



SAP FI/CO Certification Preparation

By

Captain ® Murtaza Habib
0333-4226800

SAP Certification Preparation

Document Control

1. Document Types and Number Ranges

A business transaction can create one or more documents.

Documents in R/3 include a doc header and 2-999 line items.

A document remains a complete unit in the R/3 system until archived.

Controlling info may also be included in doc header

SAP records at least one doc for every biz transaction and each doc receives a unique doc number.

Every Doc uniquely identified by fol Fields:

- i. Doc No
- ii. Coy Code
- iii. Fiscal Year

Two important control keys for documents are:

- o Document Type (to control document header)
- o Posting Keys (for line items)

Doc Type controls the doc header & is used to classify the business transactions to be posted, **it is the key to differentiate and classify business transactions.**

Most imp control functions of doc types are ;

- i. Number ranges for doc numbers;
- ii. Account types permitted for postings

Doc Types defined at client level and valid for all coy codes. It controls the following:

- i. which accounts to be posted
- ii. number range
- iii. field status of document header text and reference
- iv. Whether invoices are posted with net procedure.

If no reversal document type is specified, the reversal doc has the same doc type as original doc.

You specify a **number range** for each doc type. However, you can use one number range for several doc types.

You can copy the intervals of document number ranges from one coy code to another or copy intervals from one fiscal year to other.

Every Coy Code may define its own Doc number ranges or doc number ranges created per coy code

Doc Number range can be internal or external. **The internal range can be year specific or year independent.**

Doc no ranges must never overlap.

External number ranges may be alphanumeric

System saves the last document used from number range in field Current number.

Doc number range must be defined for the year in which it is used.

- i. Up to a future fiscal year :no restart
- ii. For each fiscal year :restart

2. **Posting Keys and Field Status Groups**

Posting Key has control functions within the line items it controls

Defined at Client level and most imp con functions for a posting key are;

- i. Determine which account type can be posted to
- ii. Side of account (debit or credit posting)
- iii. Field status of additional details or layout of entry screen
- iv. Specifies whether the line item is connected to a payment transaction or not. (helps analyzing payment history/notices)
- v. Whether posting is sales relevant and sales figures need to be updated.

Std posting keys for customer/vendor invoices are

- i. credit- 50 customer –31 Vendor
- ii. debit- 01 customer – 40 Vendor

Standard posting keys for G/L account postings are;

- i. 40 Debit posting key
- ii. 50 Credit, posting Key

Field Status of document fields is influenced by **Field status group and posting key** and is determined by three factors:

- i. Account type (S,K,D)
- ii. Field status of posting key
- iii. Field status of account.

As a general rule the account specific field status for G/L accounts is customized and for customer/vendor accounts posting key specific field status is customized.

Field status with highest priority applies, Exceptions to this rule are:

- o An activated biz area must be ready for input
- o Entries in tax fields only possible if G/L account is tax relevant.
- o Field Status group controls the field display during document entry.
- o For each group of G/L accounts you have to define the status of every document entry field.(required/optional/hidden)
- o You assign field status groups to the respective G/L accounts in the G/L account master records. Each G/L account has a field status group

If a doc is posted to a sub ledger account the field status group of the reconciliation account is used.

All the field status groups are summarized in one field status variant which is assigned to coy codes (mandatory)

Required, hidden, optional is priority. Hide + Required=Error

By changing the field status definitions of posting keys and field status group, the field status can be made transaction dependant and account dependant.

Subledgers don't have field status group and therefore a lot of posting keys are used.

In G/L postings differentiation is mainly made via different field status groups, therefore only two posting keys 40 & 50 are needed for G/L postings.

3. Posting Periods

Posting Periods defined in the fiscal year variant

System usually proposes the current date as posting date

To prevent documents from being posted to an incorrect posting period, you can close certain posting periods.

You open a posting period by entering a range in the posting period variant that encompasses this period. You can have as many periods open as desired.

As many periods as required can be open simultaneously, however, only two period intervals can be open at the same time during closing.

Posting Periods assigned to the Company Code or several coy codes can use the same posting period variant

In defining posting period variant '+' is valid for all account types.

Posting Periods can be handled differently for different account types.

At line item level the system checks the account type of the posting key to ensure that the period is open for assigned account types.

A Posting Period Variant must contain at least one line with the entry Valid for all accounts.

The account Range in the posting period variant consists of G/L accounts.

Posting period variant that contains the open periods has to be maintained manually.

The authorization group applies to the first period interval. This can also be an interval with normal posting periods.

R/3 uses one posting transaction for several different postings, e.g : G/L acc posting, Customer/Vendor invoice posting, Vendor/customer credit memo postings.

If you do not define a doc type the system proposes the standard e.g. KR for vendor invoices.

Open items list can be seen by pressing open item button.

page 247 ref READ

4. Posting Authorizations

The maximum amounts are defined per Coy Code in tolerance groups; here the processing of payment differences is controlled.

In Tolerance Groups you can enter upper limits for the fol:

- i. Total amount per document
- ii. Amount per customer/vendor item
- iii. Cash discount which a user in a tolerance gp can grant.

When setting limits the currency used is local currency of Coy Code.

You can create as many tolerance groups as you like.

Each employee must be assigned to one tolerance group

A Tolerance group can be assigned to one or more Coy Code.

If user not assigned to any tolerance group then default tolerance group valid for them

For employees with specially high/low limits—special tolerance gp created and assigned to their logon id's.

5. Default Values

Parameter IDs allow users to set default values for fields whose value does not change very often, e.g coy code or currency

Help in preventing input errors as values appear automatically

User logon id has properties like language, date format, decimal notation applicable system wide

You can have CPU date proposed as value date

Using **editing options** the screens can be configured for fol areas:

- i. **Doc entry:** users hide fields not relevant eg cross coy transact, foreign currency-you can also use special editing options for single screen transactions.
- ii. **Doc display:** using list viewer user can select diff display optns
- iii. **Open items:** using line layout displays& posting options for open item processing, user can enter the amount of partial payments or balance of new open item

(simple docs in FI):Some sources of value defaulted by system for doc entry:

- i. User master Records
- ii. Parameter memory
- iii. System Data
- iv. Account Master Record
- v. Accounting functions

6. Document Changes, Change Control

- Doc change rules can be either user defined or predefined by the system
- Only certain fields are modifiable once a doc is posted

- Incase of Header: reference no and Doc header text modifiable only if posting period is not closed
- Incase of Line items, amount, posting keys and account numbers are unmodifiable. The other are fixed in IMG
- **Conditions for doc field changes**
 - a. Posting pd must be open
 - b. Line item is not cleared
 - c. Line item either debit in customer or credit in vendor
 - d. doc not a credit memo for invoice
 - e. doc not a credit memo for down payment
- **Document change rules can be made on following criteria:**
 - a. Account type: A,K,D,M,S
 - b. Transaction class: eg special G/L (down pymt)
 - c. Company Code

7. Document Reversal

First reverse the incorrect doc

System provides function to reverse G/L, customer & vendor doc either **individually or in a mass reversal.**

There are two ways to reverse a doc entered incorrectly:

- i. **Normal Reversal Posting : Auto**, 0 bal, post incorrect debit to credit & vice versa causing an inc in transaction figures
- ii. **Negative Posting: manual**, 0 bal, removes traces, also posts incorrect debit to credit n vice versa but does not add posted amount to transaction figures, it subtracts transaction figures so **brings doc in original state before incorrect posting.**

A reversal reason must be entered which explains the reversal & also controls if reversal date is allowed to differentiate from original posting date.

Docs with cleared items cannot be reversed until it is first reset

Normally system uses normal reversal posting, but if negative postings are used following prerequisites must be fulfilled:

- i. The coy code allows negative postings
- ii. The reversal reason must be defined for negative postings.

Negative postings can also perform **transfer postings** of incorrect Line Items. The item is removed from wrong account by a negative posting and posted to correct account by a normal posting. But this can only be done if a document allows a negative posting.

In the Doc header of reversed document, the doc number of reversal is also mentioned, along with reversal reason

In Doc header of reversal doc the doc number of reversed doc is available without any reversal reason.
(reversal reason can be found in reversed doc not reversal doc)

8. Discount and Payment Terms

Terms of payment are conditions agreed between business partners for the payment of invoices.

The **terms of payment** enable system to calculate the **Cash Discount** and **due date for paying the invoice**.

In order to do the a/m the system needs the fol data

- i. Baseline date: date from which date starts
- ii. cash discount terms
- iii. cash discount percentage rates

When you process a doc you enter the **terms of payment** so that the system can calculate the required **conditions of payment**.

The terms of payment are:

- i. Defined/entered in coy code segment, sales area segment or purchasing org segment of a customer/vendor master record.
- ii. proposed when you post document
- iii. entered manually

The terms of payment default when you post an invoice all depends on where the invoice was created, **FI** (terms defaulted from coy code seg), **SD**(terms defaulted from sales area segment) or **MM** (terms of payment from purchasing organization segment are defaulted)- further copying of these terms from SD or MM to FI is done automatically.

Dunning & payment programs access these terms of payment

Generally no terms of payment are proposed at the time of creating a credit memo: There are however options to post credit memo:

- o **Invoice related credit memo** :linked to original invoice, invoice and credit memo due on same date
- o **Non Invoice related credit memo** with payment terms entered at time of posting documents, only if 'V' is entered the payment terms will take effect. These credit memos are due on baseline date

The **day limit** in payment terms is the calendar day to which the payment terms are valid, **using day limit you can store single or multi part terms of payment in terms of payment key**

The **account type** defines the subledger in which terms of payment can be used. If you want to use terms of payment for both vendors and customers, you should define these using **separate terms of payment keys** and then only use them for one account type accordingly. This prevents any change that you make in terms of payment for your customers to effect your vendors.

Using **block keys** which can be entered in line items or accounts, you can block line items or accounts for payment or collection .The block key can also be entered in terms of payment.

Payment method, predefined by systems for many countries, can also be entered in line items or accounts, like payment blocks, **payment methods can be entered in terms of payment**.

A block key and payment method defined in a payment term will be defaulted in line item when the payment term is used.

Baseline date is the starting date the system uses to calculate the invoice due date.

Possible default values for baseline date in payment terms are

- o No default
- o Posting Date
- o Document date
- o Entry Date

You can enter up to **three cash discount** periods.

To calculate cash discount, you enter a percentage rate in terms of payment. You also enter the no of days that % is valid.

The days and months specified in terms of payment are used in conjunction with the baseline date to calculate the correct cash discount amount for the payment date.

The **day limit** is the baseline date upto which the payment term version applies

Day limits enable date-specific terms of payment in one terms of payment key.

You can define several versions of terms of payment with each version having a different day limit

The following terms of payment require the specification of a delimit:

- o documents with invoice date upto 15th of the month are payable on the last day of the following month
- o Documents with a later invoice date are payable on the 15th of the month after.

An invoice can be paid over several months using an **instalment plan**, where the total invoice amount is divided into partial amounts due on different dates. The system carries out the split automatically if instalment payment is defined in the terms of payment. to do this select instalment payment and **DONOT** assign cash discount periods or cash discount percentage rates.

Define an instalment number, a percentage rate and terms of payment for each instalment. The percentage rates specified **must** total 100%, the system creates a line item for each instalment specified. The line item amounts correspond to the percentages of the total amount, while the total of the line item amounts corresponds to the total amount.

For each coy code or tax jurisdiction code, specify which value the system is to use as a cash discount base- this setting belongs to the global parameters of a coy code.

The cash discount amount is entered either **manually or automatically** by the system using the rates in the terms of payment. **You can still change the cash discount after you post the invoice.**

When you clear an open item in a customer or vendor account, the cash discount is automatically posted to the account for 'cash discount expense' or 'cash discount revenue'.

Incase of instalment payment, following steps are taken:

- o create payment term without any cash discount%, only select instalment check
- o define instalment number, a % rate and terms of payment for each instalment
- o % must be 100%
- o the system creates a line item for each instalment specified

Incase cash discounts are used in the **gross procedure** fol accounts are used

- o *Cash discount* revenue account
- o *Cash discount* expense account

If you post a vendor invoice with a document type for the **net procedure**, the amount posted to the expense or balance sheet account is reduced by the cash discount amount. The same amount is also posted to a cash discount clearing account to clear the posting.

When you use the **net procedure** the cash discount amount is automatically posted when the invoice is posted.

When the invoice is paid the system carries out a clearing posting to the cash **discount clearing account**

If the invoice is paid after the cash discount deadline the cash discount **loss is posted to a separate account**

THE CASH DISCOUNT CLEARING ACCOUNT MUST BE MANAGED ON AN OPEN ITEM BASIS.

Incase cash discounts are used in the **net procedure** fol accounts are used

- o *Cash discount* clearing account
- o *Cash discount* loss account

9. Taxes

SAP allows the consideration of fol taxes:

- i. Tax on sales and purchases
- ii. US sales tax
- iii. Additional taxes
- iv. Withholding tax

SAP covers two types of taxation

- i. Taxes levied at **national level**(with uniformly defined rates)
- ii. Taxes levied at **state level**(rates defined at state/jurisdtnl lvl), SAP also provides generic tax interface software to support complications of tax at this level.

The system provides assistance with and (treats Tax) as fol:

- i. calculating tax amount (checks the tax amount entered or automatically calculates the tax)
- ii. Posting to specified G/L accounts. (post tax amounts to tax accounts)
- iii. performing tax adjustments (for cash discounts or other deductions)
- iv. tax reporting (creates tax return)

The system determines taxes from:

- i. A **base amount** which has a cash discount included or excluded. (The expense or revenue amount is the base amount, which can include a cash discount (tax base is gross) or exclude a cash discount (tax base net)),(**GrossInclNetExcl**)
- ii. A **tax code** to validate or calculate the tax amount.

National regulations determine if tax base amount should be Net amount or Gross amount.

Tax on sales and purchases is the balance of two:

- i. **Output tax:** levied on net value of goods sold and is billed to customer; It's a liability of company to tax authorities.
- ii. **Input Tax:** levied on net invoice amount billed by vendor; It's a receivable which company claims from tax authority.

Tax authorities can define part of input tax as non deductible, which can then be posted to a separate expense account or distributed to G/L accounts and asset line items.

In USA both sales and use tax only applies to goods consumed by consumers, if a taxable good is sold either sales or use tax is levied, therefore goods are only taxed once. In US the customer only has to pay use tax if he is not charged sales tax by vendor (e.g customer has a self assessment permit or vendor doesn't have a branch in state)

In USA sales tax is collected by a vendor and remitted to the jurisdiction of customer as goods used in production or for resale to third party remain untaxed in USA.

If a customer is **exempt** from tax you can specify this in the system by entering the appropriate indicator in customer master records.

A **tax calculation procedure** is assigned to every country for carrying out tax calculations. R/3 delivered with preconfigured tax calc procedures for most countries.

The tax calculation procedure contains fol:

- i. order of the steps:
- ii. tax or **condition type** (applicable to a country, R/3 delivered with condition types nec for each type of tax calculation)
- iii. account/transaction key (used for auto account determination for taxes concerned, system has predefined account keys)

Condition types are tax calculations that are valid for the country.

The base amount is an expense or revenue item.

jurisdiction code is a combination of codes of autonomous tax authorities, national-state-county-city-district, tax jurisdiction code must be defined at all these levels

When you post taxes with a jurisdiction code you can enter the taxes **per jurisdiction code or per tax level**.

tax jurisdiction code must be defined at client level

You **enter tax code** when you post a document and this is the main connection to tax calculation

Tax codes are linked with either of the fol:

- i. country key
- ii. combination of country key and tax jurisdiction code

Tax codes with a jurisdictional taxation method are date specific

Tax code is used to

- i. Verify amount of tax
- ii. Calc amount of tax
- iii. calc additional tax portion
- iv. verify tax type
- v. determine G/L account
- vi. show tax correctly on tax forms

In configuration you can choose whether the document date or the posting date is valid for tax calculation.

In addition to other information the tax code contain tax rates. Tax rates are assigned to tax types used in tax calc procedure.

A tax code may have several tax rates entered for different tax types

Some postings to tax relevant G/L accounts must have a tax rate of zero, this applies to:

- i. items that are tax exempt but have to be reported-for these items a special tax code is created with a tax rate of zero
- ii. Items that are created by tax exempt transactions such as goods issue, good movement etc. A special tax code must be assigned to these transactions in configuration

The tax type definition determines whether the base amount is

- i. % included
- ii. % separate

If the system detects a deviation between the tax calculated and tax amount entered it issues a warning(indicator not set) or error message(indicator set)

The check indicator must not be set for input tax codes because the user must post the tax amount from invoice whether it's correct or not.

Taxes calc by system are usually posted via separate line item to a special tax account in standard scenario.

Taxes with certain transactions/account keys (NVV eg) are distributed to relevant revenue/expense item. This is common for sales tax payables and other non-deductible input taxes.

To enable automatic tax calculation, fol are assigned:

- i. posting keys(40-50 recommended)
- ii. tax accounts
- iii. Rules to determine which fields, account determination is based on.

When exchange rate differences occur because of tax adjustments in foreign currencies, these exchange rate differences are usually posted to the normal account for exchange rate differences.

However, for each coy code you can specify that the exchange rate for tax items can also be entered manually or is determined by the posting or the document date. The resulting differences are posted to a special account.

You define **tax accounts** i.e accounts to which tax items are posted in the fields Tax Category by entering one of the following signs:

- i. < for input tax
- ii. >for output tax

The properties of the tax code define whether or not the tax posted is an input or an output tax.

'Post automatically only', must be selected if manual tax postings are not to be made.

other G/L account may have one of the following entries in the field 'tax category'

- i. “ “ for non-tax relevant posting(eg blank postings)
- ii. “-“ for postings that require an input tax code (eg recon acct for payables from goods or services)
- iii. “+” for postings requiring an output tax code (eg recon accts for receivables from good and services)
- iv. “*” for all tax types permitted
- v. “XX” for postings with the predefined tax code XX

The acquisition tax code creates two posting items. It posts acquisition tax to the credit side of the acquisition output tax account and the same amount to the debit side of the acquisition input tax account.

Accounts for cash discounts require an entry in the field 'tax category' if the system is to post tax adjustments. When the field 'posting without tax permitted' is selected, you can post to this G/L account without specifying a tax code. This is especially necessary for tax postings within a jurisdiction code tax calculation procedure to foreign customers who do not have a jurisdiction code.

10. Cross-Company Code Transactions

In cross coy code transaction the system creates and posts a separate document in each coy code involved. The documents which belong to one cross coy code transaction are linked by a common cross coy code transaction number.

The process flow of cross-company code transactions is following:

- i. accounts are posted to in several coy codes
- ii. system automatically creates one offsetting posting in each company code to clearing accounts for receivable and payable
- iii. both documents receive one common cross coy code transactions

In cross coy code transactions tax is not distributed between companies, but only posted to coy code of first item

Clearing accounts must be defined in every coy code before a cross coy transaction is carried out. It can be G/L , customer or vendor account. In configuration you must assign clearing accounts to every possible combination of two coy codes

To ensure that tax is posted to the same coy code as invoice, the invoice item must always be entered first.

The cross-coy code doc number is stored in doc header and composed of:

- i. The doc number of first coy code
- ii. the first coy code
- iii. the fiscal year

The coy codes of cross coy transactions may have different local currencies.

To reduce the no of clearing accounts, you can use just one coy code as the clearing coy code.

Posting keys must be assigned to the clearing accounts to identify their account types.

The cross coy code doc number is a combination of doc no of first coy code+ first coy code no+ the fiscal year.

Cross coy doc can be reversed by using cross coy code transactions reversal function.

11. Clearing (manual & automatic)

Open items are incomplete transactions like unpaid invoices that need to be cleared for a transaction to be completed.

A transaction is cleared when a clearing posting has been carried out for an item or group of items, so that the resulting balance of the items is zero.

documents with open items cannot be archived till they are cleared

There are two ways to clear open items in SAP

- i. Account clearing(subsequent)
- ii. Posting with clearing (during posting)

Incase of **posting with clearing** two accounts are effected and 4 steps are taken:

- i. enter the clearing document amount and account manually
- ii. select the open item
- iii. clearing amount is assigned automatically
- iv. as a result of this posting, the open item is cleared

Posting with clearing can be carried out simultaneously for several accounts, account types and for any currency.

Post with clearing can be carried out manually or automatically using the **automatic payment program**.

Incase of **account clearing**, the transaction account clearing clears clearing accounts. debits & credits=0

Account clearing steps:

- i. choose open items from account that balance to zero
- ii. system marks them as cleared and creates a clearing document
- iii. the clearing doc number and date is entered in cleared items

Account clearing function works for any account managed on an open item basis in the G/L or subledgers.

Account clearing transaction may be performed manually or automatically using the **automatic clearing program**.

The clearing document normally

- i. contains no line items
- ii. does not appear in the line item display

The clearing document contains items if

- i. Items to be cleared belongs to different business areas
- ii. an invoice is cleared with a credit memo minus cash discounts

Prerequisites for clearing are:

- i. Accounts must be managed on an open item basis
- ii. accounts to be cleared must be defined

Items that cannot be cleared are:

- i. Noted items
- ii. statistical postings, down payments, bills of exchange
- iii. items with withholding tax entries

All accounts requiring **automatic clearing** must be defined in customizing

With automatic clearing program, the system groups item from an account together where they have same entries in the fol fields:

- i. Reconciliation account number
- ii. currency
- iii. special G/L indicator
- iv. 5 freely defined criteria from doc header or line item, e.g assignment field, reference number etc

The automatic clearing program does not clear

- i. noted items
- ii. statistical postings and certain special G/L transactions

iii. **items with withholding tax**

The **assignment field** of a line item is filled automatically during document entry, based on default sort indicator in the master record.

assignment field can be combination of upto 4 fields with a maximum of 18 characters

The line item sorting in the line item display and clearing functions is based on assignment field.

Example: reference and assignment in the FI invoice are copied from reference and assignment in SD billing doc, they help trace a SD doc as doc numbers in FI and SD would be different. You can define which numbers (purchase order, order, delivery, billing doc number etc) are copied into SD as reference and assignment and then transferred to FI. You can use these fields as selection criteria in FI.

12. Incoming and Outgoing Payments

Customers pay open invoices taking advantage of cash discounts. The cash discounts should be posted in the system automatically.

A manual payment is a transaction that clears an open item like an invoice, by manually assigning a clearing document

An incoming payment is posted as a credit amount to clear a debit open item and is used in AR

An outgoing payment is posted as debit amount to clear a credit open item and is used in AP

A manual payment is processed in 3 steps

- i. data is entered in the document header
- ii. open items to be cleared are selected
- iii. the transaction is saved

The document header of a payment screen consists of 3 sections

- i. payment header
- ii. bank data
- iii. open item selections

In **payment header**, the system proposes the document type dependant on the transaction called; the current date defaults as the posting date and the posting period is derived from the posting date. If no exchange rate or translation is entered, the exchange rate from the exchange rate table on the posting date is used.

In **Bank Charges**, bank may charge special charges for its services and these are posted automatically to a special expense account. **With incoming payments, the system adds the bank charges to the payment amount to form the clearing amount. With outgoing payments it subtracts the bank charges from the payment amount to determine the clearing amount. (IAOS).**

The **value date** is the date when actual cash movement takes place. The assignment number is either created by the system or you can enter it manually.

Cleared documents have to be reset before a document can be reversed.

In the **open item selection** data in payment doc header, account and account type are required to determine the account that contains the open items.

13. Payment Differences

If payment difference is small it can be dealt with automatically by fol:

- i. by adjusting the cash discount
- ii. by writing off the difference to a special account

If payment difference is material, it can be dealt with manually

- i. by manually posting cash discount
- ii. by posting the payment as partial payment
- iii. by posting the payment as residual item

- iv. by posting the payment as difference postings

In FI there are **3 types of tolerance groups**

- i. Employee tolerance group
- ii. G/L account tolerance group
- iii. customer/vendor tolerance group

Employee tolerance group is used to control:

- i. upper limit of posting transaction
- ii. permitted payment differences

The G/L account tolerance group is used to control

- i. permitted payment differences

The customer/vendor tolerance group is used to control

- i. clearing transactions
- ii. permitted payment difference
- iii. posting residual item from payment difference
- iv. tolerance for payment advice notes

Incase of **partial payment** the system creates an invoice reference between partial payment and invoice.

Incase of **residual payment**, the terms of payment can be transferred from the invoice

The partial payment and the invoice are managed as open item and both have the same assignment

No cash discount is posted for partial payment and is calculated on the complete invoice amount during clearing

When **residual item** is created, the payment difference is posted as new document. therefore the original doc and payments are cleared

Reason code are used to describe the reason for payment difference

Reason codes can be assigned to:

- i. difference postings
- ii. partial payments
- iii. residual payments

The other functions of reason code are

- i. types of payment notices to be sent to customer
- ii. account where residual item to be posted
- iii. automatic posting of a residual item to a specified G/L account
- iv. Exclusion of residual items from credit limit check being disputed.

14. Foreign Currencies and Exchange Rate Differences

The exchange rate difference key is the master record of the GL account and is used for FCY valuation on closing

One gain/loss can be assigned

- i. to all currencies and currency types
- ii. per currencies and currency types
- iii. per currency
- iv. per currency type

15. Cash Journal

SETTING UP THE CASH JOURNAL

Cash Journal supports posting cash receipt and expenses

cash journal can be created for each currency

cash journal can make postings to G/L, customer and vendor accounts

A coy code can have several cash journals

A cash journal has 4 digit alphanumeric key

There are 6 steps to configure a Cash Journal:

- i. Set up a GL account
- ii. Define document type for cash journal documents
- iii. Define number range interval for cash journal documents
- iv. Set up the cash journal
- v. **Create business transactions**
- vi. Set up print parameters for cash journal.

CASH JOURNAL TRANSACTIONS

The transactions posted in cash journal can be done on **line item level** (separate doc for each line) or post all the items in **one document**

Cash Journal also facilitates posting a document on **one time vendor/customer level**.

16. **Config and Processing Special G/L Transactions**

Special G/L transactions are transactions in the AR and AP accounting which are displayed in the sub-ledger

Special GL classes are

- i. Down payment
- ii. Bill of exchange
- iii. Others

Types of Special GL entries:

- i. Free offsetting entry- **Part of balance sheet**
- ii. statistical offsetting entry- **not part of balance sheet**
- iii. Noted item

Automatic statistical offsetting postings are always posted to the same offset

Noted items are special G/L transactions for information purpose

When noted item is created, **only one line item is updated** as open item

Noted items are managed as open items

Real free offsetting entries create a real transaction in the G/L

Controlling Org Types and Master Data(+++)-(over 20%)-(68)-(79)

Summary-SKIM

Organizational Overview

- o CO represents internal accounting entity because it provides info for manager
- o CO provides info that mgmt can use for decision making
- o CO provides all controlling options & is not restricted by legal req
- o CO enable mgmt to coordinate, monitor & streamline processes in org, to achieve this consumption of prod materials & services provided are entered
- o Any data relevant to costs flows auto from FI into CO
- o Costs & revenues are assigned to different CO account assignment objects like cost centers, biz processes, projects, orders.
- o These FI accounts are managed in CO as cost or revenue elements
- o **CCA is used for internal corporate controlling, it is an ideal means for monitoring overhead costs & assigning them to org units that incurred them**

- o **Overhead costs** are those that cannot be directly assigned to the manufacture of a product, or the provision of a particular service. You assign all overhead costs to the locations at which they incurred, or to the activities from which they arose.
- o **Cost Centers** are separate areas within controlling area at which costs are incurred. You can create cost centers acc to a no of criteria incl functional considerations , allocation criteria, activities provided or physical location
- o **Activity Types** define the type of activity that can be provided by a cost center. Activity outputs supplied by one cost center (sending cost center) to other cost centers, orders, or processes, represent the utilization of resources for this sending cost center. You value activities using a price calc on basis of certain biz or management info.
- o **Biz Processes** combine activity flows within an org over & above individual cost centers. They can be used to con org processes in line with particular functions.
- o **Internal Orders** are used to plan, collect & analyze costs arising from internal activities.
- o There are different methods for allocating values & quantities, depending on the type of CO object. You can use plan/actual comparisons at period end to analyze costs. When allocating quantities, you can use extended analysis tools at period end which take operating rate into account.
- o **Product cost controlling** calculates what costs are incurred by providing a service or during production. This enables you to calc a min price limit so you can market your product profitably
- o You can use **Profitability Analysis** component to analyze the success of your org in individual market sectors. In profitability analysis costs are assigned to revenues of each market sector. This gives you a basis for calc prices, targeting customers & choosing sales channels

Summary- Organizational Units:

- o **Operating Concern** is the highest reporting level for profitability & sales/marketing controlling. It is the central org unit in CO-PA used to segment & structure the market.
- o **Controlling Areas** structure the internal accounting operations of an org within controlling. They represent closed units that are used to calc costs. All internal allocations relate solely to objects that belong to same ConArea.
Con areas are org units within a coy where cost accounting is performed, you cannot allocate costs outside con areas
SAP std includes con area 0001 which can be used as template for creating other con areas
Con areas=COOM+COPC, the settings you make for your con areas must reflect the org con structure of your coy.
A con area may contain more than one coy code & these coy codes can include more than one currency. However, the coy codes assigned to a con area must all use the same operational CoA.
The con indicator can be used to activate or deactivate certain con components & functions for a fiscal year.
- o **Coy Codes** are independent accounting units within FI. They represent the smallest org units for which an **account group** can be set up for the purpose of external reporting. External reporting covers the entry of all relevant biz transactions & the generation of every doc required for financial reports like BL sheet & P&L statement.
- o **Business Area** is an org unit **WITHIN Financial Accounting** that represents a particular level of operations & managerial area within a company. You can assign FI transactions to a particular Biz area. In FI you can generate internal BL sheets & P&L statements on basis of Biz areas.
- o **Plant** is an org unit within logistics. It is used to break an org down according to production, procurement, plant maintenance & material planning considerations. Plants are used in MM, in logistics & in production Planning & control. In a plant either materials or goods are manufactured or services are provided.
- o You need to define internal & external org units concurrently & assign them to each other.
- o You can **assign more than one con area to a given operating concern**, so you can analyze these con areas together with op concern.
- o You can link coy codes & con areas to each other in different ways
 - o If FI & CO perspectives are identical, you can assign one coy code to one CO area
 - o If you assign more than one coy code to a given CO area, you can then carry out **cross-coy code controlling**.
- o You can assign a plant to a coy code (therefore also to CO area) based on valuation level. You can assign one plant, multiple plants or no plant at all to a coy code.
- o Changes to assignments are not a problem provided you have not created any master data or transaction data.

1:1

- o You can use fol 3 currencies in CO to perform evaluations in the info sys:

- o **CO area currency:** if you use 1:1 assignment (i.e your CO area & coy codes are identical), the CO area currency must be same as coy code currency. The COarea is then managed in COarea currency.
- o **Object currency:** An object currency is defined for each account assignment object in CO. If you use 1:1 assignment, you can define an object currency for acc assignment object **that is different** to COarea or Coy code currency.
- o **Transaction currency:** The currency in which a doc is posted to CO is transaction currency.
- o You have to use the same CoA in CO & in assigned Coy Code.
- o Fiscal year variants of the Coy Code & COarea can contain **different no of special Pd's**, they must have same no of posting periods. **The period limits of the fiscal year variants must be identical.**
- o You can use special pd's in FI to correct postings for year-end closing or to perform revaluations. If 4 special pd's are defined in FI but only one in CO, the postings from 2nd, 3rd, & 4th special pd in FI will be posted in 1st special pd in CO.
- o If no special pd's have been defined in CO, any postings made in FI special pd are posted to the last CO posting pd.

1:n

- o By assigning multiple coy codes to a COarea, you can perform cross-coy code cost accounting. You can allocate costs in CO to more than one coy code. In this case you may need to carry out **recon postings**, which you can do using the recon ledger.
- o There are 3 currencies available for evaluations:
 - o **COarea currency:** In cross coy code cost accounting, the COarea & coy codes may have different currencies. For COarea you can define a COarea currency that is the same as one of coy code currencies or use an additional currency in CO
 - o **Coy code currency:** In cross-coy code cost accounting you are only free to choose an **object currency if all the assigned coy codes have the same currency & this is the same currency as the COarea currency.** If this is not the case, the object currency in the account assignment object will auto be the coy code currency.
 - o **Transaction currency:** The currency in which a transaction is posted in CO is the transaction currency.
- o The **operational chart of accounts** is used in both FI & cost & revenue accounting.
- o As well as an operational CoA, each Coy code can have a country specific CoA with alternative account numbers. This country-specific CoA is structured according to legal req of the country it refers to.
- o The **fiscal year variants** of a COarea & Coy code can have different number of special periods. They must however, have the same number of posting periods.
- o **When to create COarea for more than one coy code:**
 - o If you req **cross-coy code reporting**
 - o If you req **cross coy code postings** such as activity allocations or assessments
 - o Where **logistical considerations** make it necessary
 - o Where a **calc value is to be spread** over more than one coy code
 - o If **profit centers cover more** than individual coy codes.
- o You cannot carry out CO closing before FI closing has taken place.
- o **Automatic recon postings are possible for cross-coy code allocations only**
- o **If you use one COarea, only one op concern is possible**

1. Cost elements and Cost Centers

- o **In Overhead Cost Controlling**, there is distinction made between master data & transaction data.
- o **Master data** contains information that remains the same over a long period of time. (cost elements, cost centers, activity types, skf's)
- o **Transaction data** is short lived and is **assigned to master data**, (line items, totals records)
- o **Cost elements** describe where the costs originated & are defined as primary or secondary cost elements. Primary cost elements are elements used in production that are procured from outside the company. Secondary cost elements are elements used in production that are produced within the coy itself.

- o **Activity Types** are production activities & services provided to the org by a cost center. They are used for allocating costs of internal activities to the areas that incurred the costs.
- o **Statistical key figures** are **values that describe a cost center**, are used as a basis for allocations (for example, distribution, assessment) & for performing key figure analysis.
- o **1. Cost Centers** are separate areas with in controlling at which costs incur
- o Before you can create cost center, you must first define a standard hierarchy
- o The name of std hierarchy is defined when you create the COarea.
- o The std hierarchy is a structure to which all cost centers within the COarea **MUST be assigned.**
- o You define the structure so it reflects the internal areas of responsibility & controlling & decision making structure within your org.
- o The cost center is the location where the costs are incurred. Cost centers can be set up based on functional requirements, allocation criteria, activities or services provided, geographic location and/or areas of responsibility.
- o For the purpose of Overhead cost controlling, cost centers are grouped together into units of decision-making, control & responsibility. To map this structure, you create the **cost center std hierarchy.**
- o Each level or node of a std hierarchy is a cost center group. As of release 4.6 you can assign **cost centers & nodes to one hierarchy level.**
- o You can create or change cost centers either using the relevant menu or directly in the std hierarchy maintenance function.
- o Cost Centers that are created or changed from within the std hierarchy have the **status inactive**, i.e. they are not handled as CO account assignment objects. The assignments can only be checked & cost center released as a transaction object once the cost center is active. **The activation process is triggered in a collective processing run.**
- o If you want to reassign a cost center to another area in the hierarchy, you can do this from within the std hierarchy maintenance function. If you use this method, you do not have to maintain the cost center master data again.
- o During the fiscal year you can only change the assignments of the org units (coy codes, biz areas, profit center) to a cost center if:
 - o the currency of the new coy code is the same as the currency of old coy code
 - o you have only posted planned data in the fiscal year
 - o The cost center is not assigned to a fixed asset, work center or HR master record.
- o **Cost center category** is an indicator in the cost center master data, which specifies the category for the cost center. Examples include **administration, production, or S&D.**
- o **You can use your own cost center categories, or use those supplied by SAP.**
- o Cost center categories allow you to **assign the same characteristics to similar cost centers. E.g. you can allow particular activity types only for particular cost centers. You can also use cost center category for cost calc, where it controls the % of overhead to be applied to that cost center category.**
- o In Customizing you can define lock indicators for each cost center category, or specify that the managing of quantities on cost centers is allowed.
- o When you assign a cost center to particular category (**you do this when creating the cost center**), the corresponding lock indicators and allowed values for this category are proposed as default values for this cost center.
- o **2. Cost Elements**
- o The CoA contains all G/L accounts belonging to FI
- o From the cost controlling view point a circular system exists because the **expense & revenue accounts in FI correspond to Primary cost & Revenue elements in CO** & because postings in FI are passed on in **real-time** to Cost & Revenue element Accounting.
- o In addition, it is only in CO that you can create **secondary cost elements**. These are used to record internal value flows like activity allocations, assessments & settlements.
- o You need to create expense accounts in FI with corresponding primary cost elements in CO. This ensures that you can reconcile expenses in FI with primary costs in CO. **Before you can create primary cost elements in CO, you first need to create them as G/L accounts in FI.**
- o To be able to post a **primary cost element**, you require a cost carrying object (like a cost center) to identify the origin of costs. Primary costs examples are salary costs, material costs etc

- o Secondary cost elements are used exclusively in CO to identify internal cost flows such as assessments or settlements. They do not have a corresponding G/L account in FI and are defined in CO only.
- o When you analyze revenues in cost controlling, R/3 system records them as revenue elements. **Revenue elements are Primary cost elements.**
- o When you create a cost element you must assign a **cost element category**. This assignment **determines the transaction for which you can use the cost element**. For example, category 01 (general primary cost elements) is used for the standard primary postings from FI or MM.
- o **Cost elements can be generated automatically.** You specify default settings, which define the individual cost element or range of cost elements to be created. You also specify their cost element categories.
- o R/3 only generates primary cost elements if the corresponding G/L account exists in the CoA. The system uses the cost element description in the FI G/L account master data as the cost element name. **You can change it in CO**
- o When you are processing the CoA list in FI customizing, you can set it so that cost elements are generated automatically when you create a G/L account.
- o **Secondary cost elements are generated for all cost elements you have defined. The description is taken from the cost element category.**
- o Once you have entered your default settings, a background session starts that generates the cost elements.

2. Activity Types

- o Classifies the type of activities that are provided **by one or more** cost centers within a company
- o If a cost center provides activities for other cost centers, orders, processes etc, then this means that its resources are being used. The costs of these resources need to be allocated to the receivers of the activity. **Activity types serve as tracing factors for this cost allocation.**
- o In an **internal activity allocation**, the quantity of the activity, such as number of repair hours is entered into system. The system calc the associated cost based on the activity price & generates a debit to the receiver & credit to the sender for both **quantity & costs**. **Internal activity is allocated using secondary cost elements which are stored in master data of the activity types as default values.**
- o You can restrict the use of the activity type to certain types of cost centers by entering the allowed cost center categories in the activity type master record. You can enter upto eight allowed cost center categories, or leave the assignments “unrestricted” by entering an asterisk (*).
- o **Activity type category** is used to determine whether, & how an activity type is entered & allocated. e.g. you can allow some activities to be allocated directly, but specify for others that they are either not allocated, or allocated indirectly only.
- o To enable **internal activity allocation**, you need to specify which cost centers provide which activity types at what price. You do this in R/3 system by planning the activity output/prices for a cost center. Cost center/activity output planning functions here in the same way as an additional master record
- o For **direct activity allocation**, you enter the quantity of activity to be allocated manually. To enable both costs & activity to be allocated, R/3 has to value the activity quantity allocated at the price **specified by the sender** for this activity type. For a direct activity allocation, the plan price for the combination “cost center/activity type” is used for this calculation
- o **You can enter the planned price either manually or have it calculated by the system automatically within planning.** If you want to set the price manually, you need to set the price indicator to 3, use it for non complex calculations e.g. where the rate depends on prices of external suppliers & not on costs of cost center.

3. Statistical Key Figures

- o **SKF's are figures relating to cost centers, profit centers & overhead cost orders** (e.g. no of employees, length of long distance calls) that give further **details on the setup, the consumption or performance output** of cost centers, internal orders, processes or profit centers.

- o You can post SKF's both as an allocation base for periodic distributions, assessments or activity allocations and to create key figures (ratios, e.g. personnel costs per employee)
- o SKF's may also be a value representing the services provided by one particular cost center e.g. the no of employees who carry out repairs in production cost center. These types of SKF's are called **activity-dependant skf's**.
- o You can use SKF's both as a basis for periodic transactions like assessments or distribution or for key figure analysis
- o **You can post both planned and actual SKF's**
- o **Two categories: type1=fixed; type2=totals**
- o SKF's are defined either as **fixed value** or **totals value**
- o The **fixed value** (e.g. employees) is carried over from the period in which it is entered to all subsequent periods of the **same fiscal year**. You only need to enter a new posting if this fixed value changes. **The fiscal year total is the average of the period totals.**
- o The **totals value** is only posted in the period in which it is entered (e.g. for long-distance calls). **The fiscal year total is the sum of all period values.**
- o **Used as an allocation base ;tracing factor' in overhead cost allocations**
- o Can be linked to Logistics information system (LIS), skf's can be transferred from LIS by linking a key figure from LIS (e.g. order receipts) to a skf (e.g. in CCA).

FUNCTIONS FOR ALL MASTER DATA-SUPPLEMENTARY SKIM

- o **Creating time dependant Master Data**
- o You can create **master data fields** for cost centers, cost elements, & activity types as **time-based**. If you change these fields for a particular timeframe, the system creates a new master record for this period. This means that several database records are maintained for each individual master record. This gives you flexibility in case e.g. a manger is posted out.
- o You specify whether individual fields are time-based in **Customizing**. Some fields like the assignment of a cost center to a (coy code, a biz area, or profit center) are defined by SAP as time-dependent & this time cannot be reduced if you have made actual postings to this cost center during current fiscal year.
- o The cost center assignment to the standard hierarchy area is a **non-time dependent** field. This means that **when you change the assignment, the system prepares historic & current cost center information.**
- o If you want to extend the validity period of a master data record, access master data maintenance & create a master record for the extended period in question. To avoid filling out the same master data fields, you can copy from the existing master record.
- o **Collective Processing**
- o R/3 provides you with collective processing func for **cost center master data**
- o You can select cost centers by entering intervals, groups or selection variants. Maintain all fields (except cust specific addl fields). Create groups using selected cost centers or switch from collective to individual processing of master data lists.
- o **You can also use collective processing to change or delete SKF's**
- o **Cost elements & activity types can only be displayed or deleted under collective processing**
- o You can create your own **list variants** for collective processing. **The list variant determines the master data fields that can be processed.**
- o In the list display of master data you can sort & filter data in same way as the ABAP list viewer
- o To make it easier to make selections at a later date, you can combine the objects displayed into **groups**
- o **Master Data Groups**
- o **You use master data groups to summarize the various types of master data in Cost Center Accounting for analysis,**

planning & allocation purposes.

- o You can use the groups to process more than one master data record in one transaction e.g. when planning or reporting.
- o Master data group function enables you to create a **hierarchical structure**. Master data is then **assigned to the groups at the lowest level and then summarized in groups belonging to the higher levels**. You can create any no of hierarchical groups as you require.
- o The **cost center std hierarchy** is a special type of cost center group. **All cost centers in a COarea must be assigned to the std hierarchy**. Alongside the std hierarchy, you can use the functions in group maintenance to **create any number of alternative cost center hierarchies**.
- o You can create new master data groups by using existing groups as templates.

Master Data Groups with Selection Variants

- o A selection variant is used for master data selection
- o **You only need to enter the selection criteria for the object once & then save them in a selection variant**. The system uses the criteria stored in the selection variant during runtime to determine the corresponding objects.
- o If you create or change groups of cost elements, cost centers, activity types, SKF's etc, then you can also assign a selection variant to an end node. This provides you with a dynamic group in which the contents can change.
- o **When you create or change groups, you cannot create any new sel variants**
- o **System performance** is better for groups w/o sel variants.

Copying Groups/Hierarchies with suffix

- o Master Data groups are not time based. Therefore if you change the group structure the system prepares the current & historic info in the new structure. If you want to save an **historical hierarchy** then you must save a copy before each update
- o You can copy the groups that have an existing hierarchy with a **suffix**. A period & a name upto 4 characters long is added to the name of the group. The hierarchy and the suffix are saved. Now u can make changes to current hier.
- o The standard hier must NOT contain a suffix
- o If you copy a group for which a suffix exists, this suffix is replaced by the new suffix you specify
- o The suffix name does NOT make a group time-based.

4. Transaction Based postings and activity allocations

- o You want to enter all activities, which you provide for a customer to a cost object. You can use this to create the billing documents.

Transaction Based Postings

- o If Biz transactions are entered, then primary costs are posted to cost centers as a result. **Costs are categorized using the posting transactions.**
- o Biz transactions that have a bearing on costs can be entered in R/3 application components like HR, Asset Acctg, MM, & FI. The result of this posting is transferred as primary cost posting to CO. e.g. **you can post a vendor invoice containing an expense item to the relevant cost center in CO.**
- o You can adjust incorrect account assignments using CO-internal reposting. **The costs are reposted using original primary cost element.**
- o **The main difference b/w reposting & allocation** is that in case of reposting, the original debit amount is always reduced on the sender, whereas for allocations, the original debit amount is not changed, but a separate credit amount written to the sender instead.
- o A direct activity allocation involves entering the activity quantities that a cost center provides for another account assignment object. These activity quantities are multiplied by the price per activity unit stored in the system. The resulting total is credited on the sender (&debited on the receiver) **using a secondary cost element.**
- o CO processes both actual postings & commitments. A commitment is a payment obligation which, although not

entered in FI, will result in actual costs through to the business transactions that follow.

1)Document No Assignment:

- o The various activities that change an object (such as, a cost center, or an order) appear in the R/3 system as biz transactions.
- o You need to define no intervals for all biz transactions that generate CO documents. **It is possible to copy document no intervals from one CO area to another.**
- o There are 2 steps to issue no intervals for documents:
 - o 1) You group more than one transaction together. If you want to assign a different no interval to each transaction, you can create a group for each transaction
 - o 2) You assign the group to an internal or external no interval. This enables you to use one group of number intervals for similar transactions.
- o You define no intervals for CO documents **independently of fiscal year.**
- o SAP recommends using diff no interval groups for actual & plan transactions.

2)Entering Primary Postings

- o **2a)Event Based Postings: Integration**
- o You can enter primary costs either directly in FI (an invoice in AP) or they can be generated from other applications (goods mov in MM) and then transferred to FI. These biz transactions (events) generate FI documents that are req for external reporting within accounting. These documents are stored in **central document file** for external accounting documents. **FI documents contain at least two line items and must balance to zero.**
- o **Line items are also written in CO for these biz transactions, if they are also posted to CO account assignment objects (like cost centers).** The CO posting is often a one sided entry, as only the income statement P&L postings are posted to CO. The line items rec the biz transactions from a cost controlling standpoint, & are managed in a **CO line item file**. In addition, the R/3 system summarizes all line items to form totals records, which in turn are stored in a CO totals rec file.
- o **2b)Account Assignment Logic: Posting to Cost Center**
- o **Cost & Revenue postings in CO can trigger subsequent real & statistical postings**
- o **Real Postings** can be processed & can be allocated/settled with other CO objects. Only real posting (only 1) can be made to CO
- o **Statistical Postings** are only used for information purposes, u can make as many as u wish.
- o **The Account Assignment Object determines if a posting is statistical or real.** e.g. the master data of an overhead cost order is used to determine if the order is real or statistical. **Only real postings are made for a real order and only stat postings for a stat order.** **Cost Center is an exception to this rule you can make both real & stat postings to a cost center.**
- o If you want to post CO costs, you **need to use the source document** (e.g. for vendor invoice) to identify the corresponding real CO account assignment object. You can enter additional statistical objects, or the system can derive them.
- o **You always make stat postings to the profit center.**
- o **2c) Account Assignment Logic: Posting to Cost Center & Order**
- o **During posting only real account assignment object can be transferred.** The only exception to this rule is the account assignment to a cost center, & an additional real account assignment object. In this case the system always updates the cost center statistically. If you specify a real order & a cost center in the posting row then the real posting is made for the overhead cost order. Statistical postings are entered for the cost center & profit center. However, if the order is only statistical, then it is posted to as such, & the cost center receives real postings.
- o You can analyze statistical postings to cost centers in the cost centers: actual/plan/variance report
- o **You can only assign one object type to each posting row. This means that you cannot post the same transaction row to more than one cost center, or order & so on.**

- o **2d) Account Assignment Logic: Revenue Postings**
- o Revenue can only be posted as real postings to a profitability segment, sales order, sales project, or to a real order that can have revenues. Revenue postings to the profit center are statistical, the same as for cost postings.
- o Revenues can also be recorded as statistical value on cost centers.
- 3) Reports in Cost Center Accounting**
- o **3a) Report**
- o You can use the report tree to select reports from the info sys. The report tree gathers all reports within an application & structures them in a hierarchy.
- o You can define your own report menu
- o Reports that you created for your own req or SAP std reports can be integrated into the report menu of an activity group.
- o Overhead cost controlling consists of the fol tasks: Planning Allocation Control Monitoring of overhead costs.
- o All overhead costs are assigned to the cost centers where they were incurred, or to the jobs that triggered them. The system provides you functions to allocate overhead costs according to source.
- o At end of the period, you can compare the planned costs & their corresponding actual costs. You can also compare 2 sets of actual data from different periods to analyze cost development over a period of time.
- o **3b) Total Values & Line items**
- o In R/3 a distinction is made between line items & total records. Both are recorded in separate database tables
- o A line item is entered for each biz transaction which can be accessed using line item report
- o For reporting, all the line items entered for biz transactions are auto stored in totals records. The amounts are totalled in R/3 based on the cost center/cost element or cost center/element & activity type thus enabling quick evaluation of data. You can analyze totals rec using report painter/report writer report.
- o Normally, you would analyze a cost center using a Report Painter report. If you req detailed info for a particular cost element posted to a cost center, you can call up the corresponding line items.
- o The line item report displays the actual costs, plan costs or commitments as line items & based on the posting documents this info is displayed as a list (ABAP list display)
- o **3c) Interactive Info system**
- o can be used to total & analyze all, or selected biz transactions, acc to various criteria (e.g. cost center/cost element)
- o The totals rec in Report Painter report are normally analyzed but sometime the line items from the summary report are also selected & examined. You can also move from the line items to the corresponding source documents. The source doc can be an FI doc or an accounting doc from reposting
- o You can call up other reports using report/report interface
- o **3d) User Settings**
- o You can specify general & user-specific default values for the selection criteria & report currency.
- o You can enter fol default values: Basic data (COarea, cost center, element etc), settings for extract management, planning timeframe, Reporting timeframe, report currency.
- o **3e) Variation**
- o The variation function enables you to select a separate report for each element of a group that was generated during a selection run. This function is especially useful when creating a report in background from a cost center group.
- o The variation function can only be used if you have activated it in report definition.
- o In the dialog box for the variation you specify which nodes or cost centers are to be output. You can choose one of the 3 options:
 - o Expand displays reports for all cost centers or nodes belonging to a selected group.
 - o Do not Expand displays only one report for highest node of sel gp
 - o Single Values displays only reports for the cost centers belonging to sel gp
- o You can save reports for cost center groups as extracts with activated variation. When you come to analyze your extracts for the group, you can then access reports for individual cost centers quickly.
- o **3f) Line item Report: Maintain Layout**
- o R/3 provides you with standardized layouts, you can define addl variants for global or user-specific use

- o You can select as many fields as req from the group of avail fields (incl customer specific fields) for a layout that is enterprise or user specific.
- o You need to define the item column in the report, & the column width for each fd.
- o Depending on the column width, R/3 auto uses the short or long text from field name. It also uses log-on language avail for the report.
- o You can sel an ascending or descending sort seq for each column
- o You can define filters for each column. Rows that fulfil filter criteria are not displayed. However they are incl in totals & subtotals calc.
- o You can also define totals interactively, by sel a column & then totals

4) Account Assignment Help

o 4a) Default & Auto Account Assignments

- o Default & Auto acc assignments are req for primary cost elements used in auto generated postings like exch rate diff, price diff & discounts
- o You can define Default & Auto account assignments for posting to primary cost elements, R/3 then auto includes the specified (additional) account assignment for the primary postings you make.
- o You define default & auto acc assignments for cost elements that you always post to a particular cost center.
- o You can also define the assignment of an overhead order or profit center to a cost element. Whether Auto or default, the account assignments are default values that can be overwritten in the application.
- o You can enter default account assignment in the cost element master rec at COarea level & account level
- o You can enter auto account assignments in Customizing activity *maintain auto acc assignment*. In this activity, you can also define more detailed acc assignments to biz areas & profit centers.
- o When system derives the info, it determines the most detailed acc assignment, it reads Customizing first. If no info is found here it uses master data for cost elements.
- o The assignment objects defined for auto acc ass therefore take priority over addl acc ass for default acc ass.

o 4b) Validation

- o You can inc the accuracy of CO data by using Validation & substitution, where the system checks if data entered meets one or more conditions you defined. These checks take place during data entry thus ensuring posting of only valid data
- o You use Validation to carry out validity checks on objects such as cost elements or cost centers. If the conditions you specified are not met, R/3 displays a user-defined message. This could be a warning, error or info message. or the system stops your posting with immediate effect.
- o You create Valid & Subst for COarea & for a particular event.
- o An event is a particular point in transaction processing, the fol events have been defined for CO:
 - o The Line item event: (0001) uses data from the CO doc header (COBK) & CO coding block (COBL). It controls posting in both external acc & in CO.
 - o The Doc Header event: (0100) uses data from COBK & effects only manual CO postings like reposting or activity allocations
 - o The CO Internal Posting Sender/Receiver event: (0002) is only used for CO internal postings & used to check sender/receiver relationships in periodic allocations.

o 4c) Substitution

- o You can also carry out validation checks when making substitutions
- o If your condition is met for a substitution R/3 substitutes the values with others defined by you, w/o informing the user of this change.
- o An additional event- the Order Event (0010) is defined for substitutions, used only for collective processing of order master data.
- o If you define a substitution that contradicts a validation, the system informs this by displaying a message. Therefore validation has priority over subst.

5) Adjustment Postings

o **5a) Reposting Costs & Revenues Manually**

- o e.g. salary postings from the personnel dept can be posted in their entirety to a **clearing cost center** (to keep no of postings in FI to min), this collective posting is transferred to CO. In order that the salary info can be used in CO, the costs have to be assigned to the responsible cost centers. **The reposting credits the clearing cost center& debits the originator of the costs.**
- o You can **manually** repost primary cost & revenues using **event-based repostings**. You do this to mainly **correct posting errors**
- o **When you make an internal reposting, the primary costs are reposted (under the original cost element) to a receiving order.** If the original transaction is posted using an incorrect cost or revenue element, the transaction must be corrected in the original application component in order to ensure recon b/w external & internal accounting.
- o **NO sender check is made,** the system does not check if the costs you repost actually exist on the sending cost center. Which means that negative costs may appear on the sending cost center.
- o The biz transaction is documented by means of line items on sender/receiver side.
- o You can set the system to make **event-based repostings auto.**

o **5b) Reposting Line Items**

- o The function for reposting line items enables you to repost specific line items
- o This function is designed to enable you to **correct primary postings that you assigned to wrong accounts.** To do this the **CO doc must contain ref to the original FI doc.**
- o **Reposting line items is the equivalent of reversal on the sender object.**
- o You can enter more than one receiver object.
- o Reposting line items creates CO documents which, **unlike event based-reposting of costs,** always contain a ref to the FI doc, so you can trace a line item reposting back to the original FI doc.
- o If you repost a line item in CO, the original account assignment object remains noted in the FI doc. To correct the account assignment obj in FI you will need to reverse the FI doc. **If you have already carried out a line item reposting in CO for this doc you will first need to reverse this reposting before you can reverse the doc in FI.**

6) Automatic commitments & funds commitment

- o **6a) Auto commitments:** Commitments are payment obligations that are not entered into the accounts, but that lead to actual costs at a later date. They are incurred in the purchasing function in the MM component:
 - o The internal communication for purchasing req is known as **purchase requisition**. A purchase req is a provisional obligation that can be changed anytime. **You do not need to assign a CO object to a purchase requisition row.** If you do not do so the commitment is not disp in CO.
 - o A **purchase order** is a contractual agreement specifying that goods or services from a vendor will be taken under certain, agreed conditions. It is a binding obligation. **For a purchase row that is assigned to a cost element, you need to specify a CO object, so the commitment is also displayed in CO.**
- o If you create a purchase order with reference to a purchase requisition the commitment is **reclassified** (as a purchase order commitment) in CO.
- o The commitment is **reduced** by processing goods receipts against the purchase order. **Actual costs are posted to the CO object.** **The biz transaction is continued until the purchase order is processed, & commitment amount =0**
- o You need to activate commitments management in COarea in CO. Additionally, the cost center may not be locked for commitments.
- o **Commitments are not reduced when you create a outline agreement.** These are only incurred when you create the contract release order or good release order (scheduling agreements)
- o **6b) Funds Commitments:** You can **use the manual funds commitment function (manual commitment) to enter expected costs that were not entered in the system using a purchase requisition or purchase order.** This enables you to reserve planned amounts at an early stage.
- o The funds commitment must be reduced when you enter corresponding transactions such as purchase requisitions, purchase orders & invoices.

- o You reduce the funds commitment by entering the corresponding amount for a reservation item. The amount you enter must not exceed the amount still open.
- o You can specify reduction references in the reduction history for a commitment reduction already entered.

7) Direct Activity Allocation**:

- o Direct activity allocation enables biz services provided to be measured, entered & allocated.
- o You need to create the corresponding measurable tracing factors in system; these are called Activity Types in CCA. To directly allocate activity, create an activity type (ATypecategory 1=manual entry)
- o If you want to enter a direct activity allocation, enter the cost center that provides the activity (sender Cost Center), then the object that receives the activity (receiver), the type (activity type), & the qty of activity provided.
- o NOTE that only one cost center from the sender can be allocated to an internal activity allocation. The receiver can be any real CO object such as a cost center, an order, a project & so on.
- o To allocate activities directly, u need to define which cost centers are to provide which activity types, by planning activity output
- o During direct activity allocation, the sender cost center is credited and the receiving cost objects are debited. **Debiting & crediting are executed by secondary cost elements (cat43)**. D&C are the activity provided, multiplied by the activity price.
- o The cost element used for direct internal activity allocation is derived directly from the master data for the activity type. **The cost element cannot be changed in the allocation transaction**
- o Direct activity allocation is rec by line items on the sender side & receiver side.
- o **Reposting Direct Activity Allocation**
- o Reposting internal activity allocation is used to adjust posting fields.
- o A search function is available, which provides you with the documents you are looking for.
- o The total quantity of the allocated activity must remain the same, although you can allocate to diff receivers.
- o You can make adjustments in periods, but not in the same period from which the doc to be adjusted originates. However, the fiscal year must remain the same.
- o You can repost the fol doc for direct activity allocation:
 - o doc entered manually into cost accounting
 - o CO doc for confirmations (from PP & CO)
 - o CO doc for time entry (time sheet)
- o Reposting creates a reference in the reposting doc to the CO source doc.

5. Reconciliation Ledger

CO data is totalled & valuated in Recon Ledger. It reconciles data from CO to FI

Recon ledger shows you the data in all CO applications for a cost element, totals for coy codes, biz areas, object types, class etc.

One purpose of recon ledger is to create recon postings:

- o Ext postings to FI that are relevant to cost are auto transferred to corres CO application component (real time). The CO totals are updated for the recon ledger for these postings.
- o If amounts in CO are posted across coy codes, functional area or biz area, then this info needs to be transferred back to FI which is not auto done. The CO totals in recon ledger are however updated.
- o You can use recon ledger to create a posting for reconciling FI & CO postings.

In addition to CO/FI recon, the recon ledger also has fol informative functions:

- o Cross-CO cost analysis
- o Navigation help & access to CO for the P&L statement.

Recon ledger uses criteria below when deciding on posting & creating a total:

Account (cost element), coy code, biz area, origin gp (MM), object type, object class, functional area.

The object class puts the Co objects into biz categories. The four object classes for CO are: Overhead costs,

investments, production, P&L, & S&D

R/3 also makes a differential update of data records, during each update, 3 currency amounts (COarea currency, coy code, & group) are updated as well as qty field.

During allocations, partner rec fields (senders or receivers) are also updated. Using this data, you can value the value flow across coy codes, biz areas & functional areas.

Recon postings: Account Determination

R/3 system needs the **adjustment account** for sec cost elements as there is no corresponding G/L account. The system usually creates the recon posting on the corres FI account for primary costs. However, you can also define the **extended account assignment** for primary cost elements if the recon posting is not to be made to the FI/GL account. The acc determination func helps you decide to which R/3 recon acc, postings are to be made to. **You need to create adjustment & clearing acc in FI.**

You can use the acc determination to assign the adjustment acc independently of the coy code. You need to maintain **posting keys** for each CoA, but it does not matter whether you use std or extended acc determination.

For std acc determination recon acc's are only defined by biz class & object class.

If you req more than one adjustment acc for your recon postings then use **extended acc determination**

Recon postings are used for transferring postings from CO to FI that are **cross-coy code, cross-biz area & cross-functional area.** You can create recon postings for FI automatically.

You have the fol options:

- o make all recon postings
- o Select individual cost flows from all relevant cost flows.
- o Select cost flows to be reconciled with user-defined rules.

System displays a list that facilitates the selection, which is created using the data records in the recon ledger.

You can make recon postings at any time. However, **it is imp to ensure that the recon postings are made after the last relevant CO posting. If you repeat the reconciliation, R/3 system only posts the difference b/w the new CO values & the last recon posting that was made.**

A ledger used for summarized display of values that appear in more detailed form in the transaction data.

Reconciles Controlling with Financial Accounting

- a. The reconciliation ledger provides reports for monitoring the reconciliation of Controlling with Financial Accounting by account.
- b. It can identify and display value flows in Controlling across company code, functional area, or business area boundaries.
- c. Value flows can be used in Financial Accounting as a basis for summarized reconciliation postings. **Reconciliation postings replicate the value flows in Controlling that affect an organization's legal financial statements (such as the balances and the profit and loss statement).** Users can enter reconciliation postings based on the values identified by the reports, or the SAP System can make automatic reconciliation postings.

Provides an overview of all costs incurred

- d. Reconciliation ledger reports provide an overview of the costs and are therefore a useful starting point for cost analysis. For example, an item in the profit and loss statement from the Financial Information System (FIS) can be examined in the reconciliation ledger reports with respect to the relevant costs. For more detailed analysis, reports from other components within Controlling can be accessed from the reconciliation ledger reports.

6. Periodic reposting and cost allocation

1)Periodic Reposting

- o Is used as a **posting aid**, **primary postings** like telephone costs are collected on an allocation object (cost center, overhead cost order, biz process, WBS etc) **to restrict the no of FI postings.** These costs are then allocated at period end closing to corresponding CO objects using a key defined by user.

- o The **receivers** of periodic repostings can be cost centers, WBS elem, internal orders or cost objects. You can restrict the no of receivers in Customizing.
- o You can **only post primary cost**, the original cost element remains same.
- o Line items are posted for the sender as well as for the receivers.
- o To save memory, R/3 does not save info from clearing cost center in totals rec during a periodic reposting.
- o Periodic repostings can be **reversed** and repeated as often as nec.
- o **1a) cycle-segment method** is used for **defining** periodic reposting and also for defining distribution & assessment
- o To display **allocation relationships** between senders and receivers you need to make fol entries:
 - o Which objects were the costs allocated from?
 - o Which objects were the costs allocated to?
 - o Which costs should be allocated?
 - o How are the costs distributed among the receivers?
- o In a **segment**, cost centers with **allocation values** based on the same rules are combined with receiver objects that have **tracing factors** based on the same rules. For example, the telephone cost center allocates **tel costs** based on **tel units**. (allocation values<->tracing factors)
- o If another rule is to be used for an allocation, you need to create a **separate segment**.
- o Several segments are grouped into a **cycle**. You can define a cycle for the entire COarea.
- o Due to performance considerations it is recommended that you create more than one cycle & process them sequentially. You can also **separate cycles for plan & actual** allocations.
- o **1b) Sender & Receiver Rules**
- o You can combine sender & receiver relationships using **rules**
- o **Sender values (sender rules)** can be **posted values**, fixed amounts, or fixed prices. **If you use posted amounts you can work with plan & actual values.** You can specify a % under 100% to cater for in house use.
- o On the **Receiver side (Receiver tracing factors)** you can store **fixed amounts, fixed %, fixed portions & variable portions** as rules.
- o The tracing factors of the variable portion identifies a posted value on the cost center as an allocation base. **You also specify if the variable portion is to consist of costs, consumption, SKF's or activities.** You can use plan or actual values as an allocation base.
- o **1c) Running More than 1 cycle:**
- o If you wanna be more economical with the allocation process, you should create separate cycles. If a cycle contains an error, you only need to repeat that cycle, not the entire process. You can also create a modular allocation process in which the allocations are processed separately.
- o A **dependant cycle** uses the results from the previous cycle. You need to execute dependant cycles in the correct order to enable the values to be processed correctly. On the execution screen you can enter more than one cycle and the order in which they are to be processed.
- o **Independent cycles can be processed in parallel if they have the same allocation type.** To do this, you have to assign the cycles to different cycle flow groups in the header data of the cycle. **You cannot process the cycles in the same cycle flow group in parallel. You can only start cycles simultaneously in different sessions if they belong to different cycle flow groups or if you use background processing.**
- o Once processing is complete, you can check for errors using the **processing log**. You can analyze all the errors that occurred using the info by R/3

2) Cost Allocations

- o **2a) Distribution:** done to transfer **primary costs** from a sender cost center to receiving controlling objects.
- o During distribution only **cost center or biz process** can be used as **senders**.
- o A distribution **receiver** can be a **cost center, WBS element, Int order, cost object or a biz process**. You can restrict the number of receiver categories in Customizing.
- o **Primary Postings** (e.g. electricity costs) are collected on a cost center & allocated at the end of the period by means of the user-defined key.
- o You can only distribute primary costs. During this process the **original cost element remains the same**.
- o **Line items** are posted for the **sender as well as for the receiver**, enabling the allocation to be recorded in detail.

- o You can **reverse** distributions as often as required.
- o You can use the **cycle-segment method** to define sender-receiver relationships.
- o **2b) Comparison: Periodic reposting & Distribution:** Diff b/w periodic reposting & distribution are **due to information content & performance**.
- o For **periodic reposting** **no separate credit rec is written on the sender** for the cost element in the summary report. Instead the **totals record** for the cost element is reduced on the debit side, which means that the original debit amount can no longer be checked here. (**unclean credit**).
- o However, during **distribution** the system writes a totals record for the credit (**clean credit**).
- o **The information on the receiver is the same for periodic reposting & dist.**
- o **During distribution the system also updates the partner in the totals rec for the sender.**
- o Fewer total rec are written during periodic reposting, performance is better than during distribution
- o **2c) Assessment:** was created to transfer primary & secondary costs from a sender cost center to receiving controlling objects.
- o **During assessment, cost centers or biz processes can be used as senders.(like distribution)**
- o **Receivers** are same as distribution which can be restd using Customizing.
- o **Primary & sec postings** are allocated at the end of the period by means of a user defined key.
- o **During assessment, the original cost elements are summarized into assessment cost elements (sec cost elem cat=42).** As the system writes fewer totals rec during assessment, u get better system performance than other methods.
- o **Line items** are posted for the sender as well as for the receiver, enabling the allocation to be recorded in detail. **However, the system DOES NOT display the original cost elements in the receivers, so assessment is more useful if the cost drilldown for receiver is not important**
- o **Similar to distribution the partner is updated in the totals record during distribution.**
- o You can **reverse** assessment as often as required.
- o You can use **cycle-segment method** to define sender-receiver relationships.
- o **2d) Overview: Periodic Reposting, Distribution & Assessment**
- o **You can only use periodic reposting & distribution for primary cost elements.** The costs are transferred to the receivers using the **original cost element**, so they are transferred to the primary cost elements of the receiver. Secondary, cost elements remain on the sender.
- o The **assessment** allocates primary as well as secondary costs. The information on the original primary cost elements for the sender is lost because the costs are allocated using an assessment cost element (category 42). **You can use more than one assessment cost element for differentiation purposes.**
- o For **performance reasons**, it is recommended that you use periodic reposting rather than distribution, as the **system does not write any sender/receiver relationships on the totals records level**. Assessment has the best performance as **costs from different primary & secondary cost elements can be totalled in one posting to the assessment cost element**.
- o **2e) Cycles & Iteration**
- o **Reciprocal relations** can exist b/w two cost centers, which mean that sending cost centers are **not completely credited**.
- o The segment relationships within a cycle can be defined so that repostings & allocation of cost centers with different segments (cost center also cost receiver) take place. Cost centers that were already credited can thus be redebited during cycle processing.
- o To guarantee that the cost centers are fully credited, R/3 iteratively processes all the sender & receiver relationships defined as a cycle. The segments are run until each sender is credited **as defined by the sender value**.
- o If you deactivate the iteration indicator in the cycle header, the system processes the segments in the given sequence once. This type of processing is faster than iterative processing.
- o **Cycles cannot iterate with each other, even if the cycles are the same type.** Therefore when you create a cycle, you should ensure that cost centers with the same allocation relationships are processed in the same cycle.
- o **Cycle Header:**
- o The **formal check function** enables you to test an individual cycle prior to an update run. You can use the error log to help you correct faulty segments and iterative relationships (customizing). The system checks for example whether the total % rate adds upto 100% or whether the fixed value rules are the same for both senders & receivers.
- o The system uses the **object search** to display the cycle using the field values you selected (cost center, activity type

etc) & to display the segment in which the values searched for arise. If you wish, you can call up the corresponding segment using the field value.

- o You use the **segment overview** function to display all segments used in a cycle. If you want to display a particular segment. You can use the search function to search for this segment within the cycle. You can use maintenance functions to move segments in the segment overview list; this alters the seq of the segments when carrying out the allocation run.
- o You can **sort & add** segments in a cycle in line with your requirements.
- o You can display the **change documents for cycle maintenance**. The system logs various cycle & segment info or settings incl the end date of the cycle, the date the cycle was last changed, the name of the last person to make the change, the segment name, the sender rule, the receiver rule, the sender % rate, the assessment cost element and so on.
- o **2f) Assessment: Allocation structure:** For a clear picture of costs to be assessed, you can summarize individual cost elements or **cost element intervals** into different assessment cost elements.
- o You can decide in each segment whether to assign a single assessment cost element or allocation structure.
- o In the **allocation structure** you can define which cost elements are to be allocated under which assessment cost elements. Therefore you do not need to create more than one segment to obtain info on the source of costs to be assigned.
- o **In the allocation structure you can assign single cost elements, cost element areas or cost element groups to an assessment cost element.**
- o If req, you can go to the maintenance for allocation structures from the **segment maintenance**, to display, change or create an allocation structure.
- o **2g) Cumulative Allocation:** Assessment, distribution & periodic repostings are usually executed by period. This means that values posted to a sender in a given period are allocated by R/3 on the basis of tracing factors entered in this period.
- o If the tracing factors or the sender amounts to be allocated are subject to strong fluctuations & you are using period based processing, you cannot assign the allocated costs according to their source. **Cumulative processing of the tracing factors or sender values lets you smooth out these fluctuations.** It does this by spreading allocations across periods.
- o If you execute a cycle for which you have selected cumulative processing, R/3 allocates the sender amounts posted upto and including the current period, based on tracing factors accumulated from period 1 onwards.
- o R/3 also accumulates the allocation amounts it has determined and posts them in the current period minus the amounts allocated in prior periods. This ensures that postings in prior periods remain unchanged.
- o **Cumulative processing is only possible for distr, assessment & per reposting.**
- o Only advisable if sender/receiver relationships stable in fiscal year.
- o **Cumulative processing always accumulates values starting from pd 1.**
- o **2f) Reversing & Reposting Segments:**
- o The segment reversal deletes the allocation postings for the selected segment by reposting the results with reversed +/- signs. **Data for the current pd-end closing transaction is not changed.**
- o **Segment reversal & rebooking** deletes the allocation but retains the component data. If req you can correct data from previous periods for a particular segment or segments. You can change skf, switch round +/- signs, select different receivers.
- o **You can use the rebooking functions only in combination with the reversal function;** a separate transaction for rebookings does not exist.
- o **Allocations belonging to previous periods must have used the cycle & segments and the current period must NOT be closed.**
- o Although the pd that is to be reversed is normally closed, but not always.
- o **You do not need to repeat period end closing for previous periods;** reporting remains consistent for all periods in questions.
- o **Segment adjustment is possible for assessment, distr & per reposting.**
- o Individual segments are reversed & rebooked but not whole cycles. Iterative relationships between cycles are not included.

- o **2g) Manual Cost Allocation**
- o Manual cost allocation lets you post primary & sec costs manually. Unlike repostings that reduce original debit line on cost center, under manual cost allocation, a separate credit line is written to the sender.
- o Use it for **simple allocations**, to avoid Customizing.
- o Manual cost alloc also lets you adjust **incorrect sec postings** & import ext data.
- o **You can use manual cost allocation for all cost element categories except cat 43 (alloc of activities/processes)** which may only be used for activity allocations. **Sender & receivers** incl cost centers, internal orders etc.
- o You can use manual cost allocation for **actual data** only.
- o Costs that are debited to a cost center by manual cost allocation cannot be further debited using periodic reposting.
- o Periodic repostings are only used for correcting postings & should be carried out before the allocations (manual or auto) takes place.

Schedule Manager-(+)-(1-10%)-(60)-(71)

1. Task List

Task list is a central store for all tasks in R/3 system and is available to those with authorization. It is a list of all work to be done.

Task list is the **central unit** in the Schedule Manager. System provides you support in form of user instructions when you create T lists.

Every enterprise has lists that document in detail the individual tasks for period-end closing.

You can store summaries of these lists in R/3 & make them accessible for every employee involved in period end closing.

Without schedule manager access & reconciliation is difficult & changes not recognized or active immediately.

With schedule manager changes immediately visible & effective, system executes settlement, access available to everyone with authorization, **documentation & flow for pd end closing centrally integrated into R/3 system**

In the **structure tree (task list)**, you can create **transactions (tasks)**, such as those required for period-end closing, if necessary you can plan them in the **daily overview** for execution by the system.

Creating a Task list

In **Preparatory tasks**: 1)collect existing documentation & process flows, 2) decide on the people involved & their responsibility, 3) specify the separation by org units, 4)review & transfer process flows & structures into R/3.

You can create a T list for all enterprise, or for several enterprises that have been separated into areas.

You must structure the **time flow** for period end closing.

The Four Task Types: cover all possibilities in the SAP R/3 system.

These are: 1) Documentary character, 2) Manual Task in System, 3) Background Job, 4) Collection of jobs.

If a job must be started manually, you must create a **NOTE** & the transaction is then started manually.

Programs with variant can be run in Background (e.g assessment, settlement), you obtain program names from input help or appendix.

You can define the variants for the corresponding program in transaction **SE38 or from the task list**; you can also use existing variants.

A flow definition is a collection of several jobs.

Documenting a Task List: You can document every task and task group in the task list with R/3 notes or MS office docs.

For every task you can nominate a responsible person to be contacted in case of problem.

Complete documentation aids transparency of Pd end closing.

Office docs stored in R/3, not possible to use em from external PC, the docs are in a task list & transported with it, if you want to include existing office documents in task list, you must copy them.

Executing Tasks from a task list: You cannot schedule a note.

Prog with variant creates background job which can be scheduled.

In Schedule manager you **do not** receive an automatic confirmation that the task was completed successfully.

User can define it manually in Schedule Manager.

2. Monitor:

During period end closing you need to recognize, analyze and correct any errors as quickly as possible.

Communications & info sharing is very important for coordination, current status info and answering questions.

Single Screen of SM monitor has all tech & biz info required, you can view colleagues work, processing sequences, technical & biz status.

Detailed data has info on runtime, user, parameters entered and application specific data (org unit, period, fiscal year etc).

Messages & results lists available anytime. When you execute a job you receive messages & result lists online.

Job logs or spool lists available.

You can navigate to the monitor directly from the daily overview for one or more jobs.

If you want to monitor the total progress of period-end closing using more than one task list, then you can select all jobs by running SCMO transaction. In external monitor, use display is not based on task list.

External use of the monitor also enables you to use the task list at a later time.

3. Flow Definitions

Monitoring of delayed postings is used in **flow definition** to send the start signal to the next job after the previous job is updated.

if background job is updated asynchronously it means that several update tasks take longer than the job itself & you do not get complete data

To avoid inconsistencies a function in schedule manager monitors the end of the update, the update column of SM monitor shows whether the update as well as the job has ended.

Using Selection Variables: To schedule background reports in SM you need to create a variant. The appearance of the report selection screen is saved in this variant. If for example the report needs the period and fiscal year, then you would have to change the variant before each processing run, by entering the new fiscal year and saving.

To avoid this in SE38 (ABAP editor) you can define fields for a variant as **selection variables** and then select variables for these field, which can be created and maintained using the STVARV transaction. After all this you only need to change period value once before the start of the new period, this then applies automatically to all variants that use this variable.

This logic also applies if you use a report with a variant in flow def.

TVARV variables are determined during runtime and are GREAT if your system landscape (authorizations) do not allow changes to variants or flow definitions in the productive system.

A flow definition can itself contain flow definitions (nesting). If you define a closing performed parallel for multiple plants the TVARV variables might be useless as both plants use same value of variables for periods or fiscal year.

You can create multiple TVARV variables for the same variable and use them in parallel sections, for this to be possible you would however have to save multiple variants and thus multiple sub flows, the solution to this new problem is the **Schedman-TVARV** variables.

Schedman variables must be specified in the variant like a normal TVARV variable. While **inserting the subflow definition** in the workflow builder, you can define the value for these variables or, when **executing a flow definition** you have another opportunity to supply schedman variables with values. These are then globally valid for all variables that are not yet filled.

Fol sequence applies when determining the current value of a variable:

Value from Workflow builder per subflow definition value from popup during scheduling value from TVARV.

In Schedule manager you **do not** receive an automatic confirmation that the task was completed successfully.

User can define it manually in Schedule Manager.

SM TVARV variables must also be created in the STARV transaction with an identical name.

Person responsible for objects in worklists:

- i. Definition of rules for finding person responsible for each worklist application in the task list.
- ii. Automatic determination of the person responsible for each object
- iii. sending objects to the people responsible using SAP mail.

4. Worklists

Worklists are **another means** to execute period end closing with speed & efficiency. Help you see **flow definitions**, get improved performance and easy error analysis. **Technically worklists are extended flow definitions, which means you can create worklists in the same way as flow definitions.**

You can integrate worklists into the SM.

Flow without Worklists: A workflow chain can contain between 4-10 steps.

It is only after all jobs are run that the system detects any object errors that occurred and it is difficult to find the source of the error.

In a flow def without worklist the **database is accessed unnecessarily**, as each job reads the relevant object from the database then validates and processes them.

After you correct an error you have to run all jobs again.

The solution to these problems is WORKLISTS!

Flow with Worklists: **The selection report selects all objects from the database that are relevant for subsequent jobs.** The system creates an entry in a special worklist for every object

The contents of this worklist are transferred to the first job; this processes the objects and assigns a status to every object (incorrect, not relevant etc). Also, the system runs the normal data update of the results.

The next job receives only the objects that are relevant according to their status in the previous job (thus avoiding follow up errors and unnec validations)

You can continue the chain for any number of jobs

The system collects incorrect objects for a job; you can process them at anytime.

After error correction you process the incorrect object only. After a user decision you restart the process (without making a new selection)

STEPS RECAP

- i. **System starts by selecting objects from the database using a selection variant & updating them in a special worklist.**
- ii. **The 1st step updates the status defined in the worklist for every object.**
- iii. **The 2nd step processes only the objects without errors & updates the status.**
- iv. **At end of first run the person responsible gets a SAP mail asking him to correct errors**
- v. **After error correction you can restart the worklist from the mail.**
- vi. **The system reprocesses only the incorrect objects.**

Worklists can be created from **extras menu or directly from task list.**

SAP delivers templates with each worklist application, making them easier to use and you can also change existing templates.

The **templates delivered by SAP display possible process flow for each application.**

You can choose the mail priority for user decisions. **A dialog box is displayed if a mail arrives with priority 1.**

There is no difference in scheduling a flow definition with or without work lists.

The **technical information for each run always remains in the system.**

You only receive info for the last run. The info in older runs is deleted to save on memory.

Click on top node of flow definition for a overview of all jobs.

Worklists process each object individually and one after the other. Faulty objects are excluded and processed separately afterwards.

Worklists are not possible for processing that involves complex allocations.

For iterative allocations like assessments & distributions the results change if one or more objects from the allocation network has errors, in such cases the allocation is stopped and must be completely restarted once the errors have been corrected.

Finance Master Data-(++)-(11-20%)-(50)-(87)

FI General

Basic settings:

R/3 has only **one repository** that reflects the runtime environment in which customer data is created & maintained. This repository contains **sub division like client**.

R/3 delivers 3 clients

- o client000-**a reference client**, used as a backup copy
- o client001-**copy of client 000** with exception that customer can make changes
- o client066-**reserved for SAP access to customer** system to provide remote diagnosis such as early watch & Golive

Important organizational unit in FI are:

- o Coy Code: a min structure nec in R/3 FI (4 digit alphanumeric)
- o Biz Area- an **independent area** within an org & **used cross-coy code** (4 digit alphanumeric)

When coy code is copied fol data is copied:

- o **Definition/Global parameters/ customizing tables/accounts & coy code segment (if req)/account determination**

The definition of a coy code contains:

- o 4 character coy code key
- o name of company
- o city
- o country
- o currency
- o language
- o address

The global parameters consist of

- o **CoA/Fiscal year/Coy Code default**

The **variant principle** is a 3 step method used in R/3 to assign special properties to one or more R/3 objects

- o **Define** variant
- o Define values for the variant (**populate**)
- o **Assign** variants to R/3 object

The **fiscal year** is usually a period of 12 months for which a company regularly creates financial statements

To compare the closing months with other periods of the fiscal year, we normally do closing postings in special periods

There are 2 conditions to post in special period

- o **Posting date must be in the last posting period**
- o **Special period must be open.**

The fiscal year can be defined as:

- o Year independent

- o Year Specific

The fiscal year variant contains the definition of posting periods & special periods.

The posting period derives from posting date

A year independent year variant can be defined as:

- o Calendar year
- o Non-Calendar Year

If fiscal year of a coy uses the same number of periods, & the posting periods always start and end on the same day of the year, it is called year independent.

A fiscal year is year specific, if one of the fol conditions are met:

- o The start & end dates of the posting period of one fiscal year is different to other fiscal year.
- o some fiscal years use a different no of posting periods (shortened)

A currency key must assigned to every currency used

For every comb of 2 currencies, you maintain diff exch rates, which are distinguished by an exch rate type.

To reduce the amount of work involved in the exch rate maintenance we use any of the fol tools for each exch rate type.

- o Inversion: (one way relation) maint relation of \$=£ no need for £=\$
- o Exchange rate spread
- o Base currency (make one currency as base & maint exch rate table)

In direct quotation, one unit of foreign currency is quoted for local currency (1\$=60PKR)

In indirect quotation, one unit of local currency is quoted for foreign currency (1PKR=\$0.01667)

The std setting for to enter exch rate for direct is “ “blank, & for indirect is “/”

The commonly used exch rate types are:

- o M=Average rate for posting & clearing
- o G=Buying Rate
- o B=Selling Rate.

1. Chart of Accounts

The CoA is a list of all G/L accounts

The CoA is a variant that contains the structure & the basic info about G/L accounts

The CoA must be assigned to every coy code for which accounts are to be set up, based on concerned structure.

If you enter a group chart of accounts in the CoA's, the system defines that you have to enter a group account number in the corresponding field in the G/L account definition (req entry fd) & checks whether the group account no you have entered exists in the group CoA's.

A CoA not yet completed can be blocked so that no coy code can use it until it is ready.

You can get a dir of G/L accounts in your CoA for info or documentation purposes via report RFSKPL00

Every coy code must have a CoA assigned to it, one CoA can be assigned to several coy codes (variant principle)

R/3 Co module uses same CoA as the FI module. If coy codes intend to use cross-coy code controlling, they must use same CoA.

The CoA contains basic info about the accounts. The info for an account is summarized in a CoA segment, it contains:

- o Acc number
- o Name of the acc (as short & as long text)
- o Control fields
- o Consolidation fields.

There are 3 steps to create & use CoA

- o Define CoA
- o Define properties of CoA
- o Assign CoA to coy codes.

The definition of CoA contains:

- o key/name/maint language/length of GL acc no (max10)/manual or auto created cost elements/Group CoA/Block indicator

One CoA can be assigned to several coy codes

Texts with different info can be assigned to each CoA. Texts entered for the CoA segment are managed by text ID & language.

To use the accounts from the assigned CoA in your company code, you must create a coy code segment for the account. This coy code segment is added to the CoA segment, and together they form the account.

The coy code segment contains info that refers exclusively to the coy code concerned.

Account=CoA segment + Coy Code segment

If the CoA has not been translated into the appropriate logon language, the account name appears in maintenance language.

The information entered in the CoA segment for a G/L account applies to all coy codes.

Via the type of integration b/w G/L accounts & **cost types**, you can control to what extent the cost master data is maintained when you maintain the G/L account master records of P&L statement accounts. You can maintain cost types manually or automatically.

When you create a new G/L account the corresponding cost type is created automatically. The pre-requisite for this is that a **default value** for the cost element category is defined for this cost element, since if no default value exists, the system assumes that no cost element is to be created.

A complete GL account consists of 2 segments i.e. posting is only possible when these 2 are defined:

- o A CoA segment
- o At least one company code segment

In CoA segment, you have to specify whether the account is a balance sheet or a P&L account.

- o **for balance sheet accounts:** the balance is carried fwd to the same acc
- o **for P&L statement accounts:** the balance is carried fwd to a retained earnings account & the P&L statement acc is set to zero.

In customizing users define the retained earnings account that is assigned to expense accounts during G/L account master record creation.

If there is one retained earnings account assigned to expense accounts, the system automatically uses the one defined in customizing. If there are more than one retained earnings acc, when you create a master record you can select the retained earnings account for each P&L statement account.

Chart of Account segment comprises of the fol & is applicable to all coy codes:

- o Account number
- o Name of Account (short/long text)
- o Control fields (G/L account group, bal sheet account/P&L)
- o Consolidation fields

The coy code segment contains info that refers exclusively to the concerned coy code

- o currency/tax/recon account/line item display/sort key/field status group/house bank/open item management

Every coy code that wants to use an account from the assigned CoA has to create its own coy code segment. Because the number & name of the account is maintained in the CoA, the account has the same name & no in all assigned coy codes.

The coy code segment for the same G/L account CAN BE DIFFERENT depending on the requirements of the coy code.

If the coy is using one retained earning acc, the field of P&L statement acc type is hidden

Since a CoA contains many different types of accounts, they can be grouped into different **account groups**

The concept of G/L account group is to control

- o group of accounts of same type (material related/ cash related)
- o number ranges
- o field status

By assigning a no range to an account group, you can ensure that accounts of the same type are within the same number range. Number intervals for G/L account master data can overlap

You **must** enter the account group in the CoA segment; it controls the appearance of the coy code segment of a G/L account, e.g. for all your cash accounts, you want to be able to display all of the line items. In customizing, for your ‘

cash accounts', account group, change the field status to make 'line item display' a required entry.

The **field status** enables you to control maint of master data

- o **suppress** the fields that are not used
- o **display** the fields whose values must not be changed
- o **require** the field where values must be entered
- o **optional** the field, where value can be entered

Certain fields are grouped together & their field status is valid for the entire group.

The fields, 'account currency' & 'field status group' are always req entry fields. This status cannot be changed.

The **fields displayed in G/L account master record** are not only controlled by the **account group**, but also by **transaction** that you are using to edit the master data, transaction specific control.

There are **2 options to control field status**:

- o **Account group specific** (at time of creation)
- o **Transaction specific** (display-change-create)

For each field, the field status definitions from the account group & the transaction are taken into consideration & the one with higher priority is used. (SDRO)

Fields accessed with transaction display master data are always either displayed or hidden.

If you do not want to use the transaction-specific control, set the field status for all fields to optional. Since this field status has the lowest priority, the account group specific field status is always used.

The fol order applies, where discrepancies are found in field status

- o Suppress-Display-Required-Optional (SDRO)

The fol reconciliation accounts connect sub ledgers to G/L's in **real time**

- o **Accounts Receivable**
- o **Accounts Payable**
- o **Assets**
- o **Contract accounts Receivable & Payable**

If a G/L account has been defined as reconciliation account, **direct posting is not possible**.

2. GL Accounts

You can assign a **group account number** (not like G/L account group) for each G/L account. **This account number is used for cross-coy code reporting, if the coy codes use different CoA's.**

If a G/L is maintained w/o line item display, only **transaction figures are updated** when a document is posted i.e. **only balance will be available**.

If a G/L is maintained with line item display, the imp data are stored in a **special index table** as such **both balance & information will be available**.

Line items display are **not recommended** for the fol types of G/L

- o Recon accounts (items are managed in the sub-ledger)
- o Revenue accounts (items are managed in SD)
- o Material accounts (items are managed in MM)
- o Tax accounts

G/L accounts are managed on an open item management if management is interested in checking whether an offsetting posting has already taken place for a business transaction.

Accounts with Open item management must also be managed on Line Item Display and are recommended for

- o Bank clearing account
- o clearing account for GR/IR
- o Salary clearing account

A G/L account can be managed on open item management later on if zero balance is there

When coy code is defined, currency is also defined which is called local currency

If the account currency is the local currency, it can be posted to in any currency

There is 1:n relation between group CoA to Operational CoA

There is 1:1 relation between Country CoA to Operational CoA

If different companies in a group use different operational CoA, cross company code, controlling is not possible.

3. Reconciliation Accounts

General ledger accounts are assigned to the business partner master data to record all transactions in the subledger. All postings to the subledger accounts are automatically posted to the assigned reconciliation accounts. The G/L is therefore always up to date.

You define a G/L account as a reconciliation account by entering one of the fol account types in the field recon account for account type:

- o D for accounts receivable
- o K for accounts Payable

Typical Recon accounts are accounts receivable & accounts payable.

If you want to look at the biz partner accounts assigned to a specific recon account, you can select the field for the recon account in the customer or vendor list (RFDKVZ00 or RFKKZV00) via the free selections.

Line items Display

Transaction **figures** are the totals of line item postings on the debit or credit side. The **balance** is the difference between debit & credit transaction figure.

The field '**line item display**' is a control field in the coy code segment of the account

- o **For accounts w/o line items display:** only the transaction figures are updated when a doc is posted to this account. When a user wants to look at this account online, they can **only view the balance**.
- o **For accounts with line items display:** the most imp data from the posted line items is stored in a **special index table**. Because, this data is also stored in documents, it is **redundant** and need additional system storage n time. Online a user can look at **both balance & individual line items**.

To avoid redundancy You should not activate the line item display for:

- o **Reconciliation accounts** (line items managed in subledgers)
- o **Revenue accounts** (line items managed by the SD application)
- o **Material stock accounts** (line items managed by MM)

Open item Management

Items in accounts with open item management are specified as **open or cleared**

Accounts with open item management **must have line item display activated**

Open item management is a prerequisite if you need **to check whether there is an offsetting posting** for a given biz transaction.

You can display open & cleared items separately

You should use open item management for the fol accounts (fast moving clearing accounts):

- o **Bank** clearing accounts
- o clearing accounts for **goods receipt invoice receipt**
- o **salary** clearing accounts

You can only activate or deactivate open item management if the account has zero balance.

Account in Local currency:

You can select one of the fol currencies as **account currencies**:

- o **Local currency**
- o **Foreign Currency**

As standard, the local currency is proposed as account currency when u create a G/L account

If account currency is local, the account can be posted to in any currency.

The indicator 'balances in local currency only' must not be set in recon accounts for customers or vendors. The indicator is **usually set in bal sheet accounts not managed in foreign currencies & on open item basis**.

Account with a foreign currency as account currency can only be posted to in this foreign currency.

To reduce data entry, programs such as RFBISA00, batch input interfaces for G/L account master data, can be modified by ABAP team to transfer new chart of accounts.

Collective Processing

SAP R/3 system provides collective processing functions for the G/L account master data

You can change data in the CoA segment, coy code segment, or the names of several G/L accounts at the same time. The G/L accounts can be from different CoA

4. Account Groups

Group Chart of Accounts(Op CoA->Ext Reporting, Gp CoA->int Reporting)

For internal purposes, **cross-coy code reporting** may be useful, e.g. financial statements that contain the items of several company codes.

There is no problem as long as coy codes use the same chart of accounts. However, some coy codes may have to use special CoA's because of legal requirements. If this is the case the fol procedure applies for internal reporting:

- o You can use a **group CoA's**; this **group chart of accounts must contain all of the group accounts**.
- o **The group chart of account must be assigned to each operational chart of accounts. If this is done, the field, 'group account number' in the CoA segments of the operational chart of accounts is a req entry field.**
- o **You must enter the group acc no in the CoA segment of the operational acc. Different acc of one operational CoA can refer to the same group account.**
- o **You must enter a FSV for the group CoA.**
- o **Disadvantage:** is that because the coy codes use different operational CoA, you cannot carry out cross-coy code controlling.

Country CoA(country CoA->ext reporting, Op CoA->Int reporting)

An alternative to using group CoA's is to use country CoA's

All coy codes use the same operational CoA, Coy Codes that nevertheless require a special CoA for external reporting have the fol option:

- o A country CoA is assigned
- o The country CoA number (alternative acc no) is entered in every coy code segment. Every country CoA no can only be used once.
- o Since all coy codes use the same op CoA for postings, you can carry out cross coy code controlling.
- o **Disadvantage:** accounting clerks who may be familiar with the country CoA first have to get used to using the operational CoA.

If coy's use same operational CoA –cross coy code cost accounting, co is possible.

Country CoA can also be set up to create reports for each country

A group CoA can be linked to Operational CoA of regions for consolidation

5. Customer and Vendor Accounts

Just like G/L accounts, customer/vendor accounts also have **segments**

- o One segment at client level that contains **general data**, this data can be accessed throughout the org
- o A **coy code specific data** at coy code level. Any coy that wishes to do biz with a specific customer/vendor has to create a coy code segment for this customer or vendor.
- o **Sales area /purch org segment**- for any sales area/purch org, that wishes to do biz with a customer/vendor

The account number is assigned to the customer/vendor at client level. This ensures that the acc no for a customer is the same for all coy codes & sales area.

The system offers separate functions for maintaining customer/vendor master records depending on the req of your org. These **data records can be maintained centrally for all areas or separately for FI Accounting & SD/MM**

If you use MM or SD, customers/vendors must be maintained for both components, they are either maint centrally or MM/SD create their own segments of master records.

A complete cust/vendor acc has 3 segments

- o Client lvl data containing general info
- o coy code specific data
- o sales area/ purchasing org segment

A sales area is a combination of

- o sales org (responsible for sales & distribution of goods & services)
- o Distribution channel (means by which cust receives a product).
- o Division (represents a product line)

To avoid duplication of vendor/customer account we use:

- o match code before creating a new account
- o Activate auto duplication check

Line item display & open item management are configured as std for every customer/vendor account.

Some imp fields in Customer/Vendor accounts are:

- o Search term (e.g. abbreviation)
- o Corporate group
- o Clerk/Accounting

IBAN is an internationally recognized unique identification for a certain bank account to facilitate handling of international payment transactions.

IBAN structured differently for each country.

IBAN usually contains the bank key, country code & acc no

R/3 uses IBAN in addition to std country specific bank details

You can enter IBAN as part of the bank details for customer/vendor master data, & in customizing settings for your house bank

IBAN can only be entered in customer/vendor master rec if the biz partner provides his IBAN & requests the entry. Therefore you have to enter it manually in each master record.

IBAN consists of 34 alphanumeric characters

Customer/Vendor account group has to be maintained before you can create a master record. , whereas at the time of creation of GL, first number is assigned than Account group is defined in CoA segment, because of **a GL account number is always external number**, whereas a customer/vendor account group controls whether the number assignment is internal or external

Cust/Vendor account group controls:

- o Number Range
- o Field Status of account field
- o One time Account

There are separate no ranges for customer/vendor accounts. The range of possible account numbers is divided into smaller number ranges.

If internal no range has been assigned, the system always assigns the next number available, to the new vendor/customer account.

A current no cannot be displayed for external no ranges.

one time account:

For all customers or vendors with whom u rarely do business, create a special customer & a special vendor master record.

These master records contain receivables & payables for one-time customers/vendors (one time accounts)

In contrast to other master records a one time account **master record** does not contain any info about a specific customer/vendor since this account is used for more than one customer/vendor. Therefore the customer/vendor specific fields should be hidden.

You enter the customer/vendor specific data for one-time customers/vendors in doc during posting.

In contrast to the other master record, one time account master records does not contain any information like bank details

Field statuses in master records

The **account group is used to control the fields** displayed in the master record. e.g. to ensure that all correspondence has complete address info, change the field status so that all address fields are marked as required entry.

Field status can be **maintained at**, & the **layout** of customer/vendor master data screens can be affected by:

- o **Account group specific field status:** usually the field status is only controlled by the account group. This means that **all accounts of one account group have the same screen layout**
- o **Transaction specific field status:** This fd status can be **dependent on the master data transaction** (create, change, display).
- o **Coy code specific field status:** The field status of the fields in the **coy code segment** for customer & vendor master records can also be controlled by the coy code dependant screen layout. You can hide fields that are not used by a specific coy code. e.g. a coy code does not want to use an auto payment prog then hide the relevant fields for this coy code.
- o The acc gp specific, transaction specific & coy code specific **fd statuses are compared & the one with highest priority is used.**
- o If you do not want to use transaction specific or coy code specific control set the field status for all fields to **OPTIONAL**. Since this field status has the lowest priority, account group control is always used.

For dual control principle, first you have to **define the fields in the IMG as sensitive**. In that case, the other person **needs to confirm the changes made in the master record** of vendor/customer.

If you define a field in the customer/vendor master record as sensitive the corresponding customer/vendor is blocked for payment if the entry is changed. The block is removed when a second person with authorization checks the change & confirms or rejects it.

The confirmation for changes can be made for a **single customer/vendor or for an entire list**

If a customer is also a vendor or vice versa, the payment & dunning prog can **clear open item against each other**

To clear open items, we have to do **following**:

- o Vendor account must be entered in customer account or **vice versa**
- o each **coy code can decide** separately whether it wants to clear open items b/w them

At client & coy code level, you can enter an **alternative payer/payee**. **The entry in the coy code segment has higher priority than the entry at client level.**

Alternative payer/payee means to get/pay (not from/to) original customer/vendor, but from/to alternative, payer/payee. If the alternative payer/payee is an existing customer/vendor, you can enter the customer/vendor account number as permitted payee/payer in the **master record**.

Alternative payer/payee can be defined at

- o **doc level**
- o at **coy code level**
- o at **client level**

When there is a difference b/w goods flow & cash flow you can reflect this in R/3 using head office & branch accounts. Encase of **head office/branch relation**, **all the postings made in branch are automatically transferred to the head office account.**

Usually, dunning notices go to the head office & it is the head office that makes & receives payments. However, if the **Decentralized field** is selected in the head office master record, the dunning & payment programs use the branch account instead.

In simple documents in R/3 FI the most imp fields are in the foreground on a tab page.

6. **Bank Accounts/Bank Keys**

For **every** bank used in system (e.g. as a house bank or a customer/vendor bank) **you have to create a bank master record**

Bank master records are stored centrally in **bank directory** and is identified by the **Bank Country & Bank key**. Bank master records incl **address data & control data**, such as SWIFT code, postal giro data & bank group (for payment optimization).

The house bank is the bank used for internal business by your coy

You create house banks in **customizing** & they contain bank master data, info for electronic payments, bank accounts per house bank, & G/L accounts per bank account.

Using the **house bank ID & bank types**, the payment prog determines the banks to be used.

Bank Master Data can be created in 4 ways

- o **At the time of entering bank info** in customer/vendor master record or in **customizing for house banks**
- o Using **create bank transaction** in AR and AP master data menu.
- o Importing Bank directory from **disks or tapes**
- o **Batch Input process** for customer using lock box, which updates customer banking info in the master record.

In the cust/vendor master record the field 'bank type' is used to distinguish b/w different banks.

When you enter bank details in the cust/vendor master rec, u can access banks already created in the bank directory. Then u only have to enter the bank country & bank key; the name & address of the bank are determined automatically.

When processing invoices, if the cust/vendor has more than one bank, the user can choose a bank by using the **match code in the partner bank field**

The house bank ID and account ID together uniquely identify an account in SAP. This comb is entered in a G/L acc that represents the bank account in the general ledger.

You must also define bank accounts that are managed at the house banks. The **accounts can be identified by an account ID which is unique per house bank.**

The bank account data contains the number of the account at your bank, the account currency, & the relevant G/L account

For every bank account a G/L account must be created. This G/L account is assigned to the bank account & vice versa. Both accounts have to have the **same account currency.**

An account ID can only be used once for each house bank and is assigned to one GL.

Payment Program, Dunning Program, Correspondence, Interest Calculation-(+)-(1-10%)-(73)-(78)

1. **Payment Program Configuration**

Summary of automatic payments

R/3 allows to automatically

- o select open invoices to be paid or collected
- o post payment documents
- o print payment media, use data medium exch or generate EDI

settings for payment prog are defined in 3 places:

- o **In vendor master record**
- o **at time of posting invoice- item level**
- o **in customizing for payment prog**

If data in master data & document is different, the data in the document takes precedence over data in master rec.

automatic payment process has 4 steps:

- o parameters
- o start proposal run & edit it
- o start payment prog
- o schedule print

(Those in dunning were 1. maintain parameters 2.dunning run, 3.editing the dunning proposal, 4. printing dunning notices)

There are 6 configuration areas for payment prog

- o all coy codes
- o paying coy codes
- o payment method / country
- o payment method / coy code
- o bank selection
- o house banks

(Firj st 3 areas req min changes to execute auto payment prog)

For all coy codes configure:

- o inter coy payment relationships
- o coy codes that process payments
- o cash discounts
- o tolerance days for payments
- o customer/vendor transactions to be processed

If coy A is making payment on behalf of coy B, then B is called sending.

Paying coy code is responsible for processing outgoing payments, **this coy code records the bank postings.**

- o sending coy code records the sub ledger posting
- o both coy's balance by auto generating cross coy postings

If vendor/customer special G/L transactions are to be paid they are defined here.

For each coy code we configure:

- o Min amount for incoming/outgoing payments
- o Forms of payment advice or EDI
- o BoEc specifications

In payment method/country we configure:

- o payment methods
- o master rec requirements (invoice not paid unless req met)
- o doc types
- o name of print prog

In payment method/ coy code we configure:

- o min/max check amount to be processed
- o if foreign biz partner is allowed
- o grouping options
- o bank optimization
- o postal code optimization
- o forms of payment media

In bank selection configuration we define:

- o ranking of bank (to be considered first)-House Bank
- o Currency, BoE account
- o Amount (available funds)
- o Accounts
- o expenses/charges
- o value date

amount field is **not** updated automatically after each payment run

value date represents the **probable no of days** until a debit/credit is entered in the bank account

Value date= payment run posting date+ days until value date

Where bank charges are defined the system automatically subtracts the bank charges from incoming payments and adds them to outgoing. (**IS-OA**)

Every payment prog run is identified by 2 fields:

- o Run date
- o Identification

Run date is **recommended** as actual date when prog run

identification field is used to differentiate b/w runs having same run date

In parameters, the coy codes in a payment run must be in same country.

In proposal run the prog selects **docs & accounts** with items pending for payments

once proposal run is completed, system generates 2 reports:

- o payment proposal list
- o exception list

Proposal list shows the biz partner & amounts to be **paid/received**

Possible reasons for items appearing in exception list are:

- o **invoice blocked**
- o **invalid data in master rec**
- o **invalid payment method**
- o **invalid house bank**
- o **payment amount less than min specified**
- o **not enough money in house bank**
- o **debit balance**

payment items can be temporarily blocked **in the proposal** by **manually assigning a payment block**

The doc incl in the payment run have been locked against any other posting like **paid manually** or in **another payment run**.

payment run uses data from payment proposal to:

- o **post payment docs to G/L & clear paid open item in vendor/cust**
- o **post related posting for taxes, discounts, exch rate differences**
- o **select the payments that can be paid with EDI**
- o **supply print prog with nec data**

The doc type for payment docs is defined in **country specific specs for the payment method**

Docs generated via payment run contain data & identification no of RUN in **doc header** text.

Print run starts the print prog, which does fol:

- o transfer **payment media, advice notes & payment summary** to **print admin**
- o transfer **DME payment data** to **DME admin**
- o create **R/3 intermediate docs** for sel payments to fwd to **EDI subsys**

A print prog is assigned to **each payment method for each country**

System **needs** at least one **variant** for each print prog to run it

If several variants are assigned, system runs prog once for each variant

In config settings for payment prog you have to assign payment medium forms either:

- o to paying coy code
- o to each payment method for each coy code

With DME a file is created, containing all relevant payment info in acc with banking rules of country

DME file can be stored in SAP TemSe or local PC

Prog for printing checks is RFFOXX_Y, XX stand for **country** & Y additional **definition for form**

In payment method country config, print prog is defined for each payment method

SAP script form to be used is specified in FORM data selection

Print prog does the fol:

- o **assign check number to payment docs**
- o **updates the payment docs & original invoice docs with check info**
- o **print checks & accompanying docs**

In SAP checks are managed in batches or lots & are used for both **manual** and **auto payments**

Each lot has a defined no range & is assigned to **one** house bank

Parameters specify the accounts & documents that are to be incl in payment run

Payment prog **needs the next posting date** to determine whether an open item has to be paid now or in next payment run.

Coy codes from different countries cannot be processed in same run.

PMW

advantages of PMW are:

- o **uniformity**
- o format can be **changed** easily
- o new formats can be **created** w/o programmer

note to payee can be freely defined in customization of PMW

6 steps for conversion to PMW include:

- o changeover to PMW
- o define PMW format
- o fill note to payee acc to origin
- o enter PMW form accompanying sheet
- o remove payment media form
- o create & assign selection variants

When **payment media** are created for payment with PMW, a prog is launched which carries out pre-services which process data for PMW:

- o **payments are sorted acc to PMW format**
- o **payment gps created based on level of granularity**
- o **note to payee is formed**

Granularity is specified in the definition of payment medium format & determines how the payment media is to be **output separately in payment groups.**

A PMW payment method is always assigned a PMW format & a content template for the note to payee

Every PMW format has upto 3 types of text fields for ref info:

- o invoice info
- o internal ref
- o external ref

The debit balance check is carried out after a payment proposal has been created

Overview

- a. Every coy needs some way to pay vendors. Auto Payment prog is a tool that will help user's manage Payables
- b. Using Auto Payment Prog you can Automatically:
 - i. Select open invoices to be paid or collected
 - ii. Post Payment Documents
 - iii. Print Payment Media (DME); or generate EDI
- c. Payment Prog handles both **incoming & outgoing payments**
- d. Consists of the fol steps
 - i. **Parameters:: Maintain Parameters** (What, When, Which, How)
 - ii. **Suggestion:: a) Start Proposal Run b)Edit Proposal** (you can block/unblock invoices for payment here)
 - iii. **Program:: Start Payment Run** (Here verified payment list from Proposal Run is posted. A Payment document is created G/L's updated)
 - iv. **Print:: Schedule Print** (accounting func are complete & a separate print prog started to generate **Payment Media**).

Configuration:

- e. Fol Options (setting categories) or structure are avail for the config of Payment Prog, The first three areas require minimum config changes. Std system contains common payment methods & their corresponding forms, defined separately for each country:
 - i. **All Coy Codes: Define:**
Intercoy Payment relationships
Coy codes that process payments: If Coy Code A is making payments on behalf of B, then B is **sending** coy code. If a coy code is not specified then system automatically regards the sending coy code as the paying coy code. **The sending coy code records sub ledger postings**
Paying coy code is the coy code responsible for processing outgoing payments. This coy code **records bank postings.**
Both companies A&B balance by automatically generating cross-coy postings.
Cash Discount:

Tolerance days for payments: You can enter for each coy code, if your vendor allows some **grace period**. This postpones payment of due items to next RUN while still receiving appropriate discounts
The customer & vendor Special G/L transactions to be processed: **specifies which G/L transactions can be processed with the payment prog**

If activated **Payment Method Supplements** allow you to **print & sort payments**. Create a payment method supplement comprising two characters that can be assigned to customer/vendor master records. When you enter a document in the system, the relevant data is automatically assigned to individual items. Payments are sorted & printed by **supplements which can also be manually entered or overwritten in the line item when you enter a document**.

ii. **Paying Coy Codes:**

Minimum amounts for incoming & outgoing payments: **Users define** min amounts of payment & the forms that will be used for each paying coy code.

Forms of payment advice & EDI: In sender screen **user can define any Coy Code dependent-standard texts to the payment forms**.

Bill of exchange Specifications: User defines **how many BOE are created** for each account during payment run.

User also control **which open items for BOE payment method are considered during RUN** using due date specifications.

iii. **Payment Method for each Country:**

FOR COUNTRY Define: Payment methods, cheque etc

FOR EACH PAYMENT METHOD Specify:

1) Create a **check, bank transfer**, BOE etc

2) **Master Record Requirements** i.e address required, invoices not paid till this req met

Here Specify:

- a. the **document types** that will be used for posting & clearing documents
- b. name of **print prog** & print data set
- c. **You can restrict payment methods to specific currencies**. Make entry in permitted currencies screen, if no entry valid for all currencies.

iv. **Payment Method for each Coy Code:** defines eligible payment method for the coy code & defines fol specifications for each payment method:

Min & Max Payment amounts: that can be processed, any amount higher/lower than this will be excl fm Run

If Payment in FC allowed/If payment via foreign bank abroad allowed/ If a foreign biz partner allowed

Grouping Options:

Bank Optimization/ Postal Code Optimization: **If selected the payment prog will try to pay from a bank within the same clearing house system. (ACH)**. If postal code optimization is used payment prog try to pay cust/vend from **city of residence** bank.

Forms for payment Media: **In form data area you can specify the name of SAPScript form for payment media**.

v. **Bank Selection/House Banks:**

1. Selecting Paying House Banks: On bank selection screen fol file folders located for each of these sections, fol components need to be considered:

- a. Ranking: On ranking order screen enter the house banks in the order the payment prog is to consider them for each payment method. Define fol for each payment method:
 - i. Which house bank to consider for payment first, second.....etc?
 - ii. Currencies
 - iii. BOE account (Bill Of Exchange)
 - iv. If bank/payment method comb does not exist, create a new one by defining: 1) payment method, 2) Currency (empty if payment method for this bank to apply

- to all currencies), 3) The ranking order, 4) use house bank identifier with this payment method.
- b. Amounts: available amounts screen lists the house banks & amount of funds avail at each bank. To add new bank define fol:
 - i. Bank & Bank Account
 - ii. Days to value date if using BOE to post payments before due date. In all other cases enter 999, so value dates are not considered
 - iii. Currencies: fd empty if payment method for this bank to apply to all currencies.
 - iv. Amount avail for outgoing payments in house bank. **The amount field is not updated after each payment run.**
- c. Accounts: screen lists the offsetting accounts for each house bank & payment method to which the payment prog posts entries.
 - i. With a vendor payment the payment prog posts: S Vendor H Bank subaccount
 - ii. Depending on user req, the bank subaccount can be either a **cash or cash clearing account**
 - iii. If a clearing account is used in conjunction with the cashed cheques prog, the prog debits the subaccount & credits the cash account once the cheque has cleared the bank.
 - iv. Sub accounts are managed with open items so users can manage the status of the payments.
- d. Expenses/charges: Incoming/Outgoing payments feature a bank charges field for users to enter any bank charges that are part of payments made or received.
 - i. For **incoming payments the system subtracts** the bank charges from clearing amount.
 - ii. For **outgoing payments it adds the charges** to clearing amount.
 - iii. The system also posts charges to an expense account for which it uses predefined posting key & acct assignmt.
 - iv. If users not using std COA delivered, they have to enter own account data to post bank charges
 - v. The Relevant to cash flow indicator must be set in the master record of accounts that record bank charges.
- e. Value Date: The value date is used in conjunction with cash management to track the outflow of funds. e.g. payments made by bank transfer are deducted from bank the next day, irrespective of the amount. So for this method you enter 1 in the days until value date field.
 - i. $VD = RUN \text{ posting date} + \text{days to VD}$
 - ii. days entered here correspond to days specified for available amounts.

2. Running the Payment Program

After completing basic configuration you now look at individual steps of the payment prog:

- a. Run Date/Identification: Every payment prog is identified by 2 fields. Run date recommended as actual date when payment prog is executed. Identification fd is used to differentiate between prog runs having same run date.
- b. Maintain Parameters: Define fol in first step:
 - i. What is to be paid? Which Documents? (dated/free sel)
 - ii. What payment method will be used?
 - iii. When will payment be made?
 - iv. Which coy codes will be considered?

- v. How are they going to be paid?
 - vi. All docs entered upto **doc entered upto date** are included in payment run.
 - vii. The **Posting Date** is the date when the G/L is updated with the postings. Posting date is defaulted from the run date.
 - viii. The coy codes in a payment run **must be in the same country**
 - ix. Selections from Pre defined payment methods can be used within the particular country for current payment run.
 - x. If you use more than one payment method in run, the system selects em according to **order & pays the one with highest priority first.**
- c. **Proposal Run:** here the prog selects documents & account with items that are pending payment. system uses search criteria you entered in parameters. Then it groups these items to payments & assign payment method & bank details for use. If valid payment method or bank data is not found, item is blocked for payment and added to **exception list**.
- Once proposal run is completed the system generates two reports: **payment proposal list & exception list**.
- i. **proposal list:**
 - 1. a list of biz partners with amounts pay/receive
 - 2. generated based on specified parameters
 - 3. **takes terms of payment & discounts into account**
 - ii. **exception list:**
 - 1. items that cannot be paid are shown here
 - 2. Possible reasons can be: invoice blocked invalid data in master rec, invalid payment method, invalid house bank, payment amount less than min specified not enough money in bank, debit balance.
 - 3. If you select **additional log** it shows why an item cannot be paid.
 - iii. **Payment block:** Payment can be temporarily blocked in the proposal by manually assigning a payment block.
 - iv. If a problem arises during invoice verification the invoice is usually blocked for payment. You can configure it in such a way that the block can be removed during invoice verification process.
 - v. If there is a reason why a vendor should not be paid, you create **a payment block in the master record**.
 - vi. **You can also configure the block so that it has to be manually removed in master data record before a payment can be processed.**
 - vii. When an AP invoice is entered, it may be blocked for payment. **The type of block determines if it can be removed during payment proposal.**
 - viii. You can define **additional payment blocks** in the system & also specify if the block can be removed when payments are processed.
 - ix. **Editing the Payment Proposal:** To further analyze the proposal list, users can edit the list:
 - 1. to **view the details** of a particular payment
 - 2. to **change the payment terms**
 - 3. to **add a payment block**

After the payment proposal is created it can be **edited** by accounting clerks. You can assign an accounting clerk to a customer/vendor by entering the **clerk's key** in the customer/vendor master data. **When editing the payment proposal, you can enter the key of a specific clerk to show only the customer/vendor payments that are assigned to the clerk.**
- x. **Editing Payments:** On the first screen in the editing transaction, the clerk receives an overview of all the payments the prog proposes.

By drilling down on a payment, a list of all open items due with payment are generated

You can **change the payment block & cash discount** for these line items.

You can also assign the item to a different **existing payment, or create new payment** by choosing a payment method & house bank.
- d. **Payment Run:** Once the payment proposal has been edited & saved, the **payment run uses the changes as a**

basis for the actual payments.

- i. Upto now no postings have occurred, documents incl in this payment run have been **'locked'** against any other postings.
- ii. **Now the payments documents are created, open items are cleared & G/L and subledgers are posted to.**
- iii. Payment Run uses data from Proposal to do fol:
 1. Post payment doc's to G/L & clear paid open items: some countries req that payment doc not posted before actual settlement (payment appears on bank statement), set **generate payment order** only indicator here. **Payment order has only info on paid doc's when settlement occurs; payment doc generated using payment order.**
 2. Post for taxes, discounts & exch rate differences: **done automatically** by payment prog
 3. Select payments for EDI payment
 4. Supply print program with nec data.
- iv. **Bank Sub-Accounts:** advisable to use to post **incoming/outgoing payments**, e.g. accounts for outgoing cheques, incoming transfers.

Advantages are:

1. You can **reconcile** the **bank account bal** with **bal of corresponding G/L account anytime**.
 2. Sub accounts contain all incoming/outgoing payments until the money is actually credited/debited to the bank account (value date). The item is then transferred from the sub account to the bank account.
 3. Postings at bank are usually entered using **manual or electronic bank account statement**.
 4. Bank sub accounts **have** to be assigned to payment methods when bank selection settings are **configured**.
 5. **You can differentiate between bank sub-accounts by specifying a house bank & currency.**
 6. **Sub accounts are generally managed on an open item basis & with line item display.**
- v. **The Payment Document**
1. The doc type for payment doc is defined in the **country-specific specs** for payment method.
 2. For **cross-coy code payments** you can enter a further doc type used for clearing postings. **Both doc types must be defined using internal number assignment.**
 3. Doc from payment run contain the date & identification number e.g. 19946738-ID of the run in doc header text.
 4. Value date of clearing doc is calc by adding the days to value date to posting date. **The days to value date depend on the payment method, bank, account, currency & account limit.**
 5. If no entry is made the system uses the posting date as the value date.
 6. To calc the value date for cheque payments you can enter a **cheque cashing time in the master data**. **This has priority over days to value date for cheques.**
 7. **If you make payments for individual Biz areas, the bank posting is made for the Biz area to which the paid items belong.**
 8. If payments are not made for specific Biz area, you can specify the business area for the bank postings. **In all other cases, the postings to the bank sub-accounts are carried out without reference to Biz areas.**

e. **Print Run**

- i. Starts the print prog which do the fol:
 1. Transfer **Payment media, payment advice notes & payment summary** to print **administration**.
 2. Transfer the **DME payment data** to **DME administration**
 3. Create R/3 **intermediate documents** for selected payments, which can be forwarded to **EDI subsystem**.
 4. **A print program is assigned to each payment method for each country when it is configured.**

5. To run print prog the system needs at least one **variant** for each print prog of each permitted & used payment method.
6. If you assign several variants to a print prog, the system runs the prog once for each variant
7. Variants contain a series of selection criteria & printing specifications which are **used to separate the data in the print data set**.
8. **Separate print jobs are created in print admin for each variant** called up from a data medium print prog.
9. Users can call up print jobs individually for printing
10. **You can leave the run date & identification fd blank in variants, they r filled dynamically when prog run.**

3. Payment Media

a. Forms for Payment Media:

- i. Form for **payment advice** & zero bal notice: In config settings for payment prog you have to assign payment medium forms **either to paying coy code or to each payment method for each coy code**. SAP std forms can be tailored. **Payment advice notes can be sent either by mail or EDI** depending on if cust/vend can receive EDI messages.
- ii. **EDI** accompanying sheet form: The first print prog run by payment prog is print prog REFOEDI1, which chooses all the payments selected for EDI, create **intermediate SAP docs** for them, and forwards them to **EDI subsystem** which converts the intermediate docs into EDI, which is sent to **bank**.
- iii. Form for Payment transfer Medium:
- iv. Next form e.g. **DME** accompanying sheet: In DME a file is created that contains all the relevant payment info in accordance with banking rules of the country. **The DME file is stored in Data Medium Administration** and can be downloaded to a data medium. You can print out the DME accompanying note, the data medium & DME accompanying sheet are then sent to bank. **DME can usually be only used with payment methods where the payment medium is sent to the bank for further processing** e.g. bank transfers, direct debits etc. If you send directly to customer e.g. cheque you cannot use it.
To use DME for a specific payment method, you select the DME field in the variant. To generate separate DME files for each house bank, you have to enter a variant for each house bank. DME file can be stored either in SAP **TemSe** in R/3 or in a file on your **PC**. **In TemSe there cannot be unauthorized access.**
- v. **Cheques:** The prog for printing cheques is RFFO"xx"_"y". where **xx** stands for country and **y** contains additional definitions for the form.
Cheques can be printed with predefined cheque numbers (cheque mgmt) or the doc number can be used as cheque no (w/o cheque mgmt)
In payment method country config screen you can define print prog for each payment method. In Form Data section, specify the SAP script form to be used.
 1. **Print Program:** Does fol:
 - a. **Assigns cheque numbers** to payment docs
 - b. **Updates the payment doc's & original invoice docs with cheque info.**
 - c. **Prints** checks & accompanying docs.
 2. **Cheque Lots:**
 - a. **Each House Bank has its own cheque no's**
 - b. Support's pre-numbered checks
 - c. Each lot has a defined no range
 - d. **No status maintained per lot**
 - e. **If you use cheque mgmt, you have to use cheque lots to print cheques.**
 - f. Cheques are managed in **batches or lots**.

- g. If you use prenumbered cheques from the bank, specify the cheque no ranges in lots. Otherwise start numbering from 1.
 - h. Lots are used for both manual & auto payments. For monitoring purposes, it is advisable to use a separate lot for each type of payment.
- b. **PMW;** can be used as alternative to std payment media print programs.
 - i. In addition to creating payment media using std pmt prog's RFFO, you can also create them using payment medium workbench (PMW)
 - ii. **History** previously, **payment media formats** were programmed in approx 60 std payment media programs (RFFO*). In PMW these formats are defined outside payment media program
 - iii. **Payment advice notes** were also created using RFFO* prog's. In PMW payment advice notes are created with a new prog RFFOAVIS_FPAYM. (**Note to payee can be freely defined in Customizing.**) The note to payee can be assigned according to origin & payment method in Customizing.
 - iv. **Advantages of PMW Payment media formats:**
 - 1. Uniformity
 - 2. Easily change formats without making modifications.
 - 3. Create new formats w/o programming exp by using DME engine
 - v. **Advantages of PMW Payment advice notes:**
 - 1. Uniformity
 - 2. All notes output in one print file
 - 3. Better sort options for advice notes.
 - vi. **Conversion steps for a Payment Method:** You can convert each payment method individually to PMW format. i.e. use std payment media prog RFFO* & new PMW formats in same system & even in same RUN. Do fol steps:
 - 1. switch to PMW radio button in payment method def/country
 - 2. Enter an existing PMW format in payment method def/country
 - 3. Assign notes to payee (general or origin specific)
 - 4. Assign a PMW form for accompanying sheet
 - 5. Remove form for doc based payment medium
 - 6. Create & assign selection variants for each payment gp.
 - vii. **Old & New Payment Medium Programs:**
 - 1. You start a std payment prog as usual.
 - 2. After creation of payment media is triggered, the individual payment methods are processed & fol prog's are launched.
 - a. For **std method**, the assigned RFFO* prog is started with variants defined in Run. The prog generates payment media & advice notes.
 - viii. **Steps in PMW process:**
 - a. std payment media prog RFFO
 - i. changeover to PMW
 - ii. Define PMW format
 - iii. Fill note to payee acc to origin
 - iv. enter PMW form accompanying sheet
 - v. Remove Payment media form
 - vi. Create & assign sel variants.
 - b. Steps **i-iii** are payment method/country & **iv-v** are Payment method/coy code and **vi** final step.
 - c. When the payment media are created for a payment with PMW payment method, the prog SAPFPAYM_SCHEDULE is launched.
 - d. This first carries out a pre service which processes the data supplied by payment run for PMW specifically, this includes:

- i. sorting payments according to PMW format
 - ii. Creating payment gp based on lvl of granularity
 - iii. Forming of note to payee
 - e. The payment prog SAPFPAYM & advice note prog RFFOAVIS_FPAYM are launched based on data generated by payment prog
 - f. prog RFOAVIS.. generates all req advice notes & zero bal notices.
 - g. prog SAPFPAYM..is started for all defined variants(customizing) of relev payment gp's . This prog generates payment media for PMW payment methods, accompanying sheet for Payment media, an error log and the payment summary.
- ix. **Granularity & Payment Groups:**
- 1. Granularity is specified in definition of payment format & **determines how payment media are output separately in payment groups**. A payment group usually corresponds to one payment file
 - 2. **E.g. if a coy code & house bank are selected as lvl of granularity, a payment gp is created for each comb of coy code & house bank.**
 - 3. At least one sel variant must be defined in generic payment medium prog SAPFPAYM for each possible payment gp. The Payment medium prog is processed with all the defined variants.
 - 4. Granularity can be refined, but not reduced, for PMW formats shipped with the system.
- x. **Note to Payee:**
- 1. A PMW payment method is always assigned a PMW format & a content template for the note to payee
 - 2. Every PMW format (with or w/o supplement) has upto 3 types of text fields for reference info:
 - a. **Type1:** Invoice info (classic note to payee)
 - b. **Type2:** Internal reference (in case payment media returned)
 - c. **Type3:** External reference (for biz partner)
 - 3. Contents of note to payee are defined in content template independent of the format.-either in Customizing or by means of a functional module.
 - 4. In Customizing you can define the contents on a language specific basis to ensure that your biz partner always receive the text in their own language.
 - 5. The content template supplies info to the reference fields when the payment medium is created.

4. Dunning Program Configuration

a. Summary

Payment process Overview

- i. during the dunning run the system chooses the accounts & checks them for item that are overdue
- ii. the dunning proposal can be edited, deleted or recreated
- iii. four steps to exec auto dunning are; 1.maintain parameters 2.proposal run, 3.editing the dunning proposal, 4. printing dunning notices
- iv. customers w/o dunning proc in master rec cannot be dunned
- v. it is possible to dun vendors as well as customers
- vi. If dunning areas are not used, dunning is performed at coy code level.

Dunning Program Configuration

- i. The dunning procedure controls how dunning is carried out
- ii. dunning prog settings are divided into fol categories:
 - 1. dunning procedures
 - 2. dunning level
 - 3. expenses/ charges
 - 4. minimum amount

5. dunning texts
6. environment
- i. In dunning procedure we maintain fol:
 1. dunning key
 2. description of key
 3. dunning interval in days
 4. min days in arrears(accounts) after which notice sent
 5. line item grace period
 6. interest calc indicator
- ii. In dunning level we maintain
 1. min no of days
 2. interest calc indicator
 3. print parameter
 4. issue legal notice although no further acc mov
- iii. In expense/charges we maintain dunning charges depending on dunning level which can be:
 1. fixed amount or %
 2. min level of amount on which charges to be calc
- iv. In minimum amount level, we maintain
 1. min amount req before interest is calc at each lvl
 2. min amount/% of overdue items to reach a dunning lvl
- v. In dunning texts we maintain name of the form that will be used at each dunning level
- vi. In environment we maintain info with regard to:
 1. coy code data
 2. sort fields
 3. sender details
 4. dunning areas
 5. dunning keys
 6. dunning block reason
 7. interest
 8. dunning groupings
- vii. Every dunning prog is identified by two fields
 1. run date
 2. identification
- viii. The identification is used to differentiate b/w progs having same run date
- ix. The parameters specify the accounts & documents to be considered in the dunning run.
- x. The dunning run creates a dunning proposal
- xi. dunning run can be divided into 3 steps:
 1. select accounts
 2. dun line items
 3. dun accounts
- xii. Fol criteria must be fulfilled for an account to be selected for dunning:
 1. a dunning procedure must be entered in master data
 2. date of last dunning run entered in account must be earlier than the dunning interval date of dunning procedure
- xiii. Usually payment terms of a credit memo do not apply, instead the fol rules are applied:
 1. if a credit memo is invoice related it has same due date as invoice
 2. all other credit memos are due at baseline date
- xiv. The account must have a debit balance for it to be dunned
- xv. The dunning notice lists all items that were cleared.
- xvi. if no grace period is defined, the system start the dunning procedure as soon as the net due date is

- reached.
- xvii. the dunning date is the day when the overdue items are dunned
 - xviii. every dunned item must be overdue but not all over due items are dunned
 - xix. system adds the account or item to block list if it finds dunning block on account or item level
 - xx. **if payment method for incoming payment has been defined for an item, the item is not considered for dunning**
 - xxi. **each dunning procedure contains upto 9 dunning levels**
 - xxii. higher the dunning lvl the stronger text
 - xxiii. dunning procedures with only one dunning lvl are referred to in the system as payment reminders
 - xxiv. **By assigning dunning keys to certain item, they can be prevented to exceed a certain dunning level.**
 - xxv. The total amount of all items in an account with certain dunning level must be greater than the defined minimum amount
 - xxvi. the relationship between total amount and total open items must be greater than a min %
 - xxvii. the account can only be dunned if at least one item has reached the min days in arrears per account
 - xxviii. accounts get the highest dunning level for all the items that have been dunned
 - xxix. account only dunned if one of the fol condition is fulfilled:
 1. always dun check has been selected
 2. dunning data has changed since last dunning run
 - xxx. as per legal dunning procedure, if start date of legal dunning procedure is entered in master data, the account is always dunned if one of fol condition is fulfilled:
 1. postings have been made since last dunning run
 2. always dun in legal procedure is selected
 - xxxi. **Dunning data is not updated until dunning notices are printed**
 - xxxii. on execution of dunning proposal you get fol list:
 1. dunning statistics
 2. dunning list
 3. blocked accounts
 4. blocked line items
 5. dunning history
 - xxxiii. **Once dunning proposal has been created, changes to dunning data in items or master records are ignored in current run**
 - xxxiv. Print prog for the dunning procedure does fol:
 1. groups items to be dunned with a dunning notice
 2. generate dunning notice for each group
 3. enters the dunning date & level in dunned items & accounts
 - xxxv. Groupings can be done on fol criteria:
 1. dunning per dunning level
 2. grouping key
 3. decentralized processing
 - vii. **one dunning form can be used for all dunning levels & areas**
 - viii. **dunning forms are assigned to dunning procedures at coy code level**
 - ix. **Dunning forms can be assigned for each account type, dunning level & dunning area.**
 - x. Dunning notices can be printed with an attached payment form for bank transfer
 - xi. **Dunning notices must only contain items with coy code currency**
 - xii. **Payment prog can create a payment advice note containing items in dunning notice**
 - xiii. Payment advice note number has 10 digits and starts with 08.

- b. If you do not receive payments from customer at net due date, you check if dunning notice be sent and with what severity.

c. There are Four steps to Dunning Program:

- i. **Maintain Parameters:** you enter parameters & specify how it is run. The parameters of old RUN can be referred & dates adjusted.
- ii. **Schedule Dunning run:** During RUN system chooses accounts & checks them for overdue items. It also checks if dunning notices have to be sent & which dunning levels should be assigned. All dunning data is stored in **dunning proposal**
- iii. **Change dunning notices:** The dunning proposal can be edited, deleted & recreated as often as necessary until the dunning clerk is satisfied with the result. You can skip this step & print straight away if req.
- iv. **Start dunning printout:** In one step dunning notices are printed & dunning data is updated in master rec & associated documents.
- v. Dunning Prog settings are divided into the fol categories: **Dunning Procedure** **Levels**
Expenses/Charges **Minimum amounts** **Dunning texts** **Environment**

d. Configuring the Dunning Program:(configuring auto dunning)

- i. **Dunning Procedure:** Most settings for dunning prog are done in dunning procedure. It controls how dunning is carried out
- ii. Every account incl in automatic dunning process needs to have a dunning procedure.
- iii. One-time accounts also have a dunning procedure valid for all one-time customers.
- iv. Many different dunning procedures can be defined as nec, predefined procedures also available in R/3
- v. Dunning procedure can process std and/or special G/L transactions.
- vi. You make min changes to config if you copy existing procedure & adapt only coy code specific config
- vii. **For each dunning process, maintain:**
 1. Key for dunning procedure to be used
 2. description of dunning procedure
 3. dunning interval in days
 4. min days in arrears account
 5. grace pd per line item
 6. Interest calc indicator to calc dunning interest
- viii. For each dunning procedure you have to specify the intervals at which the accounts that use this procedure are to be dunned.
- ix. During RUN system checks if run date is at least this no of days after the date of last dunning run, if not a new dunning note cannot be created even if new items have become overdue or dunning level of the items has changed.
- x. No of dunning levels represents the highest dunning level that is possible in this procedure.
- xi. **Min days in arrears account are the days that at least one item in the account must have. Otherwise, the account is not dunned.**
- xii. **An item whose no of days in arrears is less then or equal to the no of grace days is not considered for dunning notice.**
- xiii. If you want dunning interest calc you enter interest indicator.
 - i. **Dunning Levels:**
 - ii. **For each dunning process, maintain:**
 1. min no of days, referring to due date of net payment, to reach a certain dunning level
 2. If interest is to be calculated
 3. print parameters
 4. wish to get dunning notice w/o further acc mov
 - iii. **Number of days in arrears is defaulted by the system which proposes line item grace periods as the first dunning level. For further dunning levels , system adds dunning interval in days to days in arrears of previous dunning level**

- iv. For each dunning level you can specify if interest is to be calc
- v. If you set always dun option, dunning notice is printed even if no changes (no item reached higher dunning level & no new item added) have been made to dunning proposal since last RUN.
- vi. You can print dunning notice in legal dunning procedure, even though no further account movements occurred.
 - i. **Dunning Expenses/Charges**
 - ii. For each dunning process maintain:
 - 1. Dunning charges, depending on dunning level-(fixed or % of dunned amount or set a minimum amount).
 - iii. Dunning charges are defined for each currency & depend on dunning level.
 - iv. Dunning charge can either be a fixed amount or % of dunned amount. You cannot use both at same time
 - v. You can set minimum amount at each dunning level.
 - i. **Dunning Amounts (minimum)**
 - ii. For each dunning process maintain:
 - 1. Min amount or % of overdue items to reach a d-lvl
 - 2. Min amount req before interest calc for each lvl
 - iii. If min amount for overdue items not reached in a dunning level, the items in this level are assigned to next lowest level & system checks if a notice can be created now.
 - iv. If you specified a min %, the limit must also have been reached or exceeded.
 - i. **Dunning Texts:**
 - ii. For each dunning process maintain:
 - 1. Name of the form that will be used at each dunning lvl.
 - iii. Layout of form defined in SAP script word processing tool.
 - iv. **Dunning prog can generate payment advice notes, dunning notices & PAYMENT FORMS.**
 - i. **Environment**
 - ii. **Coy Code Data:** You specify if dunning notices are created separately by dunning area rather than by account for coy code. If you choose this the dunning data in biz partner master rec is updated according to dunning areas, **dunning area is an organizational entity which is a substructure of coy code responsible for dunning.**
 - iii. In contrast to std dunning, where all items at all dunning levels are dunned with one notice, you can choose to use a separate dunning notice with a different accompanying text for each dunning level in an account.
 - iv. **Sort Fields:** If you wanna sort your dunning notices & items according to specific criteria, you can maintain sort variants.
 - v. **Standard Texts:** have to be assigned to coy code & optionally to a dunning area. Contains text for the letter header which includes coy logo & tel no.
 - vi. **Dunning Key** determines that the line item can only be dunned with restrictions or is to be displayed separately on dunning notice
 - vii. **Dunning Block** prevents accounts & items from being dunned.
 - viii. **Interest:** You can maintain interest rate to be used to calc for interest due on debit balances.

5. Running the Dunning Program and Dunning Printout

RUNNING THE DUNNING PROGRAM

- a. **Maintain Parameters:** You can use different RUNS for different customer groups.
 - i. Every dunning prog identified by 2 fields, i.e. **Run Date & Identification**
 - ii. **Run date does not have to be actual date of prog execution**; main purpose is to identify prog run.
 - iii. Identification used to differentiate between prog having same run date.
 - iv. **Open item selection:**
 - v. Here you tell dunning prog which documents & accounts in which coy code it should examine for overdue items
 - vi. Activate **additional log** & check it after RUN to see whether the run was successful.
- b. **Schedule Dunning RUN:** A dunning run is carried out to generate a **proposal list**, which is edited, deleted or recreated as req; You can directly print after RUN w/o editing; Dunning Run can be divided into 3 steps:
 - i. **Select Accounts:** prog checks which accounts to consider in RUN acc to parameters & configuration. Prog checks all accounts using criteria entered in parameters, if they fulfil these criteria the accounts are included in RUN. Fol criteria must be fulfilled:
 1. **dunning procedure must be entered in master data**
 2. **date of last dunning run entered in account must be earlier than dunning interval date of d-procedure.**
 - ii. **Dun Line Items:** checks overdue line items in selected accounts & which dunning lvl to apply.
 - iii. **Dun Accounts:** system checks if payments have to be dunned for an account, if yes which dunning level to use.
 - i. **Due dates for Receivables & Credit Memos:**
 - ii. **Receivables are due at due date for net payment**
 - iii. Usually the payment terms of credit memo do not apply, instead there are fol rules:
 1. **if credit memo is invoice related, it has same due date as invoice**
 2. **All other credit memos are due at baseline date of document.**
 - iv. If you want the payment terms in a credit memo to apply, you have to enter V in the Invoice reference field.
 - i. **Clearing with credit memos or Vendor items:**
 - ii. **The due net debit items on the account are cleared with due net credit items. The credit items are assigned to the debit items with the highest dunning level & cleared with these items.**
 - iii. If you choose clearing between customer & vendor, the due net credit items in the vendor account are also cleared with items with **highest dunning level**.
 - iv. Same dunning procedure must be defined for both customer & vendor.
 - v. **After all due debit items have been cleared with due net credit items, the account must have a debit balance for it to be dunned.**
 - vi. **The dunning notice lists all items that were cleared.**
 - i. **Dunning Dates**
 - ii. Difference between due date & dunning date is fol:
 1. **Due date is date after which the liabilities should have been paid.**
 2. **Dunning date is day when the overdue items are dunned.**
 - iii. Every dunned item must be overdue, but not all overdue items are dunned.
 - iv. **For line item grace periods, only those items that are still overdue after the grace days have been deducted are dunned.**
 - i. **Dunning Block in item or account**
 - ii. If items are overdue but there is a dunning block in the item, system adds these items to **the blocked items list**.
 - iii. If payments have to be dunned for an account, but account contains a dunning block, the system adds the account to the **list of blocked accounts**.
 - i. **Payment method in item or account**
 - ii. **If a payment method has been specified for an item, the item is usually not dunned as the**

payment prog is responsible for collecting the payment. These items are only dunned if they have a payment block.

- iii. If payments for accounts are to be dunned, a payment method for incoming payments is specified in the master data, the system usually does not dun because payment prog is responsible for collecting the money. These accounts only dunned if they have a payment block.
 - i. **Dunning levels for line items**
 - ii. **notice text** influenced by dunning level higher lvl strong word
 - iii. **Each item to be dunned is assigned a dunning lvl according to days in arrears.**
 - iv. For invoice related credit memos, dunning lvl of invoice is used
 - v. **From one dunning run to another, the dunning lvl can only be raised by one, i.e. no dunning lvl can be skipped.**
 - vi. **When setting up a dunning procedure, the system defaults the no of days in arrears on dunning levels screen. The system proposes the line items grace period as the first dunning lvl. For all further dunning levels the system adds the dunning intervals in days to the days in arrears of previous dunning level**
- vii. Dunning procedures with only one dunning lvl are referred to in the system as payment reminders. These procedures are used for very important customers & public corporations
 - i. **Dunning Keys**
 - ii. **By assigning dunning keys to certain items you can prevent these items from exceeding a certain dunning lvl.**
 - i. **Minimum Amounts per Dunning lvl**
 - ii. **The total amount of all items in an account with a certain dunning lvl must be greater than a defined minimum amount.**
 - iii. **The relationship between the total amount & total open items must be greater than a minimum percentage. If not the items are set to a lower dunning level.**
 - iv. Usually, the min amounts & percentages at higher dunning levels are greater than those at lower levels.
 - i. **Minimum days in arrears (Account)**
 - ii. **An account can only be dunned if at least one item has reached the min days in arrears per account. This means all remaining items in account are also dunned. But if an item in an account is within line item grace period it is NOT dunned whatsoever may be the case.**
 - i. **Dunning Level in Account**
 - ii. **The account gets the highest dunning level of all the items to be dunned.**
 - iii. **If all items are dunned with one dunning notice, the dunning text is worded according to highest dunning level.**
 - i. **Dunning Requirements**
 - ii. After determining dunning data, system checks if dunning is really necessary.
 - iii. **Normally, dunning notice not sent if data has not changed since last RUN.**
 - iv. This means account only dunned if fol occur:
 - 1. **dunning data changes since last RUN**
 - 2. **The always dun (usually selected for last dunning lvl & for payment reminders) checkbox has been selected** |A1.
- v. Accounts in a legal dunning procedure are subject to a different rule. If start date of legal dunning procedure is entered in account master data, the account is always dunned if one of fol conditions is met:
 - 1. **Postings have been made since last dunning run**
 - 2. **The always dun in legal dunning procedure indicator selected**
- vi. **The system does not send any dunning notices to a customer with legal dunning procedure, even if dunning data has changed**
- vii. **The always dun in legal dunning procedure field should be selected to prevent any open items that were posted before start of the legal dunning procedure from being overlooked.**

c. **Editing Dunning Proposal:**

- i. Edit dunning proposal created by dunning prog.
- ii. After dunning proposal has been created it can be edited by a clerk.
- iii. Fol lists can printed
 1. Dunning statistics
 2. Dunning List
 3. Blocked accounts
 4. Blocked line items
 5. Dunning history
- iv. If a dunning proposal is not used for printing, it must be deleted. Otherwise, it blocks the selected items for processing in other dunning runs.
- v. **Editing Dunning Data:** The clerk can:
 1. Only changes in dunning proposal apply to current dunning run
 2. Block an account/line item in **current** dunning proposal or remove dunning block.
 3. Lower the dunning level of an item in **current** dunning proposal.
 4. Change the dunning & correspondence data of an account in the master record. Such changes do not apply to current dunning run.
 5. Change a document, this change does not apply to current dunning run.
 6. **The dunning level can be raised or lowered as req in master data & documents.**

d. **Printing Dunning Notices:**

- i. The print prog for dunning procedure does fol:
 1. Groups items to be dunned with a dunning notice according to various rules.
 2. Generates a dunning notice for each group.
 3. Enters the dunning date & level in dunned items & accounts
- ii. If dunning notices are to be sent to one-time customers, **dunning data is updated only in relevant items** & items in one-time accounts are grouped together in one dunning notice if they have same address.
- iii. Dunning notices are printed in seq defined by sort criteria.
- iv. **Items to be dunned are grouped together in dunning notices as long as they have same:**
 1. **Coy Code**
 2. **Dunning area (if areas used)**
 3. **Account**
- v. **Special Groupings:** You can group items by the fol criteria:
 1. **Dunning per dunning level**
 - a. In coy code specific settings for dunning prog, you can choose **whether a separate dunning notice is to be printed for each dunning level**.
 - b. In this case, the text for dunning notice is selected according to dunning levels of grouped items.
 2. **Grouping key**
 - a. You can enter a grouping key in customer/vendor account to group items in dunning notices **that have the same values in the fields assigned to the grouping key**.
 3. **Decentralized processing**
 - a. If a customer has a head office with several branch offices, items are posted to central account. As a result head office usually receives one dunning notice with all the due items from its branch offices.
 - b. **If decentralized processing is selected in the branch accounts, dunning is processed locally, i.e. the notices are sent to the branch offices.**
 - c. **You can use cross-coy code dunning to combine overdue items from different coy codes in one dunning run.** The overdue items from one customer that exist in different coy codes are dunned with one dunning notice. The **items are grouped**

according to predefined rules, e.g. by dunning levels, areas or dunning grouping & assigned to one or more dunning notices. **This means that you do not have to send the customer a separate dunning notice for each coy code.**

- d. In order to dun different coy codes at once you have to assign the relevant coy codes to a joint dunning coy code. The dunning procedure assigned to the account in the dunning coy code is used. The dunning frequency & dunning blocks are checked individually, not just in dunning coy code.
- e. If a date for legal dunning procedure has been specified for an account in dunning coy code, this also affects the dependent coy codes.

4. Dunning Text Control

- a. Texts in italics can be controlled by the variables used in dunning formulas.
- b. Standard texts are available for entering coy code or dunning area data in coy code independent form.
- c. **The dunning recipient can be different from the address of the dunned account.**
- d. If no specific dunning clerk is entered in the master data, the accounting clerk is displayed.
- e. Dunning interest depends on the dunning level & is calc according to an interest indicator. Minimum amounts for interests can be used.
- f. To prevent payment deadline from falling on a holiday, a public holiday calendar ID is assigned to the dunning procedure. The total of all due items from a specified dunning level is calc & can be used in dunning text
- g. All items are generally printed at a higher dunning levels to provide the customer/vendor with an overview of the overall account balance. Items with a dunning block or collection method are not displayed.
- h. If the *dunning notices for each dunning level* option is selected, a list with all the items cannot be printed.
- i. Items with special dunning keys can be printed separately

5. Attached Payment Form

- a. Dunning notices can be printed with an attached payment form for bank transfer. The customer can use this form to pay the dunned amount.
- b. The payment form can be attached to dunning notice or printed on a separate page.
- c. **The dunning notice must only contain items with the coy code currency.**
- d. **The payment prog can create a payment advice note containing the items in the dunning notice.** When the customer pays the dunned amount, this advice note can be used to assign the incoming payment to relevant items.
- e. The payment advice note number has 10 digits & starts with 08. The payment advice note type 08 must be defined in the configuration settings.
- f. The payment advice note number can be printed on the dunning notice & the payment form (e.g. reference field).

6. Configuration Correspondence

a. Summary

- i. There are various types of correspondence in SAP
 - 1. Periodic correspondence (invoice, acct statement etc)
 - 2. Online correspondence
- ii. Correspondence creation process comprises of fol:
 - 1. Request the req corres
 - 2. the requested corres types are printed
- iii. A corres type represents a type of letter in the system

- iv. fol corres are generated manually
 - 1. doc creation
 - 2. display/change line items
 - 3. bal display
 - 4. line item processing
 - 5. payment
- v. Fol corres are generated auto
 - 1. periodic bank account statements
 - 2. bal confirmation
- vi. data from several diff coy codes can be combined in one letter
- vii. depending on corres type, the req info is
 - 1. doc number
 - 2. account no
- viii. each corres type has a corres print prog
- ix. each print prog has a selection variant, which contains parameters to generate desired corres & used when creating corres automatically
- x. each prog is assigned a SAP script form
- xi. A corres type can have difference forms, identified through form ID.

b. Correspondence Overview:

- i. Everyday your coy needs different types of correspondence, these are mapped in the system by means of **correspondence types**.
- ii. There are many opportunities to generate correspondence ad hoc
 - 1. Document creation
 - 2. display/change line items
 - 3. balance display
 - 4. line item processing
 - 5. payment
 - 6. periodic bank account statements
 - 7. Balance confirmation.
- iii. Periodic correspondence is triggered by specifications made in the master record, such as invoices & account statements. The intervals (weekly, monthly etc) are specified in customer/vendor master record.
- iv. You can create correspondence online when you process payments manually & from the line item display.
- v. In Customizing you can configure appropriate correspondence for certain postings, such as payment differences,
- vi. Correspondence creation process has fol steps:
 - 1. Request req correspondence: here the system initially only notes internally which correspondence types are to be created.
 - 2. Print requested correspondence types: typically, correspondence is printed automatically with a particular frequency, e.g. dunning letters, account statements etc. In some cases, it is also possible to print certain correspondence types individually & on demand.
 - 3. The print request is sent to the spool system. Following this, the correspondence is printed on selected printers.

c. Correspondence Types:

- i. You want to use std SAP correspondence types but also be able to create and use your own.
- ii. A correspondence type represents a type of form letter in R/3 & must be created for each type of

correspondence (letter) you desire.

- iii. Std correspondence types are:
 - 1. SAP01-Payment notice
 - 2. SAP06-Account statement
 - 3. SAP10-Indvl correspondence
 - 4. SAP14-Open item list
 - 5. User-defined
- iv. The correspondence types can be selected by the user when processing biz transactions or used automatically according to rules defined by the user or the system.
- v. You can use the std correspondence types, but if you want to make changes to them, copy req corres-type & change new corres-type accordingly.

d. Correspondence Type components:

- i. You define the fol info for correspondence types:
 - 1. The req info
 - a. Account number
 - b. Document number
 - 2. If additional text can be added to the form
 - 3. If corres can be used across coy codes
 - a. Estab intercoy relationship with the correspondence coy code
 - 4. The number of date fields required.
- ii. The fol data is nec for different types of correspondence:

Correspondence	Required Data
Payment notices	Doc Number
Doc extracts	Doc Number
Internal Doc	Doc Number
BoE charges statements	Doc Number
Individual Letters	Account Number
Account statements	Account number & date

- iii. This data is either entered manually by user or determined auto by the system after the user has selected the relevant correspondence type.
- iv. Data from several different coy codes can be combined in one letter. Select the cross coy checkbox in corres type & assign the coy codes to correspondence coy codes in the IMG.
- v. You can use the fol correspondence types across coy codes:
 - 1. payment notices
 - 2. account statements
 - 3. BoE charges statements
 - 4. internal documents
 - 5. individual letters
 - 6. Document extracts

e. Printing Correspondence:

- i. Each correspondence type has a corresponding print prog
- ii. Each print prog has a selection variant
 - 1. Contains parameters to generate desired corres.
 - 2. used when creating corres automatically
- iii. Each prog is assigned a SAP script form.
- iv. A suitable print prog & sel variant are defined for each corres type. Selection variant is used to print

- the requested corres
- v. You can distinguish your specifications by coy code. This is usually nec for companies with several coy codes
 - vi. You also enter the printer on which you want your correspondence to be issued in selection variant
 - vii. **A correspondence type can have several different form letters.** The individual forms are distinguished by their form ID. This ID is assigned to the selection variant to make sure that right letter is printed, you can change these forms to add coy logo etc
- f. Linking Correspondence types & Transactions:**
- i. Define what can be selected within different online transactions
 - ii. You specify which corres types can be used in conjunction with various online functions. selection made here will influence your choice of forms avail during online processing
 - iii. Make your specifications dependent on coy code, if no entry exists for a coy code, the corres types specified w/o a coy code are offered.
- g. Linking Correspondence types & Reason Codes:**
- i. Define correspondence type to use with reason codes
 - ii. For different tolerance groups for your biz partner, you specify the default correspondence types in cases of payment differences.
 - iii. If you want to always issue the same type of correspondence, enter the corres type in *message required* field. If you want to choose the corres type during payment settlement, leave the fd blank
 - iv. If you are using diff types of corres depending on the reason code, select *according to reason code* checkbox. On reason code screen you then define the corres type for each reason code.
 - v. **A payment notice is only created acc to reason code as long as all of the reason codes carry the same corres type.**
 - vi. If reason codes occur with different types of payment notices, the type of payment notice defined for the tolerance group is sent.
 - vii. If reason codes occur w/o allocated payment notices, the system again uses the tolerance group to determine the type of payment notice.
 - viii. **Example of linking corres types & reason codes:**
 - ix. assume tolerance gp corres is SAP01 & your customer makes a partial payment after a delay of two months
 - x. when you process this incoming payment manually, you create a residual item with a reason code & request corres type SAP01, payment notice
 - xi. after your corres request is created you post the doc
 - xii. Now you maintain your corres request, i.e. you print your corres request & the system generates your letter using your customer's master data & line item info.
 - xiii. However, if a doc has several line items, some of the line items may have different reason codes & associated corres types. **In this case, the auto payment notice cannot be sent acc to reason code because the system does not know which corres type to choose. As a result it uses payment notice assigned to the tolerance gp, independent of reason codes**

7. Configuration Interest Calculation

a. Summary:

- i. There are two types of interest calculation
 - 1. account bal interest calc
 - 2. Interest on arrears/item interest calc
- ii. A certain interest rate is used for the total bal of an account over a fixed pd of time for account balance
- iii. A certain rate of interest is calc for the items that are still open or unpaid at a specified date for item level..

b. Configuring Interest calculation: Config take place in 5 areas:

- 1. Interest calc indicator

2. general conditions
 3. time dependent conditions
 4. interest rate
 5. account determination
- i. Interest calc indicator determine the type of interest calc i.e. basic parameter
 - ii. General conditions contain addl parameters that determine the effect of the individual interest cal indicator.
 - iii. Time dependent conditions determine the validity date & ref to interest rates.
 - iv. Interest rates establish **reference interest** that interest calc can be tied to
 - v. **account determination** specified the accounts to which the results of interest calc are posted
 - vi. **Each interest calc indicator (ID) must be assigned an interest calc type.**
 - vii. **interest calc type specifies whether it is used for account balance or item level**
 - viii. **every account for which interest is to be calc must have an interest calc indicator in its master record**
 - ix. In general conditions we define:
 1. how often interest is calc
 2. sets the day of the month that interest is calc on
 3. specifies the interest calc base-calendar type
 - x. account determination in SAP starts with predefined biz transactions (e.g. 1030 customers)
 - xi. **when biz transactions are combined with other options such as coy code & interest calc indicator, the system then determines:**
 1. **posting keys**
 2. **account symbols**
 - xii. **Account symbol when combined with chart of accounts & currency refers to a G/L account where interest transactions are posted.**
 - xiii. **account symbol allow companies with different CoA & currencies to use the same biz transactions**
 - xiv. There are different ways to calc interest at item interest calc:
 1. calc interest on cleared items only & post the interest
 2. calc interest on open & cleared items & post the interest
 3. calc interest on open & or cleared items with posting the interest.

c. Overview:

- i. Accountant responsible for reconciling bank accounts has requested a means to verify interest charged by banks.
- ii. There are two types of interest calc in SAP R/3
 1. Account bal interest calc: is applied to the entire bal of a **G/L or customer account** using a specific interest rate over a specified period of time.
 2. Interest on arrears: is applied to individual items in **accounts receivable or accounts payable**.
A certain interest rate is applied to those items that are still open or unpaid at a specified date.

d. Configuring Interest Calculation:

- i. Configuring the interest prog involves defining settings in 5 areas:
 1. **Interest calc indicator**: define basic parameters for calc interest in R/3. Each indicator must be assigned interest calc type which specifies whether it is used for account bal interest calc or item interest calc. To calc interest for an account (G/L, customer, vendor), the **master data for this account must contain the appropriate interest calc indicator.**
The system requires a separate interest calc indicator for each comb of interest calc frequency, calendar type, currency, interest rate & so on.
 2. **General Terms**: specify further parameters about how each interest calc indicator works. **General terms set financial parameters for each interest calc indicator.** e.g. each indicator uses a specific calendar type that governs the interest basis & pd used to calc interest
Other general terms control max/min limits on interest postings, blocks on outgoing payments, payment terms & forms.

3. **Time-based terms:** set validity dates & relationships to interest rates. **Time dependent interest terms differ from general terms in that they have validity dates.**
They incl for example the **reference interest rate** used in interest calc, & premium or spread above this reference rate. e.g. 3 month LIBOR rate.
Amount from field specifies that rates only apply to balances above a certain dollar amount.
4. **Interest rates:** In conjunction with seq numbers R/3 users can use this function to build **staggered interest rates**, where the interest on balances upto a certain amount is calc at one rate, & above that calc at different rate.
R/3 allows you to define reference interest rates. In addition to the interest calc indicators, you can enter long & short text descriptions, an effective date, a currency & a financial centre.
For each reference interest rate a value & validity date are entered periodically. Each rate value remains effective until a new validity date is entered.
5. **Account determination:** establishes the accounts to which the results of an interest calc are posted (if nec). **It starts in R/3 with predefined biz transactions that are accessed when the user runs the interest calc programs.**
When biz transactions are combined with optional modifiers such as coy code & interest calc indicator, the system determines posting keys & account symbols.
Account symbols when combined with modifiers such as CoA & currency refer to G/L (or customer/vendor) accounts where interest transactions are posted. Account symbols allow companies with different CoA & currencies to use the same biz transactions.

8. Running Interest Calculation

- a. You can make data selection with a variety of variables including:
 - i. **G/L account**
 - ii. **CoA**
 - iii. **Coy Code**
 - iv. **Currency**
 - v. **Interest cal indicator**
 - vi. **Biz area**
 - vii. **Period for calc**
- b. **The prog also provides other controls governing cash pooling, output, posting & logs**
- c. You execute the prog using one of the three options:
 - i. Execute in the foreground
 - ii. Execute & print
 - iii. Execute in batch mode **(you must execute in batch to post transactions automatically)**
- d. Different ways to calc interest:
 - i. Account balance interest calc
 - ii. Item interest calc (calc interest on arrears)
 1. calc interest on cleared items only & post the interest
 2. calc interest on open & cleared items & post interest
 3. calc interest on open and/or cleared items w/o posting interest
 - iii. Limit the no of accounts incl in interest calc by entering **intervals or individual values** for CoA; account no, coy code, interest calc indicator & bizarea.
 - iv. Generally, only accounts with an **interest calc indicator** in the master record & that are managed with **line item display** are included.
 - v. You can enter the interest calc pd, date of last interest run & other options.
 - vi. **The prog displays an interest scale for each account. You can use the summarization level to determine the degree of detail of the interest scale.**
 - vii. **To monitor the interest calc run, you can have the system create a log.**

- viii. Run the prog as a background job. Set the *Post interest settlements* indicator so that the interest is posted automatically.

Periodic Processing-(+)-(1-10%)-(88)-(58)

1) Month end & year end closing processes

MONTH END CLOSING

Open new accounting period-Technical
Enter Accrual/Deferral, bad debits, depreciation, interest calc-FI
Maintain GR/IR account clearing-MM
Post payroll process-HR
Record good issue for deliveries & invoice customers- SD
CO allocation & reposting, locking old acc pd- CO
Reconciliation postings- CO-FI
Foreign Currency Valuation
Final Closing of old period

YEAR END CLOSING

Perform physical Inventory-MM
Update product cost estimates- PP/CO
Valuation of material on FIFO/LIFO-MM
Assets valuation & Investment support-AA
Balance confirmations-AP/AR
Fiscal Year Change-AA
Balance carry forward program-FI

2) Financial Statement Versions- (FSV)

SAP provides a std report (RFBILA00) for creating financial statements. Different versions for different user's of financial statements.

RFBILLA calculates the balance sheet profit/loss from the assets & liabilities totals& enters the result in the, bal sheet results

The profit & loss statement results are determined from all accounts not assigned to either assets or liabilities, & are entered in the proper item.

You can produce different outputs from this report prog by specifying diff financial statements versions.

a)-FSV's are also used in:

- o structured balance list
- o Drilldown reporting
- o Planning
- o Transferring data to consolidation

b)-In FSV we define the following:

- o Which terms to be incl, seq & hierarchy
- o Text describing line items
- o CoA
- o Total to be displayed

We can define as many FSV's as required.

FSV is defined in two steps

- o **Enter it in directory of FSV**
- o **Define Hierarchy level & assign accounts**

Each version must have the fol special items

- o Assets
- o Liabilities
- o Profit
- o Loss
- o Profit & Loss Results
- o Accounts not assigned

A FSV consists of a max of **10 Hier levels**

- o You assign items to each level, the sys calc a total/subtotal for each item, which is displayed when the program is run.
- o Assign texts to each item
- o Assign the accounts whose bal & acc name are to be listed to the lowest levels.

Upto 4 lines texts at the beginning and/or at the end of item can be written.

You maintain the P&L statement hierarchy in the same way as you maintain assets & liabilities in bal sheet.

RFBILA00 enables you to print financial statements on a SAPSCRIPT form.

3) Receivables & Payables

a)-balance confirmation: At the beginning of the year the bal carry fwd prog is run, carrying fwd the balances of the customers accounts to the next fiscal year.

The posting periods of the old fiscal year are blocked & the special periods for closing postings are opened.

The balances are then confirmed, the foreign currency documents valued, the values adjusted, & the receivables regrouped.

The prog for creating balance confirmations auto creates bal cfm (**incl reply slips**) for a freely definable number of vendors & as well as a **recon list** and a **results table**.

The bal cfm and reply slips are sent to **vendors** & the lists fwd to a **control center**. In IDES the control center is the internal audit department.

The vendors check the bal info they receive & send their **reply to control center**, which **compares the replies with the recon list** & enters the results in **results table**.

fol procedures are avail in SAP & a sel has to be made

- o balance **confirmation**
- o balance **notification**
- o balance **request**

For each coy code the system generates an output that includes:

- o **Check List**
- o **Error List**

Fol customization takes place for bal confirmation process:

- o define form names for printing correspondence
- o define send details for corres form
- o define reply addresses for bal confirmation
- o specify sel criteria for bal cfm
- o prepare balance cfm for customers/vendors

b)-Foreign currency valuation;

Foreign currency open items & bal sheet accounts must be valued on the basis of various biz-related & legal criteria. takes place at:

- o FC Balance sheet GL Account e.g. Bank Account (bal of GL in FC evaluated)
- o Open items (customers/vendors, GL) posted in FC (line items valued)

Certain customization is done for FCY valuation

- o check currency customization (exch rate table, etc)
- o Define Valuation Method (e.g. lowest value principle)
- o Define expense & revenue accounts for exch rate diff from valuations. You must also specify bal sheet adjustment acc for receivables & payables accounts.

The valuation method determines how indivl line items are valued.

FC valuation is nec if vendor accounts contain open items in a foreign currency.

A valuation cannot be made by posting to the payables account, since recon accounts cannot be posted directly to. For this reason, the amount is posted to an adjustment account, which appears in the same line of the balance sheet as the reconciliation account.

In SAP the strict lowest value principle means that writer ups are not allowed.

Foreign Currency accounts are valued by balance

If you value a line item, SAP stores the valuation difference in the line item. The system then uses this valuation during payment clearing or for subsequent valuations.

Exch rate differences that are not realized as valuation differences during payment clearing are posted as an exchange rate translation. You specify how the exch rate translation is posted for each coy code.

You can use different rate types for determining the exch rate.

Exch rate differences can also arise for fixed or hedged exch rate as a result of rounding

Exch rate diff in foreign currency bal sheet accounts are posted to various gains & losses accounts based on exch rate difference key that you enter in the G/L account master record.

c)- Value Adjustments:

Doubtful receivables are written off as an individual value adjustment (IVA) during year –end closing. The special G/L can be used for this purpose, since the biz transaction is posted to the customer account & to a separate special G/L account.

Value adjustments are made if receivable is determined to be uncollectible. An adjustment must also be made for tax on sales & purchases

fol 3 options are avail for creating value adjustments for receivables:

- o Enter indivl value adjustments as a special G/L indicator
- o Execute SAP prog to carry out a flat rate indivl value adjustment
- o Determine the amount & pass the JV at GL account level manually.

In customizing for Accounts receivable you define the debit interest rate % (bad debt expense %) for a valuation adjustment key & an overdue time period in days. You must also set up the appropriate adjustment & bad debt expense accounts for doubtful receivables in account determination table.

The valuation adjustment key must be entered in the master record of customer account to include in the flat rate IVA adjustment posting

The valuation run produces a valuation proposal that can be edited

Once valuation proposal is finalized, system makes the adjustment postings for the relevant key date & the reversal posting for the date after the key date.

d)- Regrouping:

The foreign currency valuation as well as the regrouping can be completed in different ways to meet various legal requirements. The results are then posted to various accounts that are used by diff fin statement versions

Before you can create fin statements, u have to group your receivables & payables according to remaining life so that they are correctly displayed in the financial statements. To do this u have to make adjustment postings

An adjustment accounts is used as the offsetting account, as direct posting is not possible on recon accounts.

4)-Profit & Loss

a)-Cost of Sales Accounting: :

- o Period Accounting
- o Cost of Sales accounting

In period accounting, the total output of a period & total costs of the period are summarized.

The total output of a period is the sales revenue +/- change in inventory

The total costs are **grouped by expenses**

In cost of sales accounting the sale revenue & costs of sales are summarized.

In sales revenues balance sheet changes are not considered

Cost of sales represent the expense related to sales & **grouped by function**.

In period accounting, the posting is GR/IR clearing account to **balance sheet changes**, whereas, in **cost of sales accounting** the posting is GR/IR clearing account to **cost of goods manufactured**.

The field functional area can be filled by fol option & have priority level as well

- o manual entries
- o Automatically by substitution rules
- o Automatically by master data of P&L GL Account
- o Automatically by master data of CO object

When functional area is activated SAP uses cost of sales ledger.

To create bal sheet in cost of sales accounting, SAP system requires transaction figures for each functional area. In the std G/L, however, transaction figures are maintained only for org units, coy code & biz area. In this case a **cost of sales** ledger must be used, in which transaction figures are also maintained for each functional area.

A special bal sheet report can be used to access these transaction figures, & a profit & loss statement can be created in cost of sales accounting.

b)-Controlling:

In SAP the recon ledger represents cost element accounting.

The recon ledger **compares** the **CO data with FI** data and auto reconciles CO with FI.

In biz area, related P&L statements incl all relevant costs, the function of the recon ledger enables reconciliation of internal cross-organizational cost flows to FI.

c)-Posting Salary Expenses from HR:

Payroll results are posted to accounting via **FICO interface**.

The FI documents are linked to original HR documents via the **HR doc number**.

d)- Accrual/Deferral Postings:

Accrual has to be created when an expense or revenue is to be received in future, but is incurred or earned in current period. (**incurred now received in future**)(IR)

Deferral has to be created when an expense or revenue is posted in the current period, but is incurred or earned in future. (**Posted now incurred in future**) (PI)

An accrual has to be created for an expense/revenue that has been incurred/earned in current pd & invoice to be received in future pd.

When accrual/deferral documents are entered, a reversal reason code has to be entered.

The reversal reason define whether

- o the reversal doc can have a different posting date
- o the reversal doc can be comprised of negative postings

e)- Accrual Engine:

The accrual engine is a **generic tool for calc & creating accrual postings**

There are 3 application components for the Accrual Engine

- o Manual Accrual in FI
- o Provisions for awards in FI/HR
- o Leasing in SD

Accrual Engine stores 2 types of data

- o Basic data
- o Accrual Engine documents & totals records

Basic data in accrual engine is time dependant.

All accrual postings in Accrual Engine create an Accrual Engine Document which auto creates a corresponding doc in FI.

Two main processes are triggered from user side:

- o create/change basic data
- o Periodic start of the accrual run.

Accrual engine have several advantages

- o It calc the accrual amounts automatically
- o Accrual postings are made auto
- o Simulations can be possible for future accruals
- o It supports parallel accounting with either **diff acc areas or parallel ledgers.**
- o Extensive information system is available.

To activate the accrual engine, fol customization takes place:

- o **The application must be assigned to a coy code**
- o **Accounting principle must be defined**
- o **Application has to be assigned with req comb of accounting principle & coy code**
- o **Current fiscal year must be open for application component**

Following are the closing activities in Accrual Engine:

- o Reconciliation: Accrual Engine/ General Ledger
- o Balance carry forward

f)- Manual Accrual

The basic data is usually subject matter to be accrued based on different contracts.

The subject to be accrued is defined as an **accrual object** & is identified uniquely for each coy code using an accrual object number.

The accrual objects are grouped in accrual objects categories for manual accruals.

Each accrual object can have several accrual items

Accrual items describe how a related accrual is accrued using a specific accounting principle.

The actual is calc for each accrual item, for each comb of accrual type & accounting principle specified. **In addition to the amount to be accrued & possibly also a quantity to be accrued, the accrual item contains an accrual method.**

The accrual item contains an accrual method for which a function module is defined.

g)- Posting control & Account Determination:

The employees in FI want to show you the different posting options available with an application component.

The posting control is defined for each

- o coy code
- o accounting principle
- o accrual type

For each combination fol is defined:

- o Frequency (daily, monthly, quarterly etc)
- o Summarization Level

There are **3 options for summarization level**

- o No summarization
- o Summarization at accrual object level
- o Maximum summarization

The purpose of account determination is to

- o **determine document type**

- o **determine debit account (target account)**
- o **determine the credit account (start account)**

For **parallel accounting**, the accrual engine supports

- o **parallel accounts**
- o **parallel ledgers.**

Accounts are determined using derivation rules which consist of :

- o conditions under which the derivation rule is executed
- o Determination of fields used in derivation rules in which source & target fields are defined.
- o Rule entries that derive the input for the target fields from the content of the source fields.
- o **The derivation rules are summarized in a set of rules which are processed either in parallel or sequentially.**
- o **The order in which parallel derivation rules are created & processed is irrelevant**
- o **The order in which sequential derivation rules are created & processed is important.**

5)- Technical, Organizational & Documentary Steps

At the end of the period, the ledgers have to be closed & the balances carried forward. You are responsible for the tech change of period in the company.

a)- Technical Steps:

For documentation purposes, the balance audit trail is carried out

When balance carry forward is executed, the system calculates the balance carried forward to the new, fiscal year for each balance sheet account, & P&L account is closed to the retained earning

The posting periods for the company code are defined by the fiscal year variant.

b)- Organizational Steps:

The schedule manager facilitates period end closing & reflects a cross application access point for all tasks involved in closing process.

The schedule manger, enables to do fol:

- o Create a structured display of all tasks in the task lists.
- o flows that can be executed in back ground
- o individual jobs can be executed in background
- o Prog/transaction that can be executed online

c)- Documentary Steps:

The balance audit trail generates the compact journal for a period & enters this in a file

Doc data & master is always extracted, sorted & merged into a sequential data set, before doc reorganization takes place

At the end of the year, the data set contains the doc volume for the year, sorted by account

The accumulated balance trial is extracted from this data set.

The fund flow analysis is the 3rd most imp form of consolidation accounting after balance sheet & P&L accounts

The cash flow indicates the extent to which a coy finance itself

There are 2 methods to determine the cash flow:

- o **Direct method (cash flow=incoming revenue payment-outgoing expenses)**
- o **Indirect method (cash flow=annual profit + expenses that do not affect payments- revenue that does not affect payments)**

The flow of fund analysis is divided into 3 main activities:

- o Cash flow from **operating activities**
- o Cash flow from **investment activities**
- o Cash flow from **financing activities**

Planning-(+)-(1-10%)-(75)-(86)

1. Versions and Profiles in Cost Centers/Profit Centers

1)-Cost Center Planning Versions & Profiles:

You use planning to define the enterprise goals, by comparing actual & plan data you can find any variances & make corrections.

Cost planning is part of the overall business planning process, & is a prerequisite for standard costing. You use cost & quantity planning to calc allocation prices.

Cost center planning has several aims

- o You plan the structure of your future business transactions for a certain period of time.
- o You use benchmarks to control the business transactions within a posting period.
- o You monitor the effectivity once the posting period is closed, by comparing plan with actual data, and target with actual data.
- o You create a base for valuating the business transactions in your enterprise

Versions in Controlling:

The definition of a version applies for the whole of controlling. This ensures that your data remains consistent if you use the version in different applications. e.g. in both Overhead Cost Controlling & in Profitability Analysis (integrated planning).

You define Controlling versions centrally and add application-specific settings for profitability analysis, PCA, Overhead Cost Controlling

You can plan your cost centers in as many CO versions as you wish, each version in R/3 is tailored to particular planning requirements.

When u creates controlling area, the R/3 system auto creates version 0. Valid for 5 fiscal years. You can create alternative versions for example, positive or negative scenarios.

When referring to actual postings, R/3 system always uses version 0. Alternative versions can relate only to saving planning data in CCA.

Cost center planning distinguishes between:

- o The planning of SKF's
- o The planning of activity output & prices
- o Value & quantity-based cost planning cost planning of primary & secondary costs & revenue planning.

You enter planning data in CO using entry screens, the layout of which you can define in Customizing. These screens are known as planning layouts.

There are 3 planning areas in CCA

- o Cost element/activity/Input
- o Activity output/prices
- o Statistical Key Figures.

For each planning area, you can create at least one planning layout. You can use planning layouts to define the characteristics (cost center, cost element etc) for which you want to enter plan values, and set up the appropriate value columns. SAP provides numerous predefined standard layouts.

You use planner profiles to control the planning process. In a given planner profiles, you can assign any number of planning layouts to any number of planning areas.

R/3 contains standard planner profiles & standard planning layouts that cover almost every conceivable planning situation. You can use the SAPALL planner profile to plan for the three planning area's using a number of SAP standard layouts. SAP provides the planner profile SAPEASY for situations where a simple planner profile is required. You can also define your own planner profiles.

You can carry out both **centralized** (planning of a single cost element for all cost centers for example) and **decentralized planning** (for example, planning of all cost elements on a single cost center). The type of planning depends on way your company is organized. You can combine both methods. Enabling you for example to plan your personnel costs centrally, and have all other costs planned locally by the cost center managers.

Defining Planning Layouts:

The planning layout is very flexible, enabling easy & ergonomic plan data entry. **Planning layouts are defined using the Report Painter.** The procedure is very similar to creating reports with Report Painter.

A planning layout consists of a header & multiple lead of value columns.

In the **header** you enter selection criteria & specify which characteristics are displayed in header area. The characteristics for the current planning area are predefined in the SAP system.

In the **lead column** you define the characteristics you want to plan. **For-activity independent cost-element planning, you need to define two lead columns, one for the activity types & other for the cost elements.**

There are several options available when defining **value columns**:

- o You can create columns with either a key figure with characteristics or just characteristics. The key figures are provided by SAP. Examples of key figures are fixed plan costs or variable plan costs in CO area currency, consumption, activity prices, & total actual costs.

A formula column is a value column made up of values from previously defined columns.

In an attribute column, u have the options for the unit, distribution key & action attributes.

The unit & the distribution key should be created as an additional field in a column.

Defining Planner Profiles

In the **planner profile**, you can assign more than one planning layout to each planning area. You use the **item number** to specify the order of the planning layout in the planning area.

In the planner profile, u can specify the fol planning conditions:

- o You use the **default parameters screen** to enter default values in the planner profiles for a planning layout, & to specify that they may not be overwritten by the user. **It is possible to use the same planning layout more than once & assign different default value to it.**
- o By assigning an **authorization group** to another planner profile, u can control the planning authorizations. This is particularly **important for decentralized planning.** You can ensure that planning is restricted to the given area.

For manual planning in different planning areas, u can change the planning layout during your planning meeting. You can go to the next assigned planning layout in the initial screen, or in the overview screen, by using the **next layout & previous layout**, function.

You can define a planner profile with settings for overhead cost planning, profitability analysis & PCA.

Typical Sequence of Planning Activities:

Cost center planning is used differently in almost every organization. The industry, organization structures and management areas are all factors that affect planning.

The fol could be a typical planning sequence:

- o You **plan SKF's** that are used as tracing factors for periodic reposting, distributions or assessments.
- o Then you **plan activity output as well as the prices** for these activity types on each cost center. You plan the skf's & the activity output before the cost element planning, as these tracing factors determine the entire cost volume.
- o Now u can **plan the primary costs.** There are different methods avail for this, e.g. **you can enter the costs directly, or calc them by multiplying the transferred resource quantities by the resource price, or derive them using skf's (dependency planning)**

In addition to manual planning, u can plan primary costs **automatically** based on predefined rules (plan accrual calculations, plan distributions, & periodic reposting in the plan). **You can also plan secondary cost elements automatically (plan assessment)**

After completing planning, you need to **lock the version**, so that unauthorized-users can no longer make any changes.

Plan SKF's

You can plan SKF's to:

- o **Create company key figures on cost centers**

- o Provide **receiver bases** for internal allocations.

SAP provides you with the fol for entering planning data:

- o If you use **free entry**, u can plan the specified characteristic values in all of the fields in the initial screen. The system only displays characteristics that already have plan values. Characteristic values that were not planned on the cost center yet, need to be entered on the planning screen.

If you use **form-based entry**, then in the planning screen rows, the system displays all of the characteristic values entered in the initial screen

Distribution Keys

R/3 interprets the values entered in the overview screen as the total value for the period of time entered in the initial screen for planning. It **uses a distribution key for period-based distribution of the totals values**.

R/3 contains distribution keys that can be used to distribute values by different criteria. **It is not possible to change the defaulted distribution keys**.

Examples: If you select standard distribution key 1, the corresponding value is distributed evenly to the periods.

Distribution key 7 means that the entered value is distributed to the periods using the no of calendar days.

In addition to the standard distribution keys, **you can define as many customer distribution keys as required**. For example, you can create a distribution key for seasonal fluctuations, or one for shift schedules.

Activity Output & Planning Prices

Activity types describe the **activity output of a cost center**, and can be used to determine the operating rate & the target costs. They can be allocated on cost centers, internal orders, processes, and so on to record the usage of internal biz activity.

Activity types are allocated using secondary cost elements, which is stored in the master data for the activity type as a default.

For each combination of cost center/activity type, the price is either set **manually** or by **automatic price determination**.

- o u can set up manual prices for you comb of cost center/activity types, if the activity type is to have a fixed value within the enterprise, and is not to be dependant upon other internal activities. **Manual prices are often used if the cost situation on the cost center is not to have an influence upon price, but external providers have definitive prices, or internal resources are to be specifically controlled.**
- o During **automatic price determination**, all primary & secondary costs planned for the corresponding cost center (activity-dependently or activity independently) are contained on the price. If more than one activity type is planned on a cost center, u initially need to distribute (split) these plan costs (activity –independent) that are on the cost center to these activity types. This must be done before the prices can be determined by dividing the cost center costs by the plan activity, or the plan capacity.

The primary costs that are activity-independent, and are structured by cost element are planned on cost centers. When u plan primary costs that are activity-independent, u can only plan the fixed costs

You plan single cost elements to which you later use to compare the actual costs. This enables you to make a differentiated plan/actual comparison at the end of the period.

Resource Planning

Goods & services that are procured externally are called **resources** in the R/3 system

Resource planning supports manual cost element planning **of primary costs and revenues** for cost centers, internal orders, & WBS elements. You plan the **amount of resources** that are to be evaluated by R/3 during planning

By assigning several resources to one cost element, you can reduce your CoA w/o losing imp details for cost analysis.

You can choose between activity-dependent & activity independent planning resources.

U can also store diff prices for each period within a separate price file & if nec, you can assign them different dependencies. **If u create resources with ref to a material, the resources are calc based on the material price stored in material master.**

If you update resource prices, R/3 auto updates your plan costs

You can also copy your resource planning to another version or period. **R/3 copies only the quantities that have been used & evaluates them at same time.**

Dependency Planning

In dependency planning, u can plan both activity dependent & activity indep primary costs based on values & quantities. The system calc the primary costs using a dependency that can contain skf's or activity types.

If u use **value based dependency planning**, you plan costs per unit of skf or activity type. e.g. £100 of office materials or £1000 for each employee. You plan a cost element. Value-based dep planning normally used in administration.

In **quantity based dependency planning**, u plan the amounts of resources per unit of skf or activity types. e.g. amount of course days for each employee or amount of screws for each car. Total planned costs are calc by multiplying the amount per skf or activity type by the amount of source object.

SAP calc the precise planned costs for each **period**. If u have defined different dependency prices, quantities or resource prices, the system will use a mean value in the planning overview screen. U can view the exact values in the period planning screen.

If the **prices or quantities change**, the system will reevaluate the planning.

Quantity based dependency planning **differs from resource planning** in that it does not just evaluate the amount of resources based on the resource price, it also takes into account the dependency quantity & a skf or activity type.

SAP provides a **standard planner profile** SAP R&R which includes planning layouts for dependency planning.

Formula Planning-Template Definition

The planning templates are not dep on cost center, which means u can use the same template for several different cost centers. When calc plan data, u can use a procedure in the system which determines auto which planning template to use.

U can also define formulas which u can use to calc prices auto, when the data is evaluated.

U can also define quantities as **variable**. U can define formulas which R/3 system will use to calc the quantities a cost center uses when the data is evaluated.

U can set certain lines (items) of the planning layout to active or inactive. If u only want to plan individual cost elements for certain cost centers, u can use **methods** to set them to active or inactive.

When u plan formulas only active items are taken into account.

Accrual calc in Planning data: % method

To calc accrued costs, use the % method. This is based on a % overhead, which is related to a cost element or a cost element group.

The % method is for example, useful for accrual calc for labour costs relevant to salaries, such as vacation allowances or bonuses.

If you wish to use the % method in actual data, and are currently planning in your org, then u also need to use this method for accrual calc in your planning data. This ensures that the cost analysis provides useful info & conclusions.

When accrual is calc, the system debits the cost centers with the accrual cost amounts. At the same time, a user-defined accrual object (cost center, or internal order) is credited. **Total values that are not accrued are planned on the accrual object**

You create primary **accrual cost element** (cost element category=3) to process the accrual calc.

Periodic Reposting

Periodic reposting is used as a posting aid

Primary postings (such as, telephone costs) are planned on an **allocation object** (cost center, overhead cost order, business process, WBS element, or cost object), and during periodic reposting to the corresponding controlling objects, where a user defined key is used.

The **receivers** can be a cost center, WBS element, internal order or cost object. You can restrict the no of receiver categories in Customizing

You can only repost primary costs. During this process, **the original cost element remains the same**.

Line items are posted for the sender as well as for the receiver, enabling the allocation to be recorded exactly. **The system does not save the info from the clearing cost center in totals records during a periodic reposting**. This enables it to save memory when storing the data records.

Periodic reposting can be **reversed** and repeated as often as required.

You use the **cycle-segment method** to define sender-receiver relationships.

Plan distribution

Distribution was created to transfer primary costs from a sender cost center to receiving controlling objects. During distribution, only **cost centers or business processes** can be used as **senders**.

Primary postings (such as, energy costs) are planned on a cost center, and allocated by means of the user-defined key during plan distribution.

A distribution **receiver** can be a cost center, WBS element, internal order, cost object or a business process. You can restrict the no of receiver categories in customizing,

You can only distribute primary costs. During this process, the **original cost element** remains the same.

Line items are posted for the sender as well as for the receiver, enabling the allocation to be recorded exactly.

You can **reverse** distributions as often as required.

You use the **cycle segment method** to define sender receiver relationships.

Plan Assessment

Assessment was created to tfr primary & secondary costs from a sender cost center to receiving controlling objects.

During assessment, cost centers or business processes can be used as **senders**.

The **receivers** for an assessment can be a cost center, WBS element, internal order, cost object or a business process. You can restrict in customizing

Primary & secondary postings are allocated at the end of the period by means of a user defined key

During assessment the original cost elements are summarized into assessment cost elements (sec cost elem cat-42).

As the system writes fewer totals records, the assessment has a **better performance than distribution or periodic reposting**.

Line items are posted for the sender as well as receiver, enabling the allocation to be recorded exactly. The **system** does not display the original cost elements on the receivers. Therefore, **assessment is useful if the cost drilldown for the receiver is not important** e.g. as in case of allocation of cafeteria cost center.

Similar to distribution, the partner is updated in the totals record

You can **reverse** assessments as often as req.

You use **cycle-segment method** to define sender-receiver relationships.

Calculating Prices in Planning

Even if u have planned prices manually, u may want to find out what extent they reflect the price the system calculates based on the cost centre's planned activity. To do this, u can use the **price calc** function.

Plan cost splitting assigns the activity-independent plan costs of a cost center to the individual activity types. **To calc the price of each unit of activity. The activity-independent costs must be split among the activity types.** The simplest method of splitting planned costs is to use an equivalence number. If u want to use other allocation bases, u can define a splitting structure containing different splitting rules.

In price calc, **the planned activity prices are determined auto by the R/3 system. Activity prices for planned activity types can be calc for each cost center and activity type.** R/3 system calc the price by, e.g. dividing the planned costs by the planned activity

Planning Lock

Once the planning process is complete in CCA, u need to lock it to prevent changes being made.

Use the locking indicator in the version to lock all of the planning for **one planning year**.

Within the period lock, u can lock the planning for transactions that were not used (e.g. revenue planning on cost centers). You can lock planning transactions for a combination of **COarea, fiscal year & version**.

You can select the biz transactions to be locked from a list.

Likewise, u can lock individual biz transactions for all periods in the fiscal year, or all biz transactions for a certain period.

2)-Planning-Profit Centers

Planning in Profit Center Accounting:

To make it possible to control & analyze internal areas of responsibility effectively, **u should limit profit center planning to those values which can be influenced directly by the profit centers**. Since the concrete organizational structure and scope of your company's responsibility areas depends largely on individual factors, it is nec to create as flexible & multi

dimensional plan as possible.

Profit Center planning is an integral part of your overall company planning. The integral character of business planning is particularly apparent within the context of PCA, as the planning data used here is largely created in other applications (such as CCA) & can be supplemented or changed in PCA. Profit center planning is part of short-term business planning & thus encompasses a span of one fiscal year. Short-term business planning generally consists of the following partial plans.

- o Sales plan
- o Revenue plan
- o Production plan
- o Cost plan

During profit center planning process, these individual planning areas are combined into an integrated planning network. You can use various plan versions in order to depict various planning scenarios.

Planning Methods in PCA:

Profit center planning is a process that is handled differently in almost every company. Industry specific characteristics, unique org structures & responsibilities mean that you have to individually tailor the planning process for your particular company.

The planning process is not a one-time activity, but rather an iterative process, which is usually performed in several steps. You need to pay special attention to the sequence in which the planning activities are carried out, and which planning areas need to be controlled with one another.

The overall planning process is therefore supported by a number of different planning methods. Profit center planning, offers the following methods of planning:

- o copying existing plan or actual data to a plan
- o posting plan data by period or simultaneously by transaction from other applications
- o manual planning of profit centers
- o distribution and assessment of data between profit centers
- o Various plan reports for comparison of different plan versions.

Plan Versions

The plan data in PCA is stored in different plan versions. This makes it possible to store various plan data in parallel for the same profit center. e.g. you can make a distinction between an operational plan & a strategic plan. between optimistic/pessimistic plans.

You can display different plan versions as well as actual version in the planning transaction, and use this data to calculate new plan data. You can also analyze and compare your plan versions in the info system.

If you want to transfer plan data from other components of R/3 system, such as CCA, you need to maintain proper control parameter for PCA.

A plan version is always valid for all of the CO module. When you define a plan version you also have to maintain specific parameters for the applications in which you want to use it. If locked cannot be used.

The exchange rate type is only relevant for plan data, which is manually entered.

Define Planning Layouts

You have two basic options for defining the layout columns(s)

You can define each row separately. You choose, e.g. the characteristic account & enter * to choose all of its values or XYZ for a specific value. You can also choose a value field to place the value fields in rows.

You can define the whole layout column by not selecting any characteristic value*

Value columns are defined using key figure, such as profit center currency or local currency. You define if you want the value fields to appear in the rows or in the columns when you define the first element of the layout. Once made these settings cannot be reversed.

You can choose from among the following attributes:

- o Distribution key to distribute the aggregated values to periods
- o Units for the value field (currency or unit)

In addition to planning columns you can also define formula row or column.

General data selection: Here you specify settings which are valid for the entire planning layout.

Planning Profile

Planner profiles are used to control the planning process. They are structured hierarchically. In a planner profile, u specify which planning layout will be used for each planning area (bal sheet accounts, cost/revenues or skf's). **You can only plan using planning layouts if you work with a planner profile.** A planner profile contains a number of defaults (parameters) for manual planning, these structures are:

- o the planning layout(s)
- o default values for distribution keys
- o the planning doc type
- o defaults for the variables in the planning layouts

When u enter planning data, the system asks u to specify, values for all the variables defined in the selected planning layout. Of coarse, u can also overwrite these defaults, provided that they have not been locked.

By assigning an authorization group to a planner profile, u can control what objects your users are auth to process.

Plan Integration in PCA

Profit center planning is part of short-term business planning & thus encompasses a span of one fiscal year. Short-term business planning generally consists of the fol partial plans:

- o sales plan
- o master production schedule
- o cost plan
- o revenue plan

Sales plan is the starting point for short-term planning, in which u determine the quantities u expect to sell during the planning period. The sales plan is usually created by the sales dept. The planned sales quantities are then passed on to production planning so that the planned capacities & activities can be coordinated.

Master Production Plan is worked out in close cord with the sales plan. It determines both the capacities & the quantity req for raw materials & operating supplies. **The planned activities established here are forwarded to the cost centers, which must supply these capacities in the form of activity units.** Furthermore, the Cost center managers must plan the costs to be incurred & the activity inputs to be taken from other cost centers based on planned capacities & activities.

Cost Plan (Cost Center Plan). Once the activity units have been planned, it is necessary to plan the costs expected for these activities.

Sales & Profit Plan: The planned costs and sales quantities can then be used to derive planned contribution margins. **The costs from cost center planning & the planned sales quantities (valuation based on expected revenue) are used in sales revenue planning.**

Plan Transfer Data

It is possible to transfer plan data in realtime from CO objects (cost centers, biz processes, IO, projects etc) to PCA for each R/3 activity. **If u do not transfer plan data for CO object to PCA online, u can post this data en bloc, for single objects or for single plan version or fiscal year.**

If u are not working with line items, u always have to post all the objects of the selected type when u report the transfer. **You can post the fol objects: cost centers, IO, projects, biz processes etc.**

Planned overhead (planned primary costs, results analysis, distribution, planned sec costs, assessment etc) is posted to profit centers via the assignment of cost centers & IO.

For make to order production using the R/3 project system, you can transfer the plan data from WBS elements or from networks. Profitability analysis lets u transfer revenues from revenue planning. **It is possible to transfer planned values & quantities periodically from costing-based profitability analysis. (CO-PA) to PCA**

SOP & MRP orders are account assignment objects in sales & production planning. Their purpose is to provide a rough plan of the production activities req to realize the planned sales. **This production plan for product group is divided among the individual products, which are assigned to profit centers.**

Planning Process

a) Manual Planning-Planning Layouts:

You can use special screen layouts, so-called "planning layouts"-to **enter costs, revenues, bal sheet values, skf's manually.** You can use the standard planning layouts in the system or define your own layouts.

The use of planning layouts for defining planning screens has the following advantages

- o **u define more than one lead column**
- o **You can define formulas in individual columns**
- o **Flexible value columns let you :**
 - plan more than one col**
 - Plan quarters, half years, years**
 - Centralize or decentralize your planning**
 - Plan in different currencies.**

You define your planning layouts in Customizing

b) Integration with Excel

Integrated excel is based on the principle that you link cells in the SAP planning layouts with the cells in Excel sheet by defining an Excel template in Customizing.

The integration of Excel into profit center planning means that u can use Excel functions such as those for additional calculations, graphics & printing. R/3 ensures the consistency of data centrally, providing central functions like derivation & valuation.

c) Formula Planning

Supports the **manual planning**. it allows u to utilize mathematical dependencies, to plan costs/revenues, bal sheet accounts, & skf's for your profit centers.

You can define the mathematical relationships in the form of formulas in templates that are independent of profit centers. This way you can use the same formulas over & over for different profit centers,

You can plan costs/revenues, bal sheet accounts & skf's. You can use whatever plan or actual data available to calc these

You create a template & assign the req profit centers to it in the master data maintenance.

A template is evaluated for a profit center or a profit center group by coy code.

R/3 applies the formulas defined in the template & uses these to calc the req values. **Each individual row in the created template is calc for the corresponding profit center.** The system creates a planning record for the cost element/revenue element, the bal sheet item, or the skf on the corres profit center.

Formula Planning-Template Definition:

You can create templates for the formula planning of profit centers in PCA environment.

You can also use collective processing to assign templates in the profit center master record.

All templates created in the PCA environment can be used.

Copy Plan function lets u copy existing transaction data as a template for a new plan. The only things u need to specify are the source & target data.

You can reevaluate the selected source data, both in terms of amounts & quantities when u copy it to your plan.

You also need to specify if the system should overwrite existing data in the target plan or whether it should be added to the data you copy.

d)- Plan Allocations

The assessment & distribution function is the same for actual and for plan data

Plan closing consists of the following functions:

- o Plan assessment
- o Plan distribution

You start plan assessment or plan distribution when you have finished planning completely. The transfer of all planned values from other CO applications which are to be transferred to PCA must be complete

The allocation functions assessment & distribution, let you transfer plan or actual transactions (revenues, costs, balance sheet items) from one profit center to other profit centers.

In PCA, you can only allocate data within one coy code. In addition, each assessment or distribution cycle must be assigned to one coy code only

Transaction data is always assessed with one assessment cost element. During distribution, both credit & debit postings are made to the same account. You can use other posted values, quantities or skf's as basis

for allocation in PCA.

2. **Planning Aids**

Copying Planning or Actual Data to Planning

To speed up planning data entry, you can obtain the plan values by copying plan or actual data.

If you want to use part of your manual planning from the previous fiscal year for the current one; If you want to transfer your planning values into another period within a fiscal year; or if you want to create different versions; you can use the function of **copying planning**.

By using the 'copy planning' function you can select a reference version and a target version to copy values from one version to another.

You can copy

- o Within Fiscal Years, versions & cost centers
- o Between different fiscal years, periods & versions

To assist your manual planning, you can select and **copy posted actual data** from cost centers. **You can only use this function to copy transactions that you can plan manually.**

- o Selection criteria for actual data are cost centers (all cost centers, cost center groups, or individual cost centers), fiscal year, and from/to periods. You can also specify which actual data is to be copied.

It is possible to select any value groups in the copy function. e.g. you can restrict the selection to the data of a certain cost center, or use all of the data. You can also specify the business transactions that you want to copy.

Revaluation

Using the plan revaluation function you can **increase or decrease** planning data on a percentage basis. This means you can combine the copy planning & Revaluation functions to create several different plan versions. This may be useful if you have copied the plan data from the previous year or if you want to draft scenarios for different cases within a fiscal year.

You can Revaluate **costs & amounts**. You can revalue all cost elements used in the primary cost element & revenue planning. **You CANNOT revalue assessment cost elements, imputed cost elements & cost elements used in indirect activity allocation.**

You can execute as many revaluations of cost center or cost element plans as required

Plan line items are entered when revaluation is executed.

The percentages used during revaluation can be changed as often as you want. If you repeat a revaluation using modified percentages, the old planned line items are deleted. Revaluation always uses the original initial value.

If you do re-run a revaluation but you do not want to overwrite the existing results, you must define a new revaluation.

Transfer Plan Values

Integrated Planning enables you to transfer data from one of the pre-stored system in CCA to cost center planning. If this data was planned in the pre-stored systems, & is transferred to cost center planning, then the corresponding data in CCA can be removed.

To use integrated planning, certain requirements need to be fulfilled in CCA & in the pre-stored systems. **Therefore, for example, to be able to transfer planned personnel costs from HR to primary cost planning in CCA, valid cost centers need to exist in CCA that are assigned to corresponding master data for personnel**

Overhead Orders-(+)-(1-10%)-(62)-(77)

Overview-Summary

- o Real Order is used to collect costs & distribute them later to different cost center or other objects
- o When real order is created, coy code is assigned to the order & if business area is activated, it is also assigned to biz area.

- o Statistical order is used to evaluate costs, which cannot be itemized in detail in CCA
- o Statistical order can neither be settled nor overhead are applied to them.
- o Internal order may be used for a variety of purposes:
 - o monitor internal order actions settled to cost center (overhead cost orders)
 - o monitor internal order actions settled to fixed assets (investment order)
 - o offset postings of accrued costs calc in CO (accrual orders)
 - o display cost accounting sections of S&D sales order & revenues that are not part of the coy's core biz (order with revenues)
- o The Invest Management component provides functions supporting the planning, investment & financing processes involved in capital investment measures within the enterprise
- o Internal orders can be used as collectors of monthly credits resulting from accrual calculations.
- o **Master Data:**
- o Internal order can be created with ref to an Order Type
- o The Order Type is valid for the entire client & can be used in any COarea
- o Own screen layouts for the order master data can be designed & assigned to appropriate layout of the order type
- o Standard R/3 system includes four system status settings:
 - o Created
 - o Released
 - o Technically completed
 - o Closed
- o The user statuses & associated rules are defined in a status profile, which is then assigned to order type
- o order groups are client dependent i.e. the same group name can not be used to create different group structure in diff COarea's
- o an order group can be assigned to multiple groups, but there no std hierarchy.
- o **Transaction Based Postings:**
- o When actual cost is posted the system automatically generates
 - o total Record
 - o line item
- o Total Rec summarizes all costs posted to an order under a cost element
- o When a cost center is also specified when actual cost is posted to a real order, the cost center receives a statistical posting of actual costs.
- o Fol are event based allocations for overhead orders:
 - o reposting costs & revenues
 - o reposting line items
 - o reposting activity allocations
 - o reposting direct activity allocations
- o SKF can also be posted to an order
- o A commitment is rec auto when u assign an overhead cost order to an MM purchase req or purchase order line item.
- o A commitment can be generated manually by entering a funds commitment in CO
- o Open commitments can be carried forward to the first period of the next fiscal year as part of year end closing.
- o **Period End Closing:**
- o Period end closing includes the fol periodic actual postings
 - o Per Reposting, assessment, distr & indir activity allocation
 - o overhead
 - o process costs
 - o actual activity price revaluation
 - o settlement
 - o periodic locking
 - o updating the recon ledger
- o Overhead costing is means by which indirect costs are allocated to appropriate objects

- o Overhead can be applied to both planned & actual costs or on basis of commitment data.
- o The costing sheet combines 3 central elements which determine how overhead is calc
 - o calculation base
 - o overhead amount
 - o credit key
- o The calc base specifies the cost element base to which overhead is applied.
- o The overhead amount allows to define the amount of overhead to be applied as follows:
 - o % OVERHEAD APPROACH
 - o Quantity based overhead approach.
- o Dependency allows to differentiate overhead rate or amount by plant, coy code
- o Overhead type determines whether the overhead calc is plan/actual/commit...
- o The credit key defines which object is credited to offset the debit to the overhead cost order.
- o Revaluation function allows to revalue activity allocation based on an auto generated calc of actual price.
- o An order can be credited during a periodic reposting
- o In settlement, some or all of the costs posted to an order are allocated to one or more receiver.
- o Settlement to an asset of G/L account is external settlement because FI is updated
- o settlement to a remaining cost object is internal settlement in CO
- o Order settlement is not mandatory
- o There are two procedures to define settlement
 - o basic settlement
 - o extended settlement
- o basic settlement allows to settle 100% cost to 1 cost center or to 1 G/L account under 1 cost element
- o extended settlement allows you to create your own settlement rules, which can be used to:
 - o Settle costs to one or more receivers.
 - o Specify how the costs are to be split.
- o The central settlement control parameter is settlement profile, which has the fol functions:
 - o It determines whether settlement is req
 - o It defines valid receiver types
 - o It sets settlement indicators
 - o It defines doc management parameter
 - o It defines the default values for other settlement parameters in order master record
- o The settlement structure controls how original cost elems are assigned to settlement cost elements.
- o There are two settlement types:
 - o PER settle- Periodic settlement
 - o FUL settle-settle costs till settlement pd
- o After settlement, costs incurred on the order are still visible.
- o Each time an object is settled, a settlement doc is created.
- o In addition to settlement doc the system also creates
 - o FI doc (external settlement only)
 - o CO doc (CO related data)
- o Auto generation of settlement rules has three options & created for one order type;
 - o std strategy sequences
 - o create your own
 - o define user exit
- o **Planning & Budgeting**
- o planning is cost oriented, easily changed, line items created if desired & calls on funds requested
- o Budgeting is Fund oriented, binding values, line item created for each change, can call on approved funds.
- o Internal Order planning provides 3 diff level of cost planning:
 - o overall planning
 - o primary & sec cost & revenue planning

- o unit costing
- o Statistical key figures are planned & used as a basis of allocations
- o In case of overall planning a planning profile (not planner profile) is created & assigned to order type
- o Internal Order planning can be made in multiple versions
- o There are 2 indicators used for integrated planning in versions:
 - o integrated planning
 - o integrated planning with cost centers/biz processes
- o The system recognizes the following budget types:
 - o original budget
 - o budget updates
 - o current budget
- o Unused funds can be transferred to next fiscal year using the budget carry forward function
- o Budget can be maintained in following currencies:
 - o CO area currency
 - o Object currency
 - o freely defined currency
- o The definition of **summarization** hierarchy determines which fields are used in summarization & which objects are summarized.

1. Statistical vs. Real Orders

- o If you post directly to cost centers you cannot easily determine which events create which costs as external costs and internal activities have same cost element (2 trade fairs 1 cost center)
- o If these events have their own overhead order, the costs are allocated separately. The settlement function allocates the order costs to the cost center responsible. This provides you with an org view of costs & compare and analyze results even after settlement.
- o Orders also provide a wider variety of planning & budgeting functions
- o You can use orders as internal cost objects
- o depending on the type of jobs described in the order, there are different ways of settling it:
 - o If a job affects a single product, you could settle the costs to responsible cost centers & then access costs in CO-PA
 - o If a job affects whole enterprise, it would be difficult to find a cost center, in this case use direct settlement to CO-PA
- o You can use overhead cost orders (OCO) to conduct detailed controlling for a particular object or activity. All costs concerning this object or activity are assigned to the relevant order. When you create an overhead cost order master record, you choose whether to create it as a **real order or a statistical order**.
- o **Real Orders:**
 - o You use real orders to collect costs & distribute them later to different cost centers/objects
 - o When you create a real order you **must assign it to a cost code**, if you have self-billed area balance sheets in FI, you must also assign the order to biz area.
 - o In **primary cost posting**, the costs are updated to the real order.
 - o In periodic process of order settlement, you allocate the costs to **actual controlling objects**.
 - o You can settle **portions** of the order costs to many objects.
 - o **Reposting is possible & you can apply overhead rates to order**
- o **Statistical Orders:**
 - o You use stat orders to evaluate costs which cannot be itemized in detail in cost element or CCA.
 - o You do this by assigning costs (simultaneous posting) to both stat order & respective cost center. You immediately see costs in order (statistical) and cost center (real costs), with no further action on your part.
 - o The cost center to be posted can be stored in the **order master data**. The system then finds the cost center automatically.

Otherwise, you must specify the cost center as well as the order to complete the posting doc.

- o In statistical order you have the **option** to rec a coy code or biz area on the order master rec. If you make these assignments, you can only post transactions to CO objects belonging to same coy code or Biz area. Do not do this if you want cross-coy code or cross- biz area controlling
- o **You can neither settle statistical order nor apply overhead to them.**

2. Types of Orders

- o **Internal orders in R/3 describe individual jobs within a CO area.**
- o Orders support action-oriented **planning, monitoring & alloc of costs**
- o Internal orders may be used for a variety of purpose:
 - o Monitor internal actions settlement to cost centers (overhead cost O)
 - o Monitor internal actions settled to fixed assets (investment O)
 - o Offset postings of accrued costs calc in CO (accrual O)
 - o Display cost accounting sections of S&D orders & revenues that are not part of coy's core biz (orders with revenues)
- o The management of internal orders represents the most detailed operational level of cost & activity accounting & can be used for fol:
 - o You can **consider costs according to aspects other than those used in CCA** for cost management.
 - o You can **compare in-house production & ext procurement costs** for decision making.
- o **1) Capital Investment Orders:** The investment management component (IM) provides functions supporting the planning, investment & financing processes involved in capital investment measures within your enterprise.
- o You can control the measures that your company undertakes for the purpose of producing long term assets for its own use & which have to be entered in the Balance sheet as **assets under construction**. A **prerequisite for this is the investment profile that is stored in the order master record.**
- o Measures are represented in the system by either **internal orders** or **WBS elements**.
- o **You can create an internal order that automatically includes an asset under construction. Prerequisite for this again is the investment profile stored in order master data.**
- o In the construction phase you post all transactions to the order. **During periodic settlement all debits that do not have to be capitalized are settled to a CO receiver like a cost center.**
- o **All items not to be settled to a receivers in CO and require capitalization are settled directly to the asset under construction.**
- o The monthly evaluation balances display the capital investment undertaking in asset inventory.
- o **Full Settlement** takes place when the capital investment measure is completed. In complete or partial activation, u enter in the order settlement rules the **final assets which are to be the basis for the settlement of the asset under construction**. **The asset under construction is automatically credited.**
- o **The settlement side includes a line item settlement procedure for this particular order type in addition to the standard settlement methods for internal orders.**
- o **2) Accrual Orders**
- o Internal orders can be used as collectors of monthly credits resulting from **the accrual calculation**.
- o Operational costs are often allocated differently in FI than in CO. e.g. expense posted in one period in FI may cover a whole year in CO. **In order to avoid cost fluctuations in CCA, costs that do not occur on a regular basis should be allocated to the relevant time periods & cost centers. Any costs allocated on this basis are known as accrued costs.**
- o You can use the %method or target=actual method to calculate accrued costs
- o **In %method** you determine accrued costs on basis of an overhead % rate applied to a cost element or a gp of cost elements.
- o **In accrual calc the amounts of accrued costs are debited to the cost centers. Simultaneously, an accrual object defined by you (cost center or internal order) is credited.**
- o **The effective actual costs** are also posted on the accrual object in order to calc, analyze & allocate any balances

b/w expenses from FI and accrued costs form CO.

- o **In target=actual method** you also can use an internal order for collecting the credits
- o accrual calc requires **order cat 02**
- o **3) Internal Orders with Revenues**
- o If you are not using S&D application, you can use internal orders with revenues **to display the cost accounting sections in SD sales orders**. You can also use them to monitor costs & revenues for activities that are not part of your company's core biz.
- o Using the identifier 'revenue postings allowed' in the order type you can control whether or not revenues can be posted to an order.
- o Order's with revenues can be settled at the end of the period in the fol ways:
 - o Costs can be settled to **any recipient**
 - o **Revenues can be settled to the fol objects:**
 - Profitability segments**
 - Other records with revenues**
 - G/L accounts**
 - No cost centers!!!**

3. Order Master Records, types and status

Summary master data

You use internal orders to monitor costs based on actions & objects. **Controlling costs with overhead cost orders provide a more detailed level of cost management than can be achieved with CCA or CEA**

The order master data includes org assignments like coy code, biz area, profit center & WBS element

The order type is a central control parameter in Customizing that is used to control **number assignment, model orders for copying, & info for status management**.

Status management determines which biz transactions are carried out at which times. Alongside predefined system statuses, you can create user status structures to further delimit permitted biz transactions.

You can work on master data for multiple orders simultaneously. Substitution (user-determined replacement rules) supports large scale changes to orders

Statistical orders allow you to post costs simultaneously to an order & a cost center. The statistical posting to the order may be used for reporting and analysis purposes only.

- o **Order Type:**
- o **You can only create internal orders with ref to an order type**
- o Order types define the purpose of the order & the way it is processed in the system
- o Order type may be used to group together orders with similar characteristics
- o You must assign each order to an order type, which then transfers certain parameters to the order.
- o **The order type is valid for an entire client, so you can use an order type in any COarea.**
- o Order Type determines Following:
 - o Whether commitments management is active
 - o Order status management
 - o Whether revenue postings are allowed
 - o Characteristics,(req, optional etc) of master record fields
 - o Whether the order no is int or ext assigned & the no range
 - o General parameters for settlement, planning & budgeting
 - o Order layout
- o **Order Manager:** **Worklists & master data can be displayed in one screen at the same time using Order Manager.**
- o **Master data can be grouped in a personal worklist or as a worklist generated using various selection criteria & then processed in a number of ways.**
- o Within worklists you can: search, sort, set filters, display details, select layouts, use collective processing etc.
- o You can also navigate into the data screen from the worklist.
- o **Master Data Maintenance:**

- o The master data defines the attributes of an order, including org assignments.
- o Similar to cost centers, you assign overhead orders to a **coy code & COarea**
- o To create **biz area** balances in FI you also need to define biz area in the order master record.
- o To transfer values that were posted to orders to a **profit center**, you enter the profit center in the order master data. Then all postings to the overhead order are transferred automatically to the profit center.
- o You can also transfer **plan values** to profit center planning.
- o If you assign an order to a **WBS element** you can monitor the value of the order in the project system (PS). In addition you can settle all orders assigned to the project automatically during project settlement.
- o The **remaining assignments are for information purposes**, meaning that they can be evaluated in the internal order info system. This info does not influence the posting of plan or actual costs.
- o You can design your own **screen layouts** for the order master data, and then assign the appropriate layout to the **order type**. If you do not assign a layout for an order type, all fields are displayed in the standard layout.
- o The master data is displayed in upto 5 tab pages in a tab index
- o The master data fields are distributed among 9 predefined group boxes.
- o You can distribute these group boxes among the tab pages.
- o **Status Management**
- o An **order has its own lifecycle** which begins when you create it and ends after you close it. During this time costs are planned, posted & settled to an order.
- o **Status management** informs you that a particular phase in the order lifecycle has been reached & controls which biz transactions are valid for an order at any given time.
- o R/3 includes **4 status settings**: **created, released, tech completed & closed**. The system status allows only certain biz transactions, e.g. you cannot post actual costs in phase created.
- o **Changing the status of an overhead cost order is itself a biz transaction & is done in the order master record.**
- o You can also create user defined status indicators. The system & user status settings together determine whether a transaction is valid, A status can:
 - o Allow a biz transaction
 - o Allow a biz transaction with a warning
 - o Prohibit a biz transaction
- o You can use system status & user defined status in conjunction
- o You can also define status-dependent field selections & authorizations for your user settings
- o Status dependent field selections allow you to control master data field maintenance.
- o Authorizations allow you to define which users are permitted to process transactions at different points in life cycle.
- o **User statuses**: You define user statuses & associated rules in a **Status profile** and assign the profile to your order type.
- o The status profile allows you to:
 - o define the user statuses
 - o assign a sequence to your statuses
 - o define an initial status, which is auto set when order is created
 - o Permit or forbid specific transactions
- o The **status number** assigns the sequence for the user statuses in status profile.
- o **You can have only 1 user status with a status number active at a time.** If you assign a status number to a user status, you will also specify a lowest and highest status number. This controls the subsequent user statuses.
- o **Defining a status number for a user status is not req. A user status that does have a status number can be activated or deactivated at any time, regardless of whether other user statuses are already active.**
- o **Order Groups**
- o Like CCA you can place overhead orders in hierarchical groups.
- o Order groups are useful for planning and settling costs, calc overhead & reports for any combination of orders you define.
- o **Unlike CCA order groups are client dependent. Which means that you can use an order group name only once. You cannot use the same group name to create different group structures in different COareas, However you can assign**

orders from any COarea to an order group.

- o You can create group with reference or copy group with suffix.
- o You can assign an order to multiple groups, but there is no std hierarchy.
- o You can create or change groups of internal orders, then you can also assign a selection variant to an end node, this provides you with a dynamic group in which the contents can change. But system performance is fucked with selection variants.
- o **Manual Collective Processing:**
- o R/3 provides functions which can be used to process multiple overhead cost orders simultaneously.
- o You can use selection variants to gather costs in a single listing for collective processing (e.g. master data maint or order settlement). Along with order fields, you can also make selections on basis of fol:
 - o Boolean formulas
 - o Order classification data
 - o Order settlement receivers
- o You can create an order group from the selected orders & use this group in reporting.
- o You can also select master data fields directly w/o using list variants.
- o In **Auto Collective Processing** you can change multiple orders in one step. It enables you to update the status of the orders or substitute values on the order master record.
- o The definition of **substitution rules** is used to undertake collective changes for orders based on any desired criteria. Each rule has one or more steps, but has 2 main components
 - o **Prerequisite:** like order list, is the definition of a selection variant that finds the orders to be processed. Defined in Boolean statements, the relevant values are substituted only if this precondition is met
 - o **Substitution** contains the values to be transferred into the relevant fields.

4. Period end and settlement rules

Your overhead cost orders must be incl in period end closing. This will result in debits or credits.

You must also decide if surcharges should be applied when overhead costs are passed on & if so how they should be calc.

Orders are collectors of costs, how to do settlement??

Summary

You can use periodic reposting to support postings for internal orders in same way as you can for cost centers.

You can apply overhead to an order. To define overhead rate calc & posting info, assign a costing sheet to the order.

Costing sheet comprises calc base, overhead rate & the credit object

You settle orders using single or collective processing. To do this, you must enter a settlement rule in all orders. R/3 uses this to determine the receiver for the order costs.

Settlement parameters allow you to define how the system will process the settlement. You can settle using the **original cost elements or settlement cost elements**. You can settle different types of costs to different receivers & create a hierarchical order settlement.

The **settlement profile** parameter is transferred from the **order type** & used as a default value in individual orders. The settlement profile determines critical settlement info such as the allowed receivers & provides the default values of the other settlement parameters.

Settlement parameters can be updated in the order master record.

Period end closing:

Period end closing includes the fol periodic actual postings:

- o Periodic reposting, assessment, distribution, indir activity allocation.
- o Overheads
- o Process costs
- o Actual activity price revaluation
- o Settlement

Other Pd end closing activities incl fol: Pd lock & updating recon ledger.

1)Overhead Costs

Overhead costing is the means by which you allocate indirect costs to appropriate objects, using a % or quantity based fixed amount applied to a cost base.

The basis of applying overhead are those primary cost which were posted directly to the order. e.g. labour or material costs in manufacturing.

You can apply overhead to both planned & actual costs or on basis of commitment data.

For testing & forecasting you can simulate the calc.

The rules for applying overhead are grouped in **overhead costing sheet**.

Overhead Costing Sheet: combine 3 elements which determine how overhead is calc.

Calculation base specifies the cost element base to which overhead is applied. You can further restrict the base by identifying the origin of cost element. The origin subdivides the cost element by material.

The **overhead amount** allows you to define the amount of overhead to be applied as fol:

- o In **%method** you identify the base cost elements. A % is applied to the costs posted to these cost elements. The calc cost is added as overhead.
- o In **quantity based overhead** you specify the amount of overhead cost to be applied per quantity unit-posted to the calc base cost elem. **In this case the units of measurements must be rec in CO.**
- o The **dependency** allows you to differentiate overhead rates or amounts by plant, coy code, profit center, resp cost center, or other criteria
- o The **overhead type** determines whether the overhead calc is for actual, plan or commitment data.

The **credit key** defines which object (cost center or internal order) is credited to offset the debit to your overhead cost order. You also specify which cost elements should be used to post the overheads.

Other Periodic Postings

Overhead orders can be receiver of cost center activity allocations. In an activity allocation, the activity quantity is entered in the transaction & evaluated using the plan price or manual actual price.

Revaluation allows you to reevaluate activity allocations based on auto generated calc of actual price. **Unlike cost center accounting, this runs via a separate transaction.**

Using the **process cost** function, costs may be allocated to overhead cost orders from biz processes in ABC.

Debit via Periodic Cost Allocation

Primary postings (such as telephone costs) are collected on **clearing cost center** or order to minimize the number of postings in FI. These costs are allocated to the appropriate controlling objects (like overhead cost orders) at period end closing according to a user defined key.

- o Line items are recorded for both the sender & receiver side to document the allocations exactly
- o Periodic allocations can be reversed & repeated as often as desired.

2)Periodic Credit postings & Settlement

a-Crediting orders through Periodic Reposting

An order can be credited during a periodic reposting. To do this the order must be defined in a segment of its life cycle as a sender which can be credited to various different receiver object types.

You can define how order is credited using the allocation rules like % method.

The cycle-segment method can also be used to define distr, assessments & indirect activity allocations.

b-Settlement: Overview

You usually use overhead cost orders as an interim collector of costs, & an aid to planning, monitoring & reporting processes.

When the task is complete, the costs are transferred to their final destination (cost center, WBS, profitability segment & so on), this process is called **settlement**

In settlement, some or all of the costs posted to an order are allocated to one or more receivers. **The offsetting postings, which credit the order, are generated automatically.**

You can settle orders individually or collectively

Settlement to an asset or G/L account is **external settlement**, because FI is updated by the settlement. Settlement to remaining is internal settlement in CO

You can **settle statistically** to a cost center, statistical order, WBS element or actual receivers

Order settlement is not mandatory.

Defining Order Settlement:

Before you can settle an order, you must specify where you want the costs to be posted.

There are two procedures for defining your settlement;

- o **1-Basic Settlement:** allows you to settle 100% of costs to 1 cost center or 1 G/L account under 1 cost element. You can enter this data in order **master record**.
- o **2-Extended settlement:** allows you to create your own settlement rules in the order master record. These rules can be used to:
 - settle costs to one or more receivers & allows a wide range of receivers
 - specify how costs are split (using distribution rules)

In extended settlement the settlement process is controlled via assignments in the **settlement parameters** in the order **master record**. These parameters include **the settlement profile, settlement structure, PA transfer structure** etc.

The settlement **profile specifies** the default values for the other parameters & is derived from the Order Type. It must be specified in the master record even if you are using basic settlement. You must specify which receiver object types are to be permitted.

The default settlement parameters can be changed in the order master record.

Settlement: Parameters in Customizing

The central settlement control parameter is the **settlement profile**.

The settlement profile is entered in the Order Type, ensuring that the order master record contains the correct values.

The settlement profile has the fol **functions**:

- o determines if settlement is req
- o it sets settlement indicators (incl valid distr rules)
- o Identifies valid receiver types & enter them as default in order master
- o defines doc management parameters
- o Identifies default values for the other settlement parameters in order master record: (**settlement struct, PA transfer struct, Source struct**)

a) **Settlement Structure:** **controls how original cost elements are assigned to settlement cost elements.** You also have the option to settle using the original cost elements

b) **PA transfer structure:** **controls how cost elements are assigned to value fields in costing based profitability analysis.** You only need to use it if you are settling internal orders straight to your results.

c) **Source structure:** controls settlement to different receivers depending on the original cost elements that were posted to the order.

Maintaining a Settlement Rule:

You can enter distribution rules in the **settlement rule overview screen**. The distribution rule determines what proportion of the order should be settled to which receiver. Each line in the distribution table determines the allocation a particular receiver. Costs can be allocated to receivers based on the fol:

- o Percentages
- o Equivalence numbers
- o Fixed amounts

You can switch distr rules during settlement, but only if you assign them different validity periods.

The fol **settlement types** are defined in the system for overhead cost orders:

- o Settlement type **PER** settles only the costs for the period u specify.
- o Settlement type **FULL** settles all costs on a sender object that have been incurred right up until the settlement period.

Settlement of Order Costs

You can settle costs to receivers using the same cost elements you originally used to post your order. This helps you to identify in detail the types of costs which were allocated to your receiver e.g. material/personnel costs.

Alternatively you can use a settlement cost element to allocate costs. With this approach, you can easily determine what costs have been allocated to the receivers through the order settlement process.

There are **two categories of settlement cost elements**

- o **Internal settlement cost element** (type 21) is used when you settle to a CO object like a cost center, order, WBS etc
- o **External Settlement cost element (type 22)** is used when you settle to an asset or G/L account.

After settlement costs incurred on the order are still visible regardless of method used.

Each time an object is settled, a settlement doc is created. The settlement doc is req if you have to reverse a settlement run or repeat a period closing.

You defined the no ranges for settlement doc during system config.

To keep data volumes manageable, you also define in the settlement profile the retention period after which the settlement doc can be archived.

In addition to settlement doc the system also create fol doc's:

- o An FI doc containing all accounting related data (ext settle only)
- o A CO doc containing purely cost accounting related data.

Customizing the Allocation Structure:

The allocation structure allows you to define which cost elements should be settled using a settlement cost element or the original cost element.

The setting you choose would depend on the settlement receiver object.

This is purely technical setting. It does not influence whether or how much of a cost element should be settled. This is defined by the source structure.

To use the allocation structure previously called the settlement structure, you need to create cost element groups that contain the primary & sec cost elements used for debit posting to your orders.

The cost element group is linked to the settlement structure in Customizing using a **settlement assignment**. For each settlement assignment, you stipulate by receiver type whether the settlement will use the original posted cost elements or a designated settlement cost element.

You might use settlement cost elements:

- o To reduce data volumes by combining several debit cost elements under one settlement cost element
- o To separate out costs allocated form orders to the receiver & to describe their purpose, such as repairs & maintenance.

Customizing: Source Structure:

The source structure (also set in Customizing) enables you to settle cost element (groups) to receivers using different settlement rules, that is, the total debit for the order can be split up & settled within the relevant groups.

The debits in the internal order are structured in the source structure acc to cost elements.

To use the source structure, insert it into the settlement profile or activate it in the master data for internal orders.

You can settle every single line item in capital investment orders individually. If you do not want to settle each item individually, SAP recommends using a source structure.

Defining settlement with source structure: In source structure you can combine the primary & secondary cost elements used for debit postings to your order into **source assignments**. You can then use the source assignments to allocate diff types of costs to diff receivers.

You do not need a source struct if you want to settle all your cost elements according to same rules.

Customizing PA transfer structure

The PA transfer structure concept is similar to the allocation structure concept

The input side consists of cost elements intervals. All cost elements need to be incl in any interval, to enable settlement to a profitability segment.

The output side links the cost elements/ intervals to value fields of CO-PA. This is particularly imp if you have orders with revenues & want to settle them to CO-PA, using costing-based profitability analysis.

Special Features:

Auto generation of settlement rules: instead of manually creating a settlement rule in each order & then settling it, you can define one settlement rule in customizing, which auto creates the settlement rule for each order when settlement is made

You have 3 options: 1-use std strategy seq, 2-create your own, 3-define user exits

An auto generation of settlement rules can always be created for an order type.

Hierarchical Settlement: You can settle from one order to another & create info at different summarization levels
You can process group of indep orders using collective processing in same settlement run.

The system auto determines settlement hierarchy & processing seq (based on settlement rules created for each order). It assigns a hierarchy no b/w 000-999 to the order.

The orders are settled in descending order (highest to lowest)-000 at top & processed last. You can also enter hierarchy number manually.

Settlement to Alternative Posting Period:

During order settlement you can enter a posting period that differs from a settlement period. This means even if the previous period has been closed & locked, you can still correct settlements from it & post the correction to the current period.

To do this, enter the period to be corrected in the *settlement period* field. The posting period is the period in which the correction is posted. The posting period must be the period immediately after the correction period.

You must process the correction settlement prior to making settlements in the posting period.

The system will not allow you to enter a posting period which has already been settled.

Reverse settlements already performed in a posting period if you find out that correction settlement is req for a period for which settlements have already been processed.

The settlement pd & posting pd must be within the same fiscal year

Settlement corrections are possible in both individual & collective processing.

Profit Centre Accounting

You must define a hierarchical profit center structure (std hierarchy) before you create profit centers

The std hierarchy is a tree structure for grouping all profit centers which belong to a **COarea**.

When creating a profit center you must assign it to a node of std Hier

You maintain std hier in customizing or from application menu

customizing also provides you a function which allows you to create profit center groups by copying cost center groups

In addition to std hier you can also create alternative hier.

A profit center is defined at COarea level, when creating profit center you enter the name of the profit center & period of validity

Profit center master data is **time-based**; therefore you can create diff data for diff periods of time.

By default the Profit Center is assigned to all coy codes within a COarea.

If profit center & cost center structures are the same, you can copy cost center master records to create new profit centers & then modify them as req.

PCA is based on CoA which is assigned to relevant COarea: These accounts include

- o Those from FI which are used in CO (revenue & primary cost elem)
- o **Cost elements** which are only used in CO (sec cost elements)
- o Accounts from FI which are not used in CO (payables/receivables, material stocks, WIP, assets etc)

You can maintain revenue & cost elements directly in PCA

Account groups for PCA can be copies from existing cost element groups or bal sheet/ P&L structures.

Account groups are maintained in same way as profit center groups.

Profit center groups are alternative hierarchies to std hierarchy. You can use them in reporting, distribution & assessment or various planning functions. In contrast to std hierarchy these groups do not have to contain all the profit centers in to COarea. Profit center groups let you select only certain profit centers & structure them hierarchically to allow more flexibility.

You can define any number of hier structures of accounts for use in the info system & for planning. These structures are called **account groups**. You can copy account groups from cost element groups in CO or balance sheet/P&L structures in FI

1. Dummy Profit Center and Assignment of objects

Dummy Profit Center:

If you forget to assign a particular **object** to a profit center and postings are made to this object the corresponding data

is posted to the **dummy profit center** in Profit Center Accounting.

This ensures the reconciliation between EC-PCA & FI stays possible.

You can also discover missing assignments by analyzing the postings to the dummy profit center.

Profit center accounting lets you allocate the data from the dummy profit center to regular profit centers using distribution & assessment

You can copy the dummy profit center from an existing profit center.

You do not specify a validity period for dummy; it is auto valid for max validity period.

A switch identifying it as the dummy profit center is auto set (in indicator field)

You change & display the dummy profit center using the normal maintenance transactions for profit centers

Assignment of objects:

You assign all **account assignment objects** (if you do not it will be auto assigned to dummy profit center) which incur costs & revenues to profit centers.

These assignments also determine the transfer of balance sheet items to individual profit centers.

As a result of assignment logic profit center is normally not posted to explicitly. Instead data is derived from primary account assignment objects (cost centers, internal orders)

Generally, postings of costs & revenues to PCA are based on the assignment of sales orders/production orders & cost objects.

Overhead costs are based on the assignment of the account assignment objects in OM (cost centers, internal orders etc) to profit centers.

Assignment of Controlling Objects:

You assign Overhead Cost Controlling objects (cost centers, internal orders, project, biz processes) to profit centers in order to observe the value flow b/w FI & Overhead Cost Controlling from a profit center point of view.

When you assign a controlling object to a profit center, the system makes sure that the controlling area is the same for the object & the profit center.

Cost centers & biz processes are assigned to a profit center in the *Master Rec Basic Data screen*

Internal orders are linked to the profit center in Order Master Data assignments screen. Maintenance orders of PM-Plant Maintenance component are assigned to a profit center the same way as internal orders.

The validity period of the profit center must completely contain that of the cost center or biz process

The assignment of a cost center or internal order to a profit center implicitly assigns all assets assigned to this cost center or internal order to the profit center as well.

Cost objects are used in Product cost accounting to collect & store costs which cannot be assigned to objects on a lower level (orders, projects, cost centers). However, in certain cases you may need to assign a cost object to a profit center. The assignment logic used here is same as that used for assigning cost centers.

In contrast to other assignment objects, profitability segments do not have master records. A profitability segment is a combination of characteristics, such as a customer, product, plant, distribution channel etc.

One of these characteristics is always a Profit Center.

Assigning Projects

Projects are used to carry out common tasks. This makes it **possible for several profit centers to be involved in a single project**, e.g. constructing an 747.

One profit center might be responsible for producing the engine, while other for electronic fitments. Profit centers are therefore assigned to various data-bearing structures in the project rather than to the project definition itself.

These structures are:

- o work breakdown structure element (WBS element)
- o network header
- o Network activities.

In the project definition or the project profile, you can enter a profit center which is to be used as the default for individual WBS elements. You can overwrite this value in the individual structures. **If a WBS element is not assigned to a profit center, the system posts to a dummy profit center.**

If a **network header** is not assigned to a profit center, the profit center is taken from the corres WBS element

If a **network activity** is not assigned to a profit center, the profit center is derived from the corres WBS element,

provided that activity is assigned to a WBS element, otherwise the profit center is taken from the network header. The assignment of these structures to a profit center makes it possible for you to transfer work in process from projects to PCA, as well as seeing all costs & revenues in the derived profit centers.

Assigning materials

The assignment of the material master to profit centers is the basis for the assignment of sales & production orders. Furthermore, it forms the foundation for internal goods movement transactions & for transfer of material stocks to profit center accounting.

Materials are always assigned to profit center at the **plant level**

The plant is assigned to a coy code, which in-turn assigned to a COarea. This COarea must be the same as COarea to which the profit center belongs.

You can assign materials directly in the material master or use the fast assignment function.

Material maint is divided into several views. If your material has the Sales: general/plant data view, you enter the profit center in General plant parameters of this view.

It is always the same profit center which can be shown in different views.

Assigning Production & Sales Orders:

A **production order** contains its assignment to a profit center in the order master record.

When you create a production order the default profit center is taken from the master record (general plant parameters) of the material being produced.

For process orders, the system proposes the profit center for the main product in the order. Consequently, you do not normally have to enter the profit center manually.

All the primary & sec costs posted to the production order are passed on to the assigned profit center, **along with the credit posted** when the production order is delivered or settled. This assignment is also used for transferring WIP to PCA.

Production orders are carried out in a plant. Each plant is assigned to a coy code, which in turn belong to a COarea.

This COarea & the COarea of Profit Center must be the same.

In a **sales order**, each order item is assigned separately to a profit center.

The **default profit center** is the one the material being sold to, consequently you normally do not have to enter the profit center manually.

Assignment through Substitution:

Defaulting the profit center in a sales order item from the material master plan assumes a product-oriented division of profit centers (based on material) or a geo division (based on the plant), or a comb of both.

If u wish to struct your coy from a sales-oriented rather a production-oriented view, you can also determine a profit center from the available fields in the sales order header or item with the help of substitution rules.

The fol is a partial list of the fields from the sales order & related info which can be used to derive the profit center assignment:

- o Sales Org
- o Sales Office
- o Sales district
- o Distribution Channel
- o Biz Area
- o Customer
- o Customer Group
- o Storage Location

If a system finds a valid substitution for a sales order, it uses this instead of the default found using the assignment on the material master record

2. **Assignment Monitor**

The **assignment monitor** provides you with an overview of all the assignments you have made to profit centers & supports you when you make or change assignments. e.g. you can call up a list of all cost centers which have not been

assigned to a profit center or profit center group.

From here you can jump directly to changing a transaction.

The fast entry material menu makes it possible to assign a large number of material numbers to a profit center quickly. The menu Orders, lets you analyze the fol type of orders, Internal orders, imputed cost orders, CO production orders, PPS production orders, process orders, network headers & maintenance orders.

The Cost Objects menu contains the general cost objects as well as the cost objects for process manufacturing. Incorrect assignments lead to incorrect transaction data in PCA, which usually can only be corrected with great difficulty.

3. Actual Data Flow and Line Item Management

Actual Data Flow:

Before you can analyze your profits by profit center, the system needs to summarize all profit related postings in profit centers.

The profit related components of the **period accounting method** (revenues, sales ded, change in stock, change in WIP, primary & sec costs) are transferred directly from FI, SD, MM, CO, IM & FI-AA to PCA.

Once you have transferred actual data to PCA, you can analyze it imm acc to period accounting approach using std reports in info system.

To calc profits acc to **cost of sales method**, you need to access the characteristic functional area, which is derived in FI or CO. If this derivation is active in FI or CO, the functional area is updated for each posting, making it possible to calc profits acc to cost of sales app in PCA

When PCA is active system only allows error free postings

a) Data flow from FI

You can analyze sel bal sheet items by profit center. The person in charge of the profit center are therefore resp not only for the success but also the fixed capital of the profit center

IT IS ALSO POSSIBLE TO CALC KEY FIGURES WHICH COMPARE THE SUCCESS OF THE PROFIT CENTER WITH ITS FIXED CAPITAL (ROI)

Bal sheet items can be transferred periodically or online in realtime.

The system posts balance postings directly to PCA from online postings which directly affect the balances of assets, materials & WIP. **If you manage Line items in PCA, the system updates a profit center document for each reference doc (e.g. FI doc)**

You enter the accounts that you want to transfer to PCA in Customizing transaction for additional bal sheet & P&L accounts

P&L account with Primary Cost Element

When you post data directly in FI, all primary cost elements req an additional assignment to a CO object.

The assignment to this CO object (cost center, order etc) to a profit center ensures that the data is passed on to PCA. However, you can also directly enter the profit center in the FI posting.

Using display doc function in FI you can display the doc's which are created in PCA

Revenue Account Assignments in FI

If you are not using SD, you can post revenues directly in FI. To do this you need to **create the account as a revenue element or sales deduction.**

If you use account-based profitability analysis, you also need to make an assignment to a profitability segment. Here u must specify the profit center of the profitability segment.

W/o account-based PA, the system updates the field; profit center', directly to reconciliation object in CO. the posting to the recon object is treated as a real posting, consequently the profit center assignment is statistical.

The recon object is a comb of coy code, biz area & profit center.

Value flow from AM

assets are assigned to profit centers indirectly via their assignments to an internal order or cost center

b) Data flow from MM

Purchase order: The profit center to which data should be posted depends on which materials & which CO objects

are involved.

In case of a Purchase order to warehouse, the profit center is taken from the material master per purchase order item. The profit center determined is fwd to goods receipt for purchase order.

Goods receipt for Purchase order: When you post a purchase order, the system posts the goods usage imm upon goods receipt if the purchase order has an account assignment.

The GR/IR account is the clearing account for goods received & invoices received.

This gives u the costs of the material consumption in corres profit centers.

When a goods receipt posting is made, the profit center is always determined indirectly via the preceding doc.

If the amount on the invoice is different from std price of the material purchased, price diff arise when u post the invoice receipt.

The price differences arise are assigned to the profit center of the material purchased, provided that it is a non assigned purchase order (i.e. the price diff was not created as a cost element)

If your price diff account is defined as a cost elemt, the amount is posted to the profit center of corres CO object.

Payables & receivables can only be transferred to PCA periodically.

Repostings: Internal goods mov in logistics (stick transfers etc) can lead to an exch of goods b/w profit centers.

Look at profit centers as indvl coy's to be able to show material flow correctly. This means that a sale is made by the sending profit center while receiving profit center posts a goods receipt.

You need to make additional account assignment. Using acc determination rules which u can define in customizing the system generates & updates additional posting lines in PCA based on original doc. The source doc is not changed. Therefore this has no effect on FI. However these lines are also updated in FI if your org is using transfer prices & storing the profit center valuation method in FI

You enter acc that u need in order to represent internal goods mov in PCA for each COarea. These acc must be defined already in FI

c) Data flow from CO:

Primary Costs: All primary postings to acc assignments objects in CO are posted to profit centers using the same cost element.

You can also transfer SKF from the acc ass objects in CO to PCA

You can also create SKF's in PCA manually.

Elimination of internal biz flag: used to make system ignore transaction data b/w acc ass objects of same type assigned to same profit center.

Secondary Costs: For all allocations in cost accounting (assessments, distr, tfrs, settlements, imputed cost calc), the fol rec are updated in PCA

- o All sec transfers' b/w CO objects are sel & represented in the assigned profit centers.
- o **The profit center of the crediting acc ass object is credited, using the same cost element, & the profit center of the obj to be debited is used as the partner profit center.**
- o In addition, the profit center of the receiver is debited using the same cost elem, & the profit center of the sender is used as the partner profit center.

WIP is calc in order to determine the cost of goods manufactured or unfinished goods still in production.

The WIP calc is posted periodically in FI, where fol accounts are assigned:

- o **Value of unfinished products (bal sheet acc)**
- o **Change to WIP (P&L acc)**
- o **The postings are transferred in same way in PCA. The profit center acc assignment is taken from master rec of corres production order.**

d) Assignment of functional areas in P&L

In period accounting approach, system breaks the operating results by revenue & cost elements. This makes it possible to recognize which factors of production cause the costs which are incurred. The **total costs for the period can then be compared to the total revenues** earned during the same period. The costs of the services produced in the period but not yet sold (increase in stock) are added to the sales revenue, & the services performed in the previous

periods, however, only offset in the period under review (reduction in stock), are deducted. This sum, together with the capitalized internal activities & the changes to WIP, yields the total result for the period.

The more market-oriented **cost of sales approach** compares the costs to the corresponding quantity structure of the revenues. Revenues are only compared to the costs incurred for the quantity of goods or services sold. When products are sold from stock, it may be that the costs were incurred during a previous period. In this approach no distinction is made between different cost elements. Instead resource usage is divided according to functions R&D, production, Sales & administration

To calculate profits according to cost-of-sales approach, you need to access the characteristic **functional area**, which is derived in FI or CO. Since you can define these functional areas and the rules by which they are used, you need to define your own reports if you want to use the cost of sales approach.

If cost of sales accounting is activated for a company code, a functional area is determined when P&L postings are made

No functional area is determined when postings are made to balance sheet accounts or when stock transfers are entered in CO

The derived functional area is transferred to the line items of PCA

If you select line items the system writes a line item for each customer & supplier

e) Balance carry forward:

If you want to post material stocks, assets, WIP or additional balance sheet items to PCA **by transaction**, you need to carry balances forward during the course of year end closing.

When you carry balances forward, the P&L accounts are carried forward to the carry forward account defined in Customizing, while the balance sheet accounts are carried forward to balance sheet accounts.

Postings are divided according to CO area, profit center, origin object type & transaction.

f) Average Balance Ledger:

All transactions carried out during a period are stored with a date weighting in the average balance ledger.

This means that a transaction that takes place on the first day of the period is updated with a full weighting, whereas later transactions are weighted according to when in the period they occurred (days remaining in period, divided by days in period).

You can only update the average balance ledger if you update accounts in realtime.

If you update accounts periodically, you can only see the balances as of the end of the period, no longer possible to determine when during the period the transactions were carried out.

MISC

A transfer price is a price used to value the transfer of goods & services between independent organizational units.

If you choose to use profit center valuation in PCA, you can define transfer prices for goods movement between profit centers.

If your organization decides to use transfer prices in profit center viewpoint, you can calculate special moving average prices for all goods movement between profit centers.

You define transfer prices for PCA using the pricing function from the SD component.

4. Report Painter reporting on PCA

The info system offers you the option of evaluating posted data according to various criteria. R/3 contains a range of standard reports. In addition to the standard reports you can also use tools e.g. drilldown reporting to define your own reports.

In the info system you can evaluate posted transaction data online immediately after processing in R/3 & follow its origins down to document level.

The report painter uses a graphical report structure as the basis for the report definition.

This structure consists of rows & columns and looks like the report as it will finally appear when you execute it.

Characteristics= criteria for selection (profit center, version...)

key figures= Value fields of the selected data

Pre defined Key Figures= Combination of key figures & characteristics

The **Library** determines which database fields (characteristics, key figures, predefined columns) can be used in the report painter & report writer reports. **All report painter/writer reports MUST be assigned to a library.**

You define the report columns using the characteristics, key figures & predefined columns selected from the library.

You define the report rows using the characteristics selected from the library.

The report/report interface lets you execute other Report painter report groups, ABAP reports, drill down reports & transactions from a displayed report list.

Once you have selected an individual cell, a line, a column or a block you can branch directly to another PCA std report. The values in the selected area of the report serve as selection criteria for the report you call up.

When you save reports in **extracts**, you have quick access to the stored data.

If you create an extract for a group you can use it to call up a report for each individual profit center in the group.

You can choose to access **existing extracts** for a report painter report, which allows you to display a report (for a closed period e.g.) with a significantly shorter runtime. You can also choose to **select data from the database**, which allows you to create an ad hoc report using the latest info.

When you use an extract to display the line items of a report row, R/3 system auto accesses the latest records from the database.

In **extract** management you determine whether & how the report call-ups access existing extracts.

An alternative is to read data from **archive** using reports to disp archived info

5. Drill Down Reporting

Preface

- o Drill down reporting is a tool that enables to analyze the GL account transactions figures & financial statements
- o Characteristic & key figures form the basis of drill down report.
- o characteristics define how your data can be classified or provide a time reference like coy code, biz area, CoA, FS items, currency, fiscal year etc
- o Key Figures includes stored values/quantities & calc based on them, & can incl total credit balance, bal sheet value, accumulated bal, bal carry fwd.
- o Each report consists of 2 categories:
 - o Drilldown list
 - o Detail list
- o Drill down displays a selection of key figures in combination with at least one characteristic/
- o Details list always show all the key figure/ characteristics combination.

Drilldown reporting allows you to analyze your data acc to different characteristics & key figures. As with report painter drilldown reporting is based on the concepts, “characteristic” & “Key Figure”

Characteristics are non-numeric fields. They represent criteria acc to which you can select data records. Examples of characteristics are: COarea, Fiscal Year & Profit Center. Characteristic values are the instances of these characteristics, such as fiscal year 2003,2004,2005 etc

Key Figures are numerical fields that you can analyze in your reports. Examples include costs & revenues or balance sheet balances in a certain currency or activity quantities.

You can analyze a no of key figures for a single combination of characteristic values as well as single key figures for a number of combinations of characteristic values.

A combination of **characteristic/values** is generally referred to as an **object** (e.g.: profit center X, revenue/cost element 200000 in period3)

Concepts: Drill down reporting lets you use the same graphical user interface as the Report Painter for defining the basic structure of your reports. You can then apply this structure, or “**fom**”, to any number of drilldown reports.

You can switch b/w different list types (drilldown list/detail list), limit your analysis to a single characteristic value, or summarize the data for all values of a characteristic.

Characteristics determine how your data can be classified. SAP org units COarea, Coy code, Biz area are examples of characteristics. **The time reference (fiscal year period) is also a characteristic**

Key figures not only include stored values & quantities but also values which are calc from these based on formulas you can define: Examples of key figures

- o Value: Costs, sales, sales deductions

- o Quantity: no of employees, sales quantity
- o Calc value: sales per employee, & contribution margin

Functions: The functions of drilldown reporting are divided into 3 levels so that you can give each user only those functions that he requires.

Level 1 contains the basic functions, plus it lets u send reports by **SAPmail**, offers partial functionality of drilldown.

Level 2 contains the rest of the drilldown functions, plus it lets you display **graphics & download reports in Excel**.

All functions offers you all the functions in drilldown reporting, incl the print setup function & the functions for saving report data & defining exceptions. This level allows print & modify func in addition to interactive drilldown func

You can define the desired level for each user by entering the parameter RLV (**0=all func, 1=Level 1, 2=Level2**) in **user parameter**.

The individual func levels are subj to an auth check.

You can make a no of setting directly from a displayed report list to define how the data is displayed & printed.

Settings incl changing currency, characteristic display, row display, sorting func (like sort columns), switching display variants (like cumulative on/off) and various print settings.

Currency: This func translates the displayed currency to any other currency for the sel columns. The **currency translation key** is used to automatically find the exch rate.

Sort: you can sort the rows of the list in ascending or descending order acc to the values contained in the column where u have positioned the cursor. The system displays a dialog box in which you can decide whether you want to sort the column or column group alphabetically acc to the key or text of the characteristic values, the key figure or, where applicable, a hierarchy or hierarchy display.

Number Format: You can change the number format & the +/- sign for individual columns. What settings you can make depend on the report & the list type displayed (drill down or detailed)

Exception Reporting: **an exception condition is an exception which determines whether an object is unusual. You can create exception conditions in a report related to a user-defined key figure in a cell or a column**

These exceptions consist of two threshold values which define the upper & lower tolerance range. If a numeric value exceeds or falls below a certain threshold value it is highlighted in appropriate colour. **There are 2 types of exceptions; you can define it for a cell or an entire column.**

An exception is always created on the drilldown list.

Relative key figures, e.g. variances can normally be compared on diff drilldown levels. Therefore it makes sense to define just one exception for this column.

Report Types in Drill Down Reporting:

Basic Reports: are often **used to run a quick, ad hoc analysis to look for a specific effect**. These structures have predefined basic structures that can be used generically.

Quick & easy to define: select variables select characteristics Select Key Figures.

If you want to delete a report you can do this from the change transaction. But

If you want to delete an entire group of reports, it is simpler to do this in Customizing via reports.

Form Reports: are more complex & can be designed acc to their specific purpose. **These reports are often used for official reports & suited for printing**

These reports are defined on the basis of so-called **“forms” which are separate objects** that can be used for a number of reports.

Specially formatted reports with: layout based on standardized form, Special formatting options, Use of variables.

Basic reports do not req the use of a form.

Variables: Overview: Variables allow you more flexibility in defining forms & reports. **Variables are report or form parameters which you do not want to specify until u define or execute a report.**

Depending on how often you want to use them you can define your variable **globally or locally**.

If you want to create a variable which you only need in one particular report or form, you can create a Local variable.

These are only known within the relevant report or form. **If you define a local variable in a form, it is also valid for every report that uses this form. Variable defined for a report is only valid for that report.**

If you use a variable frequently, you can define it globally. You can use it in all forms & reports. Global variables are maintained in Customizing.

If you change an existing global variable it may affect many forms and reports that are using it.

Drilldown reporting Architecture:

You can use **characteristics, key figures and forms** to define a report.

A form determines the content & structure of a report list or a semi finished report.

You can specify characteristics in the form and in the report.

Key figures can only be contained in the form or the report

Drill down reporting in PCA provides you with easy-to-use functions for navigating through the dataset. You can move from one segment to the next level, deactivate a level, switch b/w detailed list & overview lists, drill down reporting provides special functions for defining the report layout for printing.

Types of Forms:

There are 3 form types

- o Form with 1 axis (w/o key figures)-define either row or columns of form with characteristics.
- o Form with 1 axis (with key figures)-define either rows columns of form with characteristics & key figures.
- o Form with 2 axis (with key figure)- define both rows & columns of form with key figures & characteristics.

Whether rows or columns contain key figures is optional & depends on what you want to report on.

In drill down reporting you can compare different sets of data (like plan/actual, different plan versions or fiscal years, and so on) to examine the differences.

You can execute a drilldown report online, the system displays a selection screen where u specify what data you want to see. You can define selection variants to simplify this process

A selection variant contains a set of selection parameters & other settings for a report.

You can also use selection variants to execute reports in the background. You do this by first defining a variant group & entering a no of selection variants for different reports in that group. Then u schedule the entire variant group for background processing

The variant group lets u combine separate tasks into one step:

- o schedule different combinations of variables for one report
- o schedule variants for different reports

misc:

The actual line item report lets you select individual postings according to various selection criteria (profit center, revenue/cost element, posting date). It is only available if your system stores actual line items for the relevant controlling area & fiscal year. **The line items are stored in table GLPCA.**

The function display variants let you change the column structure of the list. Several standard display variants can be defined in SAP, further **display variants can be defined interactively at the application level.**

It is possible to display plan line items in PCA, provided that your system stores plan line item for the desired COarea & fiscal year.

You can analyze line items with varying degree of details

Solution Manager-(+)-(1-10%)-(63)-(13)

1. Solution Manager-Overview-13th Oct

a) Introduction to Solution Manager:

Key concepts & Components:

Solution Mgmt is the strategy & Sol Manager the technical infrastructure to realize it.

Sol Manager is **an integrated platform** centrally running in a customer's solution landscape, **supports distributed systems, covers all aspects of implementation, operations & continuous improvement.**

Sol Manager is a customer platform that **enables representation & documentation of the entire SAP solution.**

Sol Manager provides a single point of access into component systems for **design, configuration & testing activities.**

Sol Manager **enables process-oriented design**, configuration, testing & on- going system monitoring during operations, regardless of the complexity of system landscape.

Sol Manager provides central access to list of predefined business scenarios with help of **Business Process Repository**. This serves as a **starting point** for identifying project scope to be implemented.

Customers can create their own business processes or select predefined business processes to complement project scope.

The Business Repository is a package of reusable, predefined business process content which consists of: 1) Scenario documentation 2) Transaction assignments 3) IMG assignments 4) Configuration guides 5) Predefined test cases. Available business process repository content may vary by scenario.

In **Realization phase** the customer-specific solution defined during business blueprint is configured & tested.

Sol Manager enables **process oriented rather than component oriented** configuration & testing

Sol Manager provides common platform for navigating to various component systems to complete configuration and testing.

Uses of Sol Manager in Implementation

Benefits of using SAP solution Manager in Implementation:

- o Central point of access & support for key implementation activities
- o Process-driven Blueprint, configuration & testing approach.
- o Auto customizing synchronization across SAP components.
- o Std scenarios provided by Business Process Repository.
- o **Central repository stores project documentation & issues.**
- o Project monitoring & reporting capabilities.
- o **Aligned services to assure smooth Go Live and operations.**

Implementation:

- o 5 phases of implementation roadmap are **project prep business blueprint Realization Final Preparation Go Live & Support.**

- o Sol Manager also supports **cross-functions** such as:

Reporting

Roadmaps: contain std SAP implementation methodology & cover the most imp aspects/phases of implementation. Linked to accelerators & tools for performing tasks in project.

Roadmaps allow you to (PTCDFS)

- **Navigate** in structure
- **Display & assign** documents
- **Create** messages
- **Search** for specific items in struct & accelerators.
- **Print** indvl docs or structures with assigned docs
- **Filter** the structure items by role or subj area
- **Track status** & create notes per structure item.

TYPES:

Implementation Roadmap: Project managers, functional implementation Team;

Solution managemt Roadmap: Tech implementation Team & Ops team;

Global Template Roadmap: Program/ Project Managers.

- o 1) **Project Prep:** Define **Project & system** landscape.
- o 2) **Business Blueprint:** Identify customer-specific solution based on **predefined scenario in the Biz Process Repository & customer-defined Biz processes;** Documents Biz processes. Biz Blueprint allows you to document biz processes of your org that you wanna use in your SAP system. You create a

project structure in which relevant **biz scenarios, biz processes & process steps** are organized in a **hierarchical structure**. To define how your biz processes should run in your SAP system you then assign transactions to each process step.

You can use the Business Blueprint project structure as a **point of orientation** during configuration. **You can also display & edit project documentation from biz blueprint phase during configuration**. The blueprint project structure forms basis for all test plans that you create during test org i.e. the transactions that you assign to process steps in biz blueprint are put in test plans during test plan generation.

- o 3) **Realization:** In Realization process-oriented configuration, the **process requirements specified in the business blueprint phase** are configured. If you use objects from BPR in your structures they may already be assigned to transactions & BC sets. If you create structures manually you can assign transactions yourself in transactions blue prints, BC sets, IMG objects and test cases.
- o In Realization-process oriented testing you organize tests after having already created biz blueprint and made initial configurations. **You create a test plan, which is the project structure you made in blueprint phase**. In addition, system will provide you all manual and automated test cases you have already assigned to processes and process steps.
- o While customizing you can use **customizing distribution to synchronize customizing settings in a source system (R/3) with customizing setting in target system (SAP CRM) within your SAP system landscape**. **You can also use it to transfer customizing changes made in one SAP R/3 development system to another dev system in your system landscape**. Types of distribution in customizing distr: **Initial distr** (SAP target), **Timed distr**, **Auto distr** after each customizing change/release, **Manual distr** in transport request.
- o **Testing Procedure:** **SAP test workbench functionality** is reused in Sol Manager Test Organization. Assign test cases Test organization Test execution Test monitoring & reporting Problem message handling.
- o **Document Management:** central storage of all project docs in SAP **knowledge warehouse**. Predefined templates/doc types shipped with SAP sol manager. Types of predefined templates are: 1) Customer input templates (CIT), 2) Templates for interfaces, forms & reports, 3) Templates for scenario descriptions, diagrams & installation guides. Project specific templates can be created & reporting features.

Uses of Sol Manager in Operations:

Benefits of using SAP solution Manager in Operations:

- o Customer satisfaction better performance
- o Reduction of Operational costs
- o Software change management
- o Service level management/Reporting
- o Application management/Monitoring
- o Integrated support desk

Several systems can be grouped together as a solution landscape & access to this landscape can be restricted. Sol Manager provides common platform for navigating to various component systems to complete configuration and testing.

Sol Manager can monitor SAP R/3 instances & SAP solutions

SAP software components can be monitored via RFCs or external agents. Non-SAP components can be only monitored via agents.

There is remote connection to SAP that you can open for service delivery or expert help from SAP active global support.

Components of Solution Manager as the technical & operations infrastructure:

- o **Operations:**
- o Predictive & Proactive Services, Continuous improvement services, Best Practices for sol management.

- o Idea behind sol manager is to combine all aspects of SAP service & support (services, message handling, tools, knowledge etc) in one single portal & facilitate delivery.
- o **Single point of access to SAP support services incl Remote services, on-site services, self services & best prac docs, search facilitation** (SAP service marketplace via sol manager).
- o Based on sol configuration, recommendations triggered dynamically.
- o Operations section archives all reports from such services.
- o Reports are stored in sol manager for reference for future landscapes
- o **Monitoring:**
- o Involves Business Process Monitoring, System Monitoring & Service Level Management/Reporting to help monitor & Administer entire SAP solution.
- o Covers solution monitoring of business processes across multiple components.
- o Solution Monitoring is a proactive methodology, biz process oriented, software sol landscape oriented, configurable, linked to expert analysis, open & extensible (covers SAP R/3 & other SAP components), Linked to sap delivered services.
- o Goals of Sol Monitoring are to detect situations as early as possible & to enable customer support to respond and resolve problems fast.
- o SAP sol Manager controls work areas: **real time system monitoring & central system administration** as both complement each other, through graphical displays of Sol Manager. **From graphical interface you can jump via RFC into remote system to start analyses.**
- o In **real time monitoring** fol are monitored: Background jobs (errors, logs, delays, cancellations), Transaction performance (avg dialog response time), Error updates for transactions and programs, Log messages for applications, deliveries & billings.
- o In **central system Administration** you setup different administrative tasks for your systems from a central point.
- o **Support:**
- o **Sol Manager enables collaboration between end-user support and back office resources.**
- o SAP users can contact support directly, in work environment or remotely **if within solution landscape. Users send requests directly to Sol Manager.**
- o These requests pop-up in support notification portal of Sol Manger with all relevant data automatically copied.
- o SAP employee at support can use advanced tools like, **SAP notes search, notes assistant, workflow & email, Microsoft net meeting for application sharing, SAP service marketplace interface** to send support notifications to **SAP active global support.**
- o **Through SAP router interface:** customer support desk employees and SAP active global support can look at end users desktop & test an application directly **from a client.**

Case Study-(+)-(1-10%)-(75)-(61)-14th Oct

1. **Setting Up Company Structures (Org units in mySAP Business Suite)**
2. **Integration and Dependencies**

THINGS DEFINED AT VARIOUS LEVELS (RECAP)

CLIENT

Document type

Posting keys

Tax Jurisdiction code

COYCODE

Doc number ranges

Posting Period Variant assigned to coy code

CROSS-COY CODE

BIZ AREA

PLANT

MISC

You can select different fields or columns and change the size and sequence of the columns and fields. You can also copy line items.

For complex postings you can access the complex posting transaction from the menu. You cannot return to the initial screen from this complex posting transaction.

REPORTS

RFBELJ00- Create compact document journal.

RFBUEB00/RFBUEB01-Find documents in the system.

RFBABL00- display document changes for all documents.

LSMW

MEMORIZE FOR CERTIFICATION-(Extract from real questions)

Organizational Structure:

1. Which structure provides an environment for analyzing market profitability, even allowing for customer defined segments?
 - a. OPERATING CONCERN
2. A Business Area is:
 - a. The organization entity for which bal sheets as well as profit & loss statements can be executed across coy codes covering a coy's main area of operation.

3. Which CoA is always required?

- a. Operating CoA

FI- Master Data:

1. Define G/L account group

- a. The G/L account group is a classifying feature for G/L master records.
- b. The account group determines the fields for data entry screens if you create or change a master record in a coy code
- c. The account group also determines in which number interval the G/L account number must reside.

2. Field Status group controls:

- a. The fields for data entry screens.

3. How many levels G/L account master record has and what are they?

- a. **2 levels-** coy code level & CoA level

4. The reconciliation account:

- a. Ensures real time integration of sub ledger account with G/L
- b. Itself is not designed for direct posting
- c. Can be defined for customer, vendor & asset account types.

5. Customer specific info such as name & address is stored at what level?

- a. Client

6. Vendor specific info such as recon acct & item sorting is stored at what level?

- a. Coy Code

7. What determines whether the vendor account is one-time?

- a. Account group.

8. Bank accounts that contain company's own funds:

- a. House Bank.

9. Bank master data records can also be manually created:

- a. When defining house bank
- b. At one-time (account) document entry
- c. On the general data section of customer & vendor masters

FI-Postings

10. What are examples of currency types?

- a. Global currency
- b. Hard currency
- c. Index currency

11. In the accounting document

- a. The header section contains data relevant for the management of whole document, such as doc number, posting date, coy code, currency & doc text.
- b. Each line item would contain an account, an amount & other relevant posting information.

12. What identifies which of the account types will be permitted on particular document?

- a. Document type

13. Define posting keys?

- a. The posting key also specifies the specific account type for a line item.
- b. Helps control the field status of a line item.

14. A document can only be reversed if?

- a. The original doc contains only customer, vendor & G/L line items
- b. The origin doc contains no cleared line items, if the doc does contain cleared items, then

these items must be reset before reversal can take place.

15. What defines the date on which terms of payment are to begin?

- a. BASELINE DATE

16. Allocation field

- a. Is an additional reference field for line items
- b. Is either filled automatically (sort key in master record) or manually (entry in a line item).

17. The currency that was input on the header of document

- a. TRANSACTION CURRENCY

18. What gives an overview of planned processes carried out periodically in the system?

- a. Financial Calendar

19. Which of the fol are controlled by the posting period variant?

- a. The range of periods that is currently open for processing
- b. The range of accounts within a specific account type that is currently open for processing
- c. The specific user authorization necessary to book entries within a specific period.

20. A document is identified by the combination of:

- a. Doc number
- b. Coy Code
- c. Fiscal Year

21. How many variants are required in each coy code?

- a. Fiscal Year variant
- b. Field status variant
- c. Posting period variant

22. Which payment terms are defaulted when posting an invoice (depends on where the invoice is created)

- a. If the invoice is created in FI the payment terms from the coy code segment are defaulted.
- b. When posting the MM invoice payment terms are copied to the FI invoice.

23. The FI system assists with the management of taxes calc by:

- a. Checking the tax amount entered or auto calc the tax
- b. Posting the tax amount to G/L accounts
- c. Performing tax adjustments for cash discounts or other deductions

24. The tax code is used for what?

- a. Verify the amount of tax
- b. Calc the amount of tax
- c. determine the G/L account

25. **All** recon accounts and all G/L accounts with open item transactions in foreign currency must be assigned to the G/L account for realized losses & gains. Which of the fol options exist for this assignment:

- a. A single G/L account can be used for all currencies & currency types
- b. A single G/L account can be used per currency.

26. Cross-coy code transaction number:

- a. If the cross-coy code transaction number is not entered manually the system generates the number.
- b. Cross-coy code transaction may be reversed
- c. Cross-coy code transaction no is stored in the doc header of all documents created by the system

27. What transactions in accounts receivable and accounts payable are displayed separately in the

G/L & sub-ledger? This may be nec for reporting or internal reasons:

- a. Special G/L transactions

28. You tell the payment prog which accounts & items to consider in the auto payment run, what is it?

- a. **Parameters**

29. Items which have to be paid are bundled together to create payments as long as they have.

- a. The same currency
- b. The same paying & sending Coy code

30. The payment method can be entered directly into an item, in this case the system checks if:

- a. This payment method is permitted by parameters entered
- b. This payment method can be used (payment method check)
- c. A bank account for the payment can be found

31. Following is true:

- a. When editing payment proposal items can be reallocated to existing or new payments.

32. User can clear open AR, AP items or G/L accounts with the automatic clearing prog. The prog groups together items from an account having the same:

- a. Recon account number
- b. Currency
- c. Special G/L indicator

33. What is the difference between a partial & residual payment?

- a. The partial payment leaves the invoice as an open line item & creates a new line item for the incoming payment.
- b. The residual payment clears the invoice & incoming payment & post a new line item for the residual payment amount.

34. Payment differences that fall outside defined limits:

- a. When posting a residual item, u req a payment term. You can transfer the payment term from the original invoice or default a separate payment item.
- b. Grant only cash discount for the portion paid. The remaining discount can only be granted once the outstanding receivable has been paid off in full, within the due date.
- c. Limit the possible dunning levels

35. True & False

- a. It is possible to dun vendors as well as customers-TRUE
- b. The dunning run update dunning data in dunned items & accounts-FALSE
- c. One dunning form can be used for all dunning levels & dunning area-TRUE
- d. After the dunning proposal is created, changes to the dunning data in items or master data records will not be valid for the current dunning run-TRUE

36. Which accounts shall be considered in the dunning run?

- a. Account Selection

37. What is the highest org unit which usually perform dunning?

- a. Coy Code

38. Define the concept, ' account assignment variant' in cheque deposit:

- a. The account assignment variants determine which fields are displayed during entry
- b. you can freely define variants in Customizing
- c. For some fields (doc no, invoice amount), you can enter as many values as req

39. The local currency is defined at the time. the:

- a. Coy Code is created

40. Logistics integration, define procurement process:

- a. A plant must be assigned to exactly one coy code-TRUE
- b. material valuation always take place on plant level-FALSE
- c. Material master rec consist of a lot of views –FALSE
- d. A material can be assigned to several divisions-FALSE

41. Fol is True about Difference b/w cost-of-sales acc & period acc:

- a. Companies must choose to use one of these methods for generating their legal financial statements.

42. What is Validation?

- a. Allows you to define your own individual checks for specific fields when a biz transaction is being processed.

43. Transferring data to special purpose ledger is:

- a. Most data that enters FI-SL system comes from transactions occurring in many different places.
- b. A biz transaction can enter FI-SL system via another SAP application
- c. All data that enters FI-SL system is processed by the integration manager.
- d. The account assignment block, also called the coding block is a standard component delivered with SAP system. The user does not usually come into direct contact with the coding block.

44. Report Painter allows you to use characteristics in the:

- a. Rows
- b. Columns

45. In accounting data, which are the records that remain in the system for an extended period of time?

- a. **MASTER DATA!**

46. Data relevant to MM functionality is stored in which segment of the Vendor Master Record:

- a. **PURCHASING SEGMENT**

47. The house banks are identified by:

- a. Bank ID.

48. The payment terms are used to define:

- a. Baseline date for due date calculation
- b. Cash discount percentage rates.

49. What are the ways to clear open items within an account in R/3?

- a. Account clearing
- b. Posting with clearing

50. Bank statements you enter can be displayed, changed or deleted before posting

- a. TRUE

51. What statements are TRUE, A chart of accounts...

- a. **Can be allocated to multiple coy codes-TRUE**
- b. **Only contains definitions for G/L accounts-TRUE**
- c. **Can be defined as group CoA-TRUE**
- d. **Can only be allocated to one Coy Code-FALSE**

52. It is correct to say this about SKF:

- a. Measurable value applicable to cost centers, profit centers, internal orders or processes
- b. Can be used as tracing factors

- c. You can post both plan & actual values
- 53. Expenses in FI that are relevant to cost accounting are recorded in Co using:
 - a. Primary cost elements-TRUE
 - b. Primary Expense elements-FALSE
 - c. Secondary Cost Elements- FALSE
 - d. Secondary expense elements-FALSE
- 54. Fol is TRUE about Profit Center Accounting:
 - a. It allows you to calculate **internal** measurements of Profitability
 - b. The **internal** view of profitability reflects the success of a given profit center at meeting the profitability goal for which it was given responsibilities.
- 55. About the overhead costing sheet, the dependency has the fol functions,
 - a. It allows to differentiate overhead rates or amounts by plant.
 - b. It allows to differentiate overhead rates or amounts by Coy code.
 - c. It allows to differentiate overhead rates or amounts by profit center
 - d. **EXCEPT THIS:** It allows to differentiate overhead rates or amounts by material origin.
- 56. Fol is TRUE about Cost Centers:
 - a. Cost Centers can be set up based on functional requirements, allocation criteria, activities or services provided.
 - b. For the purpose of overhead cost controlling, cost centers are grouped together in decision, control & responsibilities units.
- 57. Fol is FLASE about Cost Centers:
 - a. The standard hierarchy must be created & assigned to the Coy Code
 - b. Cost Centers can be assigned to the highest level node of the Std hierarchy.
- 58. TRUE & FALSE about Activity Types:
 - a. It classifies the specific activities provided by a cost center along cost allocation line.-TRUE
 - b. It serve as tracing factor for this cost allocation-TRUE
 - c. The system calc the associated cost based on the activity price & generates a credit to the receiver & a debit to the sender for both the quantity & the costs.-FALSE
 - d. The internal activity allocation is carried out via primary cost elements, which are stored in master data of the activity type master record.-FALSE
- 59. Postings of costs & revenues to CO can result in real & statistical postings, identify TRUE/FALSE
 - a. One, and only one, real posting is required in CO-TRUE
 - b. Real postings are for informational purposes only- FALSE
 - c. Statistical postings can be allocated or settled to other CO objects-FALSE
- 60. About the activity type that can be entered on the sender, it is correct to say that:
 - a. You generate the posting to the receivers by executing indirect activity allocation
 - b. For activities that can be measured & posted on a sender object, you can create a manual entry, indirect allocation activity type
- 61. Data from internal & external accounting should be reconcilable. Fol are correct:
 - a. External postings to FI with a cost accounting effect are transferred automatically to appropriate CO application component.
 - b. It is possible to use the recon ledger to generate a posting that brings FI into agreement with the CO postings
 - c. If amounts are allocated within CO across coy codes, functional areas or biz areas, the

- info needs to pass back to FI, R/3 does not send this data to FI automatically
- d. The CO totals in Recon Ledger are updated for external postings.
62. Assessment is designed for what?
- a. Allocation of Primary & Secondary costs from a sender to receiver controlling object.
63. Assessment is **NOT** designed for:
- a. Classifying specific activities provided by a cost center along cost allocation lines.
 - b. Allocation of amounts within CO across CO codes.
 - c. Activating plan integration with orders & projects
64. For each fiscal year, you can make basic settings in the version affecting all of planning. These settings include.
- a. Locking the version against any plan activity
 - b. Saving exchange rate types for currency translation
 - c. Activating plan integration with orders & projects.
65. When creating an Overhead Cost Order, the first order info which must be entered is:
- a. Order Type.
66. When creating an overhead cost order, the settlement rule must be entered in the control data. Which settlement receivers are available for internal orders?
- a. Cost Center
 - b. Orders
 - c. G/L accounts
 - d. Asset
67. Which of the following statements regarding order numbers are correct:
- a. The order master record is uniquely identified by the order no within a client.
 - b. The order is assigned to a particular number range group through the order type
 - c. A separate no is NOT required for each order type
 - d. For internal orders, only internally assigned numbers are allowed.
68. Certain postings to a cost center can be blocked using a cost center indicator. Which of the following blocking indicators can be selected?
- a. Primary costs actual/plan
 - b. Secondary costs actual/plan
 - c. Revenues actual/plan
 - d. Commitments
69. When a cost center is created, certain basic data must be entered. Which of the following are needed when creating a cost center?
- a. Cost center category
 - b. Assignment to CO code
 - c. Validity period
70. Accounting can be divided into internal & external accounting. Which of the following areas are part of internal accounting?
- a. Overhead cost controlling-true
 - b. Product cost controlling-true
 - c. FI-False
 - d. Asset Management-False
71. Assignment to profit centers: Mark correct
- a. Direct assignment of costs to a profit center is not possible because the profit center is posted as a "shadow object"-CORRECT

- b. Revenues can be assigned directly to profit centers through FI- CORRECT
 - c. With outgoing invoices, the profit center of the customer is posted-FALSE
 - d. When materials are withdrawn from stock on cost centers, the profit center for the consumption posting is derived from material master record.-FALSE.
72. Choose the correct statements regarding the document posting & entry dates of accounting documents
- a. The posting period is determined by the doc date-FALSE
 - b. The doc date must be the same as the invoice date-TRUE
 - c. The posting date must be the same as entry date-FALSE
 - d. The posting period is determined by the posting date-TRUE
 - e. The entry date is the same as operating systems date-TRUE
73. Which of the fol statements about creating customer master rec are correct?
- a. An account group always gets assigned to a customer-TRUE
 - b. The coy code is always a req entry-TRUE
 - c. The acc number may be assigned by user externally-TRUE
 - d. Info on each screen may be defined in config as mandatory, suppressed or optional, depending upon the acc group-TRUE.
 - e. Info on each screen may be defined in config as mandatory, suppressed or optional, depending upon Coy Code-FALSE
74. Which of the fol statements are true?
- a. Each cost center must be part of Std hierarchy-TRUE
 - b. You can define multiple hierarchies-TRUE
 - c. Multiple cost center areas can be grouped together in parent nodes- TRUE
 - d. A node represents a summarization of multiple cost centers-TRUE
 - e. The cost center hierarchy can contain cost centers & activity types-FALSE
75. Which of the following SAP items can be imputed during the creation of vendor master record?
- a. The account group
 - b. A reference vendor
76. Which of the fol SAP items CANNOT be imputed during the creation of vendor master record?
- a. The field status definition
 - b. The doc type
 - c. The no range interval of the doc type.
77. Which structure provides an environment for analyzing market profitability, even allow for customer defined segments?
- a. OPERATING CONCERN
78. A business area is:
- a. The organizational entity for which balance sheet as well as P&L statement can be executed across coy codes covering a coy's main areas of operation.
79. A biz are is NOT:
- a. The legal unit of consolidation to which coy codes are assigned.
 - b. The smallest org unit for which a complete self-contained set of books can be executed.
 - c. Identifies an independent org structure within a coy, which includes all functions for internal cost & revenue accounting.
80. Which CoA is always required?
- a. Operating Chart of Accounts
81. Which CoA is NOT always required?

- a. Group CoA
- b. Country CoA
- c. Alternative CoA

82. Define G/L account group?

- a. The G/L account group is a classification for G/L master records
- b. The account group determines the fields for data entry screens if you create or change a master record in a coy code.
- c. The account group also determines in which number interval the G/L account number must reside.

(**Note:** the account group does not only determine in which number interval the G/L account number reside)

83. Field status group controls:

- a. The fields for data entry screens

84. ,Field status DOES NOT control:

- a. The number range
- b. The account type
- c. The G/L account group

85. How many levels the G/L account record has & what are they:

- a. 2 levels-coy code & CoA level

86. The Reconciliation Account:

- a. Ensures real-time integration of sub ledger accounts with the General Ledger
- b. Itself is not designed for direct postings
- c. Can be defined for customer, vendor & asset account types
- d. Is NOT defined on the client portion of the Coy Code.

87. nm

88. m

89. m

90. m

91. m

92. ,m

93. n

94. m

95. m

96. m

97. ,

98. m

99. m

100.m

101.

