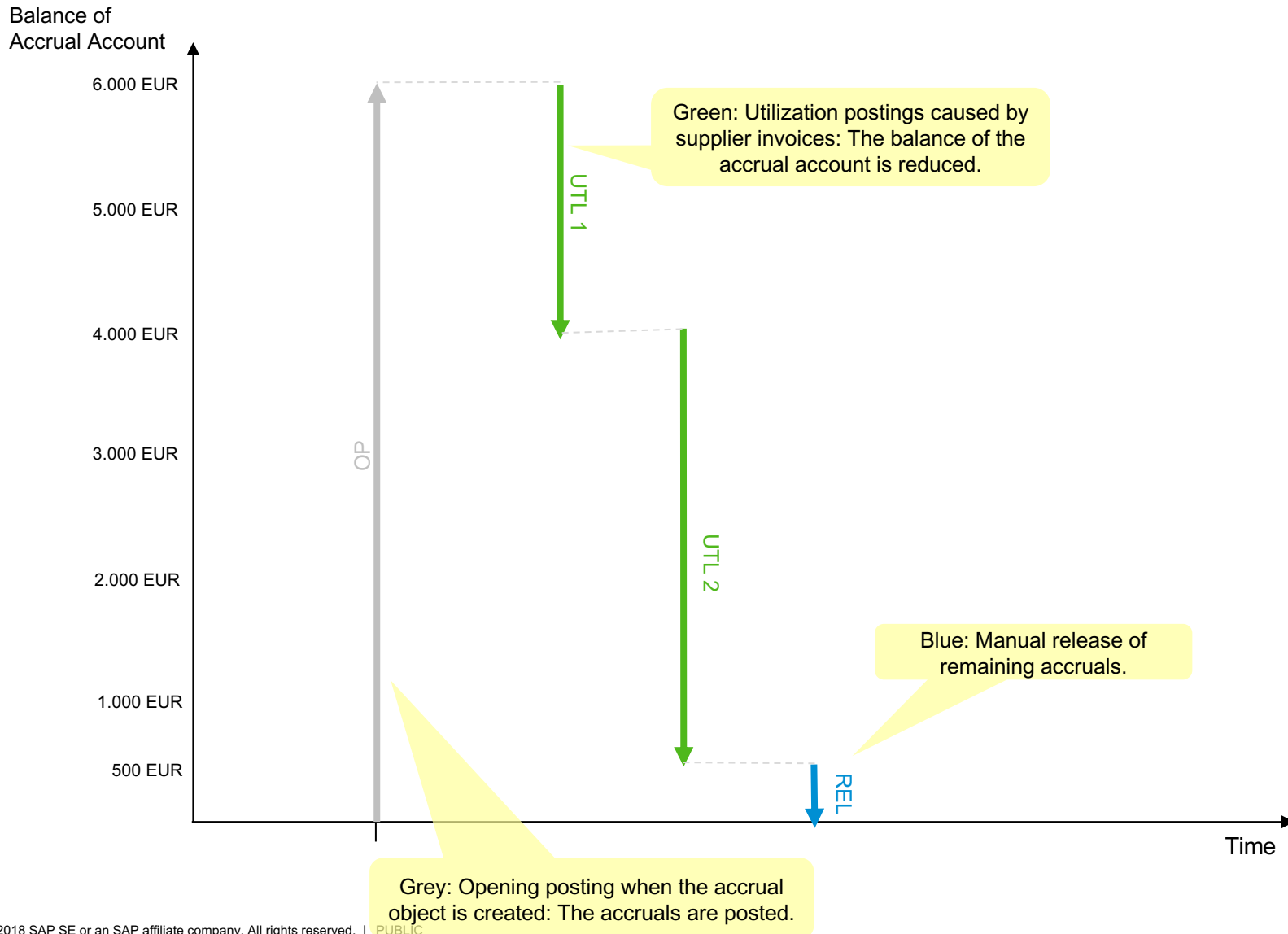
# Utilization of Standing Accruals: T-Account Example

D    Cost Account    C				D    Accrual Account    C			
(OP)	6000					6000	(OP)
(SIV 1)	2000	2000	(UTL 1)	(UTL 1)	2000		
(SIV 2)	3500	3500	(UTL 2)	(UTL 2)	3500		
		500	(REL)	(REL)	500		

## Events that perform the above postings:

1. The accrual object is created with an amount of 6000 EUR. This leads to the **opening posting (OP)**.
2. Supplier invoice (SIV 1) posts costs of 2.000 EUR. The supplier invoice posts costs “as usual”. Supplier and tax account are not shown here.
3. Since the cost item of the supplier invoice has a reference to the accrual object, the accrual engine generates a utilization posting **(UTL 1)**. Sufficient accruals exist, so the full costs that are posted by the invoice are posted as utilization.
4. Another supplier invoice (SIV 2) posts costs of 3.500 EUR - which leads to a utilization of 3.500 EUR **(UTL 2)** because sufficient accruals exist.
5. No further invoice is expected: An accountant decides that the remaining accruals are not needed any more:
6. He manually releases the remaining accruals: A release posting **(REL)** of 200 EUR is performed by the Accrual Engine.

# Utilization of Standing Accruals: Chart for the Example



# Utilization of Standing Accruals: Increasing the Accruals

## T-Account Example

D    Cost Account    C			D    Accrual Account    C		
(OP 1)	6000			6000	(OP 1)
(SIV 1)	2000	2000 (UTL 1)	(UTL 1)	2000	
(OP 2)	1000			1000	(OP 2)
(SIV 2)	7000	5000 (UTL 2)	(UTL 2)	5000	

It is possible to increase the standing accruals!

### Events that perform the above postings:

1. The accrual object is created with an amount of 6000 EUR. This leads to the **opening posting** (OP 1).
2. Supplier invoice (SIV 1) posts costs of 2.00 EUR. The supplier invoice posts costs "as usual". Supplier and tax account are not shown here.
3. Since the cost item of the supplier invoice has a reference to the accrual object, the accrual engine generates a utilization posting (UTL 1). Sufficient accruals exist, so the full costs that are posted by the invoice are posted as utilization.
4. User posts additional accruals of 1.000 EUR (OP 2) by changing the total amount of the accrual object from 6.000 EUR to 7.000 EUR in transaction AACTREE02. This change of the accrual object will directly lead to a posting of the changed amount as opening posting.
  - It is recommended to customize the opening posting as delta posting in the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
5. Another supplier invoice (SIV 2) posts costs of 7.000 EUR - which leads to a utilization of 5.000 EUR (UTL 2) because only 5.000 EUR accruals exist.



# Utilization of Periodic Accruals

- Accruals are posted by the periodic accrual posting run.
- Subsequently utilization postings of the accruals occur due to posting of costs with reference to the accrual object.
  - Posting of costs will only utilize accruals that were posted with a posting date before the posting date of the cost posting!
- Use case for periodic postings and utilization by actual costs:
  - The accruals shall increase gradually over time.
  - One or several invoices are expected to be posted in future. The invoices shall then automatically reduce the accruals.
  - The invoices are posted into costs (as usual): They do not to post to the accrual account directly.
    - But the Accrual Engine generates a utilization posting for the invoice which credits the cost account and debits the accrual account. This happens online or by the periodic accrual posting run.
  - If not sufficient accruals exist when the invoice is posted, the overshooting costs of the invoice will remain as costs:
    - If the periodic accrual posting run posts additional accruals at the end of the same period where the invoice was posted, the overshooting costs of the invoice will remain:
    - The periodic accrual posting run will not increase the utilized amount of the invoice.
    - This behavior is different compared to the *Plan Minus Actual* approach. See corresponding slides.
- The result is a saw-tooth kind of chart:
  - The accruals increase “continuously” over time
    - More accurate: The increase happens step-by-step by posting from the periodic accrual posting run. So the increase looks like a stair-case.
  - From time to time a drop of the accruals occurs caused by the utilization postings.

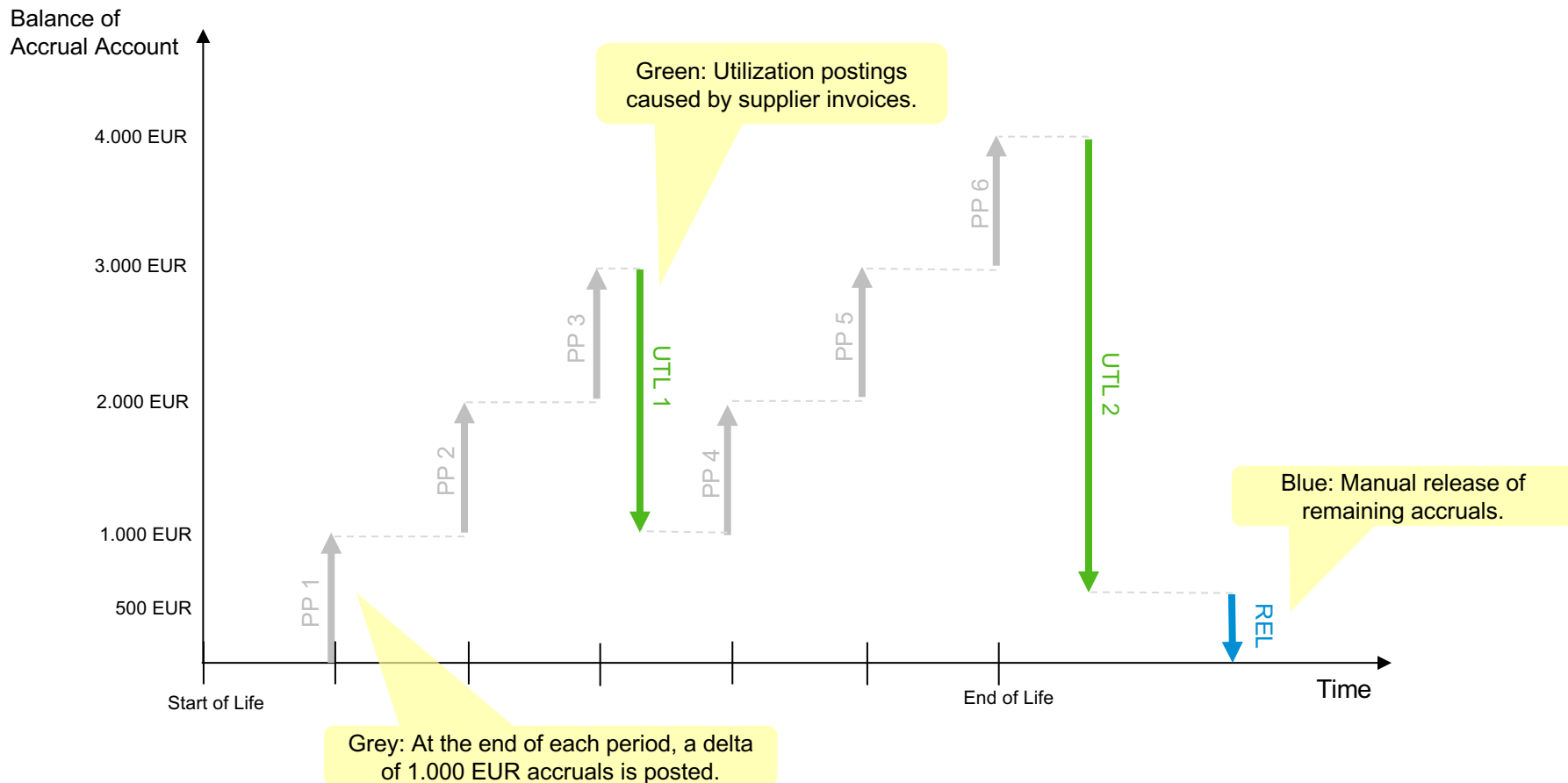
# Utilization of Periodic Postings: T-Account Example

D    Cost Account    C			D    Accrual Account    C		
(PP 1)	1000			1000	(PP 1)
(PP 2)	1000			1000	(PP 2)
(PP 3)	1000			1000	(PP 3)
(SIV 1)	2000	2000 (UTL 1)	(UTL 1)	2000	
(PP 4)	1000			1000	(PP 4)
(PP 5)	1000			1000	(PP 5)
(PP 6)	1000			1000	(PP 6)
(SIV 2)	3500	3500 (UTL 2)	(UTL 2)	3500	
		500 (REL)	(REL)	500	

Events that perform the above postings:

1. The accrual object is created with an amount of 6.000 EUR and a life-time of 6 periods: Period 01-06/2019. No opening posting is performed.
2. Since accrual method is entered as LINEAR in the accrual object, in each period the delta amount of 1.000 EUR is posted as accruals (PP 1-3).
3. In period 4, a supplier invoice (SIV 1) posts costs of 2.000 EUR. The supplier invoice posts costs "as usual". Supplier and tax account are not shown here.
4. Since the cost item of the supplier invoice has a reference to the accrual object, the accrual engine generates a utilization posting (UTL 1). Sufficient accruals exist, so the full costs that are posted by the invoice are posted as utilization.
5. In the following periods the periodic run continues to post accruals according to the accrual method LINEAR (PP 4-6).
6. The life-time of the accrual object ends, no further accruals are posted.
7. In period 7, after the end of life of the accrual object, another supplier invoice (SIV 2) posts costs of 3.500 EUR - which leads to a utilization of 3.500 EUR (UTL 2) because sufficient accruals exist.
8. Since no further invoice is posted, finally the remaining accruals of 500 EUR are manually released (REL) by an accountant.

# Utilization of Periodic Accruals: Chart for the Example



# Utilization of Periodic Accruals: Drawbacks

- There are two potential drawbacks related to the utilization of periodic accruals:
  1. Only those accruals are utilized that have a posting date before the posting date of the actual costs, for example an invoice.
  2. If the amount of the actual cost posting is higher than the accruals that can be utilized, these overshooting costs are not utilized with the next periodic posting run is executed.
    - Such a correction might be expected, since the next periodic run will increase the accrual amount – but since the accrual run has a higher posting date, these additional accruals are not utilized by the actual costs.
- If this behavior of the utilization calculation are not desired, it is recommended **not** to use this scenario.
- Instead, use the *Plan Minus Actual* approach, because there, after a actual cost posting, the next periodic accrual run makes sure that the accruals are fully reduced by the actual costs.

# Utilization of Periodic Postings: Drawback: Example

	D	Cost Account	C		D	Accrual Account	C
(SIV 0)	800		0 (UTL 0)	(UTL 0)	0		
(PP 1)	1000				1000	(PP 1)	
(PP 2)	1000				1000	(PP 2)	
(PP 3)	1000				1000	(PP 3)	
(SIV 1)	3500	3000 (UTL 1)		(UTL 1)	3000		
(PP 4)	1000				1000	(PP 4)	
(PP 5)	1000				1000	(PP 5)	
(PP 6)	1000				1000	(PP 6)	
(SIV 2)	2000	2000 (UTL 2)		(UTL 2)	2000		
		500 (REL)		(REL)	500		

## Remarks on the shown postings:

1. The supplier invoice SIV 0 posts costs of 800 EUR but does not lead to a utilization of accruals (UTL 0), because its posting date is before the posting date of the first accrual posting PP 1.
2. The supplier invoice SIV 1 posts costs of 3500 EUR but utilizes only 3000 EUR (UTL 1) because only 3000 EUR were posted as accruals with a posting date before the invoice posting. The next periodic run PP 4 posts additional accruals of 1000 EUR, ignoring that the invoice has posted overshooting costs of 500 EUR. This behavior might be not desired.

# Plan Minus Actual Approach

- The *Plan Minus Actual* approach works similar to the *Utilization of Periodic Accruals* case. But there are some differences:
- In the *Plan Minus Actual* approach
  - The posting of actual costs (for example supplier invoices) can only utilize accruals that have been posted in former periods.
  - Because in the current period the actual costs reduce the accruals according to the formula  $\text{accruals} = \text{cumulated planned costs} - \text{cumulated actual costs}$ .
  - **Important:** Due the usage of cumulated planned and actual costs, the periodic accrual posting run “corrects” the accruals period.
    - See example in separate slides for details.
  - Due to its corrective logic, the *Plan Minus Actual approach* might in general be the better choice compared to the other scenario *Utilization of Periodic Accruals*.
- The Accrual Engine needs to calculate three values instead of two:
  - The planned costs,
  - the actual costs and
  - the accruals by applying the formula  $\text{accruals} = \text{cumulated planned costs} - \text{cumulated actual costs}$ . With boundary condition that accruals are never negative.

# Plan Minus Actual Approach: T-Account Example

	D	Cost Account	C		D	Accrual Account	C
(PP 1)	1000				1000	(PP 1)	
(PP 2)	1000				1000	(PP 2)	
(PP 3)	1000				1000	(PP 3)	
(SIV 1)	3500	3000	(UTL 1)	(UTL 1)	3000		
(PP 4)	500				500	(PP 4)	
(PP 5)	1000				1000	(PP 5)	
(PP 6)	1000				1000	(PP 6)	
(SIV 2)	2000	2000	(UTL 2)	(UTL 2)	2000		
		500	(REL)	(REL)	500		

## Important:

The periodic posting run for period 4 posts only **500** EUR whereas in the other scenario *Utilization of Periodic Accruals* it would post 1000 EUR, ignoring the overshooting costs of the invoice.

## Events that perform the above postings:

1. The accrual object is created with a total amount of 6.000 EUR as planned costs and a life-time of 6 periods: Period 01-06/2019. No opening posting is performed.
2. Since accrual method is entered as LINEAR in the accrual object for the planned costs calculation, in each period the delta amount of 1000 EUR is calculated as planned costs. Since in periods 1-3 no actual costs are posted, the planned costs are posted as accruals (PP 1-3).
3. In period 4, a supplier invoice (SIV 1) posts costs of 3.500 EUR.
4. The accrual engine generates a utilization posting (UTL 1). Only 3.000 EUR can be utilized from former periods: The costs posted by the invoice are higher than the accruals posted in previous periods.
5. The periodic accrual posting run for period 4 will calculate the cumulated planned costs as 1.000 EUR \* 4 = 4.000 EUR. The periodic accrual posting run calculates the accruals as 4.000 EUR minus 3.500 EUR = 500 EUR and post these 500 EUR (PP 4). This behavior is the main difference compared to the other scenario *Utilization of Periodic Accruals*!
6. The other postings PP4 – 6, SIV 2, UTL 2 and REL are identical to the other scenario *Utilization of Periodic Accruals*.

# Retrospective and Prospective Linear Calculation

- Concept of Retrospective and Prospective
  - Retrospective: Once the periodic amounts are changed, the changed amounts are applied to all periods.
  - Prospective: Once the periodic amounts are changed, the changed amounts are applied from period determined by the valid from and onwards.
- Example: Accrual item with total amount 600 EUR and life starts from January 1<sup>st</sup> to June 30<sup>th</sup> 2020. The total amount is changed from 600 EUR to 900 EUR effective April 1<sup>st</sup> 2020.

	Before Change	After Change	
		Retrospective	Prospective
Period	Periodic Amount	Periodic Amount	Periodic Amount
2020-01	100	100	100
2020-02	100	100	100
2020-03	100	100	100
2020-04	100	300	200
2020-05	100	150	200
2020-06	100	150	200

**Retrospective:** The changed amount is applied to all periods. So the new periodic amount is  $150 = 900 / 6$ . In period of 2020-04 in which the change is effective, the amount to be posted is  $300 = 150 * 4 - 100 * 3$  (balance amount – posted amount).

**Prospective:** The changed amount is applied to periods from 2020-04 onwards. The new periodic amount is  $200 = (900 - 300) / 3$ .

- Standard accrual method LINEAR is a linearization method and works in retrospective way, which is the same behavior as in the old Accrual Engine.
- New accrual method LINEAR\_PRS is also a linearization method but works in prospective way, which is available in rel. 2020.



# Retrospective and Prospective Shift Operator

- Concept of Retrospective and Prospective Shift Operator
  - Retrospective: Once the periodic amounts of source accrual item are changed, the shift operator shifts exactly the changed periodic amounts.
  - Prospective: Once the periodic amounts are changed, the shift operator keeps already shifted periodic amounts before the period determined by valid from, and shifts changed amounts from the period determined by valid from and onwards.
- Shift operator S based on standard accrual method LINEAR works in retrospective way, which is the same behavior as in the old Accrual Engine.
- Shift operator S based on newly delivered accrual method LNR\_PRS\_PS works in prospective way. The new accrual method LNR\_PRS\_PS itself also works in prospective way.
- Example in next slide

# Retrospective and Prospective Shift Operator - Example

## ■ Example

- Source accrual item with total amount 15,000 EUR and life starts from January 1<sup>st</sup> 2020 to March 31<sup>st</sup> 2020.
- The total amount is changed from 15,000 EUR to 17,800 EUR effective February 1<sup>st</sup> 2020.
- The table in the middle indicating the result of source accrual item with accrual method LINEAR\_PRS
- The table in the right indicating the result of source accrual item with accrual method LNR\_PRS\_PS

Before Change		
	Prospective	Retrospective
Period	Short-Term	Long-Term
Jan-20	1,000	1,000
Feb-20	1,000	1,000
Mar-20	1,000	1,000
Apr-20	1,000	
May-20	1,000	
Jun-20	1,000	
Jul-20	1,000	
Aug-20	1,000	
Sep-20	1,000	
Oct-20	1,000	
Nov-20	1,000	
Dec-20	1,000	
Jan-21	1,000	
Feb-21	1,000	
Mar-21	1,000	

After Change: based on LINEAR_PRS		
	Prospective	Retrospective
Period	Short-Term	Long-Term
Jan-20	1,000	1,200
Feb-20	1,200	1,200
Mar-20	1,200	1,200
Apr-20	1,200	
May-20	1,200	
Jun-20	1,200	
Jul-20	1,200	
Aug-20	1,200	
Sep-20	1,200	
Oct-20	1,200	
Nov-20	1,200	
Dec-20	1,200	
Jan-21	1,200	
Feb-21	1,200	
Mar-21	1,200	

After Change: based on LNR_PRS_PS		
	Prospective	Prospective
Period	Short-Term	Long-Term
Jan-20	1,000	1,000
Feb-20	1,200	1,200
Mar-20	1,200	1,200
Apr-20	1,200	
May-20	1,200	
Jun-20	1,200	
Jul-20	1,200	
Aug-20	1,200	
Sep-20	1,200	
Oct-20	1,200	
Nov-20	1,200	
Dec-20	1,200	
Jan-21	1,200	
Feb-21	1,200	
Mar-21	1,200	

# Signs in Accrual Objects

- The Accrual Engine supports the case that no utilization postings are used.
  - Only opening and periodic postings (and in case of a premature finish also a release posting) are performed in this case.
  - The opening posting posts the *Total Amount To Be Accrued* to the accrual account, e.g. 12.000 USD.
  - The subsequent periodic postings post partial amounts from the accrual account to a P&L account, for example 1.000 USD each month during the lifetime of the accrual object until the balance of the accrual account is zero.
  - That's why opening posting and periodic postings have opposite sign.
  - If the *Total Amount To Be Accrued* is positive, the opening posting posts a credit to the P&L and the periodic postings post the debit to the P&L account.
- Utilization and release postings have opposite sign compared to the posted accruals.
  - Because utilization and release postings shall reduce the posted accrual amount.
  - In *Standing Accruals* case, the utilization and release postings have opposite sign compared to the opening posting.
  - In *Periodic Accruals* case and *Plan Minus Actual* case the utilization and release postings have opposite sign compared to the periodic posting.
- As a consequence, the *Total Amount To Be Accrued* of the accrual object in transaction ACACTREE02 usually should have the following sign:
  - **Standing Accruals** case
    - The *Total Amount To Be Accrued* usually needs to be **negative**.
    - Because the opening posting shall post a debit to the P&L account in this case – and the later utilization and release postings shall post a credit to the P&L account.
    - **So when creating an accrual object with transaction ACACTREE02 the user needs to enter the Total Amount To Be Accrued with negative sign!** This might be not intuitive. In future releases it is planned to offer a customizing to invert the sign so that users can enter positive amounts.
  - **Periodic Accruals** case
    - The *Total Amount To Be Accrued* usually needs to be **positive**
  - **Plan Minus Actual** case
    - There is no *Total Amount To Be Accrued*; the accrual amount is determined from planned costs and actual costs in each period separately.
    - The *Total Amount To Be Accrued* for the Planned Costs is usually **positive**.

# **Customizing the Accrual Item Types for Utilization Postings**

# Utilization Postings: Accrual Item Types

- For each amount that the Accrual Engine shall calculate, a separate **accrual item** needs to be created in the accrual object.
  - The key field of an accrual item is the accrual item type.
- As a consequence, for each amount that the Accrual Engine shall calculate, a separate **accrual item type** is needed.
  - Regardless of which scenario is used, accruals shall be calculated and posted.
  - So an accrual item type is needed for the accrual amounts, for example **ACCRL\*** where \* stands for
    - **\_STD** in the scenario Utilization of Standing Accruals,
    - **\_PER** in the scenario Utilization of Periodic Accruals and
    - **\_PMA** in the Plan Minus Actual approach.
- If utilization postings shall be performed, the Accrual Engine needs to calculate not only the accrual amounts, but also the amounts that were posted as actual costs (with reference to the accrual object).
  - So an accrual item type is needed for the actual costs, for example **ACTCST**.
- If the *Plan Minus Actual* approach is used, then in addition to accruals and actual costs also planned costs are calculated.
  - In this scenario, an accrual item type is needed for the planned costs, for example **PLNCST**.

# Accrual Item Types: Relationships

- In order to enable the Accrual Engine to detect that the posting of actual costs shall reduce the accruals, a relation between the accrual item types must be defined:
- In the IMG activity *Define Accrual Item Types* the following accrual item types are linked together, see screen-shot: The accrual item types that calculate
  - Accruals,
  - Actual costs and –in case of the *Plan Minus Actual* approach also:
  - Planned costs.

An item type for planned costs is only required for the Plan Minus Actual approach, that is, for item type ACCRL\_PMA.

For all three ACCRL\* item types, an Actual Cost Item Type needs to be entered. This is necessary to achieve utilization postings. The Plan Minus Actual approach needs this item type also for the calculation of the accruals

**Change View "Define Item Types": Overview**

New Entries

Dialog Structure

- Define Item Types
  - Item Type Settings
  - Calculation Rules

Component: ACAC

Accrual Item Type	Derived	Upd Allow	Plnd Costs Itm Type	Actl Costs Item Type	Default Accr. Method	Description
ACCRL_PER	<input type="checkbox"/>	<input type="checkbox"/>		ACTCST	LINEAR	Periodic accruals - with utilization
ACCRL_PMA	<input type="checkbox"/>	<input type="checkbox"/>	PLNCST	ACTCST	PLN-ACT	Accruals as planned costs - actual costs
ACCRL_STD	<input type="checkbox"/>	<input type="checkbox"/>		ACTCST		Standing accruals - with utilization
ACTCST	<input type="checkbox"/>	<input type="checkbox"/>			ACT_COSTS	Actual cost posted with ref. to the accrual object
PLNCST	<input type="checkbox"/>	<input type="checkbox"/>			LINEAR	Planned costs

# Accrual Item Types: Assignment To Posting Schemas

- The accrual item types that shall perform postings need to be assigned to transaction types and posting schemas.
  - These are the accrual item types ACCRL\*
  - The other accrual item types ACTCST and PLNCST are used only for calculation. They are not assigned to any posting schema.
  - The assignment is done in IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
- Since utilization and release postings are required, all accrual item types ACCRL\* are assigned to posting schemas UP (utilization posting), RP (manual release posting) and FP (automatic release posting).
- But ACCRL\_STD is assigned to IP (opening posting) whereas ACCRL\_PER and ACCRL\_PMA are assigned to PP (periodic posting).

Note: If utilization postings shall be done, it is not allowed to assign an accrual item type to both, IP and PP, because if opening posting and periodic postings would be performed, it is undefined, which of those two postings should be utilized – because IP and PP postings have opposite sign.

**Change View "Assignment of Accrual Item Types to Posting Schemas": Overview**

68 New Entries

Component: **ACAC**

Assignment of Accrual Item Types to Posting Schemas								
Accrual Item Type	Company Code	Accr TType	Doc. Type	Posting Schema	Post Deltas	Post Online	Post Periodically	
ACCRL_PER	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_PER	0001	PP	SA	SAP_ACE_PP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_PER	0001	UP	SA	SAP_ACE_UP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_PMA	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_PMA	0001	PP	SA	SAP_ACE_PP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_PMA	0001	UP	SA	SAP_ACE_UP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_STD	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ACCRL_STD	0001	IP	SA	SAP_ACE_IP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ACCRL_STD	0001	UP	SA	SAP_ACE_UP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

# Utilization Postings: Creating Accrual Objects

- When an accrual object is created, for example with transaction ACACTREE02, that shall perform accrual and utilization postings, several accrual items – with the required accrual item types need to be entered:
- One accrual item for the accruals with accrual item type ACCRL\*.
  - The \* stands for \_STD or \_PER or \_PMN depending on the scenario used.
- An additional accrual item for the actual costs with accrual item type ACT\_CST.
- In case the *Plan Minus Actual* approach is used, a third accrual item for the planned costs with accrual item type PLN\_CST.
- After the accrual object was created, postings can be performed with reference to this accrual object, for example supplier invoices can be posted or manual journal entries with transaction FB01, FB50 etc.
- Once such postings with reference to this accrual object were done, the accrual item will show these amounts, for example in transaction ACACTREE02.
- The following slides show how the accrual objects need to be created in order to achieve the utilization postings.



# Creating Accrual Objects for Standing Accruals

- In the scenario for *Utilization of Standing Accruals*, two accrual items need to be entered when the accrual object is created:
  - An item type that posts the accrual amount when the accrual object is created.
    - Accrual Item Type is ACCRL\_STD and the total amount should have negative sign.
    - This accrual item type must perform an opening posting and utilization postings – that's why for transaction types IP (opening posting) and UP (utilization posting) it is assigned to a posting schema in Customizing activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
  - An additional item type that will calculate the actual costs that have been posted with reference to this accrual object.
    - Accrual Item Type is ACTCST.
    - In this accrual item an accrual method must be entered: ACT\_COSTS.
    - The accrual item must have the same transaction currency like the other accrual item.

## Create Accrual Object

Check and Simulate | Download Template | Upload



Company Code/Accr Objec... C

Company Code 0001

Reference Data

Accrual Object Category OLITIGATN Accrual Object Number 4811-020

Text Accruals for litigation case 4811-20

Person Responsible TESTER

Life Parameters Account Assignments

Start of Life 01.01.2019

End of Life 31.12.2022

Lifecycle Status

Item Data

Choose Accrual Item

Accr Item Type	Item Type Text	Ledger Group	Tot. Accr. Amt (TC)	Transaction Currency	Total Qty to Accrue	Unit of Measure	Accrual/DeferralMeth
ACCRL_STD	Standing Accruals - With Utilization		6.000,00-	EUR			
ACTCST	Invoices posted with ref. to the accrual object		0,00	EUR			ACT_COSTS

Screen-shot from transaction ACACTREE02.

Two accrual items must be entered as shown in this screen-shot.

Start of Life date is the default posting date for the opening posting.

End of Life date has no meaning in this case.

In the Standing Accruals case, no accrual method needs to be entered for ACCRL\_STD, since no periodic accruals are needed.

# Creating Accrual Objects for Periodic Accruals

- In the scenario for *Utilization of Periodic Accruals*, two accrual items need to be entered when the accrual object is created:
  - An item type that calculates and posts the accrual amounts for each period.
    - Accrual Item Type is ACCRL\_PER.
    - This accrual item type must perform periodic postings – that's why for transaction type PP (periodic posting) and UP (utilization posting) it is assigned to a posting schema in Customizing activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
  - An additional item type that will calculate the actual costs that have been posted with reference to this accrual object.
    - Accrual Item Type is ACTCST.
    - In this accrual item an accrual method must be entered: ACT\_COSTS.
    - The accrual item must have the same transaction currency like the other accrual item.

## Create Accrual Object

Check and Simulate Download Template Upload

Company Code/Accr. Objec... C

Company Code 0001

Reference Data

Accrual Object Category OLITIGAIN Accrual Object Number 4811-030  
Text Accruals for litigation case 4811-30  
Person Responsible TESTER

Life Parameters Account Assignments

Start of Life 01.01.2019 End of Life 31.12.2019  
Lifecycle Status

Item Data

Accr Item Type	Item Type Text	Ledger Group	Tot. Accr. Amt (TC)	Transaction Currency	Total Qty to Accrue	Unit of Measure	Accrual/DeferralMeth
ACCRL_PER	Periodic accruals - with utilization		12.000,00	EUR			LINEAR
ACTCST	Invoices posted with ref. to the accrual object		0,00	EUR			ACT_COSTS

Screen-shot from transaction ACACTREE02.

Two accrual items must be entered as shown in this screen-shot.

Start and End of Life date define the time interval where periodic accruals will be calculated and posted.

In the Periodic Accruals case it is mandatory to enter an accrual method for ACCRL\_PER, since periodic accruals are needed.

# Creating Accrual Objects for Plan Minus Actual Approach

- In the scenario for *Plan Minus Actual Approach*, three accrual items need to be entered when the accrual object is created:
  - An item type that calculates and posts the accrual amounts for each period
    - Accrual Item Type is ACCRL\_PMA.
    - This accrual item type must perform periodic postings – that's why for transaction type PP (periodic posting) and UP (utilization posting) it is assigned to a posting schema in Customizing activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
    - The accrual method in this accrual item is PLN-ACT (“Plan minus actual”).
  - An additional item type that will calculate the cumulated planned costs for the single periods
    - Accrual Item Type is PLNCST.
    - For this accrual item any accrual method can be entered, for example LINEAR.
  - An additional item type that will calculate the actual costs that have been posted with reference to this accrual object.
    - Accrual Item Type is ACTCST.
    - In this accrual item an accrual method must be entered: ACT\_COSTS.
  - All three accrual items must have the same transaction currency.

**Create Accrual Object**

Check and Simulate | Download Template | Upload

Company Code/Accr Object... C | Company Code 0001

**Reference Data**

Accrual Object Category OLITIGAIN | Accrual Object Number 4811-030

Text Accruals for litigation case 4811-30

Person Responsible TESTER

**Life | Parameters | Account Assignments**

Start of Life 01.01.2019 | End of Life 31.12.2019

Lifecycle Status

**Item Data**

Choose Accrual Item

Accr Item Ty...	Item Type Text	Ledger Group	Tot. Accr. Amt (TC)	Transaction Currency	Total Qty to Accrue	Unit of Measure	Accrual/DeferralMeth
ACCRL_PMA	Accruals as planned costs - actual costs		0,00	EUR			PLN-ACT
ACTCST	Invoices posted with ref. to the accrual object		0,00	EUR			ACT_COSTS
PLNCST	Planned costs		12.000,00	EUR			LINEAR

Screen-shot from transaction ACACTREE02.

Three accrual items must be entered as shown in this screen-shot.

In the *Plan Minus Actual* approach it is mandatory to enter accrual methods.

# **Utilization Postings in General:**

## **Online or Offline**

### **With Examples**

# Utilization Postings

- The Accrual Engine supports the process that the posting of actual costs like the posting of a supplier invoice or a goods receipt reduce the accruals that have been posted before.
- This process is called *Accrual Utilization*.
- Accrual Utilization Postings are line items in journal entries that can be identified as utilization of accruals.
  - The field *Subledger-specific Line Item Type Code*, ACDOCA-SLALITTYPE can for example be evaluated for this purpose.
- *Accrual Utilization* can be customized to take place
  - *Online*, i.e. during the posting of the actual costs.  
In this case the Accrual Engine will add the utilization posting as additional line items in the journal entry of the actual cost posting, for example in the supplier invoice.
  - *Offline*, that is at the end of the period by the periodic accrual posting run.  
In this case the periodic accrual posting run will perform the utilization posting.  
The corresponding indicator in customizing is called *Periodically* instead of *Offline*.
- The usage of an *Accrual Closing Frequency* enables to differentiate between
  - utilizations of accruals from **last** fiscal year and
  - utilization of accruals from **current** fiscal year accruals.

## Utilization Postings:

### Additional Line Items in Actual Cost Posting (E.g. Invoice)

- In order to achieve that during the posting of actual costs (for example supplier invoice) the accruals are directly reduced during this posting, the following configuration is required:
  - In IMG **Activity Assign Accrual Item Types to Journal Entry Types and Posting Schemas** the transaction type UP and optionally UL needs to be assigned to a posting schema and
  - the indicator *Post Online* needs to be set in order to achieve that the utilization line items are added in the invoice or goods receipt.
- Additional line item will then be automatically added to the journal entry of the actual cost posting:
  - They credit the cost account and debit the accrual account.
- Utilization postings are delta postings
  - The indicator *Post Deltas* needs to be set.
  - Reason: Otherwise the system would need to re-calculate the utilizations of all former periods when a posting of actual costs takes place.
- Note: You can set both indicators, *Post Online* and *Post Periodically*.
  - This does not harm. In this case the periodic accrual run will not post the UP posting twice.

**Display View "Assignment of Accrual Item Types to Posting Schemas": Ov**

Component:

Assignment of Accrual Item Types to Posting Schemas							
Accrual Item Type	Company Code	Accr TType	Doc. Type	Posting Schema	Post Deltas	Post Online	Post Periodically
ACCRL_FER	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_FER	0001	FP	SA	SAP_ACE_PP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_FER	0001	UP	SA	SAP_ACE_UP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_FMA	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_FMA	0001	PP	SA	SAP_ACE_PP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_FMA	0001	UP	SA	SAP_ACE_UP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_STD	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ACCRL_STD	0001	IP	SA	SAP_ACE_IP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ACCRL_STD	0001	UP	SA	SAP_ACE_UP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

# Utilization Postings: Partial Utilization

- If the accrual amount is smaller than the costs that are posted for example by the invoice then only the corresponding partial amount of the costs will be posted as utilization posting.
  - The rest is posted as costs.
  - Technically speaking: The minimum of existing accruals and costs posted by the invoice or goods receipt is posted as utilization posting.

# Posting Frequency and Posting Period

- *Posting Periods* in the General Ledger are defined by the fiscal year variant that of the combination company code and ledger.
- The Accrual Engine is more flexible compared to the General Ledger:
- The Accrual Engine supports also posting frequencies other than periods defined by the fiscal year variant.
- In the IMG activity *Define Accrual Item Types* you can enter a **Posting Frequency**.
  - By default this frequency is **By Posting Period** which means that it is the fiscal period like in General Ledger.
  - This is also the recommendation: Use the fiscal period, i.e. enter as frequency the value *By Posting Period*.
  - But you can enter also a different frequency like *Daily* or *Quarterly* for example.
- That's why the term *Period* in the context of the Accrual Engine means the period defined by the posting frequency of the accrual item type:
- The period in the Accrual Engine is called **Accrual Posting Period** in order to emphasize that this period (daily, fiscal period, quarterly,...) can be different from the period of the General Ledger (always = fiscal period).

**Change View "Item Type Settings for Ldrgrp incl. Repr. Ledger":**

New Entries

Dialog Structure

- Define Item Types
  - Item Type Settings f
  - Calculation Rules for I

Component	ACAC
Accr Item Type	ACCRL_PER
Company Code	0001
Ledger Group	

Settings for Accrual Item Type and Ledgergroup

Posting Freqncy	P Per Posting Period
-----------------	----------------------



# Utilization Postings:

## Accruals From Former Posting Periods Are Utilized

- If the plan minus actual approach is used to calculate accruals, then the posting of actual costs (e.g. invoice) can utilize only accruals that have been posted in a **former accrual** posting period.
  - The posting of actual costs **cannot** utilize accruals that have been posted in the same or in a future accrual posting period.
  - Instead, when the periodic accrual posting run is executed at the end of this or at the end of a future period, this run will reduce the accruals as a regular periodic accrual posting (transaction type PP).
  - This reduction is done according to the formula  $\text{accruals} = \text{cumulated planned costs} - \text{cumulated actual costs}$ :
    - The actual costs increase due to the actual (invoice or goods receipt) posting.
    - That's why the accrual amount decreases accordingly.
- Relevant dates in the journal entries used to determine which accruals can be utilized:
  - For the posted accruals the *Accrual Value Date* is used.

By default, the accrual value date is identical to the posting date.

    - Exceptional case: In the selection screen of the periodic accrual posting run, a posting period can be entered that is different from the key date ("Last Date of Period") for which the accrual posting run is executed. In this case, the posting date is derived from the manually entered posting period.
  - For the actual cost postings the *Posting Date* is used.

The posting date of the actual cost posting determines the period.

# Example: Invoiced Costs < Accruals From Former Periods

- Customizing settings of the accrual item types:
  - Posting frequency is *By Posting Period* and
  - *Accrual Closing Frequency* not used (empty).
  - Utilization postings are done online.
- The following accruals have been posted:
  - On 31. December 2018, at end of last fiscal year: 3.000 USD.
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 USD.
  - On 28. February 2019: An additional delta of 5.000 USD.
- Now a supplier invoice is posted with posting date 15. February 2019:
  - The invoice posts costs of 3.700 USD.
  - The invoice can utilize the accruals that were posted until end of January (former period).
    - Which is 4.000 USD = 3.000 USD from Dec. 2018 + 1.000 USD from Jan. 2019.
    - Since the invoice posts only 3.700 USD it will not utilize the full accrual amount of 4.000 USD.
    - Instead the invoice utilizes only the partial amount of 3.700 USD.
  - The Accrual Engine will add 2 line items to the supplier invoice:
    - 2 line items , debit and credit, with transaction type UP (Utilization Posting) with an amount of 3.700 USD.

The invoice, that is, all line items have posting date = 15. February 2018.  
Grey: Line items added to the supplier invoice by the Accrual Engine.

Line Item	D/C	G/L Account	Amount	Tcurr	Accrual Value Date
1	C	<Supplier>	4000 USD		
2	D	<Tax>	300 USD		
3	D	<Expense>	3700 USD		
4	C	<Expense>	3700 USD		15-Feb-2018
5	D	<Accruals>	3700 USD		15-Feb-2018

# Example: Invoiced Costs > Accruals From Former Periods

- Same customizing settings as in former example.
- The following accruals have been posted, same as in former example:
  - On 31. December 2018, at end of last fiscal year: 3.000 USD
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 USD
  - On 28. February 2019: An additional delta of 5.000 USD
- Now a supplier invoice is posted with posting date 15. February 2019 (despite accruals were posted at end of period on 28.02.2019 already):
  - The invoice posts costs of 4.700 USD
  - The invoice can utilize the accruals that were posted until end of January (=former period).
    - Which is 4.000 USD = 3.000 USD from Dec. 2018 + 1.000 USD from Jan. 2019.
    - In addition, repeating the accrual posting run for 28. February 2019 will reduce the accruals in February from 5.000 USD by 700 USD to 4.300 USD. This reduction will be posted with transaction type PP (Periodic Posting).  
Note: The invoice does not utilize the accruals from February: The Accrual Engine only utilizes accruals that were posted in a former posting period! The accruals of the “current” period are always corrected with the periodic accrual run.
  - The Accrual Engine will add 2 line items to the supplier invoice:
    - 2 line items, debit and credit, with transaction type UP (Utilization Posting) with an amount of 4.000 USD.
  - Overall, the invoice posts costs of 700 USD: 4.000 USD out of the 4.700 USD are covered by accruals that are utilized by the invoice.

The invoice, that is, all line items have posting date = 15. February 2018.  
Grey: Line items added to the supplier invoice by the Accrual Engine.

Line Item	D/C	G/L Account	Amount	Tcurr	Accrual Value Date
1	C	<Supplier>	5000 USD		
2	D	<Tax>	300 USD		
3	D	<Expense>	4700 USD		
4	C	<Expense>	4000 USD		15-Feb-2018
5	D	<Accruals>	4000 USD		15-Feb-2018

# Accrual Utilization: Additional Currencies

- Assume the following case:
  - The posting of actual costs (e.g. invoice or goods receipt) is posted in a foreign currency.
  - The Accrual Engine is configured to calculate accruals only in transaction currency.
    - This is the default and currently only supported setting in IMG activity *Define Accrual Item Types*.
- **Important:** The goal is to achieve that the utilization posting uses the same exchange rate as the posting of the actual costs.
  - Reason: The assumption is that the posting of the accruals was done when the costs occurred: The posting of the accruals defines the *Date of Transaction* according to IAS21 which fixes the exchange rate. The later posting of actual costs shall not change this exchange rate.
- This means: If sufficient accruals exist that can be utilized the posting of actual costs shall have **zero effect in all currencies on the cost account**.
  - Otherwise, if the amount in the actual cost posting in transaction currency is higher than the available accruals, then the costs are only partially “neutralized” by the utilization posting.
    - The logic how the utilization amounts are calculated in additional G/L currencies differs slightly between online and offline (->periodic posting run) utilization.
      - In the Online case, the utilization line items are added to the actual cost posting before the currency conversion is performed in General Ledger. This way it is guaranteed that both, the actual cost line item and the utilization line item will use the same exchange rate.
      - In the offline case the utilization posting is performed at the end of the period by the accrual posting run as a separate journal entry, because the actual cost posting was done already before within the period, with a different exchange rate. The Accrual Engine calculates the utilization amounts in additional currencies <> transaction currency proportionally by taking the transactional currency as basis and posts the utilization as a separate journal entry.
      - In both cases, online and offline, the result should be identical or at least very similar. Maybe some cent difference because of rounding differences.

# Example: Online Utilization with Additional Currencies

## Case: Invoiced Costs < Accruals From Former Periods

- The following accruals have been posted, in transaction currency EUR.  
 Company code currency is **USD**.
  - On 31. December 2018, at end of last fiscal year: 3.000 EUR
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 EUR
  - On 28. February 2019: An additional delta of 5.000 EUR
- Now a supplier invoice is posted with posting date 15. February 2019:
  - The invoice posts costs of 3.700 EUR with exchange rate EUR/USD = 1,2.
  - There are sufficient accruals that can be utilized: 4.000 EUR = 3.000 EUR + 1.000 EUR.
- Line items are added by the Accrual Engine as utilization of accruals, because **online** utilization is customized.  
 The utilization line items use the same exchange rate as the invoice:
  - Reason: The accruals have already posted the costs in the period when the costs occurred. The invoice (posted later) shall not change the already recognized costs.
  - The balance on the expense account is zero in all currencies!
- The balance on the accrual account is not zero, because the accruals have been posted with different exchange rates.
  - Since the accrual account is a monetary item, a **foreign currency valuation** needs to be performed for the accrual account. This will "correct" the amounts in company code currency on this account.

Important: The balance on the expense account is zero in all currencies!

Line Item	D/C	G/L Account	Amount in EUR	Amount in USD	Accrual Value Date
1	C	<Supplier>	-4000	-4800	
2	D	<Tax>	300	360	
3	D	<Expense>	3700	4440	
4	C	<Expense>	-3700	-4440	15-Feb-2018
5	D	<Accruals>	3700	4440	15-Feb-2018

# Example: Online Utilization with Additional Currencies

## Case: Invoiced Costs > Accruals From Former Periods

- The following accruals have been posted, in transaction currency EUR.  
 Company code currency is **USD**.
  - On 31. December 2018, at end of last fiscal year: 3.000 EUR
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 EUR
  - On 28. February 2019: An additional delta of 5.000 EUR
- Now a supplier invoice is posted with posting date 15. February 2019:
  - The invoice posts costs of **4.700** EUR with exchange rate EUR/USD = 1,2: This is 5.640 USD.
  - There are not sufficient accruals that can be utilized: Only 4.000 EUR = 3.000 EUR + 1.000 EUR can be utilized.
- The amount that can be utilized is determined in transaction currency because only amounts in transaction currency are calculated by the Accrual Engine: 4.000 EUR.
- The amounts in the additional currencies for the utilization line items are calculated by the General Ledger currency conversion using the same exchange rate like in the other line items.
- In this example: Utilization Amount in USD = 4.800 USD = 4.000 EUR \* 1,2.

Only 4000 EUR of the 4700 EUR costs are covered by existing accruals.

Line Item	D/C	G/L Account	Amount in EUR	Amount in USD	Accrual Value Date
1	C	<Supplier>	-5000	-6000	
2	D	<Tax>	300	360	
3	D	<Expense>	4700	5640	
4	C	<Expense>	-4000	-4800	15-Feb-2018
5	D	<Accruals>	4000	4800	15-Feb-2018

# Example: **Offline** Utilization with Additional Currencies

## Case: Invoiced Costs > Accruals From Former Periods

- The following accruals have been posted, in transaction currency EUR.  
Company code currency is **USD**.
  - On 31. December 2018, at end of last fiscal year: 3.000 EUR
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 EUR
  - On 28. February 2019: An additional delta of 5.000 EUR
- Now a supplier invoice is posted with posting date 15. February 2019:
  - The invoice posts costs of **4.700** EUR with exchange rate EUR/USD = 1.2: This is 5.640 USD.
  - There are not sufficient accruals that can be utilized: Only 4.000 EUR = 3.000 EUR + 1.000 EUR can be utilized.
- The amount that can be utilized is determined in transaction currency because only amounts in transaction currency are calculated by the Accrual Engine: 4.000 EUR.
- The amounts in the additional currencies are calculated proportionally according to the formula
- Utilization Amount in Add. Crcy = Invoiced Costs in Add. Crcy \* 
$$\frac{\text{Utilization Amount in Trans. Crcy}}{\text{Invoiced Costs in Trans. Crcy}}$$
- In this example: Utilization Amount in USD = 4.800 USD = 5.640 USD \* ( 4.000 EUR / 4.700 EUR ).

Line Item	D/C	G/L Account	Amount in EUR	Amount in USD
1	C	<Supplier>	-5000	-6000
2	D	<Tax>	300	360
3	D	<Expense>	4700	5640

Line Item	D/C	G/L Account	Amount in EUR	Amount in USD
1	C	<Expense>	-4000	-4800
2	D	<Accruals>	4000	4800

Posting of actual costs during the period, for example a supplier invoice.

Periodic accrual posting run posts the utilization as separate journal entry: The fraction  $4000 / 4700 = 85.1\%$  of the invoiced costs is covered by existing accruals. The amount in USD is calculated as 85,1% of 5640 USD.

# Additional Currencies: Online AND Offline

- Accrual Utilization postings can be customized to be performed
  - not only *online* during the posting of the actual costs (like invoices or goods receipts)
  - But also *periodically* (“offline”) by the periodic accrual posting run, usually at the end of the period.
  
- At the end of the period, the exchange rate is usually different compared to the date when the online utilization posting took place, for example during the posting of the invoice or goods receipt.
  
- But the amounts that were posted by the online utilization posting by adding line items to the journal entry of the actual cost posting are correct and **shall not be changed by the periodic accrual run**.
  
- In fact, this requirement is fulfilled if the Accrual Engine is customized to
  1. calculate accruals only in transaction currency.
    - In IMG activity *Assign Currency Types to Accrual Item Types* only for the transaction currency the *Currency Handling* may be configured as *By Accrual Engine*.
  2. And post **delta** amounts, not full amounts.
    - In IMG *Assign Accrual Item Types to Journal Entry Types and Posting Schemas* for accrual item type ACCRL the flag *Post Deltas* must be set.
  
- Reason: The online utilization posting also calculated the utilization amount only in transaction currency; so a re-calculation at period end will yield the same result in this currency:
  
- The delta is zero – and as a consequence the periodic accrual run will not post any delta!
  - A full posting would reverse the online utilization posting and post the (full) amount again; the General Ledger would calculate the additional currencies in this case – which would be wrong.
  
- Due to these restrictions in utilization postings must be customized as *delta* postings.

**Display View "Assignment of Accrual Item Types to Posting Schemas"**

Component: POAC

Assignment of Accrual Item Types to Posting Schemas				
Accrual Item Type	Company Code	Accr. T-Type	Post Online	Post Periodically
ACCRL	0001	UP	✓	✓

**Change View "Accrual Item Type Settings for Currency Type": Overview**

New Entries

Component: POAC

Accrual Item Type Settings for Currency Type				
Accr Item Type	Company Code	Ledger	Crcy Type	Currency Handling
ACCRL	0001	OL	00	A By Accrual Engine
ACCRL	0001	OL	10	G Calculated by General Ledger (by Curr. Conversion)
ACTCST	0001	OL	00	A By Accrual Engine
ACTCST	0001	OL	10	G Calculated by General Ledger (by Curr. Conversion)
PLNCST	0001	OL	00	A By Accrual Engine
PLNCST	0001	OL	10	G Calculated by General Ledger (by Curr. Conversion)



# Accrual Utilizations: First Come First Served (FCFS)

- When accruals are utilized by posting of actual costs (e.g. by a supplier invoice), the Accrual Engine applies a **First Come First Served (FCFS)** logic.
- If there are several actual cost postings in the same posting period the Accrual Engine sorts these actual costs postings by their timestamp.
  - The actual cost posting that is posted first in the sense that it was posted at an earlier point in time (CPU date and time), will utilize accruals first.
  - The later actual cost postings will utilize accruals only, if some accruals are left.

# First Come First Served (FCFS): Example 1:

## Two Invoices in Same Period

- Customizing settings of the accrual item types:
  - Posting frequency is *By Posting Period* and
  - *Accrual Closing Frequency* not used (empty).
  - Utilization postings are done online.
- The following accruals have been posted by the accrual posting run:
  - On 31. December 2018, at end of last fiscal year: 3.000 USD.
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 USD.
- Now a supplier **invoice 1** posts costs of 3.700 USD with posting date 15. February 2019:
  - The invoice utilizes 3.700 USD of the 4.000 USD accruals.
- **Afterwards** another supplier **invoice 2** posts costs of 2.000 USD with earlier posting date 10. February 2019:
  - The invoice can utilize only the remaining 300 USD (= 4.000 - 3.700 USD) accruals
  - Because this second invoice was posted with a later CPU date and time compared to the first invoice.
  - It does not matter that the posting date of invoice 2 is before the posting date of invoice 1 – as long as the posting dates are in the same period.

# First Come First Served (FCFS): Example 2: Two Invoices in Same Period + Reversal

- Same customizing settings as in former example.
- The following accruals have been posted by the accrual posting run, same as in former example:
  - On 31. December 2018, at end of last fiscal year: 3.000 USD.
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 USD.
- Two invoices are posted like in former example:
  - Supplier **invoice 1** posts costs of 3.700 USD with posting date 15. February 2019:
    - The invoice utilizes 3.700 USD of the 4.000 USD accruals.
  - **Afterwards** another supplier **invoice 2** posts costs of 2.000 USD with **earlier** posting date 10. February 2019:
    - The invoice can utilize only the remaining 300 USD (= 4.000 - 3.700 USD) accruals because this second invoice was posted with a later CPU date and time compared to the first invoice.
- Now the supplier invoice 1 is reversed!
  - Due to the reversal of invoice 1, the later invoice 2 should have utilized not only 300 USD, but 2.000 USD instead.
  - **The correction of the utilization amount of invoice 2 is done by the next accrual posting run for February 2019!**
  - Even if utilization postings are customized as online, the correction posting is not done during the reversal of invoice 1 because the line items of invoice 1 would then be hard to understand.

# First Come First Served (FCFS): Example 3:

## Three Invoices in Different Periods + Reversal in Former Period

- Same customizing settings as in former example.
- The following postings are done in this sequence:
  1. With posting date = 31. December 2018, at end of last fiscal year:  
The accrual posting run posts 3.000 USD accruals.
  2. With posting date = 15. January 2019 supplier invoice 1 posts costs of 3.700 USD:
    - The invoice can utilize the full amount of 3.000 USD accruals.
  3. With posting date = 20. January 2019 supplier invoice 2 posts costs of 1.300 USD:
    - The invoice cannot utilize any accruals, since invoice 1 has utilized all accruals.
  4. With posting date = 31. January 2019:  
The accrual posting run posts an additional delta of 1.000 USD as accruals.
    - For example because the planned costs increased.
  5. With posting date = 15. February 2019 supplier invoice 3 posts costs of 2.100 USD
    - The invoice can utilize only the 1.000 USD from January, because from former periods no accruals are left:
    - The accruals from former periods were utilized by invoice 1 fully.
  6. On CPU date 20. Feb. the supplier invoice 1 is reversed with reversal posting date 15. January 2019!
    - The reversal of the invoice reverses also its utilization posting of 3.000 USD.
    - Due to the reversal of invoice 1, the later invoice 2 should have utilized 1.300 USD instead of 0.
      - Because the full accruals of 3.000 USD from December 2018 are now available again.
      - This correction of the utilization amount of invoice 2 is done by repeating the accrual posting run for January 2019.
    - Due to the reversal of invoice 1, also the later invoice 3 should have utilized 2.100 USD instead of 1.000 USD.
      - Because due to the reversal, there are 1.700 USD (=3.000 – 1.300) USD accruals left from Dec 2018 that can be utilized in February 2019.
      - And from January 2019 there are 1.000 USD available as additional accruals that can be utilized.
      - So invoice 3 can utilize fully the 1.700 USD from Dec 2018 and the partial amount of 400 USD of the 1.000 USD from January 2019.
      - This correction of the utilization amount of invoice 3 is done by the executing the accrual posting run for February 2019.

# Example 3: How The Accruals Are Calculated

- More details for example 3:
  - The accrual object has a lifetime of 09/2018 – 01/2019. Total amount is 15.000 USD. **Plan minus Actual** approach is used.
    - The planned costs are calculated as a linear distribution: 3.000 USD in each period:  $3000 \text{ USD} = 15.000 \text{ USD} / 5 \text{ periods}$ .
    - At end of 12/2018: planned costs are 12.000 USD =  $3.000 \text{ USD} * 4 \text{ periods}$  - and actual costs of 9.000 USD were posted.
    - So the accruals on 31.December 2018 are posted as  $3.000 \text{ USD} = 12.000 \text{ USD} - 9.000 \text{ USD}$ .

Before reversal of invoice 1, amounts are in USD:

Date	Planned Costs (Balance)	Actual Costs (Balance)	Accrual Amount (Balance)	Utilized Accruals (Delta)
31.Dec. 2018	12.000	9.000	$3.000 = 12.000 - 9.000$	
31.Jan. 2019	15.000	$14.000 = 9.000 + 3.700 + 1.300$	$1.000 = 15.000 - 14.000$	3.000
28.Feb. 2019	15.000	$16.100 = 14.000 + 2.100$	0	1.000

## Important:

- After the periodic accrual posting run was executed on 31.Jan 2019, the accrual account will have a **balance of 1.000 USD** which consists of the
  - 3.000 USD accruals posted as **credit** in Dec. 2018.
  - 3.000 USD utilization posted as **debit** in Jan. 2019.
  - 1.000 USD new accruals posted as credit in Jan. 2019.
    - If delta postings are customized for transaction type PP, the periodic accrual posting run posts 1.000 USD as periodic accruals, despite in Jan. 2019 the delta compared to the former period Dec. 2018 is actually  $1.000 - 3.000 \text{ USD} = -2.000 \text{ USD}$ .
    - But the utilization posting of 3.000 USD has reduced the accruals to zero: The true balance before the posting run in Jan 2019 is not 3.000 USD but  $3.000 \text{ USD} - 3.000 \text{ USD} = 0$ . So the posting run calculates the delta to be posted finally as  $1.000 \text{ USD} - 0 = 1.000 \text{ USD}$ .
- In Feb. 2019 the accrual balance drops to zero due to the invoice 3 which utilizes 1.000 USD.

## Example 3: Calculated Accruals After Reversal

After reversal of invoice 1:

Date	Planned Costs (Balance)	Actual Costs (Balance)	Accrual (Balance)	Utilized Accruals (Delta)
31.Dec. 2018	12.000	9.000	3.000 = 12.000 – 9.000	
31.Jan. 2019	15.000	10.300 = 9.000 + 1.300	4.700 = 15.000 – 10.300	1.300
28.Feb. 2019	15.000	12.400 = 10.300 + 2.100	2.600	2.100

The reversal of invoice 1 with 3.700 USD in Jan 2019 leads to a change of the utilized amounts:

- If the periodic accrual posting run is repeated for Jan. 2019, the following amounts are posted:
  - A utilization posting (UP) for invoice 2 of 1.300 USD.
  - An accrual posting (PP) of 2.000 USD.
    - Delta with respect to former period of 4.700 – ( 3.000 – 1.300 ) USD = 3.000 USD.  
And in first execution of the accrual posting run for Jan 2019 already 1.000 USD have been posted as accruals, so the final delta to be posted is 3.000 – 1.000 = 2.000 USD.
    - Another explanation of the 2.000 USD is: Before the reversal of invoice 1, the balance of the accrual account was 1.000 USD. The reversal has reversed also the utilization posting of 3.000 USD. So the accrual balance is now 4.000 USD. But a new utilization of 1.300 USD is now posted which reduces the accrual balance to 2.700 USD. But the balance should be 4.700 USD according to the plan minus actual formula. So the delta of 2.000 USD needs to be posted.
- If the periodic accrual posting run is repeated for Feb. 2019, the following amount is posted:
  - A delta utilization posting (UP) of 1.100 USD.
    - The utilization amount for invoice 2 is changed from 1.000 to 2.100 USD.
  - No periodic accrual posting (PP).
    - The accrual balance should be 2.600 USD. Since it was 4.700 USD in January and 2.100 USD of it were utilized in February, the balance in February is already 2.600 USD = 4.700 USD – 2.100 USD.

# Recommendation: Use Delta Postings

- Use delta postings instead of full postings
  - In IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas* set the indicator *Post Deltas* for all transaction types
- Reasons:
  - The amounts in the utilization (UP, UL), manual release (RP, RL) and automatic release postings (FP, FL) are easier to understand.
  - Also for the periodic accrual postings (PP) delta postings are reasonable because
    - The utilization postings are reducing the existing accruals anyway, so no need to “reversing” them in next period.
    - Anyway a foreign currency valuation should be performed for the accrual account. This will bring the accrual balance in other currencies to newest exchange rate anyway.

# **Meaning and Usage of Accrual Value Date**



# Accrual Value Date

- The *Accrual Value Date* is a field in the journal entry line item.
  - Technically this is field ACRVALDAT in table ACDOCA.
- The *Accrual Value Date* is filled only in journal entry line items that are created by the Accrual Engine.
  - It is filled in all accrual postings that are performed by the Accrual Engine, for example in periodic accrual postings, utilization and/or release postings.
  - It is empty and not used in all other postings, for example in line items that post actual costs in goods receipts or supplier invoices.

# Accrual Value Date

- The Accrual Engine evaluates the accrual value date in order to determine which accrual, utilization or release amounts the Accrual Engine has already posted in which period.
  - In other words: For postings done by the Accrual Engine, the accrual value date determines to which period they are assigned.
- **By default the Accrual Engine uses the posting date as accrual value date.** Exceptions:
  - In some posting screens of the Accrual Engine it is possible to enter a posting date (or posting period and fiscal year) that is different from the accrual value date.
  - In *Late Utilization (UL)* and *Late Release (RL, FL)* postings the accrual value date is different from the posting date.
    - Such postings can only occur if an *Accrual Closing Frequency* is used. See separate chapter.
    - In a nutshell: Assume an invoice is posted in year 2019 but utilizes accruals from year 2018: When adding the utilization line items to the invoice the info must be stored in these line items that they utilize accruals from the other year 2018. This info is stored in the new field Accrual Value Date: This field is filled with the date 31.12.2018 in this case:  
Posting date and document date are header fields – and are filled by the invoice itself, likely with a date in 2019, that's why these fields cannot be used by the Accrual Engine; instead a new field *Accrual Value Date* had to be introduced in the journal entry line item.

# **Optional Customizing**

## **Accrual Closing Frequency**

# Distinguish Between Accruals from Last and from Current Fiscal Year

- The Accrual Engine supports the distinction between last and current fiscal year in a generic way for utilization and release postings.
- For example when accruals are utilized by a posting of actual costs, like a supplier invoice, it can be required to distinguish whether the accruals that are being utilized were created in former or in current fiscal year.
  - Created in former fiscal year means: The accruals were posted by the Accrual Engine with an *Accrual Value Date* that is in the former fiscal year.
  - Note: When posting accruals, the accrual value date is usually identical to the posting date.
- Background:
  - The accruals that were posted at the end of last fiscal year have reduced the profit of the company.
  - As a consequence usually less taxes have been paid by the company.
  - In order to prove to an auditor whether the accruals from last year were really needed, it is required to show in reporting
    - which portion of the accruals from last fiscal year was utilized in the next fiscal year and
    - which portion of the accruals from last fiscal year had to be released due to non-use in the next fiscal year.

# Different Transaction Types: Utilization And Release of Accruals from Last Fiscal Year

- The Accrual Engine can be configured to post utilizations of accruals from
  - last fiscal year and
  - current fiscal yearusing different transaction types (UP and UL) in order to enable a distinction of the corresponding journal entry line items in reporting.
- This distinction is not only possible for utilization of accruals but also for manual release of accruals, transaction types RP and RL as well as for automatic release of accruals, transaction types FP and FL:
  - Release of accruals from last fiscal year can be posted with a different transaction type compared to release of accruals from current fiscal year.
- Technically, the different transaction types mean different posting schemas (SAP\_ACE\_UP, SAP\_ACE\_UL and SAP\_ACE\_FP, SAP\_ACE\_FL).
  - The different posting schemas lead to
    - different values of field “Subledger-Specific **Line Item Type**” in the line item of the journal entries.  
This is field SLALITTYPE in database table ACDOCA.
    - When posted not online but with the periodic accrual posting run:  
Different **journal entry types** (field BLART) in the header of the corresponding journal entries can be used.  
The journal entry type is defined in the IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
  - These two fields can be evaluated in reporting.

# Accruals Closing Frequency

- The Accrual Engine supports **not only** the distinction between former and current **fiscal year** for accrual utilization and release postings.
- Frequencies other than fiscal year are also supported, for example quarter or even fiscal period.
- This frequency is called ***Accruals Closing Frequency***.
- As a consequence, the accruals closing frequency defines *Accrual Closing Periods*:
  - If you enter *Annually* as accruals closing frequency, each fiscal year is an accrual closing period.
  - If you enter *Quarterly* as accruals closing frequency, each quarter is an accrual closing period.
- The accruals closing frequency is entered in the IMG activity *Define Accrual Item Types*, see screenshot.

**Change View "Item Type Settings for Ldrgrp incl. Repr. Ledger":**

63 New Entries

Dialog Structure

- Define Item Types
  - Item Type Settings for Ldrgrp incl. Repr. Ledger
  - Calculation Rules for Derived Item Types

Component	POAC
Accr Item Type	ACCRL
Company Code	0001
Ledger Group	

Settings for Accrual Item Type and Ledgergroup

Posting Freqncy	P Per Posting Period
Closing Frequency	Y Annually

Performance Assistant

Frequency of accruals closing process

**Use**

Enter a Frequency like "Annually" if you want to be able in reporting to distinguish the following types of accrual postings:

- Consumption and release of accruals in current fiscal year.
- Consumption and release of accruals from former fiscal year.  
For example: An invoice is posted in current fiscal year but consumes accruals from former fiscal year.

If this distinction is not required, you can leave this field empty.

# Late Utilization and Late Release Postings

- Since the *accrual closing frequency* supports not only the fiscal year, the transaction types have “generic” names:
- The transaction types that represent a utilization or release of accruals from a former accrual closing period have the word **Late** in their names.
  - They do not have the term *Former Fiscal Year* or similar in their names, because the accruals closing frequency can not only be *Annually* but also for example *Quarterly*.
- Accruals utilization postings are using the transaction types
  - **UP Utilization Posting**  
If the posting utilizes accruals from the *current* fiscal year.
  - **UL Late Utilization Posting**  
If the posting utilizes accruals from a *former* fiscal year.
- Accruals release postings are using the transaction types
  - **FP Automatic Release Posting** (also called *Closing Posting* or *Final Posting*)  
If the posting releases accruals from the *current* fiscal year.
  - **FL Late Automatic Release Posting**  
If the posting releases accruals from a *former* fiscal year.
  - **RP Manual Release Posting**  
If the posting releases accruals from the *current* fiscal year.
  - **RL Late Manual Release Posting**  
If the posting releases accruals from a *former* fiscal year.

# Posting Date And Accrual Value Date

- The accrual value date is filled only in journal entry line items that are created by the Accrual Engine.
- By default the accrual value date is identical to the posting date.
- Exceptional cases are **Late** Utilization (UL) and Late Release (RL, FL) postings:
  - In order to save the information in the journal entry line item from which accrual closing period accruals are utilized or released, the Accrual Engine fills the accrual value date with the **last day** of the accrual closing period from which accruals are utilized or released.



# Late Accrual Utilizations: Example 1

## Invoiced Costs < Accruals From Former Periods

- Customizing settings for accrual item type that posts the accrual amounts:
  - Posting frequency “By Posting Period”, accrual closing frequency “Annually”, online utilization.
  - These customizing settings mean that the Accrual Engine performs accrual postings at the end of each fiscal period and the utilization postings are posted with different transaction types depending on whether accruals from former fiscal year or from current fiscal year are utilized.
- The following accruals have been posted:
  - On 31. December 2018, at end of last fiscal year: 3.000 USD
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 USD
  - On 28. February 2019: An additional delta of 5.000 USD
- Now a supplier invoice is posted with posting date 15. February 2019:
  - The invoice posts costs of 3.700 USD
  - This invoice posting will
    - fully utilize the 3.000 USD accruals from last year and
    - utilize the partial amount of 700 USD accruals from the current year.
  - The Accrual Engine will add 4 line items to the supplier invoice:
    - 2 line items, debit and credit, with transaction type UL (Late Utilization Posting) with an amount of 3.000 USD  
Note: UL postings have as accrual value date the last day of the accruals closing period from which they utilize accruals.
    - 2 line items, debit and credit, with transaction type UP (Utilization Posting) with an amount of 700 USD.

The invoice, that is, all line items have posting date = 15. February 2018.  
Grey: Line items added to the supplier invoice by the Accrual Engine.

Line Item	D/C	G/L Account	Amount	Tcurr	Accrual Value Date
1	C	<Supplier>	4000 USD		
2	D	<Tax>	300 USD		
3	D	<Expense>	3700 USD		
4	C	<Expense>	3000 USD		31-Dec-2018
5	D	<Accruals>	3000 USD		31-Dec-2018
6	C	<Expense>	700 USD		15-Feb-2018
7	D	<Accruals>	700 USD		15-Feb-2018

# Late Accrual Utilizations: Example 2

## Invoiced Costs > Accruals From Former Periods

- Same customizing settings as in example 1.
- The following accruals have been posted, same as in example 1:
  - On 31. December 2018, at end of last fiscal year: 3.000 USD
  - On 31. January 2019, current fiscal year: An additional delta of 1.000 USD
  - On 28. February 2019: An additional delta of 5.000 USD
- Now a supplier invoice is posted with posting date = 15. February 2019:
  - The invoice posts costs of 4.700 USD
  - This invoice posting will
    - fully utilize the 3.000 USD accruals from last year and
    - also fully utilize the 1.000 USD accruals from January of current year.
    - In addition, repeating the accrual posting run for 28. February 2019 will reduce the accruals in February from 5.000 USD by 700 USD to 4.300 USD. This reduction will be posted with transaction type PP (Periodic Posting).

Note: The invoice does not utilize the accruals from February: The Accrual Engine only utilizes accruals that were posted in a former posting period! The accruals of the “current” period are always corrected with the periodic accrual run.

  - The Accrual Engine will add 4 line items to the supplier invoice:
    - 2 line items, debit and credit, with transaction type UL (Late Utilization Posting) with an amount of 3.000 USD and
    - 2 line items, debit and credit, with transaction type UP (Utilization Posting) with an amount of 1.000 USD.
  - Overall, the invoice posts costs of 700 USD: 4.000 USD out of the 4.700 USD are covered by accruals that are utilized by the invoice.




































The invoice, that is, all line items have posting date = 15. February 2018.  
 Grey: Line items added to the supplier invoice by the Accrual Engine.

Line Item	D/C	G/L Account	Amount	Tcurr	Accrual Value Date
1	C	<Supplier>	5000 USD		
2	D	<Tax>	300 USD		
3	D	<Expense>	4700 USD		
4	C	<Expense>	3000 USD		31-Dec-2018
5	D	<Accruals>	3000 USD		31-Dec-2018
6	C	<Expense>	1000 USD		15-Feb-2018
7	D	<Accruals>	1000 USD		15-Feb-2018

# Accruals Closing Frequency is Optional

- If you do **not** need to distinguish whether utilization or release postings are for accruals from last or from current year, you can leave the accrual closing frequency **empty** in IMG activity *Define Accrual Item Types*.
- If you are **not** using an accruals closing frequency, you also do **not** need to assign the transaction types UL, RL and FL to posting schemas in the other IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
- But if you are using an accruals closing frequency, you must assign the transaction types UL, RL and FL to posting schemas in the other IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.

**Change View "Assignment of Accrual Item Types to Posting Schemas"**

68                                     

# Accruals Closing Frequency in Accrual Item Types

- In the *Plan minus Actual* approach three accrual item types are relevant:
  - PLNCST for the planned costs
  - ACTCST for the actual costs (invoices or goods receipts)
  - ACCRL\_PMA for the accruals, calculated as planned costs minus actual costs.
- But you can enter an accrual closing frequency only in the accrual item type for the accruals (ACCRL\_PMA).
  - It is not supported and not allowed to enter an accrual closing frequency in the other two accrual item types for actual and planned costs (PLNCST and ACTCST).
- The same rule applies to the other utilization scenarios (ACCRL\_PER, ACCRL\_STD):
  - Only in the ACCRL\* accrual item type an accrual closing frequency can be entered.

# **Manual and Automatic Release Postings**

# Lifecycle of an Accrual Object

A typical sequence of lifecycle events of a purchase order item is shown in the following example:

1. An accrual object is created.
2. Accruals are posted for example by the opening posting or by the periodic posting run.
3. Some supplier invoices are posted which lead to a reduction of the accruals.
4. After the life-time of the accrual object has ended, some supplier invoice(s) were not yet posted: Some accruals remain.
5. In January of next year, a Controller **manually** releases a partial amount of the existing accruals.
  - Reason: The Controller has decided that the remaining accruals are too high: He expects that the outstanding invoices will post less costs than originally planned.
6. In February, the last supplier invoice is posted.
  - It utilizes a portion of the accruals that were not yet released. Still a small amount of accruals exist.
  - Since no further invoices are expected, an accountant changes the status of the accrual object to F which **automatically** releases the remaining accruals.
    - The corresponding action in transaction ACACTREE02 is *Edit -> Terminate Accrual Subobject Prematurely*.

# Manual Release of Accruals

- Manually releasing accruals is possible in transaction ACACTREE02:
- In this transaction the function *Edit -> Release Accruals* can be performed:
  - A popup appears that allows to either fully or partially release accruals that had been posted before.
  - In the partial release case, the user can manually enter the amount that shall be released.

**Release Posted Accrual Amounts**

☐ Full Release      Posting Date: 03.05.2019

☒ Partial Release      Period: 5      Fiscal Year: 2019

Postd Amt	Trans Crcy	Trans Crcy	Total Rlsd Amt	TCur.	Trans Crcy	To Release Amt	TCur.	Trans Crcy	Rmng Amt	Trans Crcy	Trans Crcy
11.500,00	EUR		0,00	EUR		10.000,00	EUR		1.500,00	EUR	

The user manually entered 10.000 EUR as amount that shall be released. After this release, still 1.500 EUR will remain as accruals.

Note: The user could enter a maximum of 11.500 EUR as to be released.

# Manual Release of Accruals: With Accrual Closing Frequency

- Manually releasing accruals can lead not only to *Release* postings (transaction type RP), but also to *Late Release* postings (transaction type RL).
- Prerequisite for late release postings is of course that an accrual closing frequency is entered in the customizing of the accrual item type.
- Late release postings will occur if
  - a. The accruals were posted in a former accrual closing period, usually in a former fiscal year and
  - b. The posting date for the release posting that the user enters in the release popup is in a later accrual closing period, for example in current fiscal year.
- If accruals that were posted in several accrual closing periods, they will be displayed in the release popup as separate rows.
  - Start and end date of the accrual closing period (e.g. fiscal year) will be visible as columns.
  - This way a user can decide from which accrual closing frequency he wants to release which accrual amount.



# Interplay of Utilization and Release Postings

- Usually, first utilization postings occur – and afterwards the remaining accruals are released.
- But the opposite sequence can also occur:
  - A user has released accruals – and afterwards a utilization posting occurs.
  - In this case, **the utilization posting can lead to a reversal of the release posting.**
- Example
  - Accruals of 1.000 EUR have been posted in 01/2019
  - In the next period 02/2019 a user manually releases 400 EUR. So only 600 EUR are left afterwards.
  - In the period 03/2019 actual costs of 800 EUR are posted by a supplier invoice.  
This leads to a utilization posting of 800 EUR – and 200 EUR of the release posting are inverted:  
**A release of -200 EUR (= minus 200) will be posted automatically.**
  - Note: If utilization posting is customized as online, the utilization posting of 800 EUR will be added as line items to the invoice. But the inverse release posting of the -200 EUR is not done online because it has no direct connection to the invoice from a business point of view:
  - The inverse release posting of -200 EUR is a correction posting: The system assumes that the user has by mistake released 200 EUR too much – despite these accruals turned out to be needed:
  - The inverse release posting of -200 EUR will be done by the next periodic accrual posting run.
  - During the time between the invoice (incl. utilization) posting and the next periodic accrual posting run, there is an over-utilization of the accruals visible in reporting.

# **Additional Account Assignments in Utilization and Release Postings**

# Utilization Postings: Additional Account Assignments

- Accruals are usually posted as **debit** to a cost account.
  - Cost accounts in general require an additional account assignment like cost center, internal order etc.
- Utilization postings are usually posted as **credit** to a cost account.
  - **By default the Accrual Engine posts the utilization posting with the same additional account assignment (cost center, internal order etc.) that is entered in the accrual object.**
  - In general this means that the utilization posting is done with the same additional account assignment like the posting of the accruals.
- This logic is important if the actual cost posting, for example the supplier invoice, is posted to a different additional account assignment than the accruals!
- Example:
  - In period 01/2019 accruals of 1.000 EUR were posted to cost center 1, because this cost center is entered in the purchase order item.
  - In the next period 02/2019 a supplier invoice of 800 EUR is posted to cost center 2.
  - The invoice posting leads to a utilization posting of 800 EUR:  
This utilization posting posts a credit of 800 EUR to cost center 1.
  - After this, cost center 1 has a balance of 200 EUR (debit) and cost center 2 has a balance of 800 EUR (debit).
  - In other words: **The invoice incl. utilization posting transfers 800 EUR from cost center 1 to cost center 2.**
  - Interpretation: This transfer of 800 EUR means that finally the cost center 2 received the goods or services for which the invoice is posted – and has now the corresponding costs of 800 EUR: It was a mistake to post the corresponding accruals to cost center 1.

# Utilization Postings: Time-Dependent Account Assignments

- Special case: Assume several accrual postings were done with different additional account assignments (cost center, internal order etc.).
  - This can occur if the additional account assignment was changed between the accrual postings.
  - The utilization posting will then use the additional account assignment that is currently entered/valid in the accrual object.
  - Example:
    - In period 01/2019 accruals of 1.000 EUR were posted to cost center 1.
    - Then the cost center in the accrual object is changed from cost center 1 to cost center 2.
    - In period 01/2019 accruals of 1.000 EUR were posted to cost center 2.
    - In the next period 03/2019 a supplier invoice of 1.200 EUR is posted to cost center 3.  
The invoice posting leads to a utilization posting of 1.200 EUR:  
This utilization posting posts a credit of 1.200 EUR to cost center 2, because cost center 2 is derived from the accrual object.
- This behavior is not optimal, because the utilization posting posts a credit of 1.200 EUR to cost center 2 despite only 1.000 EUR were debited on this cost center by the accrual postings to this cost center 2.
  - Better would be if the utilization posting would post only 1.000 EUR to cost center 2 and 200 EUR to cost center 1, but this logic is not implemented in the Accrual Engine.

# Late Utilization Postings: Additional Account Assignments

- *Late Utilization Postings* can occur only if an accrual closing frequency was entered in the customizing of the accrual item type.
- The main use-case for usage of an accrual closing frequency is the frequency *Annually* in order to distinguish utilization and release postings between current and former fiscal year.
  - In this use-case *Annually*, a late utilization posting means that the accruals had been posted in the last fiscal year.
  - The G/L balance carry forward run has cleaned-up the balance of all profit accounts during the fiscal year change:
  - All costs that had been posted to cost center 1 in the old year are gone in the new year:
    - Cost center 1 has amount zero as beginning balance in the new year on all cost accounts.
    - Only the balance on the accrual account is carried forward because it is a balance sheet account.
- If the actual costs in the new year (e.g. invoice) are posted to the different cost center 2 and if the utilization posting would post the credit on the cost account to the original cost center 1, this would increase the budget of this cost center 1 in the new year, since the debit posting from the old year is missing in the new year on cost center 1.
- That's why in **Late** Utilization (UL) postings the Accrual Engine by default posts the credit not on the original cost center 1 but on cost center 2.
- This is different in “normal” utilization postings (UP) and release postings as described in the corresponding slide.

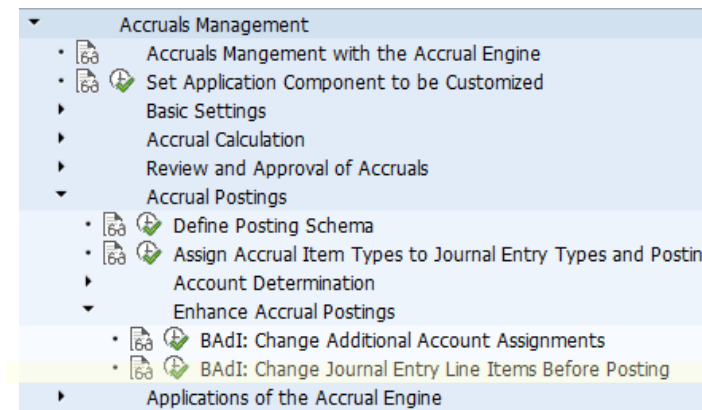
# Release and Late Release Postings: Additional Account Assignments

- Like utilization and late utilization postings, also release postings usually are posted as credit to a cost account.
- For posting release of accruals similar logic applies like for utilization postings.
  - The only difference is that in release postings there is no actual posting (like supplier invoice) from which the additional account assignment can be taken.
- In both type of postings, “normal” release postings with transaction types RP (or FP) and late release postings, transaction types RL (or FL), the additional account assignment is derived from the accrual object using the posting date of the release posting.
  - Late release postings occur if an accrual closing frequency (e.g. Annually) is used and accruals are being released which were posted in a former accrual closing period (e.g. fiscal year).
  - Like in the logic for late utilization postings, this way it is avoided that a budget on the “old” cost center 1 is created in the new fiscal year by the credit posting that is performed by the release of the accruals.
  - Issue: With the late release posting a credit on cost center 1 is posted which increases the budget in the new year.

If such an increase of the budget of the cost center not desired, you can implement a BAdI to derive a different cost center, for example a dummy cost center, see next slide.
  - The account assignment can be changed by implementing BAdI  
BADI\_ACE\_DOCUMENT\_ASGNMT\_CUST when deriving them from accrual object for postings.

# Additional Account Assignments: BAdI

- The default behavior, which additional account assignment is used in utilization, late utilization and other postings like release of accruals can be changed by the customer by implementing the BAdI `BADI_ACE_DOCUMENT_SCHEMA_CUST`.
- In this BAdI the table `CT_SCHEMA_CALCULATED` contains the line items that will be posted.
- In these line items the field `S_ASSGMT` contains the additional account assignment that is used in the current posting.
  - In the utilization posting of the example, this field would contain cost center 1.
- As information, the other field `S_ASSGMT_POSTED_ACT` contains the additional account assignment that was used in the posting of actual costs.
  - This field is not used in the posting; it is only for information, so that the BAdI can decide which account assignment shall be finally used in this posting.
  - In the utilization posting of the example, this field would contain cost center 2.
- The BAdI implementation can change the content of `S_ASSGMT`
  - For example by copying the account assignment from field `S_ASSGMT_POSTED_ACT` into field `S_ASSGMT`.
  - The posting will then be done to this changed account assignment.
- For more information see documentation of the corresponding IMG activity (transaction `ACEIMG`).



# Cross-Company Code Postings



# Cross-Company Code Accrual Postings

- With the following support packages or after applying note SAP note 2885625, it is possible to perform cross-company code postings with the Accrual Engine:
  - Release S/4HANA 1809 SP4
  - Release S/4HANA 1909 SP2

By entering an **Offsetting** Company Code, the offsetting line item will be posted in this company code. The offsetting line item usually posts to a cost account. In the screen-shot this is the company code F001.

The line item that posts to the accrual account will be posted in the original company code – which is 0001 in the screen-shot.

Company code clearing line items are generated in order to guarantee balance = zero in both company codes.

Two journal entries are posted: One in each company code.

**Display Accrual Object**

Company Code: 0001 SAP DEMO Company 0001 Time Dependency: 1 01.01.0001 - 31.12.9999

Reference Data

Accrual Object Category: ORENTING Accrual Object Number: 505

Text: Test Cross-Company Code

Person Responsible: SCHACHNER

Life Parameters Account Assignments

BusA	Profit Center	Segment	Cost Center	OffsCoCode	Order
	SAP-DUMMY		1000	F001	

Item Data

Choose Accrual Item

Accr Item Type	Item Type Text	Tot. Accr. Amt (TC)	Transaction Currency	Accrual/DeferralMeth	Start of Life	End of Life
COSTS	Cost Accrual	12.000,00	USD	LINEAR	01.01.2018	31.12.2019

Calculated Accruals Postings Posted Totals

Reverse Details

Accr TType	Accrual Value Date	Fiscal Yr	Period	Posting Date	DocumentNo	Line Item	Ty	Amount in Transaction Currency	TrCry	Time Stamp
IP	01.01.2018	2018	1	01.01.2018	100002850	000001	SA	12.000,00	USD	20.200.131.100.025
PP	31.03.2018	2018	3	31.03.2018	100002851	000001	SA	1.500,00-	USD	20.200.131.100.213
PP	30.04.2018	2018	4	30.04.2018	100002852	000001	SA	500,00-	USD	20.200.131.100.258
								<b>10.000,00</b>	<b>USD</b>	

List of Documents in Accounting

Documents in Accounting

Document	Object type text	CoCode
0100002850	Accounting document	0001
0100050420	Accounting document	F001
0001363322	Profit center doc.	
A000HXEU00	Controlling Document	F001

Separate Original document

# Cross-Company Code Accrual Postings: Checks

If an offsetting company code is entered in the account assignment of the accrual object,

- for example the existence of the cost center or internal order is checked in this offsetting company code when the accrual object is created or changed.
- Like cost center, also the **offsetting G/L account** in the accrual object is checked in the offsetting company code.

The screenshot shows the SAP configuration for accrual postings. The 'Opening Posting' section is active, showing 'Offsetting Account' as 430000 and 'Accrual Account' as 980000. The 'Periodic Posting' and 'Closing Posting' sections are also visible, each with fields for 'Accrual Account' and 'Offsetting Account'.

- The account determination for the accrual postings depends on company code. So if an offsetting company code is entered in the account assignment, the offsetting company code is used to determine the G/L account for the offsetting line item, i.e. for the symbolic accounts that have names line "...\_OFFSTNG\_...".

Account Determination for Manual Accruals				
Company Code	Accr Object Cat	Accr Item Type	Symbolic Account	G/L Account
0001			FIN_ACCR_ACCNT	98000
F001			FIN_OFFSTNG_ACCNT	430000

# Posting Run Features

# Posting Summarization

- Before rel. 2020, the transaction ACEPOSTINGRUN will summarize documents as much as possible to reduce the number of documents.
- From rel. 2020 onwards, the transaction ACEPOSTINGRUN can summarize posting document in different levels, i.e. maximum summarization, accrual subobject level and accrual item level. This provides the flexibility for customer to view the posting result and do the true reversal of individual document.
  - Formerly, reversal of a posting is done in an inverse-way, i.e. posting the same amount in opposite credit/debit side, because reversal of individual document usually have impact on a few accrual subobjects.
  - With possibility to posting for one accrual subobject or even one accrual item, a document can be truly reversed.
- IMG activity to define aggregation level in transaction ACEIMG
  - Accruals Management -> Accrual Postings -> Define Posting Summarization

# Posting Summarization in Test Run

- If transaction ACEPOSTINGRUN runs in test run mode, the summarization customizing will be ignored and postings are summarized in accrual items and posting types level.
- The background is, the error messages generated in posting run are attached to each document. If documents are created for several accrual subobjects, the error messages can't be linked to the corresponding accrual subobjects, which introduced difficulty to identify the root cause in accrual subobjects.
- This feature is delivered in rel. 2020, and downported to rel 1809 SP5 and 1909 SP3 by Note 2912042.

# Account Assignment and Sign of Amounts in Posting Run Result List

- Account Assignment
  - Formerly, account assignment fields are available in posting run result list, but most of them are empty as account assignment from accrual account (balance sheet account) is shown.
  - Now the behavior is changed, account assignment from offsetting account (usually a P&L account) is shown.
  - This is available in rel. 2020 and downported into rel 1809 SP4 and 1909 SP3 by Note 2893536.
- Sign of Amounts
  - Formerly in posting run result list, Accrual Amount is in negative sign, but Remaining Amount and Accumulated Amount are in positive sign. Sign of Accrual Amount follows the value in posting document, but sign of Remaining Amount and Accumulated Amount follow the value in Calculated Accruals in Tree UI (Transaction ACACTREE02). Sometimes it causes confusion to end users.
  - The new behavior is, the Accrual Amount, Remaining Amount and Accumulated Amount are all in negative sign. The consistency of sign will help know the relationship between each of them.
  - This is available in rel. 2020.

# Quantity Only Postings

- Quantity Only Postings are enabled in two cases
  - When quantity is changed in Accrual Items, an opening posting will be triggered and the posting document will contain quantity only, i.e. the amount fields are 0.
  - In ACEPOSTINGRUN, if quantity is different when comparing the balance quantity and posted quantity for other kinds of posting, for e.g. periodic posting, a posting document will be created which contains quantity only.
- This feature is delivered in rel. 2020, and downported into rel. 1809 SP5 and 1909 SP3 by Note 2926918 and 2936548.

# Find Next Open Period

- The use cases are,
  - A contract is closed in December 2019 and reaches the admin department in late January. The contract must be deactivated. FI-Periods may be closed which is no problem, but posting must occur then in the next available period.
  - A contract change is done in June, but in a backdated manner, i.e. the change should become effective in April. This is practice in a lot of businesses, due to warranty issues, complaints etc. Also in this case the FI periods are closed, but we must be able to post in the next available period.
- In Accrual Engine before rel. 1809, this is not supported. Now it's available again in the S/4HANA Accrual Engine. Opening posting, periodic posting and release posting are supported.
- IMG activity to define this behavior in transaction ACEIMG
  - Accruals Management -> Accrual Postings -> Settings for Accrual Postings on Application Level.
- This feature is delivered in rel. 2020, and downported into rel. 1809 SP4 and 1909 FPS2 by Note 2869043.



**Fiori Apps**

# Fiori Apps for Manual Accruals

- The application Manual Accruals itself is not available as Fiori app.
  - Manual Accruals is a flexible application that can be used to cover many different use-cases with complex customizing and complex screens – which is not suitable for Fiori.
  - It is planned to provide Fiori apps for dedicated use-cases like
    - Deferral of Supplier Invoices
    - Managing Provisions.
- With release S/4HANA 1909 there is the Fiori app **Analyze Accrual Postings** available
  - This is a reporting app that reports posting that were performed by the Accrual Engine.
  - It shows data not only for *Manual Accruals*, but also from other applications that are based on the Accrual Engine, for example *Purchase Order Accruals*.
- For reporting of posted line items, also the app **Display Line Items in General Ledger** can be used.

# Reporting for Accrual Postings: Analyze Accrual Postings

- The Fiori app *Analyze Accrual Postings* offers a line item reporting for postings that were performed by the Accrual Engine, i.e. by transaction ACEPOSTINGRUN.
- Important in the filterbar of this report is the field *Line Item Type*:
  - Accrual postings consist usually of two line items that together balance to zero amount.
  - If the report would show all line items, all totals would be zero and most of the charts would also show zero amounts.
  - That's why the report shows only “half” documents: By default the report shows the offsetting entries, that is, it does not show the line item that post to the accrual account. Instead it shows the line items that post the offsetting account – which is usually a P&L account.
  - The filter can be changed to show either the line items that post to the accrual account – or all line items.
- **Note:** Changing BTTYE during journal entry posting from 'ACEA' to any other values via custom logic will result in this journal entry be excluded from this reporting.

Standard \* ▾

*Display Currency:	Journal Entry:	Accrual Object:	Accrual Subobject:	Ledger:
EUR				0L
Fiscal Year Period:	Posting Date:	Cost Center:	Posting Type:	Line Item Type:
2018010			1 More	(Offsetting Line Item) ▾
				<input checked="" type="checkbox"/> (Offsetting Line Items)
				<input type="checkbox"/> X (Accrual Line Items)

# Fiori App *Analyze Accrual Postings*: Features

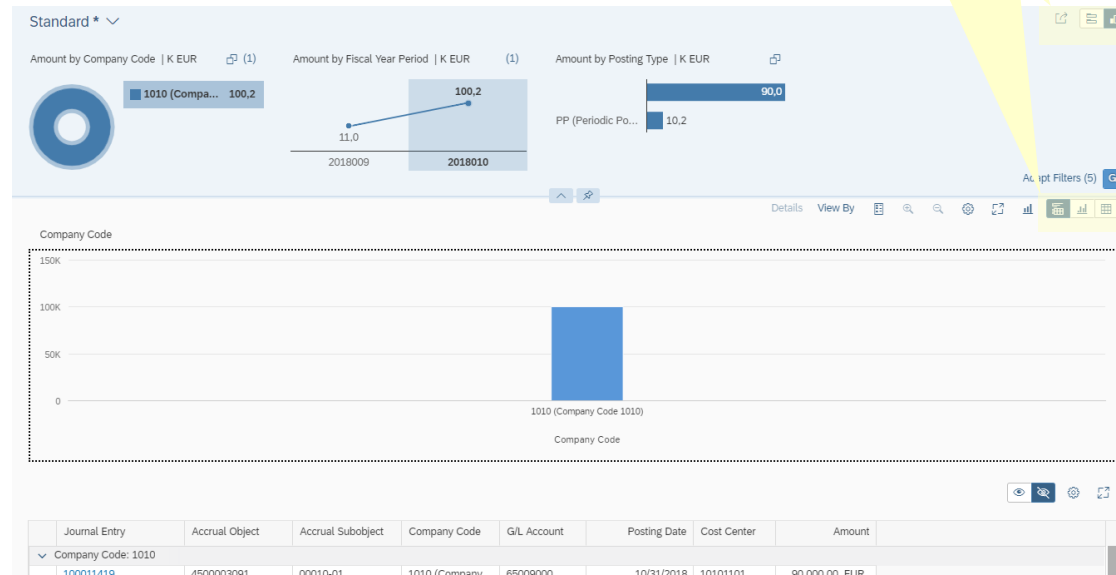
All amounts are shown in a selected Display Currency.

Standard

\*Display Currency: EUR Journal Entry: Accrual Object: Accrual Subobject: Ledger: DL Company Code: 1 Item G/L Account: Fiscal Year Period: 2018010 Posting Date: Cost Center: Posting Type: Line Item Type: 1 Item Adapt Filters (5) Go

Journal Entry	Accrual Object	Accrual Subobject	Company Code	G/L Account	Posting Date	Cost Center	Amount
Company Code: 1010							
100011419	4500003091	00010-01	1010 (Company...	65009000	10/31/2018	10101101	90.000,00 EUR
100011547	4500003610	00020-01	1010 (Company...	65008000	10/31/2018	10101201	12.000,00 EUR
100011548	4500003610	00020-01	1010 (Company...	65008000	10/31/2018	10101201	-36.000,00 EUR
100011550	4500003638	00010-01	1010 (Company...	65008000	10/31/2018	10101201	12.000,00 EUR
100011550	4500003638	00020-01	1010 (Company...	65008000	10/31/2018	10101201	12.000,00 EUR
100011686	4500003638	00010-01	1010 (Company...	65008000	10/31/2018	10101201	1.200,00 EUR
100011687	4500003638	00010-01	1010 (Company...	65008000	10/31/2018	10101201	-13.200,00 EUR
100011708	4500003638	00010-01	1010 (Company...	65008000	10/31/2018	10101201	13.200,00 EUR
100011925	4500004015	00010-01	1010 (Company...	65009000	10/31/2018	10101101	9.000,00 EUR
			1010				100.200,00 EUR
							100.200,00 EUR

Graphical charts can be displayed for filtering data and for visualization of result.



# Fiori App *Display Line Items in General Ledger*

- In the Fiori app *Display Line Items in General Ledger* the accrual object fields are available as additional filter.
- The fields can also be shown in the result list: They are available as additional columns in the Settings dialog.

The screenshot shows the SAP Fiori app interface for 'Display Line Items in General Ledger'. The main app area is on the left, and the 'Adapt Filters' dialog is open on the right. The dialog has a search bar and a 'Basic' section with the following fields and checkboxes:

Field	Show on Filter Bar
*Ledger: OL (Ledger OL)	<input checked="" type="checkbox"/>
Company Code:	<input checked="" type="checkbox"/>
G/L Account:	<input checked="" type="checkbox"/>
Status: All Items	<input checked="" type="checkbox"/>
Posting Date: Year to date (01/01/2019 - 01/03/2019)	<input checked="" type="checkbox"/>
Clearing Date:	<input type="checkbox"/>

Below the 'Basic' section, there are three more sections with 'More Filters' links:

- Display Currency Parameters: More Filters (3)
- Account Assignment Fields: More Filters (14)
- Accrual Fields: More Filters (4)

A 'Select Filters' dialog is also shown, listing the following filters:

Filter
<input type="checkbox"/> Accrual Object Type
<input type="checkbox"/> Accrual Object
<input type="checkbox"/> Accrual Subobject
<input type="checkbox"/> Accrual Item Type

Screen-shot from the Adapt Filters dialog.

# Fiori App *Display Accrual Object Items*

- In release S/4HANA On Prem 2020 FPS1, the Fiori app *Display Accrual Object Items* is available.
- It's a reporting App which shows accrual object and items information which is determined by a key date.
- Comparing to transaction ACACDSITEMS in old Accrual Engine, most of the information is there except the Accrual Amount and Remaining Accruals.

Display Accrual Object Items

Standard\*

Search

29.03.2021

ACAC (Manual...)

0001 (SAP DE...)

Ledger:

Lifecycle Status:

Start of Life: Date (01.01.2019)

End of Life:

Go Adapt Filters (4)

Accrual Object Items (3.952)
Standard\*

Accrual Object	Accrual Subobject	Accrual Item Type	Ledger	Accrual/Deferral Method	Component	Company Code	Start of Life	End of Life	Lifecycle Status	Ttl AccrDfrl Amt TC
371	1	ACCRL_PER	0L (Ledger 0L)	LINEAR	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	01.01.2019	30.12.2019	P (In Process)	12.000,00 EUR
		ACTCST	0L (Ledger 0L)	NO_CALC	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	01.01.2019	30.12.2019	P (In Process)	0,00 EUR
403	1	ACCRLCL_STD	0L (Ledger 0L)		ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	01.01.2019	30.12.2020	P (In Process)	14.000,00 USD
		ACTCST	0L (Ledger 0L)	ACT_COSTS	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	01.01.2019	30.12.2020	P (In Process)	0,00 USD
473	1	ACCRL_PER	0L (Ledger 0L)	LINEAR	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	01.01.2019	30.12.2019	P (In Process)	12.000,00 EUR

# Fiori App *Display Periodic Accrual Amounts*

- In release S/4HANA On Prem 2020 FPS1, the Fiori app *Display Periodic Accrual Amounts* is available.
- It's a reporting App which shows accrual object, items and periodic accrual amounts if review / approval is active.
- The periodic accrual amounts come from table ACESOBJ\_PER. Once review / approval is active, the proposal run (transaction ACEPROPOSALRUN) will generate periodic accrual amounts into table ACESOBJ\_PER. The information about review / approval will also be updated in this table.

< **SAP** Display Periodic Accrual Amounts ▾

Standard\* ▾

Fiscal Year Period: \*  
001.2021

Component:  
ACAC (Manual... x ▾

Company Code:

Accrual Object:  
>4820 x ▾

Accrual Subobject:

Ledger:

Lifecycle Status:  
▾

Start of Life:

End of Life:

Review Type:  
▾

Approval Type:  
▾

Review Status:  
▾

Approval Status:  
▾

Go Adapt Filters (3)

Periodic Accrual Amounts (123) Standard\* ▾

Accrual Object	Accrual Subobject	Accrual Item Type	Ledger	Component	Company Code	Ttl AccrDftrl Amt TC	Planned Costs (TC)	Revised Costs (TC)	Actual Costs (TC)	Accr. Amt (TC)	Cost Center	Profit Center
4822	1	COSTSP	0L (Ledger 0L)	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	12.000,00 EUR	0,00 EUR	0,00 EUR	0,00 EUR	0,00 EUR		
4821	1	ACCRLCL_PMA	0L (Ledger 0L)	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	24.000,00 EUR	2.000,00 EUR	0,00 EUR	0,00 EUR	2.000,00 EUR		
4839	1	COSTS	0L (Ledger 0L)	ACAC (Manual Accruals)	0001 (SAP DEMO Company 0001)	120.000,00 EUR	0,00 EUR	0,00 EUR	0,00 EUR	0,00 EUR		

# Reporting



# Reporting of Accrual Engine Postings

- In release S/4HANA 1909 reporting of accrual engine postings is possible with Fiori apps.
  - Fiori app **Analyze Accrual Postings**  
This app is similar to the regular G/L line item reporting app, but selects only line items that were posted by the Accrual Engine.
  - Fiori app **Display Line Items in General Ledger**  
The accrual object and other fields related to the Accrual Engine are available as optional fields that a user can unhide.
  - The Fiori apps are described in the separate chapter for Fiori apps.
- In release S/4HANA 2020 FPS1, two more Fiori Apps were released for reporting,
  - Fiori App *Display Accrual Object Items*
  - Fiori App *Display Periodic Accrual Amounts*
  - They are described in the separate chapter for Fiori Apps.
- Also in some SAP GUI reporting transactions, the accrual object and other fields related to the Accrual Engine are available, see next slides.
- In release S/4HANA 2022, two more reports were released. They can be used to check the accrual objects, the simulated accrual postings and the actual accrual postings. More details in next slides.

# Accrual Object in G/L Line Item Reports: Selection Screen

- In the G/L Line Item Browsers, transactions FAGLL03H and FBL3H the accrual object is available as field
  - In the selections screen and
  - In the result list
- In release 1809, support package 0-2 you need to apply the note 2736673 in order to enable the accrual object fields in these transactions.

Screen-shot from selection screen of transaction FBL3H:

The accrual object fields are available as Additional Restrictions.

The screenshot displays the 'G/L Account Line Item Browser' selection screen. It includes sections for 'General Restrictions', 'Line Item Selection', and 'Dynamic Selections'.

**General Restrictions:**

- Company Code: 0001
- G/L Account: (empty)

**Line Item Selection:**

- Status: Open Items (selected)
- Details for selection of Open Items:
  - Open Items at Key Date: 03.01.2019
  - Include items from accounts w/o open item management: (unchecked)
- Cleared Items (not selected)
- Details for selection of Cleared Items:
  - Clearing Date: (empty)
  - Open Items at Key Date: (empty)
- All Items (not selected)
- Details for selection of All Items:
  - Posting Date: 01.01.2018

**Type:**

- Normal Items (checked)
- Noted Items (unchecked)
- Parked Items (unchecked)

**Additional Restrictions:**

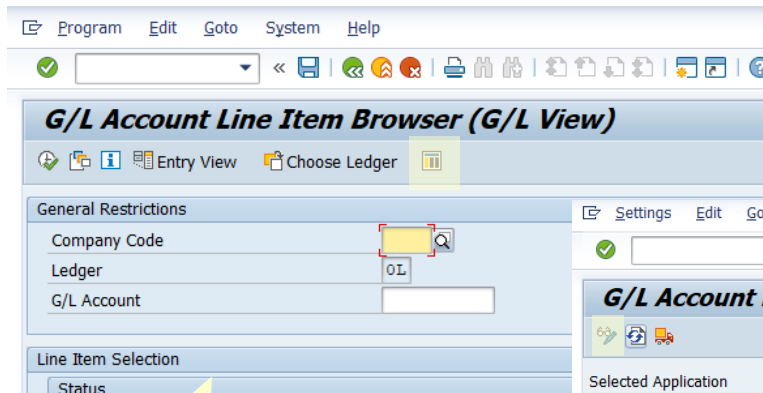
- One Restriction Active

**Dynamic Selections:**

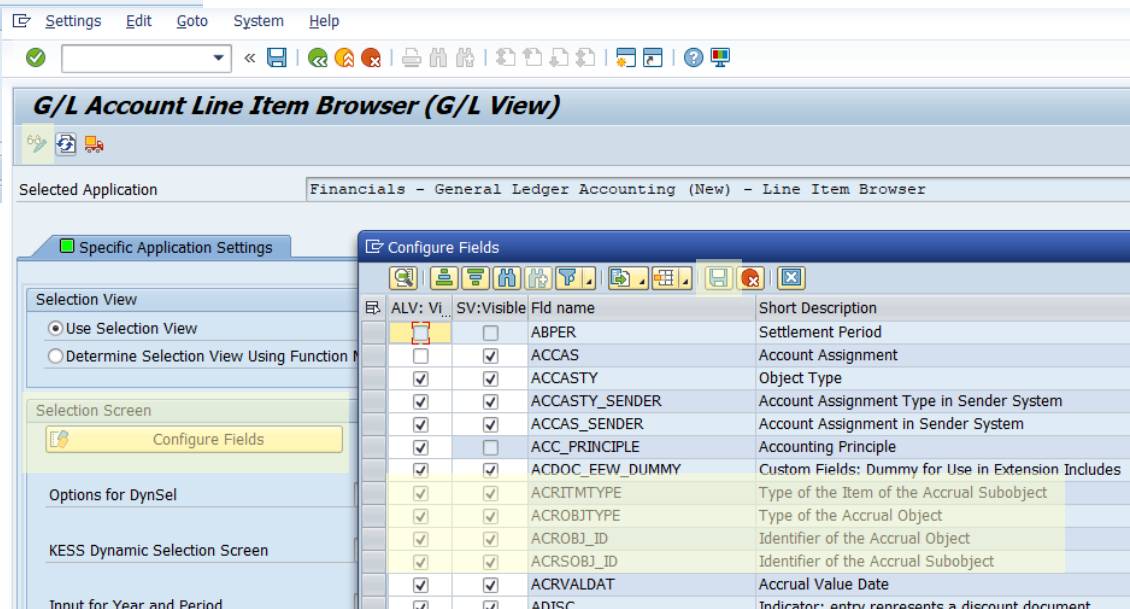
Field	Technical Name	O..	From value	To value	More
Partner Profit Center: Short Text	SP_KTEXT				
Profit Center: Long Text	RP_LTEXT				
Profit Center: Short Text	RP_KTEXT				
Reconciliation Account: Long Text	SK_TXT50				
Reconciliation Account: Short Text	SK_TXT20				
<b>Other Document Fields</b>					
ALE: Original DocNr	CO_ALEBN				
AR Pledging Ind.	CESSION_KZ				
Account ID	HKTID				
Accrual Item Type	ACRITMTYPE				
Accrual Object	ACROBJ_ID				
Accrual Object Type	ACROBJTYPE				
Accrual Subobject	ACRSOBJ_ID				
Accrual Value Date	ACRVALDAT				
Activity Code GI Tax	GRICD				
Activity Type	LSTAR				
Alt Reference Number	XBLNR_ALT				
Alt. Price Control	PSALT				
Alternative Account No.	LOKKT				

# G/L Line Item Reports: Configure Fields

- If the accrual object fields are not visible in the *Additional Restrictions* popup, you need configure the visibility of the fields accordingly:
  - In the selection screen of transaction FAGLL03H and FBL3H click on the *Settings* icon (Ctrl+F4).
  - In the next screen click switch to edit mode, then click on the *Configure Fields* button.
  - In the popup set the checkboxes in both columns for the fields ACR\* and click on the *Save* icon in the popup.



Screen-shot from selection screen of transaction FBL3H.



# Accrual Object in G/L Line Item Reports: Result List

- In transactions FAGLL03H and FBL3H the accrual object is available as column in the result list.

Screen-shot from  
result list of  
transaction FBL3H.

G/L Account Line Item Browser							
CoCode	Fiscal Yr	Period	G/L Acct	Accrual Object	CCodeCurr	CC Value	DB Rows
0001	2018	1	113100	ORENTING IVZ012	EUR	2.399,00-	26
		6		ORENTING HLN03		660,00-	1
				ORENTING HLN01		55,00-	1
		11		OVENDORINV0100056225/2017/001		0,00	2
				OVENDORINV4800001048/2017/001		0,00	2
				ORENTING 4711-110		12.000,00-	1
		4	170000	0000005917		1.899,00-	1
		6	400000	0000026857		200,00	2
				0000035552		200,00	2
				0000064952		200,00	2
				0000042661		200,00	2
			431010	ORENTING HLN03		660,00	1
				ORENTING HLN01		55,00	1
		11		ORENTING 4711-110		12.000,00	1
		6	474240	ORENTING HLN02		55,00	1
			793002	ORENTING HLN02		55,00-	1
			800000	0000064952		1.400,00-	2
			889000	0000064952		100,00	1

# Accrual Object in G/L Line Item Reports: TA FAGLL03

- In transactions FAGLL03 and FAGLB03 the accrual object is also available as column as free selection and in the result list.

The screenshot displays two SAP screens side-by-side. The left screen is titled "G/L Account Line Item Display G/L View" and shows the "G/L Account Selection" section with fields for "G/L account" and "Company code" (0001). The right screen is titled "Free Selection" and shows a list of fields for selection. The "Accrual Object" field is highlighted in yellow. A yellow callout bubble points to the "Accrual Object" field in the "Free Selection" screen, containing the text: "Screen-shot from free-selections screen of transaction FAGLL03."

**G/L Account Line Item Display G/L View**

Choose Ledger Entry View Data Sources

G/L Account Selection

G/L account		to	
Company code	0001	to	

**Free Selection**

Single Values Only Hide Field Selection

Dynamic selections

General Ledger Line Items

Accrual Object Type		to	
Accrual Object		to	
Accrual Subobject		to	
Accrual Item Type		to	
Accrual Value Date		to	

# Obsolete Reports

The reports of the old Accrual Engine, transactions

- ACACPSDOCITEMS Display Line Items
- ACACPSITEMS Display Totals Values

are not available any more in the new S/4HANA Accrual Engine because they were based on the prima nota table ACEPSOIT which was redundant to the G/L line items. In the new S/4HANA Accrual Engine posted line items are only stored in the General Ledger, table ACDOCA.

Note that also the report on accrual objects, transaction ACACDSITEMS is not available any more.

In release OP 2022, two reports *Accrual Postings - with Simulation* and *Accrual Postings – Simulated / Posted* were released. They can cover most of the functions in transaction ACACDSITEMS and ACACPSITEMS, and beyond that, more reporting possibilities are provided. Before running the report, either run transaction *ACESIMULATIONRUN* or run a *Simulate Accrual Postings* job in the *Schedule Accruals Jobs* app.

# Report: Accrual Postings – With Simulation

- Shows the total accrual amount, posted accrual amount and remaining accrual amount.
- Shows the postings in a way that for already posted accruals, the actual postings will be used, and for accruals not yet posted, the simulated postings will be used.

For example, below screenshot shows an accrual object with total accrual amount 24,000 EUR, life is from 01.01.2022 to 31.12.2023, the amount in opening posting is 24,000 EUR, and on key date 30.04.2022 (Field Valid To in the filter bar) -4,000 should be posted, and the remaining accrual amount is 20,000 EUR (i.e. Column Total on the right).

splay ▾ Measures ▾ Totals ▾						
			Measures	Accrual Amt (TC)		
			Accr Trans Type	IP	PP	Total
				Opening Posting	Periodic Posting	Total
≡ End of Life	≡ Start of Life	≡ Total A/D Amt (TC)				
31.12.2023	01.01.2022	24.000,00 EUR		24.000,00 EUR	-4.000,00 EUR	20.000,00 EUR

## Dimension settings for the above report,

- Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type
- Column Fields:** Measures, Accrual Transaction Type
- Attributes:** Accr/Defrl Method, End of Life, Start of Life, Total A/D Amnt (TC)

## Tips

- How to add attributes: Click on a cell of Accrual Item Type, click on menu Drilldown -> Add Attributes
- How to show total: Click on the header of IP or PP, click on menu Totals -> Show Totals

Dimensions		
Search Dimensions		
Rows		
Field Name	Row Action	Column Action
Component	≡	≡
Company Code	≡	≡
Accrual Object	≡	≡
Accrual Subobject	≡	≡
Accrual Item Type	≡	≡
Columns		
Field Name	Row Action	Column Action
> Measures	≡	≡
Accr Trans Type	≡	≡

# Report: Accrual Postings – With Simulation

Below screenshot is another example to show actual postings and simulated postings.

It shows the postings in the whole life of the accrual objects. In this case, the valid to date in the filter bar can be set to 31.12.9999.

For already posted accruals, actual postings will be used. For accruals not yet posted, the simulated postings will be used. With this report, the progress of postings is shown clearly.

Accr Trans Type		Fiscal ...	Fiscal...	Journal Entry	Accrual Amt (TC)
IP	Opening Posting	2022	1	101586536	24.000,00 EUR
PP	Periodic Posting	2022	1	101586537	-1.000,00 EUR
			2	101586538	-1.000,00 EUR
			3	101586539	-1.000,00 EUR
			4	#	-1.000,00 EUR
			5	#	-1.000,00 EUR
			6	#	-1.000,00 EUR
			7	#	-1.000,00 EUR
			8	#	-1.000,00 EUR
			9	#	-1.000,00 EUR
			10	#	-1.000,00 EUR
			11	#	-1.000,00 EUR
			12	#	-1.000,00 EUR
		2023	1	#	-1.000,00 EUR
			2	#	-1.000,00 EUR
			3	#	-1.000,00 EUR
			4	#	-1.000,00 EUR
			5	#	-1.000,00 EUR
			6	#	-1.000,00 EUR
			7	#	-1.000,00 EUR
			8	#	-1.000,00 EUR
			9	#	-1.000,00 EUR
10	#		-1.000,00 EUR		
11	#	-1.000,00 EUR			
12	#	-1.000,00 EUR			
Total					0,00 EUR

Dimension settings for the above report,

- **Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type, Accr Trans Type, Fiscal Year, Fiscal Period, Journal Entry
- **Column Fields:** Measures



# Report: Accrual Postings – Simulated / Posted

- Shows the total accrual amount, simulated accrual amount and posted accrual amount.
- The simulated accrual amount and posted accrual amount are displayed in parallel and posted amount can be compared with simulated amount.

For example, below screenshot shows an accrual object with total amount 24,000 EUR, life is from 01.01.2022 to 31.12.2023, and for the whole life cycle, how much accrual amount should be posted and how much accrual amount has been posted, aggregated by fiscal year. The valid to date in the filter bar can be set to 31.12.9999.

led> Filter Sort Hierarchy Drilldown Display Measures Totals									
			Accr Tr...	IP		PP		Grand Total	
				Opening Posting		Periodic Posting		Grand Total	
Accrual S...	Accrual Item ...	Fiscal ...		Posted Accr Amt ...	Smltd A/D Amt (TC)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)
000000000000...	1	0L/COSTS	2022	24.000,00 EUR	24.000,00 EUR	-3.000,00 EUR	-12.000,00 EUR	21.000,00 EUR	12.000,00 EUR
			2023			0,00 EUR	-12.000,00 EUR	0,00 EUR	-12.000,00 EUR

**Dimension settings for the above report,**

- Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type, Fiscal Year
- Column Fields:** Accrual Transaction Type, Measures

# Report: Accrual Postings – Simulated / Posted

In below example, an accrual object with total amount 24,000 EUR, life is from 01.01.2022 to 31.12.2023, and on key date (Field Valid To in the filter bar) 30.04.2022, amount -1,000 EUR should be posted for April 2022, but the actual posted amount is 0 EUR, which indicates the accrual posting in April 2022 for this accrual object is missing.

led> <span>Filter</span> <span>Sort</span> <span>Hierarchy</span> <span>Drilldown</span> <span>Display</span> <span>Measures</span> <span>Totals</span>										
				IP					Grand Total	
				Acc					Grand Total	
					Opening Posting		Periodic Posting			
					Posted Accr Amt ...	Smltd A/D Amt (TC)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)
00000000...	1	0L/COSTS	2022	1	24.000,00 EUR	24.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	23.000,00 EUR	23.000,00 EUR
				2			-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR
				3			-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR
				4			0,00 EUR	-1.000,00 EUR	0,00 EUR	-1.000,00 EUR

**Dimension settings for the above report,**

- **Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type, Fiscal Year, Fiscal Period
- **Column Fields:** Accrual Transaction Type, Measures

# Report: Accrual Postings – Simulated / Posted

In below example, an accrual object with total amount 24,000 EUR, life is from 01.01.2022 to 31.12.2023, and on key date (Field Valid To in the filter bar) 31.12.9999, the accrual amounts are shown with both posted and simulated, and aggregated by fiscal year.

Filter ▾ Sort ▾ Hierarchy ▾ Drilldown ▾ Display ▾ Measures ▾ Totals ▾									
	Accr Trans Ty...	IP		PP		Grand Total			
		Opening Posting		Periodic Posting		Grand Total			
	Fiscal Year	2022		2022		2023		Grand Total	
Accrual S...	Accrual Item ...	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	Posted Accr Amt (...)	Smltd A/D Amt (TC)
1	0L/COSTS	24.000,00 EUR	24.000,00 EUR	-3.000,00 EUR	-12.000,00 EUR	0,00 EUR	-12.000,00 EUR	21.000,00 EUR	0,00 EUR

**Dimension settings for the above report,**

- **Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type
- **Column Fields:** Accrual Transaction Type, Fiscal Year, Measures

The aggregated amounts can be expanded to periods by adding fiscal period as Column Field.

Filter ▾ Sort ▾ Hierarchy ▾ Drilldown ▾ Display ▾ Measures ▾ Totals ▾															
	Accr Trans T	IP		PP											
		Opening Posting		Periodic Posting											
	Fiscal Year	2022		2022											
	Fiscal Period	1		1		2	3	4	5	6					
Accrual S...	Accrual Item	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	Posted Accr ...	Smltd A/D A...	Posted Accr ...	Smltd A/D A...	Posted Accr ...	Smltd A/D A...	Posted Accr ...	Smltd A/D A...	Posted Accr ...	Smltd A/D A...	Posted Accr ...	Smltd A/D A...
000...	1	0L/COSTS	24.000,00 EUR	24.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	-1.000,00 EUR	0,00 EUR	-1.000,00 EUR	0,00 EUR	-1.000,00 EUR	0,00 EUR

**Dimension settings for the above report,**

- **Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type
- **Column Fields:** Accrual Transaction Type, Fiscal Year, Fiscal Period, Measures

# Report: Accrual Postings – Simulated / Posted

Below example is for accrual object with short-term and long-term shift. The accrual object have two accrual items, item type COSTS\_BASE represents the overall costs, and with total amount 36,000 EUR, life is from 01.01.2022 to 31.12.2024.

On key date (Field Valid To in the filter bar) 31.03.2022, the total accrual amounts is 36,000 EUR which is shown on the accrual item with item type COSTS\_BASE. The total long term accrual amounts is 24,000 EUR which is shown on the accrual item with item type COSTS\_LT, and -3,000 EUR has been amortized. The amortized short term accrual amounts is -3,000 EUR which is shown on the accrual item with item type COSTS\_ST.

For the whole accrual object, we can see that the total accrual amount is 36,000 EUR. The balance of long term accruals is 21,000 EUR, and the balance of amortized short term accruals is -3,000 EUR.

Standard \* ▾

⊞ ▾ ↗ ▾ ⓘ ▾

Valid to Date:\*

31.03.2022 ✕

Accrual Object:

0VENDORINVOICE\_011 ✕

Adapt Filters (2) G

<div> <div>▾ Data Analysis</div> <div>Graphical Display</div> <div>Query Information</div> </div>											
<div> <div>&lt;No Bookmark Loaded&gt; ▾</div> <div> <div>Filter ▾</div> <div>Sort ▾</div> <div>Hierarchy ▾</div> <div>Drilldown ▾</div> <div>Display ▾</div> <div>Measures ▾</div> <div>Totals ▾</div> </div> <div>Navigate To ▾</div> <div>⊞ ▾</div> </div>											
				Accr Trans Type	IP		PP		Grand Total		
					Opening Posting		Periodic Posting		Grand Total		
mp...	Compa...	Accrual Object	Accrual S...	Accrual Item Type	Posted Accr Amt...	Smltd A/D Amt (...)	Posted Accr Amt...	Smltd A/D Amt (...)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)	
AC	F001	#F001/0VENDORINVOICE_011	1	0L/COSTS_BASE	36.000,00 EUR	36.000,00 EUR			36.000,00 EUR	36.000,00 EUR	
				0L/COSTS_LT	24.000,00 EUR	24.000,00 EUR	-3.000,00 EUR	-3.000,00 EUR	21.000,00 EUR	21.000,00 EUR	
				0L/COSTS_ST			-3.000,00 EUR	-3.000,00 EUR	-3.000,00 EUR	-3.000,00 EUR	

Dimension settings for the above report,

- **Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type
- **Column Fields:** Accrual Transaction Type, Measures

# Report: Accrual Postings – Simulated / Posted

Below example is for the same accrual object as previous page, but the key date is set to 31.12.2023. We can see that the posted accruals are the same as previous page, but the simulated accruals are different. The total accrual amount is still 36,000 EUR, but the balance of long term accruals should be 0 EUR, and the balance of amortized short term accruals should be -24,000 EUR.

Standard \* ▾



Valid to Date:\*

31.12.2023 x



Accrual Object:

0VENDORINVINVOICE\_011 x



Adapt Filt



▾ Data Analysis

Graphical Display

Query Information

<No Bookmark Loaded> ▾

Filter ▾

Sort ▾

Hierarchy ▾

Drilldown ▾

Display ▾

Measures ▾

Totals ▾

Navigate To

			Accr Trans Type	IP		PP		Grand Total	
				Opening Posting		Periodic Posting		Grand Total	
pa...	Accrual Object	Accrual S...	Accrual Item Type	Posted Accr Amt...	Smltd A/D Amt (...)	Posted Accr Amt ...	Smltd A/D Amt (...)	Posted Accr Amt (TC)	Smltd A/D Amt (TC)
.	#/F001/0VENDORINVINVOICE_011	1	0L/COSTS_BASE	36.000,00 EUR	36.000,00 EUR			36.000,00 EUR	36.000,00 EUR
			0L/COSTS_LT	24.000,00 EUR	24.000,00 EUR	-3.000,00 EUR	-24.000,00 EUR	21.000,00 EUR	0,00 EUR
			0L/COSTS_ST			-3.000,00 EUR	-24.000,00 EUR	-3.000,00 EUR	-24.000,00 EUR

**Dimension settings for the above report,**

- **Row Fields:** Component, Company Code, Accrual Object, Accrual Subobject, Accrual Item Type
- **Column Fields:** Accrual Transaction Type, Fiscal Year, Measures

# Report: Extensibility

- The reports *Accrual Postings - with Simulation* and *Accrual Postings – Simulated / Posted* are generic reports for all reporting-enabled components in Accruals Management, thus no component specific fields are shown.
- If Manual Accruals specific information from table *ACAC\_OBJECTS* needs to be displayed in the reports, the generic query views *C\_AccrEngnRptgSmlteFutrPostgQ* and *C\_AccrEngnRptgSimlnActlCostQry* need to be extended with table *ACAC\_OBJECTS* which fields can then be exposed in the reports. **Remark:** Note 3320193 needs to be applied before the CDS views can be extended.
- Documentation about how to extend CDS views can be found [here](#).

# Legacy Data Transfer

# Legacy Data Transfer: Available as of Release 1809 SP3

- Legacy Data Transfer is supported from release S/4HANA 1809 support package 3 onwards.
- If you are using an earlier support package (0-2) you need to apply SAP note [2800607](#).
- The note 2800607 contains a downport of several new features of the Accrual Engine.
  - That's why this note contains many program corrections.
  - **Remark:** Applying this note must follow the instructions carefully.



# Legacy Data Transfer: Scenarios

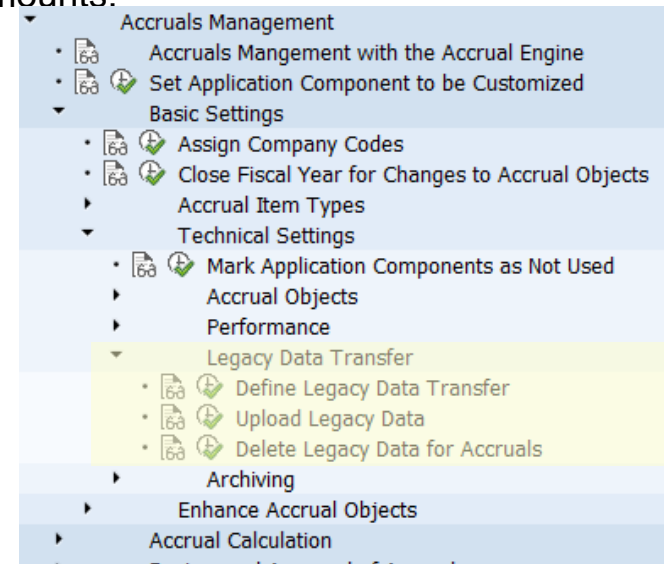
A legacy data transfer is required in the following cases:

1. You want to “migrate” data into the Accrual Engine from within the SAP system
  - You have posted accruals in the SAP system – but without using the Accrual Engine
  - Now you want to start using the Accrual Engine:
    - You want to create accrual objects
    - But you do not want to reverse the accrual postings that were already done “outside” the Accrual Engine.
2. You want to “migrate” data into the Accrual Engine from a non-SAP system.
  - In this “legacy” system you have posted accruals.
  - There are two options:
    - a) The posted accruals are uploaded separately into the General Ledger, i.e. “outside” the Accrual Engine. This is the regular case.
    - b) The posted accruals are **not** uploaded separately into the General Ledger; instead, the Accrual Engine shall post these accrual amounts during legacy data transfer. This is regarded as an exceptional case and is not yet supported: Instead, for appl. *Manual Accruals* you can use the EXCEL upload in transaction ACACTREE02 to achieve this behavior: No already posted amounts need to be provided because the Accrual Engine will post all amounts itself.

In both cases 1. and 2a) the legacy data transfer makes sure that the Accrual Engine does not post the amounts again/twice – that have already been posted “outside” the Accrual Engine: The information which amounts have already been posted outside is stored in the Accrual Engine!

# Legacy Data Transfer: Customizing

- The legacy data transfer program allows to create accrual objects in the Accrual Engine together with the already posted amounts.
- As prerequisite some settings in IMG activity *Define Legacy Data Transfer* need to be performed:
  - Define a *Legacy Data Transfer Date*
    - The *Legacy Data Transfer Date* is the cutoff date of legacy system. After that date, no change / posting should happen in legacy system.
    - It has no restriction on the posting in new system. Whether a posting in one period can be done in new system depends on whether there is already a posting happens for the same period or future periods. No posting can be done before the period determined by the accrual value date in the latest posting document.
  - A dummy account that is used for storing the already posted amounts.
  - For details refer to the documentation in the IMG activity.

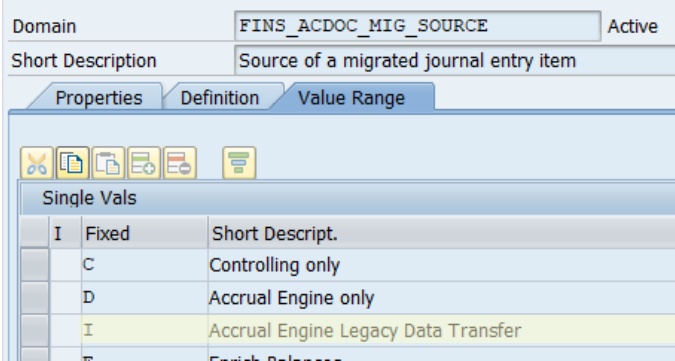


# Legacy Data Transfer: Accrual Objects and Postings

- There are two ways to transfer accrual objects and postings
  - Via IMG activity *Upload Legacy Data*
  - Via class method CL\_ACE\_LEGACY\_DATA\_TRANSFER=>TRANSFER\_ACCRUAL\_SUBOBJECT
- IMG activity *Upload Legacy Data*
  - It's an ABAP program allows uploading of EXCEL data
  - In the selection screen you can download the EXCEL template.
  - Fill the EXCEL template with the accrual objects and their posted amounts (columns TTYPE, ACCRUAL\_AMNT\_WSL and ACRVALDAT).
    - In column TTYPE you can enter the values
      - IP "Opening Posting",
      - PP "Periodic Posting",
      - ... see value help for field *Transaction Type* in the other IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas*.
    - In column ACRVALDAT you can enter the Accrual Value Date, usually it's the key date of the accrual posting.
    - As the transferred posting information will only be used as reference for further accrual posting in Accrual Engine, it's not mandatory to fill posted amounts exactly the same as posting documents.
    - Posted amounts can be summarized by year and posting type, especially for previous years during which fine granularity of posting information is not much interested.
      - For e.g., for posting type PP, in year 2019, there are 12 postings with 100 EUR for each period. These 12 postings can be summarized as one posting with TTYPE = 'PP', ACCRUAL\_AMNT\_WSL = '1200', and ACRVALDAT = '20191231'.
      - If there are more than one posted amount for one accrual subobject, the information for accrual subobject needs to be repeated in the Excel (Details can be found in following examples).
  - Upload the EXCEL template: This will create the accrual objects in the Accrual Engine and will generate dummy postings.

# Legacy Data Transfer: Generated Dummy Postings

- The posted amounts are stored in table ACDOCA.
  - These are “dummy” postings that will not increase the balance of the G/L account, because also an offsetting entry with opposite amount is generated during legacy data transfer.
  - Formerly, offsetting entry has the same amount for accrual subobject but opposite debit / credit indicator. But it has a drawback that in G/L account balance report (For e.g. FAGLB03), the amounts from the dummy postings are included in the debit / credit side, which looks like there are some transactions for this dummy account in previous years.
  - In rel. 2020, the offsetting logic for dummy postings are changed to negative posting. The generated offsetting entry will not be the same amount with opposite debit / credit indicator, but the same debit / credit indicator with negative amount, which brings the account balance to 0 on each side of debit and credit. This is also downported to rel. 1809 SP5 and 1909 SP3 by Note 2931882.
  - The dummy postings are done to the dummy account defined in the IMG activity *Define Legacy Data Transfer*.
  - Technically these dummy postings can be identified by table field ACDOCA-MIG\_SOURCE = 'I'.



The screenshot shows the SAP SPRO configuration for the domain FINS\_ACDOC\_MIG\_SOURCE. The 'Value Range' tab is selected, showing a table of single values. The table has columns for 'I' (Indicator), 'Fixed' (Fixed/Variable), and 'Short Descript.' (Short Description). The value 'I' is highlighted in the table, corresponding to the 'Accrual Engine Legacy Data Transfer' description.

Domain: FINS_ACDOC_MIG_SOURCE Active		
Short Description: Source of a migrated journal entry item		
Properties Definition Value Range		
Single Vals		
I	Fixed	Short Descript.
	C	Controlling only
	D	Accrual Engine only
	I	Accrual Engine Legacy Data Transfer
	F	Foreign Balance

# Legacy Data Transfer: Example of Uploading by EXCEL

- With below accrual objects and posted documents in legacy system.

## Legacy Data

### Accrual Subobject

Component	Company Code	Accr Object No	Accr Subobj No
ACAC	1000	PrePaiedExpense	0001

### Accrual Item

Accrual Type	Accounting Principle	Total Amount	Currency	Accrual Method	Life Start Date	Life End Date
COSTS	IAS (0L)	12,000	EUR	LINEAR	2018-07-01	2019-06-30
COSTS	IFRS (A1)	12,000	EUR	LINEAR	2018-07-01	2019-06-30

### Posted Documents

Company Code	Fiscal Year	Posting Period	Ledger	Posting Type	Key Date	Amount in TC	Trans. Crncy
1000	2018	7	0L	I	2018-07-01	12,000	EUR
1000	2018	7	0L	P	2018-07-31	-1,000	EUR
1000	2018	8	0L	P	2018-08-31	-1,000	EUR
1000	2018	9	0L	P	2019-09-30	-1,000	EUR
1000	2018	10	0L	P	2018-10-31	-1,000	EUR
1000	2018	11	0L	P	2018-11-30	-1,000	EUR
1000	2018	12	0L	P	2018-12-31	-1,000	EUR
1000	2019	1	0L	P	2019-01-31	-1,000	EUR
1000	2018	7	A1	I	2018-07-01	12,000	EUR
1000	2018	7	A1	P	2018-07-31	-1,000	EUR
1000	2018	8	A1	P	2018-08-31	-1,000	EUR
1000	2018	9	A1	P	2019-09-30	-1,000	EUR
1000	2018	10	A1	P	2018-10-31	-1,000	EUR
1000	2018	11	A1	P	2018-11-30	-1,000	EUR
1000	2018	12	A1	P	2018-12-31	-1,000	EUR
1000	2019	1	A1	P	2019-01-31	-1,000	EUR

# Legacy Data Transfer: Example of Uploading by EXCEL

- With below customizing, how to fill the Excel template and what will be the generated dummy postings.

Customizing View: V\_TACE\_LEGACY\_S4

Component	Company Code	Account Legacy & Mig.	Leg. Trans. Date
ACAC	1000	DUMMY	2019-02-22

Data Filled in EXCEL Template

CompanyCode	Accr Object No	Accr Subobj No	Accr ItemType	Ledger Group	Total Amount	Currency	Accr Method	Life Start Date	Life End Date	Trans. Type	Accrual Amount	Accrual Value Date
1000	PrePaiedExpense	0001	COSTS	0L	12,000	EUR	LINEAR	2018-07-01	2019-06-30	IP	12,000	2018-01-01
1000	PrePaiedExpense	0001	COSTS	0L	12,000	EUR	LINEAR	2018-07-01	2019-06-30	PP	-6,000	2018-12-31
1000	PrePaiedExpense	0001	COSTS	0L	12,000	EUR	LINEAR	2018-07-01	2019-06-30	PP	-1,000	2019-01-31
1000	PrePaiedExpense	0001	COSTS	A1	12,000	EUR	LINEAR	2018-07-01	2019-06-30	IP	12,000	2018-01-01
1000	PrePaiedExpense	0001	COSTS	A1	12,000	EUR	LINEAR	2018-07-01	2019-06-30	PP	-6,000	2018-12-31
1000	PrePaiedExpense	0001	COSTS	A1	12,000	EUR	LINEAR	2018-07-01	2019-06-30	PP	-1,000	2019-01-31

New Posting (Dummy Posting Using Legacy Account)

Doc No.	Company Code	Posting Date	Accrual Value Date	Ledger	G/L Account	Debit	Credit	Currency	Accr Object Type	Accr Object No	Accr Subobj No	Accr Item Type	SLALITTYPE	MIG_SOURCE
CB1000501	1000	2019-02-22	2018-01-01	0L	DUMMY	12,000		EUR	ACAC	PrePaiedExpense	0001	COSTS	9001	I
CB1000501	1000	2019-02-22	2019-02-22	0L	DUMMY	-12,000		EUR	ACAC	PrePaiedExpense	0001		9000	I
CB1000501	1000	2019-02-22	2018-12-31	0L	DUMMY		-6,000	EUR	ACAC	PrePaiedExpense	0001	COSTS	9003	I
CB1000501	1000	2019-02-22	2019-01-31	0L	DUMMY		-1,000	EUR	ACAC	PrePaiedExpense	0001	COSTS	9003	I
CB1000501	1000	2019-02-22	2019-02-22	0L	DUMMY		7,000	EUR	ACAC	PrePaiedExpense	0001		9000	I
CB1000502	1000	2019-02-22	2018-01-01	A1	DUMMY	12,000		EUR	ACAC	PrePaiedExpense	0001	COSTS	9001	I
CB1000502	1000	2019-02-22	2019-02-22	A1	DUMMY	-12,000		EUR	ACAC	PrePaiedExpense	0001		9000	I
CB1000502	1000	2019-02-22	2018-12-31	A1	DUMMY		-6,000	EUR	ACAC	PrePaiedExpense	0001	COSTS	9003	I
CB1000502	1000	2019-02-22	2019-01-31	A1	DUMMY		-1,000	EUR	ACAC	PrePaiedExpense	0001	COSTS	9003	I
CB1000502	1000	2019-02-22	2019-02-22	A1	DUMMY		7,000	EUR	ACAC	PrePaiedExpense	0001		9000	I

**Archiving**

**Accrual Objects and  
Accrual Postings**

# Archiving: Available as of Release 1809 SP3

- Archiving of accrual objects is supported from release S/4HANA 1809 support package 3 onwards.
- If you are using an earlier support package (0-2) you need to apply SAP note [2800607](#).
- The note 2800607 contains a downport of several new features of the Accrual Engine.
  - That's why this note contains many program corrections.

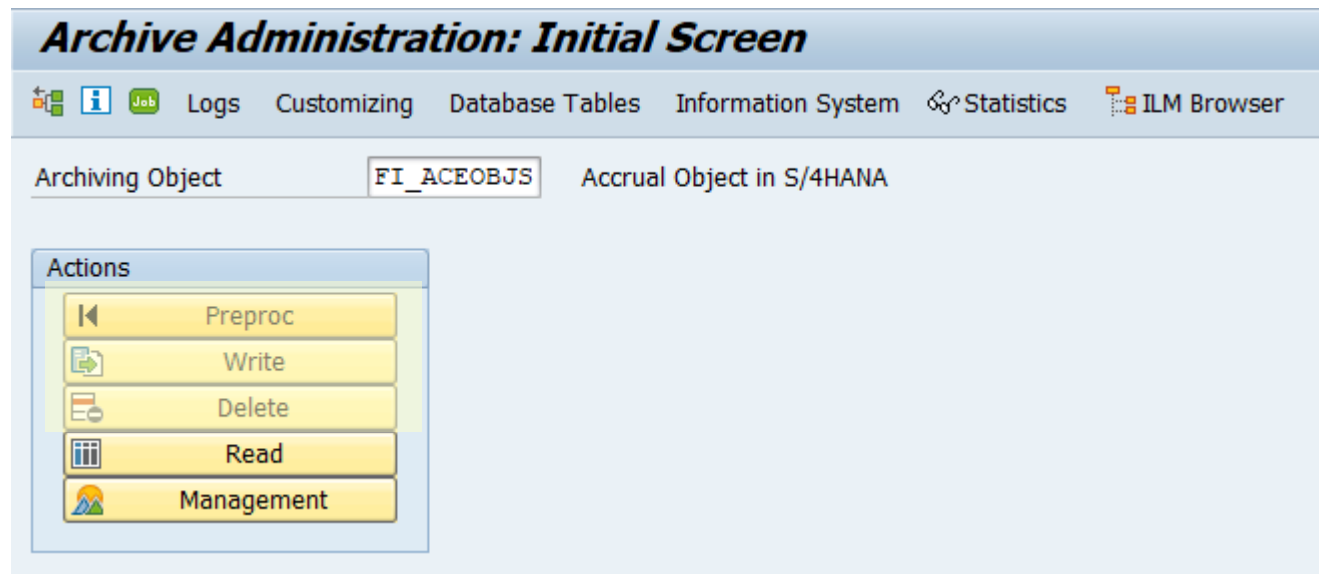


# Archiving

- Archiving in the Accrual Engine consists of several aspects:
  - Archiving of accrual objects  
The corresponding archiving object for the S/4HANA Accrual Engine is **FI\_ACEOBS**.
  - Archiving of journal entry line items that have a reference to an accrual object.
- The current restriction is that journal entry line items that have a reference to an accrual object can only be archived after the accrual object was archived.
  - A corresponding check is implemented in the archiving program for journal entries.

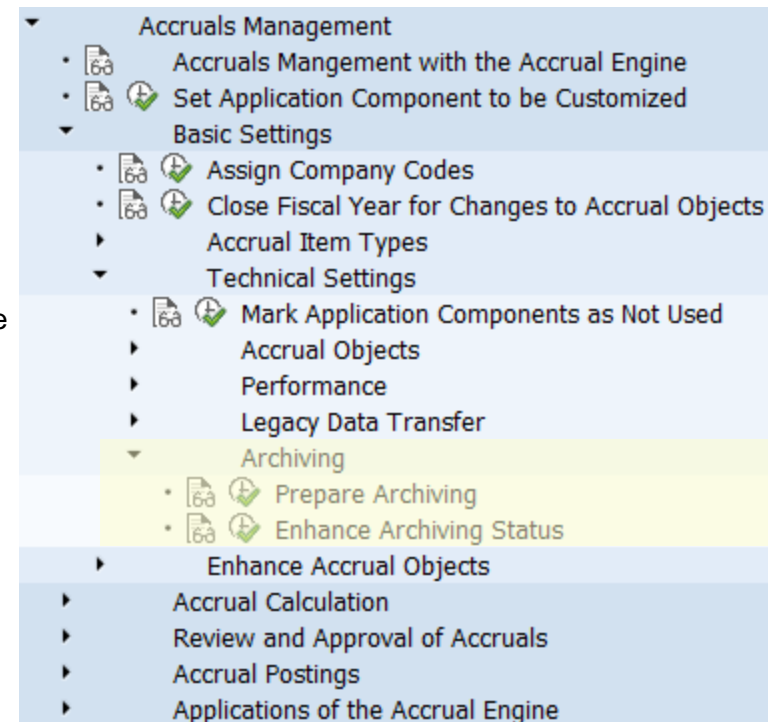
# Archiving: Steps

- Like for all other archiving objects also the archiving of accrual objects consists of 3 steps:
  - Preprocessing:** Execute the preprocessing program.
  - Write data to archive file:** Execute the write program.
  - Delete data from database tables:** Execute the deletion program.
- All three steps can be executed using transaction SARA, see screen-shot.



# Archiving of Accrual Objects: Preprocessing Run

- Prerequisite for archiving an accrual object is to execute the archiving preprocessing program for the **accrual object**.
  - The preprocessing run can be started with IMG activity *Prepare Archiving*.
- The preprocessing run does the following steps:
  1. Check whether this accrual object can be archived.
    - There are some default checks implemented, but these checks can be replaced by a BAdI implementation, see IMG activity *Enhance Archiving Status*.
    - The default checks that can be replaced by a BAdI are:
      - The current date must be after the End of Life date of the accrual object.
      - Since 200 days no accrual postings were done by this accrual object.
      - Since 200 days this accrual object was not changed.
      - If opening posting and periodic posting are customized, or any type of release postings is customized, the balance of the Accrual Object must be zero: No accruals left.
  2. If all checks were passed successfully:
    - Set the indicator *To Be Archived* in the accrual object.
    - Set the *Business Completion Date*.



# Archiving of Accrual Objects: Result of Preprocessing Run

- In the display transaction for accrual objects (ACACTREE02) click on *Goto -> Display Technical Data*.
    - In the corresponding popup for the technical data the two fields are displayed that are updated by the archiving preprocessing run:
      - The indicator *To Be Archived* and
      - The *Business Completion Date*.
- The business completion date is filled with the CPU date when the archiving preprocessing run sets the indicator *To Be Archived*.  
The business completion date is relevant for the *Information Lifecycle Management (ILM)*, see separate slide.

**Display Accrual Object**

Company Code: 0001

Reference Data

Accrual Object Category

Text

Person Responsible

Life Parameters

Start of Life

Lifecycle Status

Technical Data for the Accrual Object

Application Component

Company Code

External Display

Accrual Object: 0VENDORINV0100000032/2017/003

Accrual Subobject: 1

Status

Processing Status: P In Process

Bus. Completion Date

☐ To Be Archived

**Performance Assistant**

**Accrual Object Business Completion Date**

Date when the accrual object is completed from a business point of view.

**Use**

The business completion date is relevant for the information lifecycle management: It is the start date of the residence period.

The residence period is the date interval that the accrual object must remain in the system after it was marked as to be archived. Only after this period it can be deleted by the *Delete* step in the archiving process, see transaction [SARA](#) for archiving object FI\_ACEOBS.

**Dependencies**

The business completion date is filled automatically by the system when the accrual object is marked as to be archived.

By default the business complete date is the system date when the accrual object is marked as to be archived. This default logic can be changed using a BAdI, see customizing activity [Enhance Archiving Status](#).

# Archiving of Accrual Objects: Write To Archive File

- The program that writes the accrual object data into the archive file can be started using transaction SARA for archiving object **FI\_ANCEOBS**.
  - The technical program name is FI\_ANCEOBS\_WRI.
- This program writes the accrual objects into the archive file.
  - The list of database tables that are written into the archive file can be displayed with transaction AOBJ.
  - These are tables ACESOBJ\*.
- In addition to the accrual objects, also the journal entries that were posted by this accrual object are written into the archive file of the accrual object.
  - This is necessary, because the next step, the deletion program will clear the accrual object reference fields in those journal entry line items in table ACDOCA.
  - By writing the journal entry line items into the archive file, it is documented that the journal entries had a reference to the accrual object.

# Archiving of Accrual Objects: Delete from Database Tables

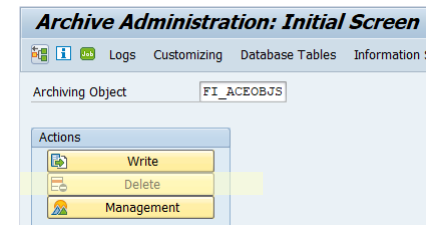
- The program that writes the accrual object data into the archive file can be started using transaction SARA for archiving object **FI\_ACEOBS**.
  - The technical program name is FI\_ACEOBS\_DEL.
- This program deletes the accrual objects from the database tables.
  - The list of database tables that are written into the archive file can be displayed with transaction AOBJ.
  - These are tables ACESOBJ\*.
- After deleting the accrual objects, this program also clears the accrual object fields in the journal entry line items that were posted by the Accrual Engine.
  - Technically, the content of the following fields is cleared in table ACDOCA:
    - ACROBJTYPE
    - ACROBJ\_ID
    - ACRSOBJ\_ID
    - ACRITMTYPE
  - This clearing of the reference fields is necessary because the content of these fields is carried forward by the G/L balance carry forward run to the next year.
    - If the fields would not be cleared in the line items after archiving of the accrual object, the G/L balance carry forward run could not aggregate the line items with other line items that were posted to the same G/L accounts:
    - Over the years, more and more “senseless” fine-grained records would be carried forward on accrual object level – despite the accrual objects do not exist any more.

# Archiving of Journal Entry Line Items

- There are two types of journal entry line items that are treated differently with respect to archiving:
  - Journal entry line items that the Accrual Engine has posted
  - Journal entry line items that were generated by the migration from old to (new) S/4HANA Accrual Engine.
    - Currently this point is relevant for appl. *Manual Accruals* only.
- Archiving of line items that were posted by the Accrual Engine.
  - The current restriction is that first the accrual object has to be archived.
  - After the accrual object was archived, the journal entry line items can be archived with the archiving object of the journal entry **FI\_DOC\_PPA** or FI\_DOCUMENT.
- Archiving of journal entry line items that were generated by the migration from old to (new) S/4HANA Accrual Engine
  - These line items do not have an entry in table BKPF, that is, they do not have a journal entry header.
  - That's why they cannot be archived with the archiving object of the journal entry.
  - During archiving of the accrual object, these line items are written into the archive file of the accrual object.
  - After the accrual object was archived, these line items will remain in the system, but will be compressed in order to save memory.

# Relation to Information Lifecycle Management (ILM)

- The point in time when the accrual object is marked as *To be Archived* defines the start of the Residence Period
  - The residence period defines how long the accrual object must stay in the system before it can be archived,
  - More precisely: The accrual object can be deleted from the database tables of the Accrual Engine after the residence period has ended.
  - This deletion is performed by the *Delete* step in the archiving process, see transaction SARA.
- The residence period can be defined using transaction IRMPOL.
  - See also [sap help portal for ILM Rules](#).
  - The audit area should be used in residence period is ARCHIVING and the audit area should be used in retention period is GENERAL.
  - The residence period, that is, the date interval that the accrual object must remain in the database tables in the system after the accrual object was marked as to be archived starts at the **Business Completion Date**.
  - The Business Completion Date is the calendar date, when the accrual object is marked as to be archived.
  - The Business Completion Date can be displayed in the accrual object, for example using *transaction ACACTREE03 -> Display Technical Data*.
- The names and meanings of the different dates and periods relevant for ILM are explained in [this blog](#).
- A summary on the interplay of the different periods and dates relevant for ILM refer to [this blog](#).

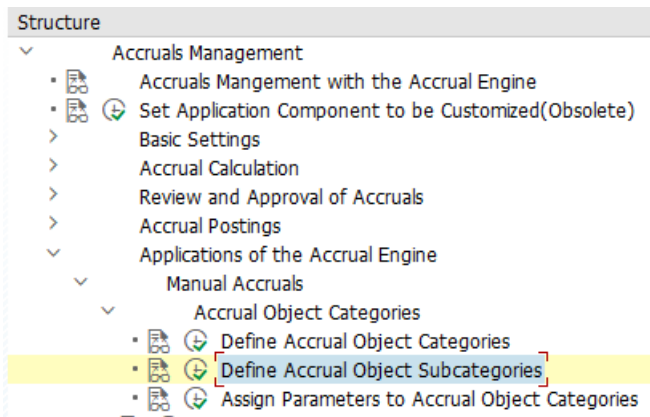




**Accrual Object Subcategory**

# Accrual Object Subcategory

- A new field accrual object subcategory is introduced in release 2021 On Prem.
  - It is used to group accrual subobjects in Tree U transaction ACACTREE01/ACACTREE02.
  - It is not a key field of accrual subobjects, but an attribute.
- Customizing for Accrual Object Subcategory
  - Accrual object subcategory can be defined in customizing activity Transaction ACEIMG -> Applications of the Accrual Engine -> Manual Accruals -> Define Accrual Object Subcategories
  - An accrual object category needs to be assigned to an accrual object subcategory.



Display View "Manual Accruals Sub-category": Overview

Manual Accruals Sub-category			
AccrSubcat	Text	AccrObjCat	Text
MEDICAL	Mecial Benefit Provision	PROVISIONS	Povisions
PENSION	Pension Provision	PROVISIONS	Povisions

# Accrual Object Subcategory

- In Tree UI transaction ACACTREE01/ACACTREE02, accrual subobjects will be grouped under their subcategories, and the ones without subcategory will be grouped in a folder called 'No Subcategory'.

Display Accrual Object

Download Template Upload

Company Code/ Accr Objec... C Accr...

Company Code F001 SAP A.G. F001 Time Dependency 01.01.0001 - 31.12.9999

Reference Data

Accrual Object Category	PROVISIONS	Accrual Object Subcategory	PENSION
Accrual Object Number	23062	Person Responsible	
Text	Pension 1		

Life Parameters Account Assignments

Start of Life	01.01.2021	End of Life	31.12.2021
Lifecycle Status	P In Process		

# **Dynamic Selection in Tree UI Selection Screen**

# Dynamic Selections in Tree UI Selection Screen

- A more flexible selection in Tree UI selection screen is introduced in release 2021 On Prem.
  - A new button called Dynamic Selections is added in the selection screen.
  - More fields from below tables are added for selection.
    - ACESOBJ - Accrual Subobject
    - ACESOBJ\_ITEM - Accrual Item
    - ACESOBJ\_ASSGMT - Accrual Account Assignment
    - ACAC\_OBJECTS - Manual Accrual Reference Information
    - ACESOBJ\_PARAM - Customer-Specific Parameters

**Manual Accruals: Change Accrual Objects**

General Data Selection

Company Code

Additional Selections

Accrual Object Category

Accrual Object Subcategory

Accrual Object Number

**ER9(1)/500 Additional Selections**

- > Accrual Subobject
- > Item Data for Accrual Subobject
- > Standard Account Assignments for Accrual Objects
- > Manual Accruals: Accrual Objects
- > Manual Accruals: Customer-Specific Parameters

**Dynamic Selections**

Accrual Subobject

Processing Status  to

Created By  to

Item Data for Accrual Subobject

Accrual Item Type  to

Ledger  to

Standard Account Assignments for Accrual Objects

Profit Center  to

Cost Center  to

Apply Selected Items Delete Selected Objects Single Va

# Tips and Tricks

# Invoice Deferral: Long- And Short-Term Deferrals

- The S/4HANA Accrual Engine can –like the old Accrual Engine– distinguish between long-term accruals or deferrals.
  - Long-term means: Due in 12 months or later.
- Long-term accruals or deferrals are posted to a separate G/L account.
- Technically this can be achieved by using an derived accrual item type that is using the **Shift 1 Year** operator.
  - In the following examples this is accrual item type LONG\_TERM.
- This use case, i.e. usage of derived accrual item types (with opening postings) works from release S/4HANA 1809 SP3 onwards.
  - In former support packages 0-2 the note 2800607 needs to be applied. This is a big and complex note because it is a downport of many new features.

# Shift Operator: Example for Invoice Deferral

- A supplier invoice is posted on 15.01.2019 with an amount of 18.000 EUR.
- The invoice is for an insurance. It is for the next 18 months, from 01/2019 to 06/2020.
- At the end of January 2019, the following shall be posted:
  - 1.000 EUR on cost account (18.000 EUR / 18 month).  
These are the recognized costs since 1/18<sup>th</sup> of the lifetime has passed.
  - 12.000 EUR on balance sheet account for **short**-term deferrals.
  - 5.000 EUR on balance sheet account for **long**-term deferrals.
- At the end of next month, February 2019, the following delta postings shall be performed:
  - 1.000 EUR from the short-term deferral account to the cost account.  
This is the recognition of additional 1.000 EUR into P&L.
  - 1.000 EUR from long-term to short-term account:  
The balance of the long-term account is reduced by 1.000 EUR, since time proceeded one month.
- After these postings, the balances at end of February 2019 are as follows:
  - 2.000 EUR on cost account.
  - 12.000 EUR on balance sheet account for **short**-term deferrals.
  - 4.000 EUR on balance sheet account for **long**-term deferrals.



# Example for Invoice Deferral: Accrual Object

- In order to achieve the desired postings from and to the balance sheet account for long-term deferrals, an accrual object needs to be created that contains two accrual items:
  - One accrual item type DEFERRALS for the invoice amount of 18.000 EUR.  
If a linear distribution of the total amount of 18.000 EUR over the lifetime of the 18month is desired, then this accrual item has the accrual method LINEAR.
  - One accrual item type LONG\_TERM that is customized as derived from DEFERRALS, using the **Shift 1 Year** operator in the derivation rule.
- Both accrual item types are customized to perform
  - Opening Postings
  - Periodic Postings and optionally
  - Release Postings

The accrual item type LONG\_TERM calculates 1.000 EUR in each of the first 6 periods.

The screenshot displays the 'Display Accrual Object' window in SAP. It shows the configuration for an accrual object with the following details:

- Company Code:** 0001, **SAP A.G.**, **Time Dependency:** 101.01.
- Reference Data:**
  - Accrual Object Category:** 0VENDORINV, **Accrual Object Number:** 4711-010
  - Text:** Deferral of invoice 4711-010 (short- and long term)
  - Person Responsible:** SCHACHNER
- Life Parameters:**
  - Start of Life:** 01.01.2019, **End of Life:** 30.06.2020
  - Lifecycle Status:** P In Process
- Item Data:**

Accr Item Type	Item Type Text	Total Accr Amt	T CrCy	Transaction Currency	Accrual/DeferralMeth
DEFERRALS	Deferrals	18.000,00	EUR	EUR	LINEAR
LONG_TERM	Deferrals: Long-Term Portion	0,00	EUR	EUR	DERIVED
- Calculated Accruals:**

Last Day	BalAmtT	DeltaAmtT	T CrCy
31.01.2019	1.000,00	1.000,00	EUR
28.02.2019	2.000,00	1.000,00	EUR
31.03.2019	3.000,00	1.000,00	EUR
30.04.2019	4.000,00	1.000,00	EUR
31.05.2019	5.000,00	1.000,00	EUR
30.06.2019	6.000,00	1.000,00	EUR
31.07.2019	6.000,00	0,00	EUR
31.08.2019	6.000,00	0,00	EUR
30.09.2019	6.000,00	0,00	EUR
31.10.2019	6.000,00	0,00	EUR
30.11.2019	6.000,00	0,00	EUR

# Example for Invoice Deferral: Result of Shift 1 Year

- Transaction AACTREE02: Comparison of the calculated periodic amounts of the two accrual item types
  - DEFERRALS calculates the linearized amount of 1.000 EUR in each of the 18 periods.
  - LONG\_TERM calculates the amount of 1.000 EUR in each of the first 6 periods (=18-12months) that shall be posted from long-term to short term deferral account.

Item Data				
Choose Accrual Item				
Accr Item Type	Item Type Text	Total Accr Amt TCrcy	Transaction Currency	Accrual/DeferralMeth
DEFERRALS	Deferrals	18.000,00	EUR	LINEAR
LONG_TERM	Deferrals: Long-Term Portion	0,00	EUR	DERIVED

Calculated Accruals			
Last Day	BalAmtT	DeltaAmtT	TrCrcy
31.01.2019	1.000,00	1.000,00	EUR
28.02.2019	2.000,00	1.000,00	EUR
31.03.2019	3.000,00	1.000,00	EUR
30.04.2019	4.000,00	1.000,00	EUR
31.05.2019	5.000,00	1.000,00	EUR
30.06.2019	6.000,00	1.000,00	EUR
31.07.2019	7.000,00	1.000,00	EUR
31.08.2019	8.000,00	1.000,00	EUR
30.09.2019	9.000,00	1.000,00	EUR
31.10.2019	10.000,00	1.000,00	EUR
30.11.2019	11.000,00	1.000,00	EUR
31.12.2019	12.000,00	1.000,00	EUR
31.01.2020	13.000,00	1.000,00	EUR
29.02.2020	14.000,00	1.000,00	EUR
31.03.2020	15.000,00	1.000,00	EUR
30.04.2020	16.000,00	1.000,00	EUR
31.05.2020	17.000,00	1.000,00	EUR
30.06.2020	18.000,00	1.000,00	EUR

Item Data				
Choose Accrual Item				
Accr Item Type	Item Type Text	Total Accr Amt TCrcy	Transaction Currency	Accrual/DeferralMeth
DEFERRALS	Deferrals	18.000,00	EUR	LINEAR
LONG_TERM	Deferrals: Long-Term Portion	0,00	EUR	DERIVED

Calculated Accruals			
Last Day	BalAmtT	DeltaAmtT	TrCrcy
31.01.2019	1.000,00	1.000,00	EUR
28.02.2019	2.000,00	1.000,00	EUR
31.03.2019	3.000,00	1.000,00	EUR
30.04.2019	4.000,00	1.000,00	EUR
31.05.2019	5.000,00	1.000,00	EUR
30.06.2019	6.000,00	1.000,00	EUR
31.07.2019	6.000,00	0,00	EUR
31.08.2019	6.000,00	0,00	EUR
30.09.2019	6.000,00	0,00	EUR
31.10.2019	6.000,00	0,00	EUR
30.11.2019	6.000,00	0,00	EUR
31.12.2019	6.000,00	0,00	EUR
31.01.2020	6.000,00	0,00	EUR
29.02.2020	6.000,00	0,00	EUR
31.03.2020	6.000,00	0,00	EUR
30.04.2020	6.000,00	0,00	EUR
31.05.2020	6.000,00	0,00	EUR
30.06.2020	6.000,00	0,00	EUR

The *Shift 1 Year* operator copies the amounts from the other accrual item type DEFERRALS, looking 12 months into the future.

For later periods, the balance stays, here: 6.000 EUR, i.e. no additional delta amounts are posted.

# Customizing Using the Shift 1 Year Operator

The following customizing settings are required in order to achieve that the desired amounts are calculated:

- In IMG activity *Define Accrual Item Types* the indicator *Derived* must be set:

Accrual Item Type	Derived	Upd Allwd	Plnd Costs Item Type	Actl Costs Item Type	Default Accr. Method	Description
LONG_TERM	<input checked="" type="checkbox"/>	<input type="checkbox"/>			DERIVED	Deferrals: Long-Term Portion

- For the other accrual item type DEFERRALS the flag *Derived* does not need to be set.
- In the same IMG activity *Define Accrual Item Types*, in section *Calculation Rules for Derived Item Types* the following entry must be created:

SortNo	Operator	Accrual Item Type
10	S	DEFERRALS

- This entry means: The amounts for LONG\_TERM are calculated by taking the amount from DEFERRALS and shift them 12 months: The value S is the *Shift 1 Year* operator.
- For the other accrual item type DEFERRALS no such entry is required.

# Customizing: Posting Schema Assignment

The following customizing settings are required in order to achieve that the desired amounts are posted by the S/4HANA Accrual Engine:

- Both accrual item types, DEFERRALS and LONG\_TERM need to be customized to perform opening postings and periodic postings – and optionally also release postings:
- In IMG activity *Assign Accrual Item Types to Journal Entry Types and Posting Schemas* the accrual item types must be assigned to postings schemas for the transaction types IP, PP and optionally also RP, FP and RL, FL:

Component ACAC							
Assignment of Accrual Item Types to Posting Schemas							
Accrual Item Type	Company Code	Accr TType	Doc. Type	Posting Schema	Post Deltas	Post Online	Post Periodically
DEFERRALS	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DEFERRALS	0001	IP	SA	SAP_ACE_IP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DEFERRALS	0001	PP	SA	SAP_ACE_PP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
LONG_TERM	0001	FP	SA	SAP_ACE_FP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LONG_TERM	0001	IP	SA	SAP_ACE_IP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LONG_TERM	0001	PP	SA	SAP_ACE_PP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

# Customizing: Account Determination

The following customizing settings are required in order to achieve that the desired amounts are posted to the correct accounts by the S/4HANA Accrual Engine:

- The account determination, for example IMG activity *Create and Edit Basic Account Determination* needs to be maintained.

**New Entries: Overview of Added Entries**

Account Determination for Manual Accruals

Company Code	Accr Object Cat	Accr Item Type	Symbolic Account	G/L Account
		DEFERRALS	INC_ACCR_ACCNT	short-term
		DEFERRALS	INC_OFFSTNG_ACCNT	cost acct
		DEFERRALS	PER_ACCR_ACCNT	short-term
		DEFERRALS	PER_OFFSTNG_ACCNT	cost acct
		LONG_TERM	INC_ACCR_ACCNT	long-term
		LONG_TERM	INC_OFFSTNG_ACCNT	short-term
		LONG_TERM	PER_ACCR_ACCNT	long-term
		LONG_TERM	PER_OFFSTNG_ACCNT	short-term

Enter here your real G/L account numbers.

# T-Accounts for Short- And Long-Term Deferral Postings

D Cost Account C		D Short-Term Deferrals C		D Long-Term Deferrals C	
(SIV) 18.000		(IP Defrl) 18.000	6.000 (IP LongT)	(IP LongT) 6.000	
(PP 1 Defrl) 1.000	18.000 (IP Defrl)	(PP 1 LongT) 1.000	1.000 (PP 1 Defrl)	1.000 (PP 1 LongT)	
(PP 2 Defrl) 1.000		(PP 2 LongT) 1.000	1.000 (PP 2 Defrl)	1.000 (PP 2 LongT)	
Balance	2.000	12.000		4.000	
end of 02/2019					

Events that perform the above postings:

1. Supplier invoice is posted: Posting SIV is performed. Supplier and tax account are not shown here.
2. Accrual object is created: Opening postings IP Defrl and IP LongT are performed automatically.
3. Periodic posting run at end of period 01/2019: Postings PP 1 Defrl and PP 1 LongT are performed.
4. Periodic posting run at end of period 02/2019: Postings PP 2 Defrl and PP 2 LongT are performed.

# Example for Invoice Deferral With Delayed Recognition

- Same example as before, but this time the invoice is posted two months before the recognition into P&L starts:
  - The supplier invoice is posted on 15.November 2018. It posts costs of 18.000 EUR.
  - The recognition of the costs into P&L shall start later, on 01.01.2019 until 30.06.2020 (18 months).
- At the end of November 2018, the following shall be posted:
  - 10.000 EUR on balance sheet account for **short**-term deferrals:
    - 0 EUR from the two periods 11/2018 + 12/2018
    - 1000 EUR from each period between 01/2019 - 10/2019.
  - 8.000 EUR on balance sheet account for **long**-term deferrals.
- At the end of next month, December 2018, the following delta postings shall be performed:
  - 1.000 EUR from long-term to short-term account:  
The balance of the long-term account is reduced by 1.000 EUR, since time proceeded one month.
- At the end January 2019, the following delta postings shall be performed:
  - 1.000 EUR from the short-term deferral account to the cost account.  
This is the **recognition** of 1.000 EUR into P&L.
  - 1.000 EUR from long-term to short-term account:  
The balance of the long-term account is reduced by 1.000 EUR, since time proceeded one month.
- At end of February 2019 the same delta postings shall be performed as in January.

# T-Accounts for Delayed Recognition Postings

D Cost Account C		D Short-Term Deferrals C		D Long-Term Deferrals C	
(SIV) 18.000	18.000 (IP Defrl)	(IP Defrl) 18.000	8.000 (IP LongT)	(IP LongT) 8.000	
		(PP 1 LongT) 1.000		1.000 (PP 1 LongT)	
		(PP 2 LongT) 1.000		1.000 (PP 2 LongT)	
(PP 3 Defrl) 1.000		(PP 3 LongT) 1.000	1.000 (PP 3 Defrl)	1.000 (PP 3 LongT)	
(PP 4 Defrl) 1.000		(PP 4 LongT) 1.000	1.000 (PP 4 Defrl)	1.000 (PP 4 LongT)	
Balance	2.000	12.000		4.000	
end of 02/2019					

Events that perform the above postings:

1. Supplier invoice is posted: Posting **SIV** is performed. Supplier and tax account are not shown here.
2. Accrual object is created: Opening postings **IP Defrl** and **IP LongT** are performed automatically.
3. Periodic posting runs at end of period 11/2018 and 12/2018: Postings **PP 1 LongT** and **PP 2 LongT** are performed: In each period 1.000 EUR is shifted from long-term to short-term deferrals, no recognition into P&L yet.
4. Periodic posting runs at end of period 01/2019 and 02/2019: Postings **PP 3+4 Defrl** and **PP 3+4 LongT** are performed: Recognition postings of 1.000 EUR into P&L are no performed in each period in addition.



# Delayed Recognition Postings: Accrual Object

- How to achieve
  - the delayed start of the periodic recognition postings,
  - but having at the same time periodic postings that shift a portion of the long term deferrals to short-term account?
- The solution is to enter different lifetimes for the two accrual items DEFERRALS and LONG\_TERM in the accrual object in transaction ACACTREE02, see screenshot.
  - You might need to manually unhide these fields.
- All other data and configuration are the same as in the first (simpler) example.

**Display Accrual Object**

Text: Deferrl of inv. 4711-011 (short- and long term, delayed)  
 Person Responsible: SCHACHNER

Company Code/Accr O...: 0001 SAP A.G.  
 OVENDORINV  
 Deferrl of inv.

Life Parameters Account Assignments

Lifecycle Status: P In Process

Item Data

Accr Item Type	Item Type	Text	Total Accr Amt	T CrCy	Transaction Currency	Accrual/DeferralMeth	Start of Life	End of Life
DEFERRALS	Deferrals		18.000,00		EUR	LINEAR	01.01.2019	30.06.2020
LONG_TERM	Deferrals: Long-Term Portion		0,00		EUR	DERIVED	15.11.2018	30.06.2020

Calculated Accruals Postings Posted Totals

Last Day	BalAmtT	DeltaAmtT	TrCrCy
30.11.2018	1.000,00	1.000,00	EUR
31.12.2018	2.000,00	1.000,00	EUR
31.01.2019	3.000,00	1.000,00	EUR
28.02.2019	4.000,00	1.000,00	EUR
31.03.2019	5.000,00	1.000,00	EUR
30.04.2019	6.000,00	1.000,00	EUR
31.05.2019	7.000,00	1.000,00	EUR
30.06.2019	8.000,00	1.000,00	EUR
31.07.2019	8.000,00	0,00	EUR
31.08.2019	8.000,00	0,00	EUR

The Start of Life date for the accrual item DEFERRALS is the date when the recognition postings shall start.

For the accrual item LONG\_TERM 1.000 EUR is calculated for the periods 11/2018 and 12/2019 as a consequence of the earlier Start of Life date.

Important: The Start of Life date for the accrual item LONG\_TERM is the posting date of the invoice.

# Different Transaction Currencies Between Accrual Object and Actual Costs

- When posting actual costs, for example a supplier invoice with transaction MIRO, FB60 or FB01, it is possible to enter a different document currency compared to currency of the accrual object.
- Since the Accrual Engine calculates the accrual amounts incl. the utilization amounts in transaction currency, the Accrual Engine performs a currency conversion in this case.
- Online utilization, that is, adding utilization line items for example to the invoice item is not possible in case of different transaction currencies:
  - Because the transaction currency of a journal entry is a **header field**: All line items of a journal entry must have same transaction currency.
  - When an invoice is posted with a different transaction currency other than the accrual object currency and online utilization is active, then this online utilization posting (adding line items to the invoice) will **not** occur: Instead, the periodic posting run, transaction ACEPOSTINGRUN will perform the utilization posting at the end of the period.
- There is a possibility to prevent such postings of actual costs with different transaction currency: To achieve this, change the message type of message ACE\_S4 092 from warning to error. This can be done with transaction OBA5.

Transaction ACACTREE02:  
Accrual object has  
currency EUR.

In the supplier  
invoice the user  
can enter a  
different currency  
USD.

**Enter Incoming Invoice: Company Code 0001**

Show PO structure Show worklist Hold Messages

Transaction    
Diff. Posting

Basic Data Payment Details Tax Withholding tax Amount ...

Inv. rcpt date    
Invoice date  Reference    
Posting Date

☐ Calculate Tax   
Tax amount  V1 V1 (19% domestic inpu...

Text    
Company Code 0001 SAP DEMO Company 0001 Walldorf

PO Reference G/L Account Material Contract Reference Asset

1 Purchase Order/Scheduling Agreement

# Exchange Rate in Invoice Deferral

## Use Case

- Usually there are opening postings and periodic postings in invoice deferral. Both opening posting and periodic postings should **use the same exchange rate with the invoice** to convert amounts into other currencies.
  - In old accrual engine, using a certain exchange rate for opening posting is achieved by entering key date in the popup of posting parameters, and for periodic posting it is achieved by implementing BAdI `ACEPS_BAPIDOC_MODIFY` or `ACEPS_BAPIPREDOC_MOD`.
  - In S/4 HANA Accrual Engine, using a certain exchange rate is achieved by entering converted total accrual amounts in other currencies of accrual items. The conversion here should use the same exchange rate with invoice. The opening postings take converted total accrual amount directly from accrual items. The periodic postings use proportion algorithm based on amount in transaction currency to calculate amounts in other currencies, and finally it achieves using the same exchange rate with the invoice.

# Exchange Rate in Invoice Deferral

## Use Case

- Below diagram explains how proportion algorithm works.

Supplier Invoice Line Item										
Supplier	G/L Account	G/L Acctn Text	Amount in TC	Trans. Crncy	Amount in CC	CoCd Crncy	Posting Date			
101100	160000	Purchase Material	10,000	EUR	12,000	USD	2020-06-15			
Accrual Item										
Item Type	Item Type Text	Ledger Group	Total Amnt in TC	Trans. Crncy	Total Amnt in CC	CoCd Crncy	Accr/Dfrl Method	Life Start	Life End	
COSTS	Costs		10,000	EUR	12,000	USD	LINEAR	2020-07-01	2020-04-30	
Opening Posting										
Company Cod	Fiscal Year	Posting Date	Amount in TC	Trans. Crncy	Amount in CC	CoCd Crncy				
1000	2020	2020-07-01	10,000	EUR	12,000	USD				
Periodic Postings										
Company Cod	Fiscal Year	Posting Date	Amount in TC	Trans. Crncy	Amount in CC	CoCd Crncy				
1000	2020	2020-07-31	1,000	EUR	1,200	USD				
1000	2020	2020-08-31	1,000	EUR	1,200	USD				
...	...	...	...	...	...	...				
1000	2021	2021-04-30	1,000	EUR	1,200	USD				

Comes from invoice line item directly

Comes from accrual item directly

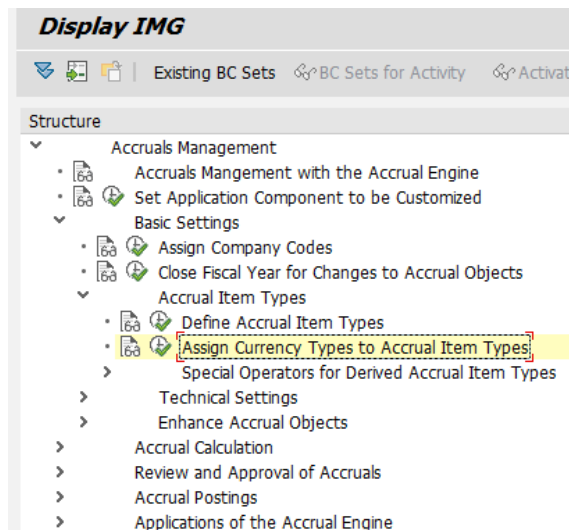
$$1,200 = 1,000 \text{ (Periodic Amnt in TC)} / 10,000 \text{ (Total Amount in TC)} * 12,000 \text{ (Total Amount in CC)}$$

# Exchange Rate in Invoice Deferral

## How to Achieve

- In customizing *Assign Currency Types to Accrual Item Types*, define the currency types for which you want to specify a certain exchange rate and select value 'A – By Accrual Engine' for currency handling.
- **Remark:** Currency handling for currency types other than '00' can be defined as 'A – By Accrual Engine', but these currency types should **not** be used together with review / approval process where only currency type '00' is supported.

Transaction: ACEIMG



Component ACAC					
Accrual Item Type Settings for Currency Type					
Accr Item Type	Company Code	Ledger	Crcy Type	Currency Handling	
COSTS	0001		00	A By Accrual Engine	
COSTS	0001		10	A By Accrual Engine	
COSTS	0001		30	A By Accrual Engine	

# Exchange Rate in Invoice Deferral

## How to Achieve

- Specify total accrual amount in other currencies in accrual items when creating accrual objects. This can be achieved by one of the below options,
  - Transfer program. Refer to page [Program ACAC DATA TRANSFER EXAMPLE](#) for details.
  - Excel Upload. Refer to page [EXCEL Upload: Use-Cases + Templates](#) for details. **Note:** Default Excel template contains only fields for total accrual amount in transaction currency. Fields for total accrual amounts in other currencies can either be added manually to the template or filling the values during uploading by implementing BAdI BADI\_ACE\_SUBOBJECT\_MODIFY.
  - Manually enter amounts in other currencies in transaction ACACTREE01.
- **Remark:** For how to migrate existing invoice deferral objects from old accrual engine to S/4 HANA accrual engine, and ensure they use the correct exchange rate, refer to page [Exchange Rate Handling in Migration](#).

# Group Tax Item and Supplier Line Item in Invoice Deferral

- Usually an supplier invoice contains supplier line item and tax item. In some cases, both supplier line item and tax item need to be deferred, for e.g. invoice containing tax item for VAT. As they belong to one invoice and have the same performance period, it's better to defer them in one accrual object.
- This can be achieved by creating one accrual object containing two accrual items for supplier line item and tax item respectively. Below diagram illustrates how to create accrual items on top of supplier invoices.

Supplier Invoice Line Items							
Item No.	Supplier	G/L Account	G/L Acct Text	Amount	Trans Crcy	Posting Date	
1	101100	160000	Purchase Material	10,000	EUR	2020-06-15	
2		417000	VAT	2,100	EUR	2020-06-15	
3		113100	Petty Cash	-12,100	EUR	2020-06-15	
Accrual Items							
Item Type	Item Type Text	Ledger Group	Total Amount	Trans Crcy	Accr/Defrl Method	Life Start	Life End
COSTS	Costs		10,000	EUR	LINEAR	2020-07-01	2020-12-31
TAX	Tax		2,100	EUR	LINEAR	2020-07-01	2020-12-31

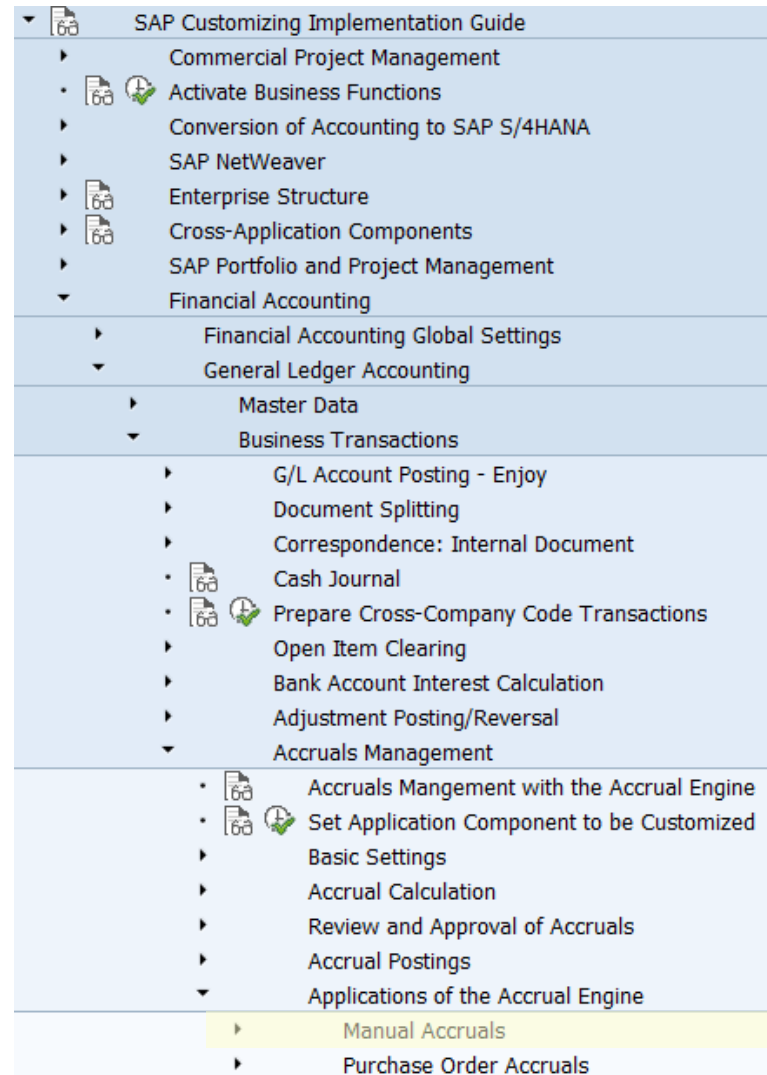
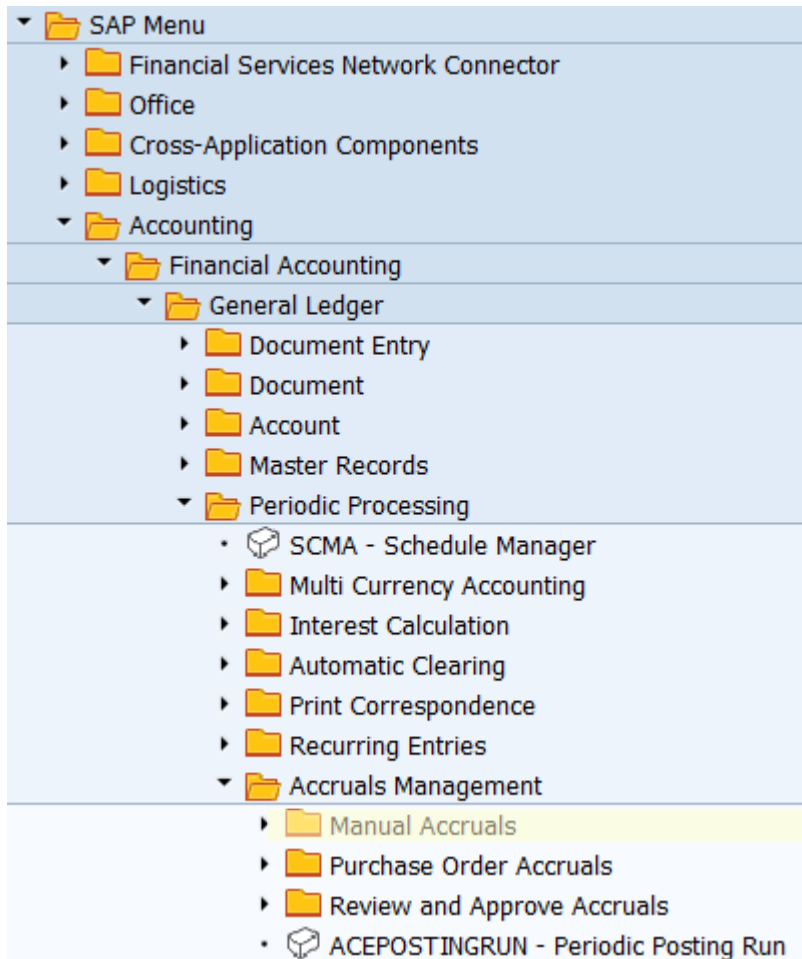
# **Manual Accruals as Part of Accruals Management**



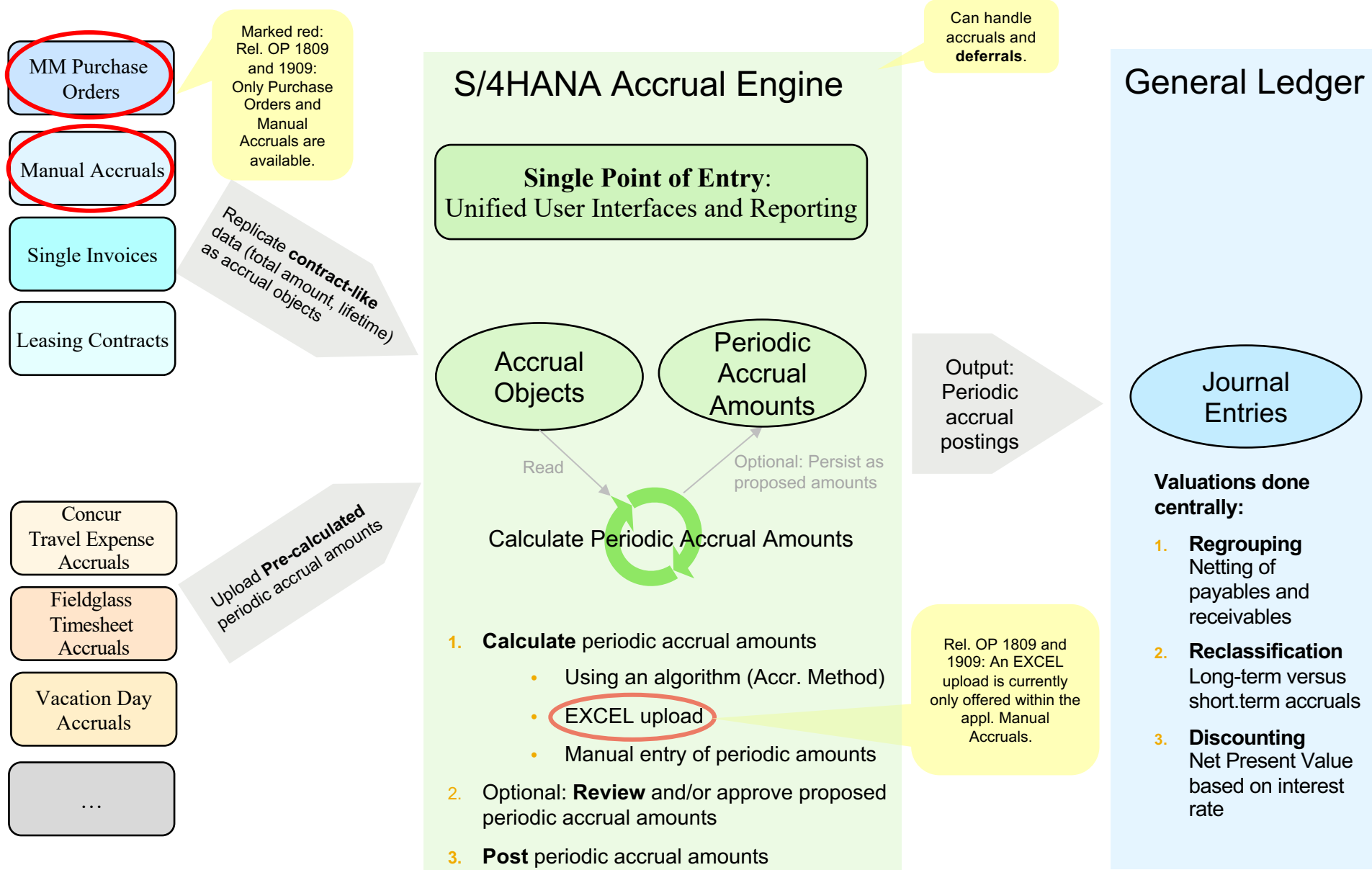
# Relation to Accruals Management

- The application *Manual Accruals* is part of the bigger application *Accrual Management*.
- *Accruals Management* bundles all applications that are based on the (new) S/4HANA Accrual Engine.
- The long-term vision of ***Accruals Management*** is to be the single point of entry for managing accruals.

# Manual Accruals in the Application Menu and IMG



# Accruals Management – Vision / Big Picture



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