- R/3 System
- Release 4.6C
- November 2000
- 5004 2204

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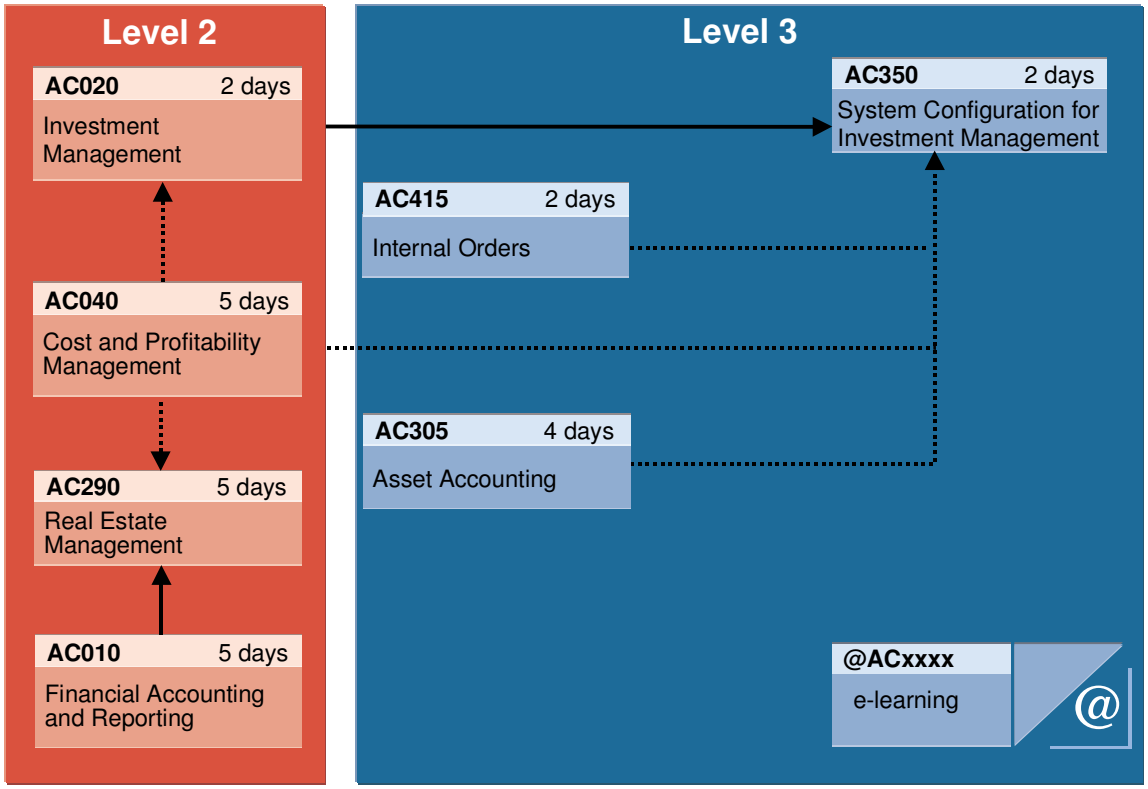
Investment Management



Course Prerequisites

- SAP20 (SAP R/3 Overview)
- AC040 (Cost Management and Controlling)

Target Group

- **Participants:**
  - **Project managers**
  - **Project team members responsible for investment management**
- **Duration: two days**

Notes for the user

- The course documents are **not** designed as a **self-study program**. Used in conjunction with the course documents, **explanations by the instructor are necessary** to complete the course materials. There is space provided on your course documents for you to note this additional information.
- It may be the case that there is not sufficient time during the course to complete all the exercises. The exercises are additional examples on topics that have been covered during the course. After completing the course, participants can use these examples to strengthen their knowledge of the course.

Course Overview

Contents:

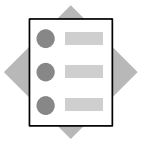
- Course goal
- Course objectives
- Course content
- Course overview diagram
- Main business scenario

Course Goal

This course will prepare you to:

- **Plan and manage your investments using the Investment Management (IM) component of the SAP R/3 System.**

Course Objectives



At the conclusion of this course, you will be able to:

- **Create the basic master data (investment program, appropriation request, and investment measures) in the R/3 System**
- **Plan your investment strategies (appropriation requests) and investment measures, and display a summary of the values in the investment program**
- **Budget the investment program and measures**
- **Post actual values to the measures and then settle these in Asset Accounting**
- **Perform the fiscal year change in Investment Management**

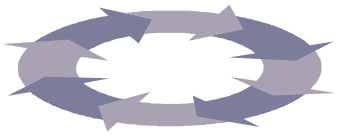
Course Content

Preface

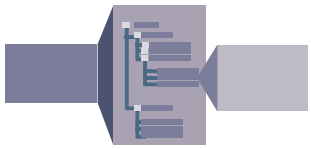
Unit 1	**Course Overview**	Unit 5	**Planning and Budgeting**
Unit 2	**Navigation**	Unit 6	**Implementation**
Unit 3	**Investment Management Cycle**	Unit 7	**Settlement**
Unit 4	**Master Data**	Unit 8	**Fiscal Year Change**
		Unit 9	**Summary**

Course Overview Diagram

Course Overview

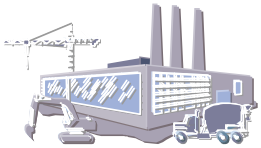


Investment Management Cycle



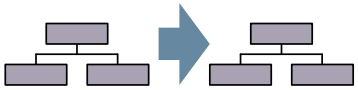
Master Data

Planning and Budgeting



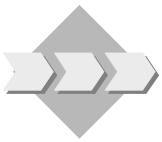
Implementation

Settlement



Fiscal Year Change

Main Business Scenario



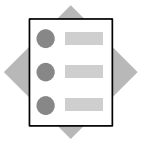
- The company IDES AG implements the Investment Management (IM) component.
- Master data for investment planning/management is created in the R/3 System.
- Investment strategies (appropriation requests) are created, planned, and submitted for approval.
- The approved investment measures are budgeted.
- In the under-construction phase, all assigned funds are posted to the measures. The accumulated values are then settled to CO or Asset Accounting (capitalized).
- During the fiscal year change, a new investment program is created and then planned.

Navigation

Contents:

- Navigation in the system
- User-specific settings
- Navigation in the mySAP.com Workplace

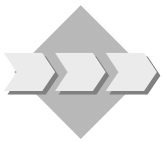
Navigation: Unit Objectives



At the conclusion of this unit, you will be able to:

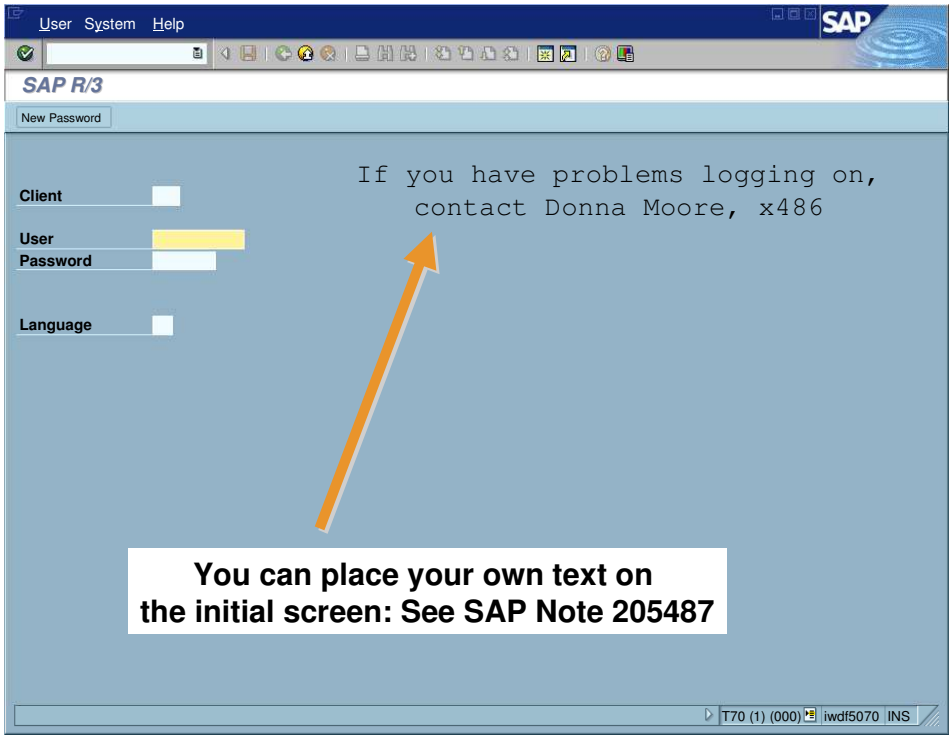
- **Identify the elements of a typical window**
- **Navigate in the system**
- **Personalize your user settings**
- **Describe and use the mySAP.com Workplace**

Navigation: Business Scenario



- **New users need to familiarize themselves with the screens in the system and define their personal default settings**

Logging On to the System

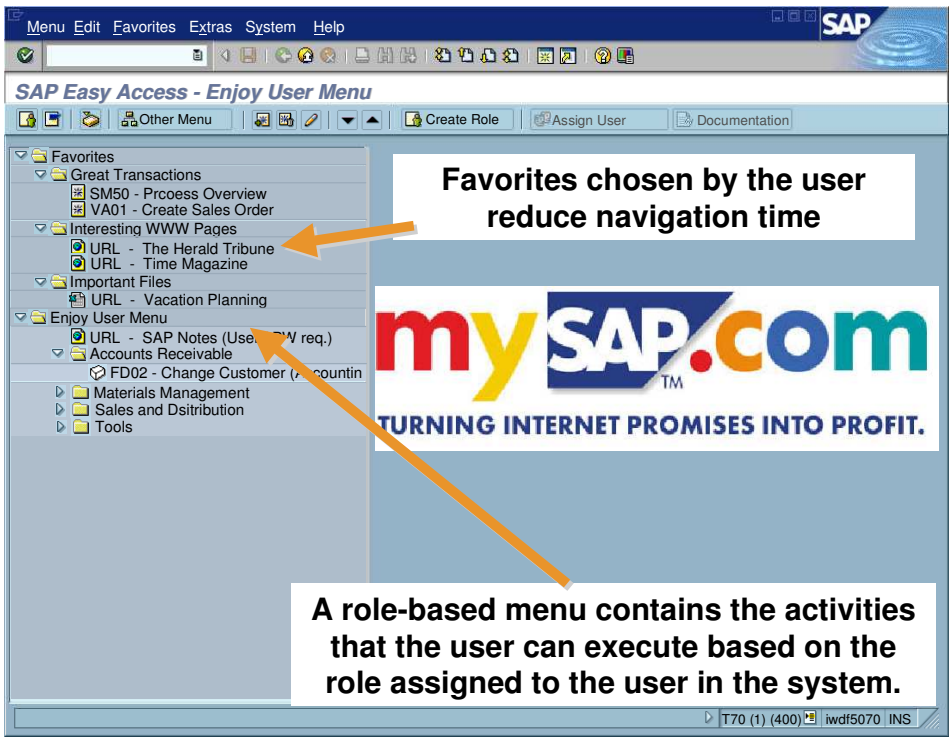


- SAP R/3 Systems are **client systems**. The client concept enables the parallel operation, in one system, of several enterprises that are independent of each other in business terms. The components SAP Business Information Warehouse (BW) and SAP Knowledge Warehouse (KW) are exceptions to this: in these cases only one client is used. During each user session you can only access the data of the client selected during logon.
- A **client** is, in organizational terms, an independent unit in the system. Each client has its own data environment and therefore its own master data and transaction data, assigned user master records and charts of accounts, and specific Customizing parameters.
- For a user to log on to the system, a master record must exist in the system for that user. To protect access, a password is required for logon. The password is hidden as you type (you only see asterisks).
- SAP R/3 Systems are available in several languages. Use the *Language* input field to select the logon language for each session.
- Multiple logons are always logged in the system beginning with SAP R/3 4.6. This is for security as well as licensing reasons. A warning message appears if the same user attempts to log on twice or more. This message offers three options:
  - Continue with current logon and end any other logons of the same user in the system
  - Continue with current logon without ending any other logons in the system (logged in system)
  - Terminate current logon attempt
- You can place your own text on the initial screen in a number of ways. For more information, see the SAP Note mentioned above. The GuiXT (covered at the end of this chapter) offers a further option.

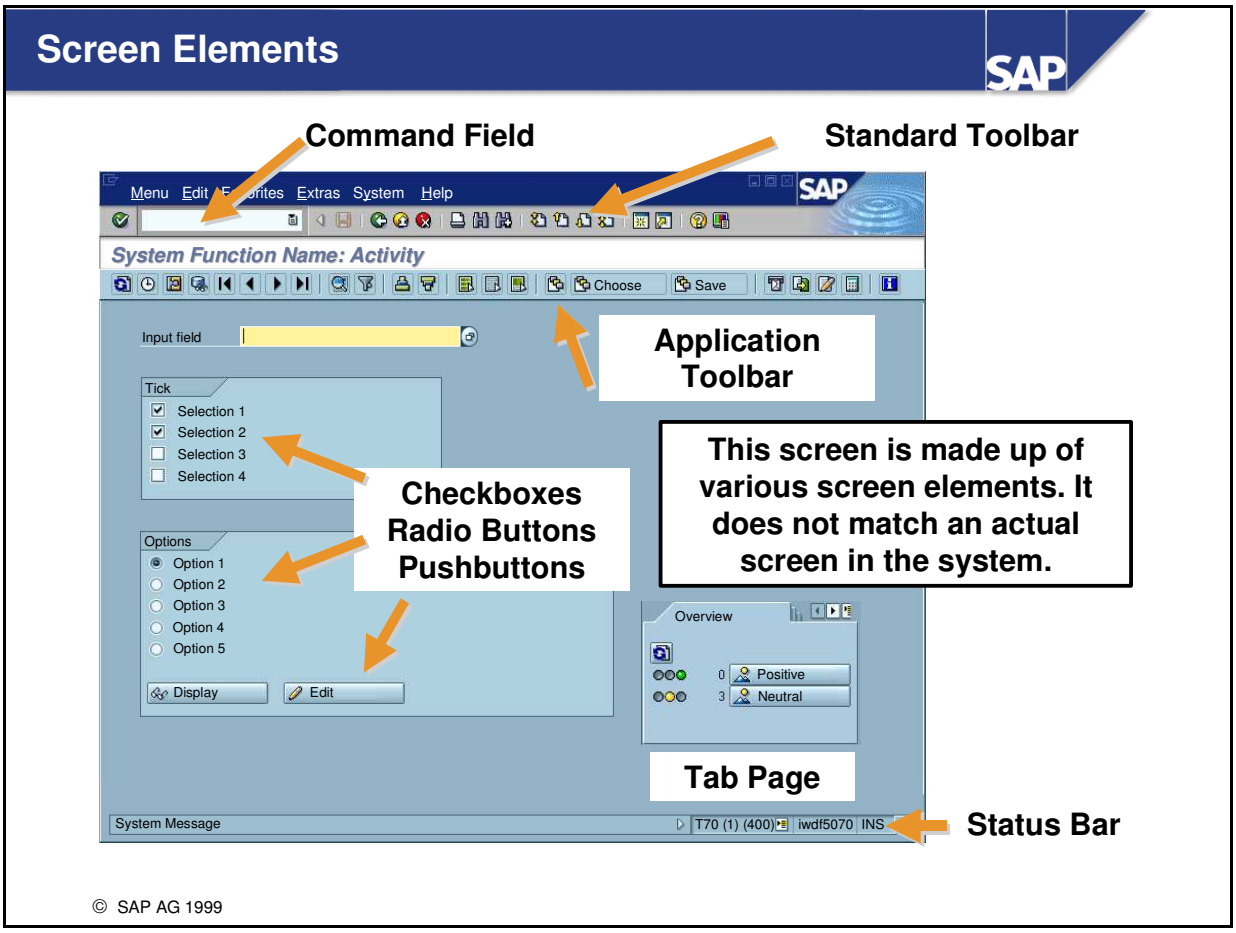
SAP Easy Access - Standard

- **SAP Easy Access** is the standard entry screen displayed after logon. You navigate through the system using a compact tree structure.
- You can include an image on the right-hand side of the screen such as your company logo. This image can only be entered systemwide, and is a cross-client setting. Assuming you have the appropriate authorization, you can find a detailed description of the necessary settings by choosing *Extras → Administration Information*. Note that this image is stored in the system and transported to the SAP Frontend every time it is called by SAP Easy Access. Although this transfer is compressed, the image for the initial screen should not be bigger than around 20 kB. You can prevent this image being called either by using the setting *Low Speed Connection* in the SAPLogon program (see SAP Note 161053), or by switching off the calling of the image under *Extras→Settings*. See also *User-Specific Personalization*.

Role-Based User Menu



- A **Role** describes a set of logically linked transactions in the system. These represent the range of functions users typically need for their work.
- **User roles** (previously “activity groups”) have to be set up using the Profile Generator so that SAP R/3 System users can work with **user-specific** or **position-related** menus.
- The authorizations for the activities listed in the menus are also assigned to the users using user roles. With Release 4.6, predefined user roles from all application areas are included in the standard system.
- Users who have been assigned a user role can choose between the user menu and the SAP standard menu.
- The above screen shows the role-based user menu for a user with the name "Enjoy". You can find roles that are supplied in the standard SAP R/3 System by choosing *Other menu* on the *SAP Easy Access* initial screen.
- Every enduser can personalize the initial screen using *Favorites*. You can create your own **Favorites list** containing the transactions, reports, files, and Web addresses that you use most often.
- You can add favorites either by choosing *Favorites* or by using the mouse to “drag & drop” items into the *Favorites* directory.



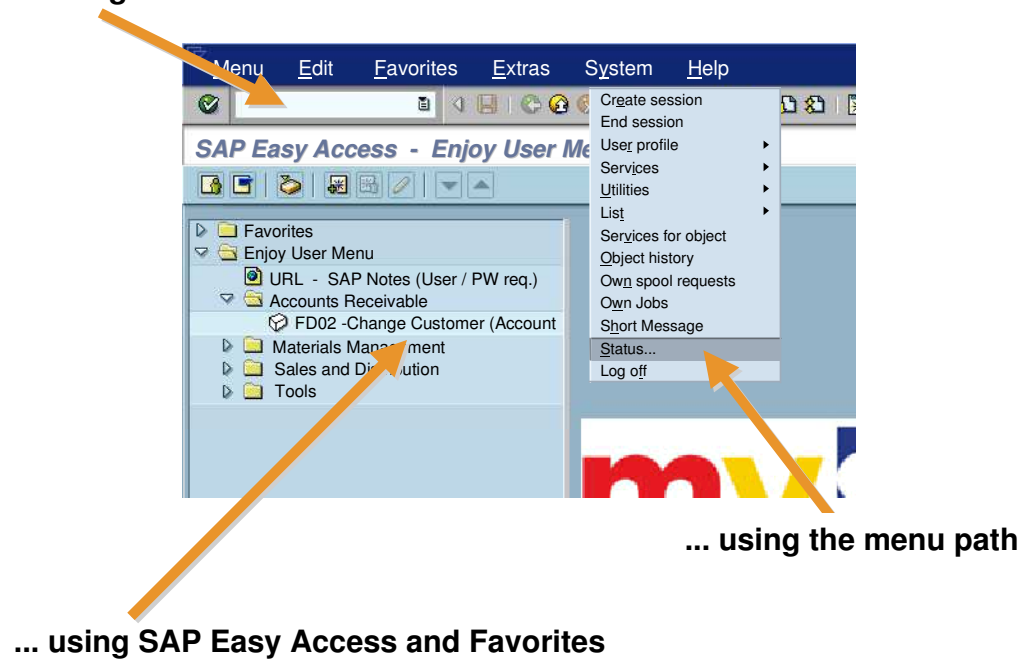
- **Command field:** You can use the command field to go to applications directly by entering the transaction code. You can find the transaction code either in the *SAP Easy Access* menu tree (see the page *User-Specific Personalization*) or in the appropriate application by choosing *System→ Status*.
- **Standard toolbar:** The icons in the standard toolbar are available on all SAP R/3 screens. Any icons that you cannot use on a particular screen are dimmed. If you leave the cursor on an icon for a moment, a QuickInfo appears with the name (or function) of that icon. You will also see the corresponding function key. The **application toolbar** shows you which functions are available in the current application.
- **Checkboxes:** Checkboxes allow you to select several options simultaneously within a group.
- **Radio buttons:** Radio buttons allow you to select one option only.
- **Tabs:** Tabs provide a clearer overview of several information screens.
- **Status bar:** The status bar displays information on the current system status, for example, warnings or error messages.

Other elements are:

Menu bar: The menus shown here depend on which application you are working in. These menus contain cascading menu options.

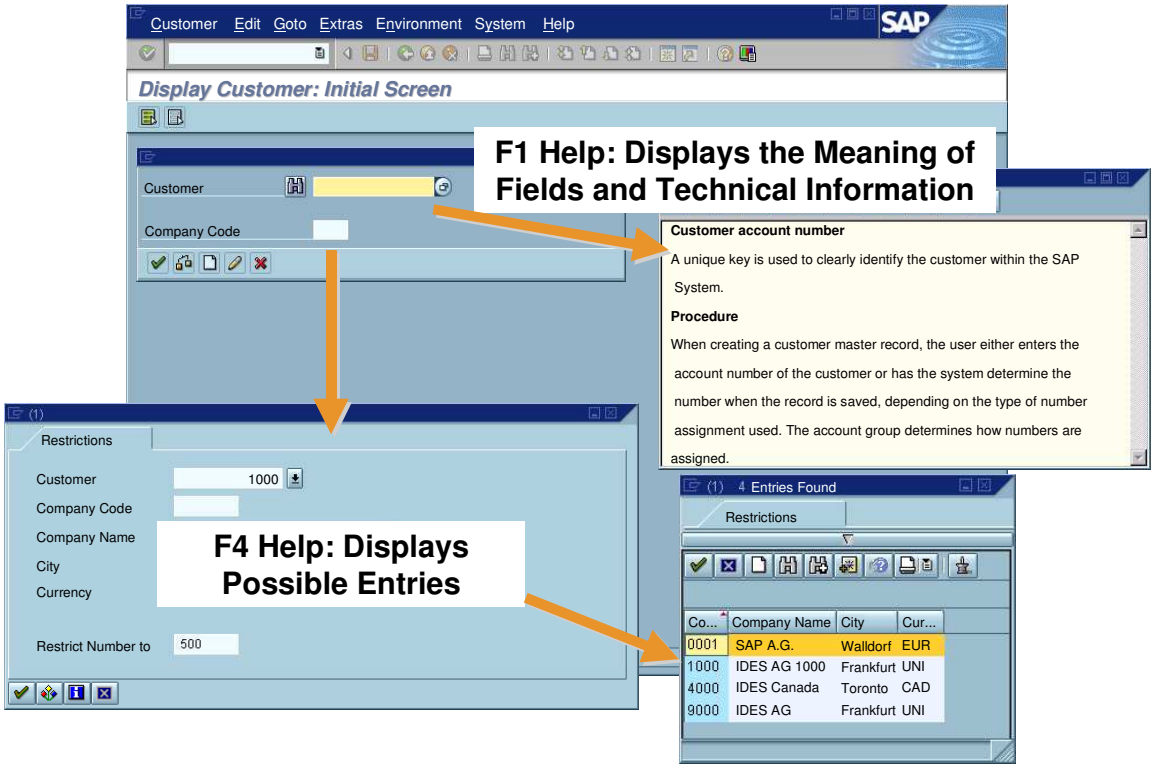
Title bar: The title bar displays your current position and activity in the system.

Selecting Functions



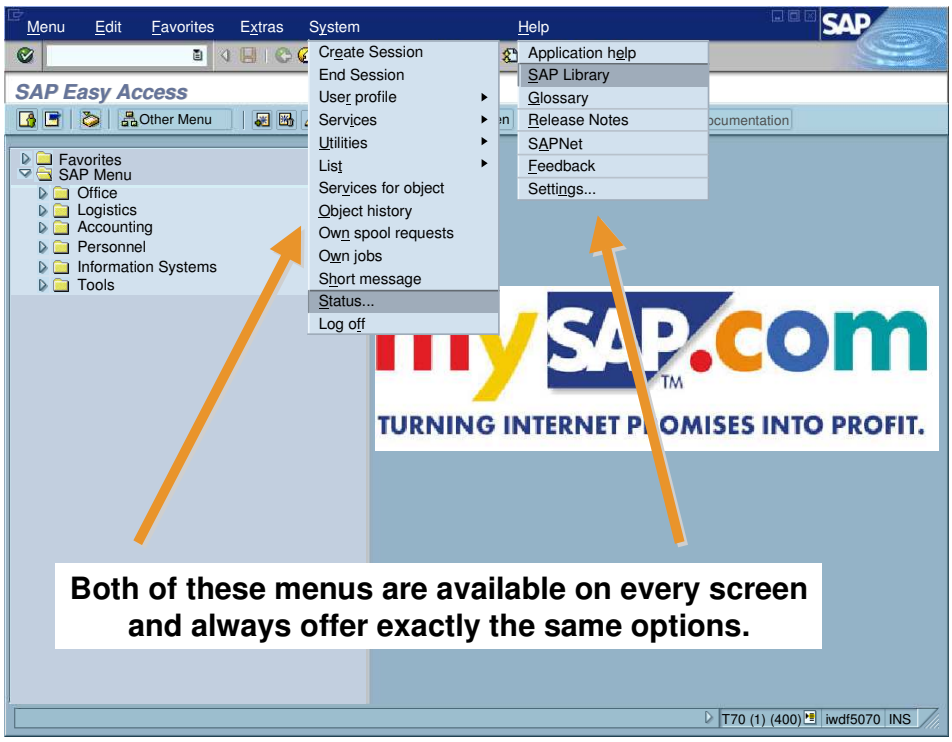
- You can select system functions in the following ways:
  - Use the mouse to choose
    - Menu options
    - Favorites
    - SAP Easy Access options
  - Use the keyboard (ALT + the underlined letter of the relevant menu option)
  - Enter a **transaction code in the command field**:
    A transaction code is assigned to each function in SAP R/3 Systems. You can access the assigned transaction code from any screen in the system. For example, to display customer master data, enter `/n` and the appropriate transaction code (in this case `/nfd03`). You can find the transaction code for the function you are working in under the *Status* option of the *System* menu. Other possible entries:
    - `/n` ends the current transaction.
    - `/i` ends the current session.
    - `/osm04` creates a new session and goes to the transaction specified (SM04).
- You can also use the keyboard to go to the command field. Use the CTRL + TAB key combination to move the cursor from one (input) field group to the next.
  Use TAB to move between fields within a group.

Field Help: F1 and F4

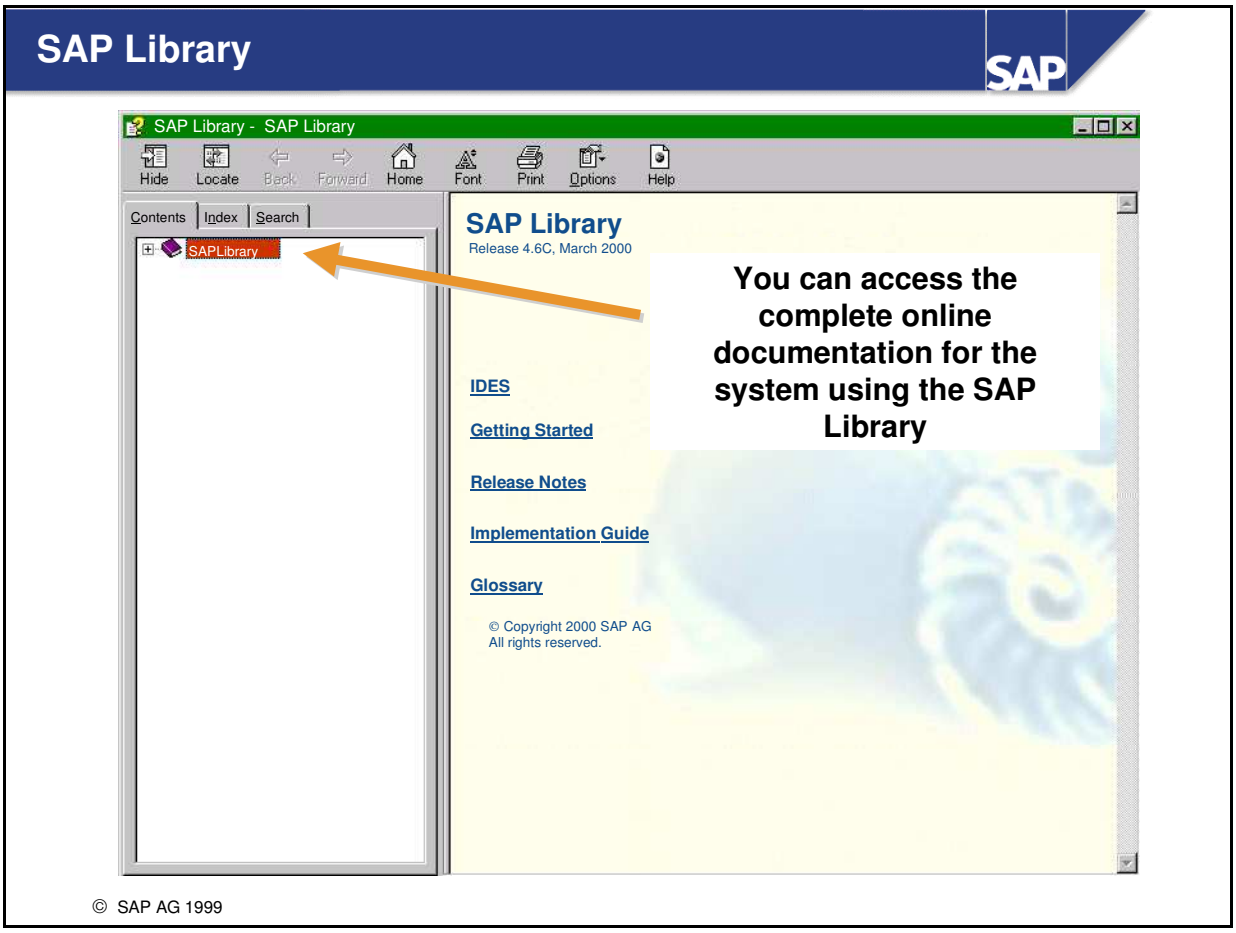


- For help on fields, menus, functions, and messages, use **F1**.
- F1 help also provides technical information on the relevant field. This includes, for example, the parameter ID, which you can use to assign values for your user to input fields , which have to refer to these parameter IDs.
- For information on what values you can enter, use **F4**. You can also access F4 help for a selected field using the button immediately to the right of that field.
- If input fields are marked with a small icon with a checkmark, then you can only continue in that application by entering a permitted value. You can mark many fields in an application as either required entry fields or optional entry fields. You can also hide fields and preassign values using transaction or screen variants or Customizing.

Menus: System and Help

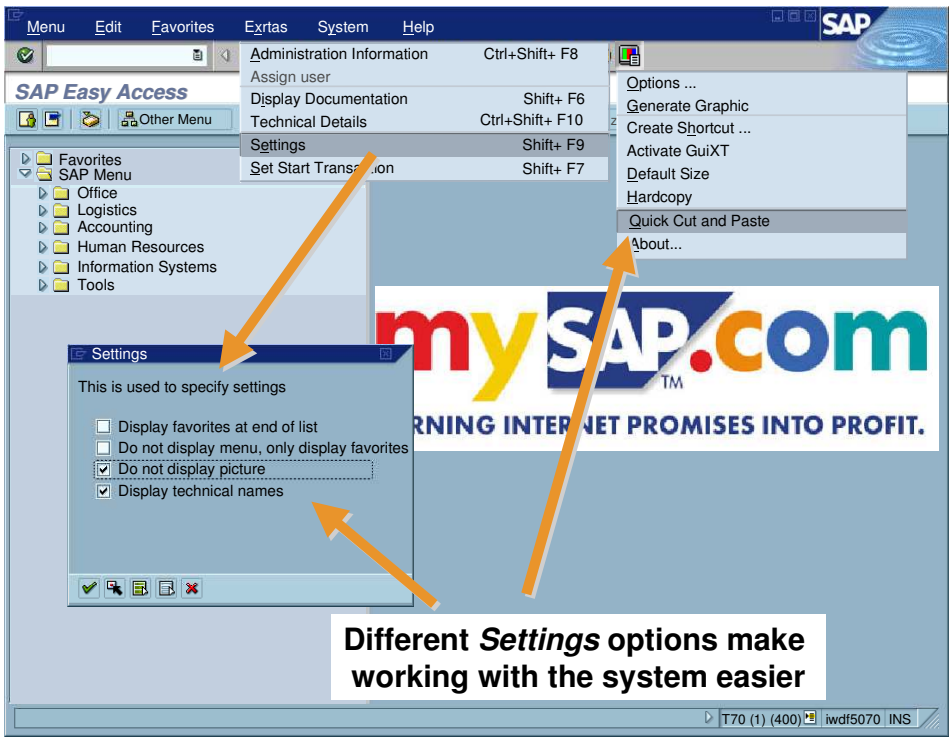


- The *System* menu contains, among others, the following options:
  - Create/End Session: Allows you to create and end sessions. The maximum number of sessions can be set to a number between 2 and 6 by the system administrator using the parameter rdisp/max_alt_modes.
  - User profile: This is where you can enter user-specific settings. For example, you can use Parameter IDs in *Own Data*, in order to set default values for specific user-dependent fields in the system (for example the company code field).
  - List: Contains important list functions, such as searching for character strings, saving in PC files, printing, and so on.
  - Status: Enables you to display important user and system data.
  - Log off: Ends the R/3 session with a confirmation prompt.
- The *Help* menu contains, among others, the following options:
  - Context-sensitive *Application Help*
  - Access to the *SAP Library* (see previous page)
  - a *Glossary*
  - ...



- SAP R/3 Systems provide comprehensive online help. You can display the help from any screen in the system. You can always request help using the *Help* menu or using the relevant icon (the yellow question mark).
- You can access the SAP Library quickly and comfortably by using the SAP Service Marketplace. There you can find the *SAP Help Portal* under *Knowledge and Training*, where you can not only access Help in HTML format, but can also perform efficient full-text searches in the SAP Library. If you have the SAP Library installed, you also have, of course, these opportunities within your company.

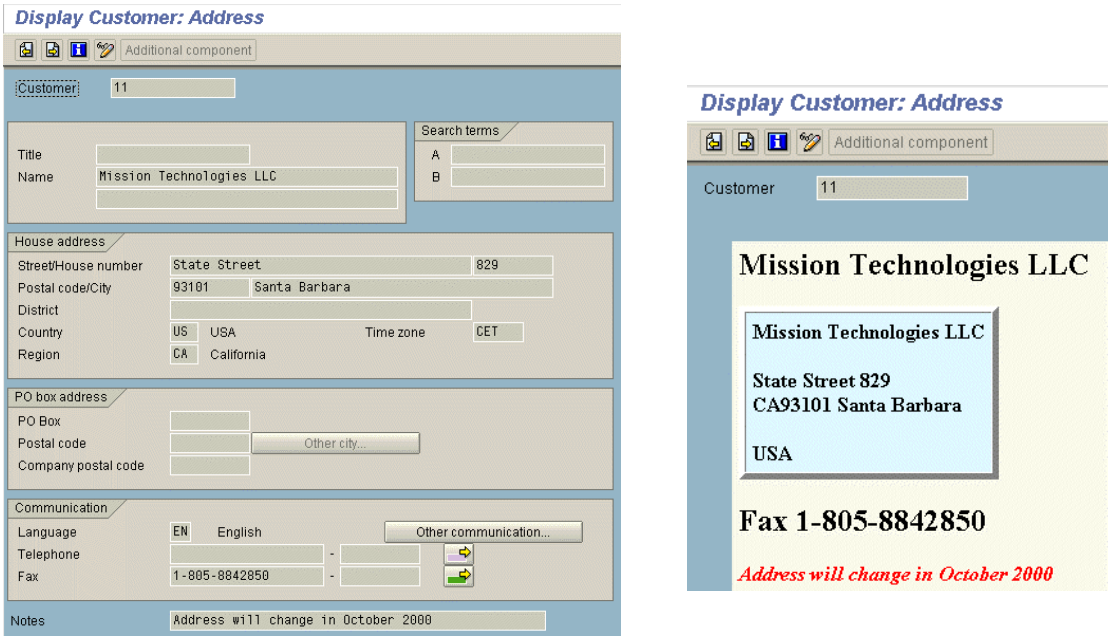
User-Specific Personalization



- The end user has many possibilities for personalizing the system. Some are described below:
  - You can alter the layout of your initial screen under *Extras → Settings*, for example by switching off the image in the right-hand part of the window or by turning on the option to display the technical names (transaction codes) in the SAP Easy Access Menu.
  - Among other things, you can activate a quick cut and paste in the *Options menu.* Using *Options* you can change the reaction speed of the QuickInfo that is displayed when you hold your mouse cursor over an icon or a push button.
  - By following the path *System→ User profile→ Own data,* you can set personal standard values. You can choose the tabs *Address, Defaults,* and *Parameters*. As an example, the setting of *Parameters* is explained here:
    - Parameters: Here you can set defaults for frequently used input fields. In order to be able set a default value for a field, it must have been assigned a Parameter ID.

      Procedure for finding the Parameter ID: Go to the field for which you wish to set a default value. Select the F1 help, and then choose *Technical Info*. The system displays an information window that contains the relevant parameter ID under the heading *Field Data* (as long as the field has been assigned a *Parameter ID*).

Personalizing the Frontend with GuiXT

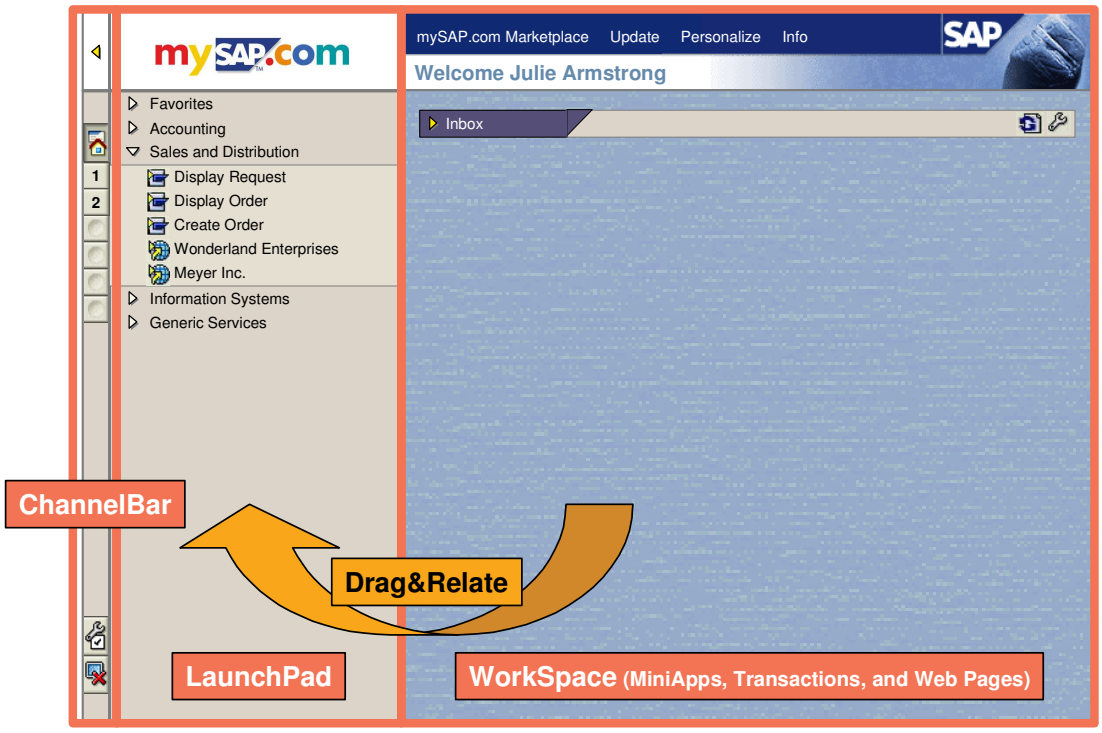


FD03 without GuiXT **FD03 with GuiXT**

Example from http://www.guixt.com

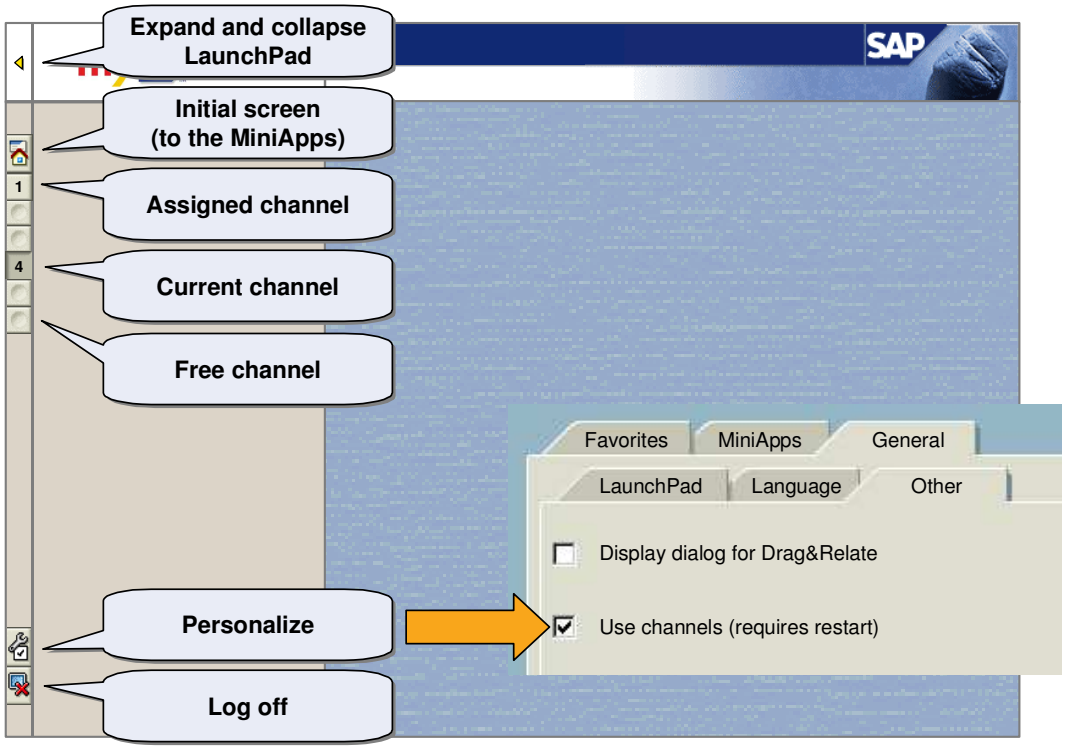
- SAP R/3 Systems offer numerous options for settings and adjustments:
  - Define default values for input fields
  - Hide screen elements
  - Deactivate screen elements (dimmed)
    You can do this by, for example, defining transaction variants.
- SAP offers **GuiXT**, as of SAP R/3 Release 4.6. In addition to all of the above functions, you can now:
  - Include graphics
  - Convert fields and add pushbuttons and text
  - Change input fields (or their F4 help results) into radio buttons
- **GuiXT** scripts are stored on the Frontend. In accordance with local scripts, the GUIXT scripts determine how data sent from the application server is displayed. These scripts can be standard throughout a company, or they can be different for each Frontend.
- **NOTE:** The GuiXT will support the mySAP.com Workplace only as of the end of the year 2000. This means that until then you should use **either** the SAP GUI for the Windows Environment and the GuiXT **or** the mySAP.com Workplace with the SAP GUI for HTML (or the SAP GUI for Java or the SAP GUI for Windows).

Elements of the Workplace



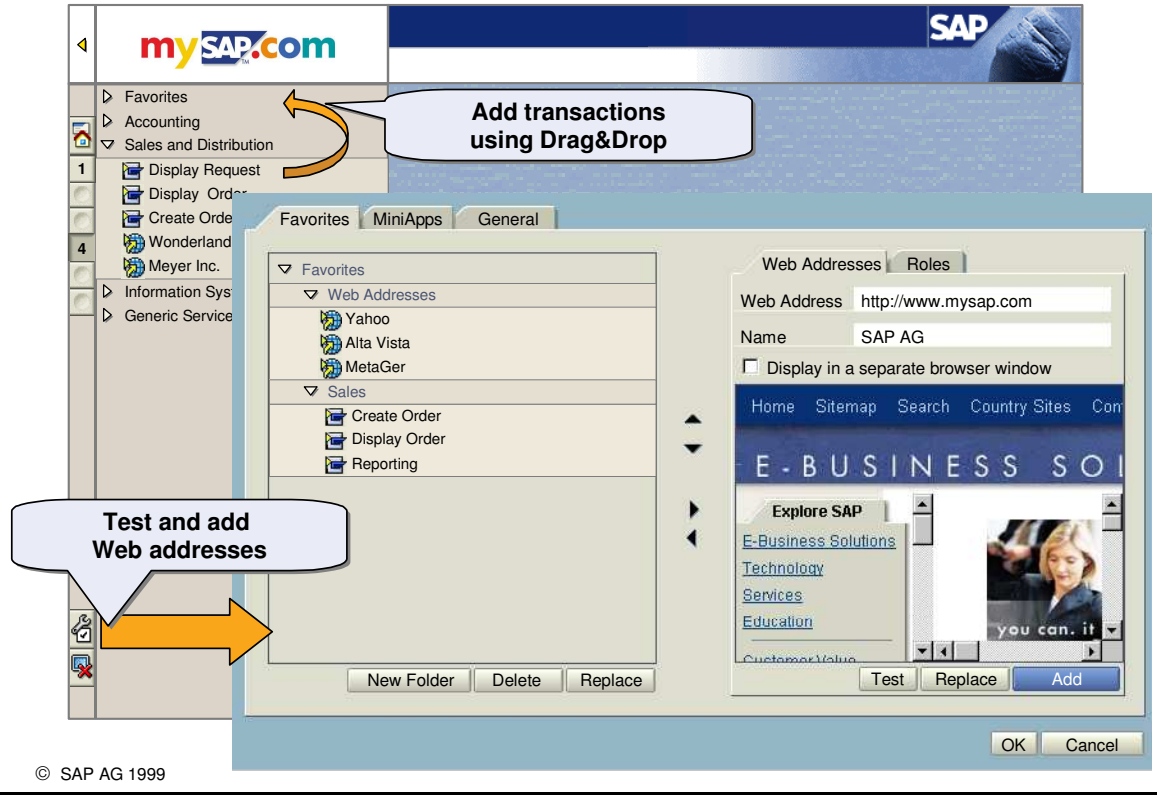
- You call the mySAP.com Workplace by entering the relevant URL (Internet address) in a Web Browser. Usually this is done by clicking a link (instead of being entered manually).
  The syntax for the URL of the Workplace is typically
  <protocol>://<webserver>[:*<port>*]/scripts/wgate/sapwp/!, for example:
  `https://workplace.wdf.sap-ag.de:1042/scripts/wgate/sapwp/!`
- The browser window of the mySAP.com Workplace consists of three areas:
  - Session handling in the Workplace allows you to hold several applications at the same time in channels. The individual channels are displayed as icons in a vertical strip, the **ChannelBar,** in the left-hand part of the browser window. By clicking the channel icons you can switch between the different applications.
  - When working with the mySAP.com Workplace, the roles containing the entries relevant to your job appear in the **LaunchPad**. You can also add your own entries (Favorites) to the LaunchPad.
  - When you log on to the mySAP.com Workplace, the list of MiniApps (for example: the StockTicker, news, overview lists, or reports) that are assigned to your role appears in the **WorkSpace** on the right-hand side, as well as MiniApps that you have added yourself. If you start a particular transaction in the LaunchPad (for example, the transaction for booking invoices), this application is executed in the WorkSpace on the right-hand side.
- Using **Drag&Relate** you can link objects from one application with another with a simple mouse click and execute them from there.

ChannelBar Functions



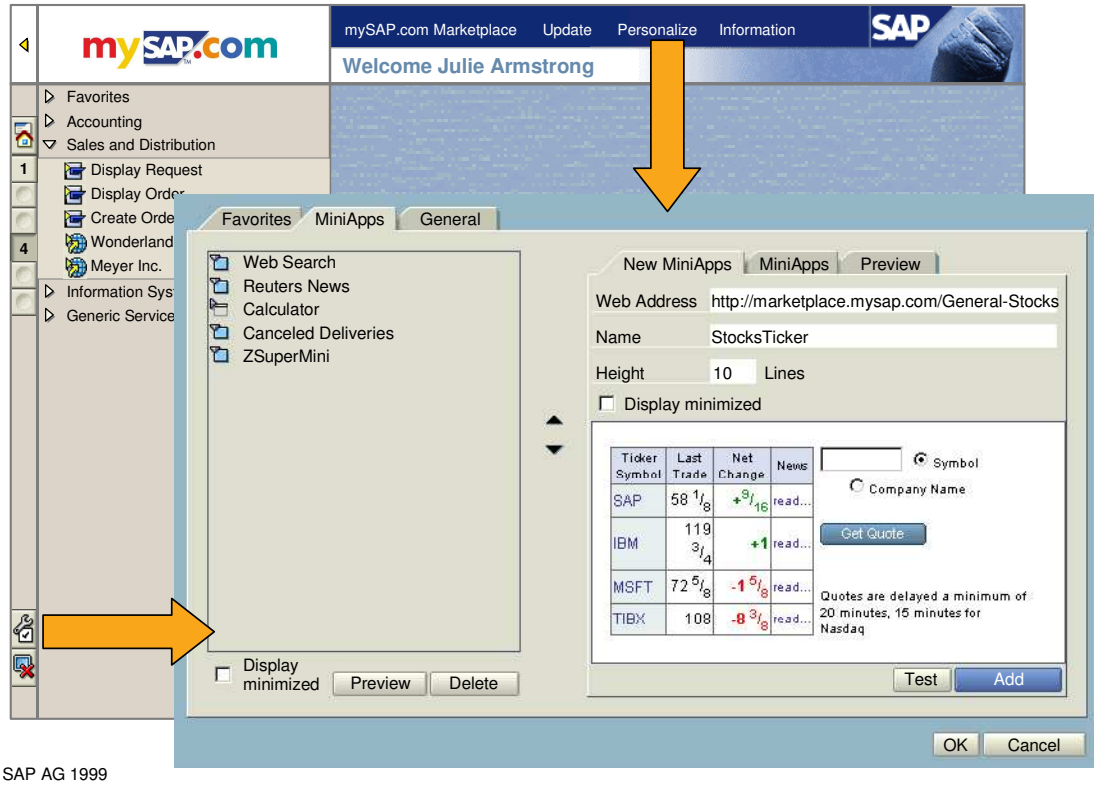
- The **ChannelBar** is at the left-hand edge of the mySAP.com Workplace. When you log on to the mySAP.com Workplace for the first time, only one channel is displayed as standard. If you want to use all of the Channels, you must adjust your ChannelBar. By choosing *Personalize* (or alternatively, choosing the *Personalize* button), you open a new window. You should check *Use Channels* box on the *Other* tab page of the *General* tab.
- You can hide and show LaunchPad in the ChannelBar. By choosing *Channel* icons, you can change between the different applications, or navigate to the MiniApps. In so doing, you are working with several browser windows that are all displayed in the mySAP.com Workplace (as frames). To log off, choose the bottom button.
- You can assign an application to a channel. Channels without numbers are not yet assigned (free channels).
- You can make channels available using a Quickstart assignment. This means that the channels are maintained even after you have logged off from the mySAP.com Workplace. The next time you log on, you can start your application directly in this preassigned channel.

Favorites in LaunchPad



- You can personalize the **LaunchPad** using Favorites.
- By choosing *Personalize* (or using the *Personalize b*utton in the ChannelBar), you open a new window. You can create and (re)name your own folders in the left-hand part of the tab page *Favorites,* as well as moving them and changing their grouping.
- You can enter Web addresses (URLs) in the right-hand part. These are then available in the *Favorites* folder in the LaunchPad. You should test your favorites by choosing the *Test* button before you add them to your favorites list. A favorite that requires a complete browser window is not suitable for displaying in the WorkSpace of the mySAP.com Workplace.
- You can see the entries in your LaunchPad that were assigned to you by your system administrator on the second tab page, *Roles*. This contains, for example, transactions. If you use a transaction frequently, you can define this as a favorite. To do so, click the relevant transaction and choose *Add*.
- You can also add to and edit your favorites directly form the LauchPad. Using Drag&Drop, you can add frequently used transactions to the *Favorites* folder.

Personalizing MiniApps



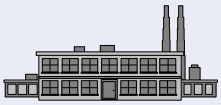
- MiniApps are Web applications or documents that are simple and intuitive to operate. After you have started the mySAP.com Workplace, they offer you a quick overview and access to the functions that are most important to you on the initial screen.
- You are assigned the MiniApps in the Workspace by your system administrator, but you can also add your own MiniApps.
- By choosing the menu option *Personalize* (or alternatively choosing the *Personalize* button in the ChannelBar), you open a new window. You can add your own MiniApps on the right-hand side of the tab page *MiniApps* under *New MiniApps.* Also enter the Web address (URL), a name for the MiniApp, and the height in lines. Test MiniApps before adding them. You can easily rename and reassign them later.
- You can change and adjust the format of MiniApps. On the tab page *MiniApps,* you can change the order in which the MiniApps are displayed on the Workplace or choose your desired display format (minimized or expanded).

Workplace: Advantages

User

- **User-Friendliness**
  - Role-based access
  - Tailored to match your needs
  - Access from anywhere
- **Efficiency**
  - “Drag&Relate”
  - Uniform access
  - Log on only once
- **Openness**
  - Standard Internet user interface
  - Components from SAP and other providers
  - Extendable role specifications

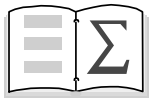
Enterprise



- **Low Total Costs**
  - No installation expenses at the PC workstation
  - Standardization
  - Uncomplicated maintenance
- **Security**
  - Central administration
  - Controlled access
- **Productivity**

- Both the user and the enterprise profit from the advantages of the mySAP.com Workplace.

Navigation: Unit Summary



You are now able to:

- **Identify the elements of a typical window**
- **Navigate in the system**
- **Make personal system settings**
- **Describe and use the mySAP.com Workplace**

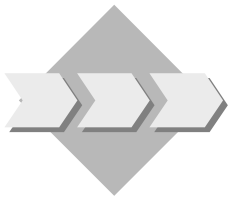
Exercises

Unit: Navigation

Topic: Basic Functions

At the conclusion of this exercise, you will be able to:

- Log on to an SAP R/3 System
- Find transaction codes
- Access the SAP Library
- Use F1 help to find field information
- Use F4 help to search for possible field entries



As a new user of an SAP R/3 System, you begin to navigate the system using the menu paths and transaction codes. You also begin to access the various types of online help.

1-1 Logging on to the system

Select the appropriate system for this course. Use the client, user name, initial password and logon language specified by the instructor. The first time you log on, you will get a prompt in which you must enter your new password, which you choose yourself, twice. Make a note of the following:

Client: _ _ _ User: _ _ _ _ _ _ Password: _____ Language: _ _.

1-2 What is the maximum number of sessions (windows in the SAP R/3 System) you can have open simultaneously? __

1-3 Identify the functions and find the transaction codes that correspond to the following menu paths.

1-3-1 ***Tools → Administration → Monitor → System Monitoring → User Overview***

Name of function: _____

Transaction: _____

1-3-2 ***Accounting → Financial Accounting → Accounts Receivable → Master Records → Display***

Enter *Customer* **1000** and *Company Code* **1000** to go to the next screen.

Name of function: _____

Transaction: _____

1-4 Help

1-4-1 If you choose *Application help* in the *SAP Easy Access* initial screen, which area of the SAP Library does it take you to?

_____

To answer the questions below, you will need to go to the *Display Customer: Initial Screen*.

1-4-2 Use **F1** help on the *Customer* field. What is this field used for? Write a brief summary of the business-related information.

_____

1-4-3 Use the **F1** help on the *Company code* field. If you choose the *Application help* icon from the F1 help screen, which area of the SAP Library does it take you to?

_____

1-4-4 Which icon do you need to use on the F1 help screen to find the parameter ID for the *Company code* field?
Hint: See the notes on the slide *User-Specific Personalization*

_____

1-4-5 Use **F4** help on the *Customer* field to find the customer number for *Becker ##*. To do this, use the *Search term* "Becker*" after calling the F4 help.

Note: ## corresponds to your assigned group number.

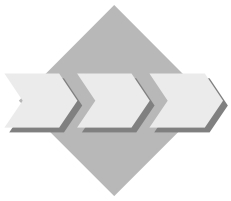
_____

Unit: Navigation

Topic: User-Specific Settings

At the conclusion of this exercise, you will be able to:

- Set a user parameter for a field
- Set user defaults
- Maintain your favorites
- Select a start transaction of your choice



You begin to set various user-specific settings.

Exercises marked * are optional.

2-1 Setting user parameters.

2-1-1 Assign a parameter value for the *Company code* field to your user profile.

Note: The instructor will tell you what parameter value to enter (for example `1000`). For information about defaults, see the notes on the slide *User-Specific Personalization*.

Parameter ID: ___ ___ ___

Parameter value: ___ ___ ___ ___

2-2 Defining User-Specific Settings using System → User profile → Own Data

2-2-1 In your user profile, set your logon language to the value used for the course.

2-2-2 In your user profile, set the decimal notation and date format of your choice.

2-3 Defining your favorites

2-3-1 Insert at least one new folder under the *Favorites* folder.

2-3-2 Add any two of your favorite transactions to the corresponding folders.

2-3-3 Add the Internet address `http://www.sap.com` with the text *SAP Homepage*.

2-4* Setting a start transaction using the *Extras* menu.

2-4-1 Enter a transaction of your choice as the initial transaction. You will then need to log off and on again for the change to take effect.

Note: If desired, you can change the initial transaction back to the default value simply by deleting the transaction code that you entered.

Solutions

Unit: Navigation

Topic: Basic Functions

1-1 Log on to the system specified by the instructor and change your initial password.

1-2 To open and close sessions, choose ***System → Create session*** (or use the appropriate icon) or ***System → End session***.
The maximum number of sessions you can have open simultaneously is six (6), depending on your system settings.

1-3 To find the transaction code, choose ***System → Status***. These function names and transaction codes correspond to the menu paths:

1-3-1 Transaction: SM04 for Function Name: *User list*

1-3-2 Transaction: FD03 for Function Name: *Display Customer: General Data*

1-4 Help

1-4-1 The section of the unit *Getting Started* that deals with using SAP Easy Access is displayed.

1-4-2 Customer ## (## corresponds to your assigned group number)

When you select **F4** in the *Customer* field, the *Restrict Value Range* window appears. You can explore the various tabs to see the different search criteria available. Find a tab that includes the *Search term* field and enter the following:

Field Name	**Value**
Search term	*Becker**

Choose *Enter*. A window appears listing the customer account numbers that match your search criteria. Select the line that corresponds to Becker ##, then choose *Copy*. This automatically copies the customer account number into the *Customer* field.

1-4-3 Suggestion: The customer is a unique key (account number) used to clearly identify the customer within the system.

1-4-4 FI – Accounts Receivable and Accounts Payable

1-4-5 To find the *Parameter ID:* BUK, choose *Technical Info*

Unit: Navigation

Topic: User-Specific Settings

2-1 Setting user parameters.

2-1-1 To assign a parameter value to a field you will need the parameter ID of the field. First you need to select a transaction that contains this field. For example, *Company code* can be found in transaction **FD03**. Next, place the cursor on that field (click it with the mouse). To display the required info, choose:

F1 → Technical Info → Parameter ID

gives you the required information. For the *Company code* field, the parameter ID is **BUK**.

Finally, enter the parameter ID and desired value in your user profile:

System → User profile → Own data

On the *Parameter* tab page you enter the parameter ID and value that you want to be entered into the field. *Save* your entries.

2-2 Setting user defaults.

2-2-1 To set the logon language, go to your user profile:

System → User profile → Own data

On the *Defaults* tab page, enter the language of your choice in the *Logon language* field.

2-2-2 To set the decimal notation and date format, remain on the *Defaults* tab in your user profile. Select the indicator adjacent to the notation and format you desire. *Save* your selections.

2-3 Defining favorites of your choice.

2-3-1 ***Favorites → Insert folder***

Type any name for the folder then select *Enter*. You can add as many folders as you desire. Once created, folders can be dragged and dropped to position them where you want.

2-3-2 To create favorites, select specific applications (transactions) that you need as favorites for your daily work from the menu tree of the SAP standard menu. Add them to your Favorites list by selecting them and choosing *Favorites → Add* from the menu bar. Alternatively, use the mouse to drag & drop favorites to a folder. You can also use the menu path ***Favorites → Insert transaction*** to add using a transaction code.. Finally, you can move existing favorites to different folders later by choosing ***Favorites → Move*** or using drag & drop.

2-3-3 Create Internet addresses by choosing ***Favorites → Add Web address or file***. When you select *SAP Homepage* from your favorites, an Internet browser will open and you will be connected to SAP's homepage.

2-4 Setting a start transaction.

2-4-1 ***Extras → Set start transaction***

Enter a transaction of your choice then choose *Enter*. Notice the system message on the status bar indicates that your selected transaction has been set as the start transaction. The next time you log on, the system will go directly to your start transaction.

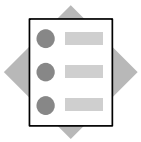
Note: To change back to SAP Easy Access as the initial screen, follow the menu path again, delete the transaction code and select *Enter*. The next time you log on, SAP Easy Access will be the initial screen.

Investment Management Cycle

Contents:

- Overview of the investment management cycle
- Flow of values between components
- Integration with other components
- Overview of the R/3 objects used
- Business Scenario for Investment Management

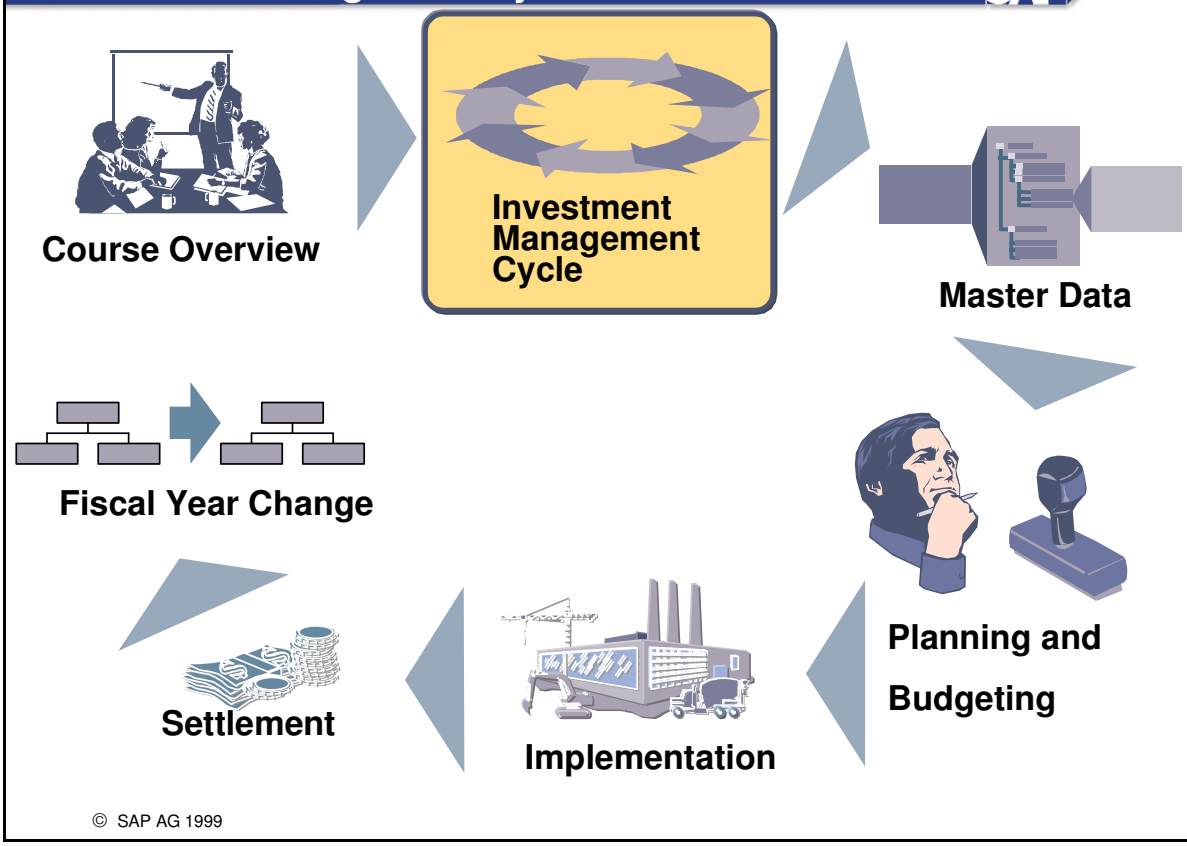
Investment Management Flow: Unit Objectives



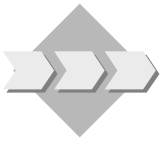
At the conclusion of this unit, you will be able to:

- **Describe the life cycle of an investment**
- **Name the basic R/3 objects that are used in Investment Management**

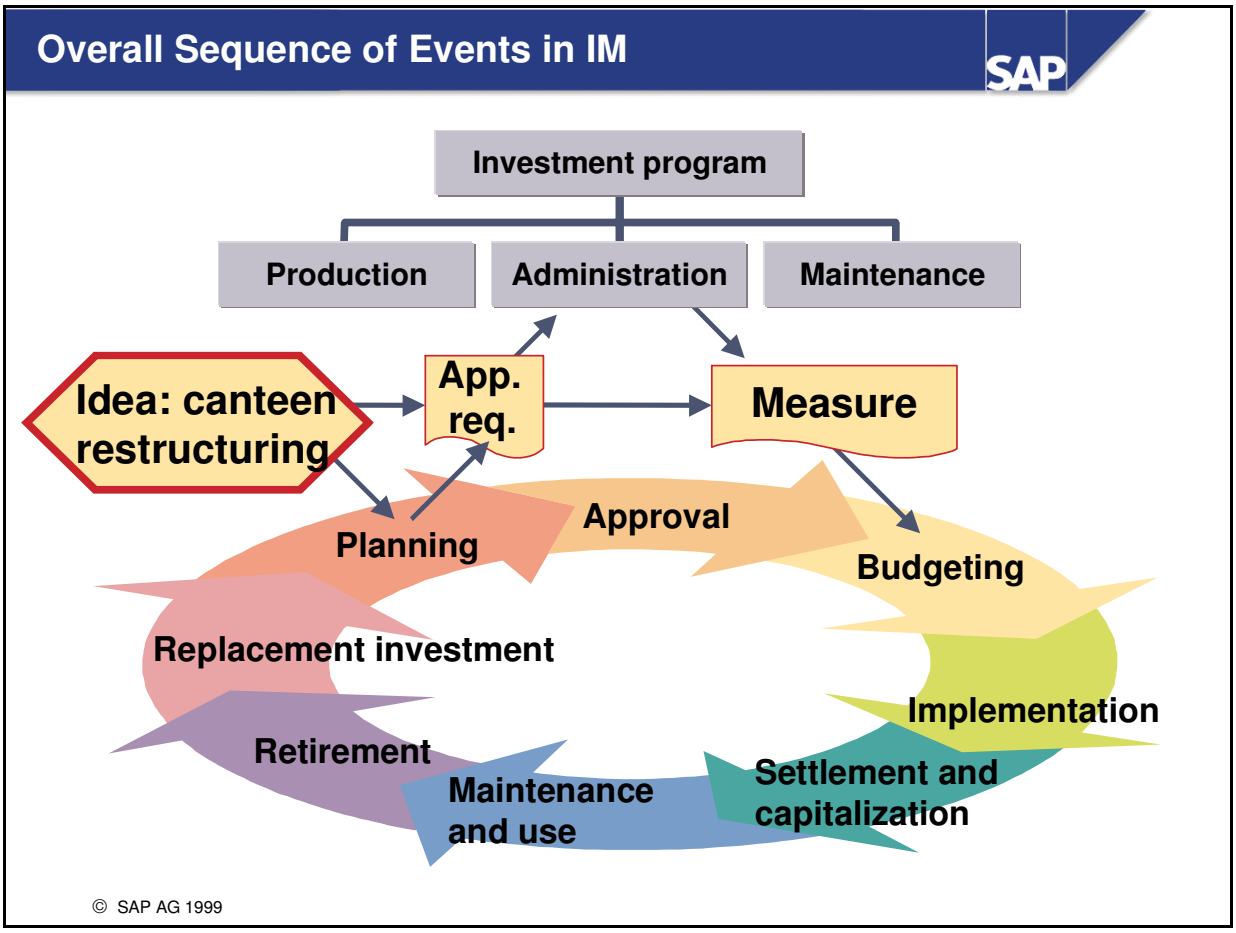
Overview Diagram - Investment Management Cycle



Investment Management Flow: Business Scenario

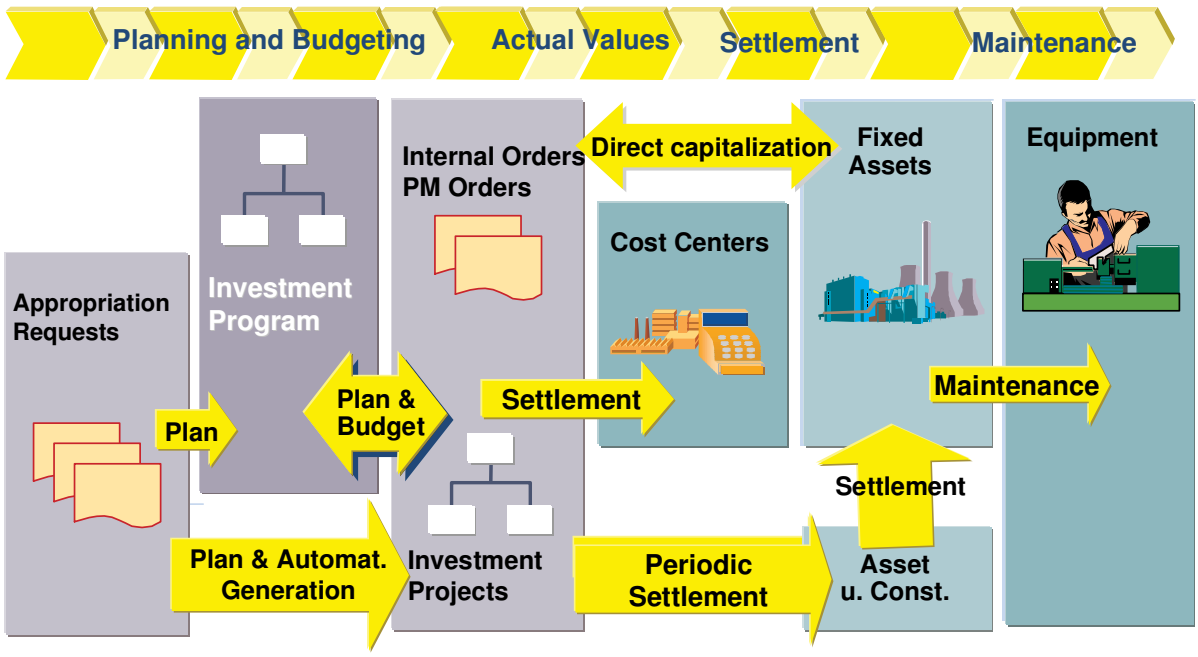


- Before implementation of the Investment Management (IM) component of SAP, the fundamental investment management procedures are examined
- Selection of some Customizing settings

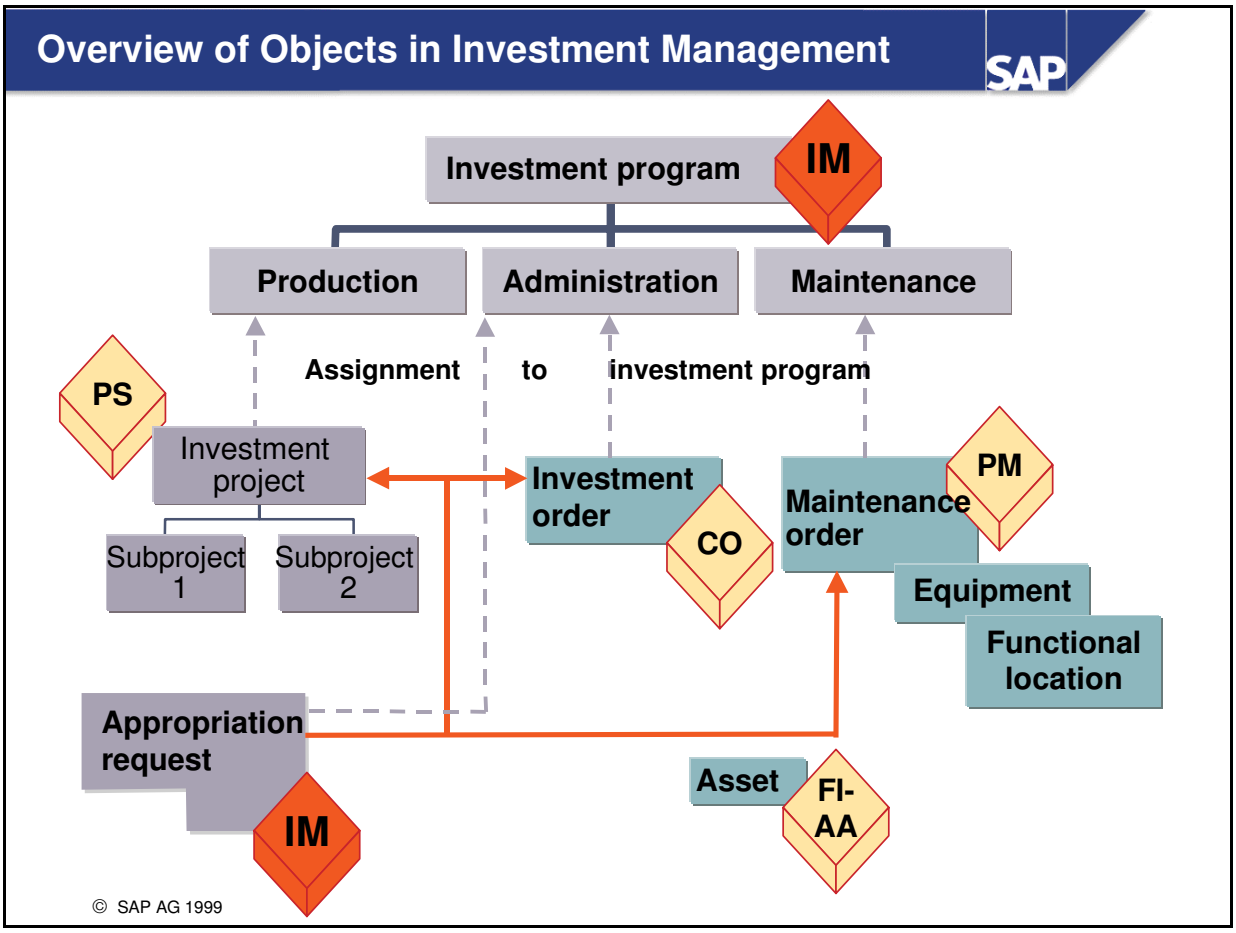


- Within the context of IM, investments are all measures that only deliver deferred revenues for the costs (not necessarily investments in the accounting sense), for example, research and development. And also all expenditure that (because of importance or size) must be approved by several members of the company.
- An investment program is a hierarchical structure for managing investments. Details to follow.
- An appropriation request is an idea for an investment. Details to follow.
- Planning: Cost planning on the appropriation request (possibly different variants). Rolling up/summarizing values in the program.
- Approval (possibly by different people). Then the measure is generated (either investment orders or projects) from the appropriation request (with transfer of assignments and plan values).
- Budgeting the measure (possibly from the program).
- Difference: Planning (requested funds) versus budgeting (approved funds).
- Implementation and settlement/capitalization: Posting actual costs to the measure during construction and periodic settlement/full settlement of these costs.
- This course does not address the topics maintenance and use, retirement, and replacement investment.

Flow of Values in Investment Management

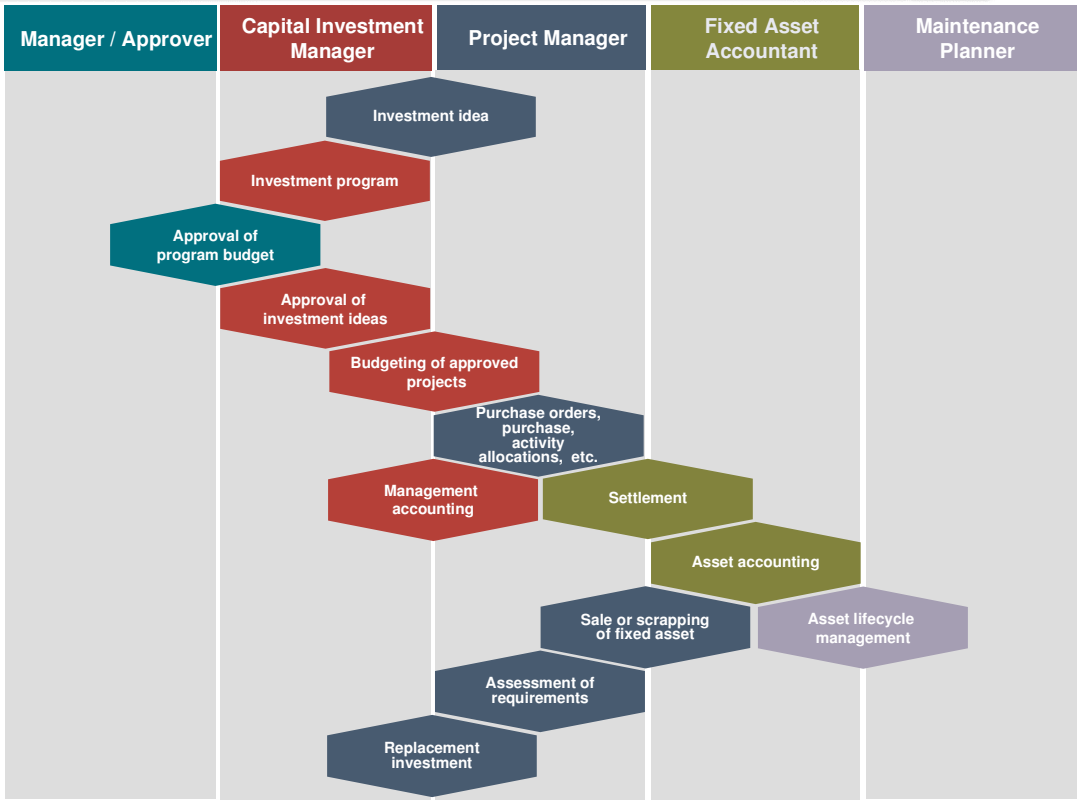


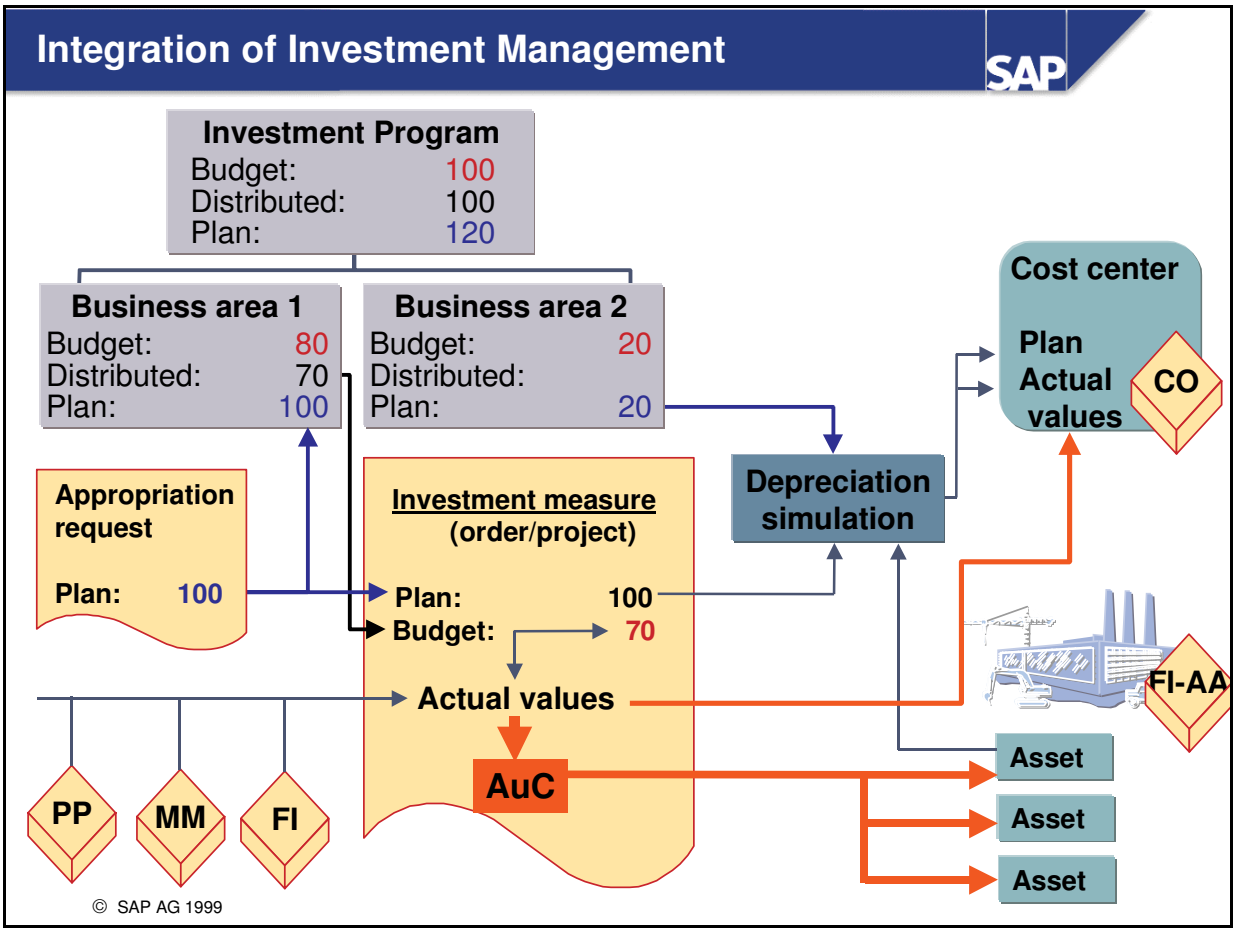
- The investment program is linked to the investment measures (orders or projects) by their integrated planning and budgeting functions.
- Assigned funds resulting from purchase orders, invoices, in-house activity, and so on, are collected on the investment measures. Reports can be run on these values from the viewpoint of the investment program.
- The actual values that are part of these assigned funds are settled periodically to receivers in management accounting. Or, if the actuals require capitalization, they are settled to assets under construction. When the asset under construction is complete, it is settled to final fixed assets.
- During the useful life of the capital investment, you can monitor maintenance costs for fixed assets when they are linked to equipment master records in the Plant Maintenance (PM) component.



- The Investment Management (IM) component has two objects of its own: the investment program and the appropriation request. The other objects come from related components and are used in conjunction with them. An advantage of this is that you can implement the IM process much more quickly if you are already using the components PS, CO, PM, and FI-AA.
- The measures (investment project/order) can be generated directly from the appropriation requests. As of Release 4.6, maintenance orders can also be created from the appropriation requests.
- Both measures and appropriation requests can only be added to the lowest program level (end nodes).

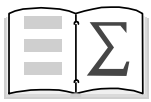
Business Scenario Investment Management





- Investment management is a highly integrated component of the R/3 System.
- You can collect plan values on appropriation requests and roll them up in the investment program. Once an appropriation request has been approved, you can generate measures (internal orders, WBS elements, and maintenance orders) from it. The plan values entered on the appropriation requests can be transferred to the new object.
- You can run a depreciation simulation. You can use either the plan values or the budget values as the basis for this. This topic will be addressed later in the course.
- During the under-construction phase, all amounts are posted to the measure and settled periodically to the asset under construction (which may have been created automatically). During full settlement, the values accumulated on the AuC are settled to completed assets.

Investment Management Flow: Unit Summary



You are now able to:

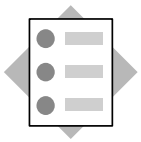
- **Describe the life cycle of an investment**
- **Name the basic R/3 objects that are used in Investment Management**

Master Data

Contents:

- Master data in Investment Management
  - Investment program
  - Appropriation requests
- Other master data:
  - Projects
  - Orders
  - Assets/equipment

Master Data: Unit Objectives

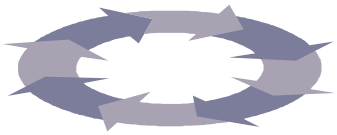


At the conclusion of this unit, you will be able to:

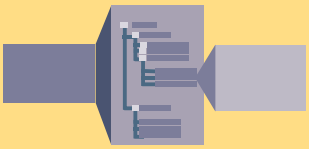
- **Define the basic IM master data and enter it in the system**
- **Identify additional basic master data from CO, PS, AA, and PM**

Overview Diagram - Master Data

Course Overview

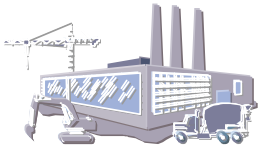


Investment Management Cycle



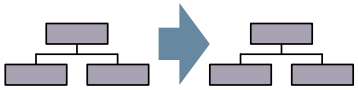
Master Data

Planning and Budgeting



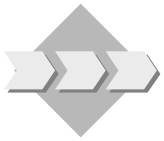
Implementation

Settlement



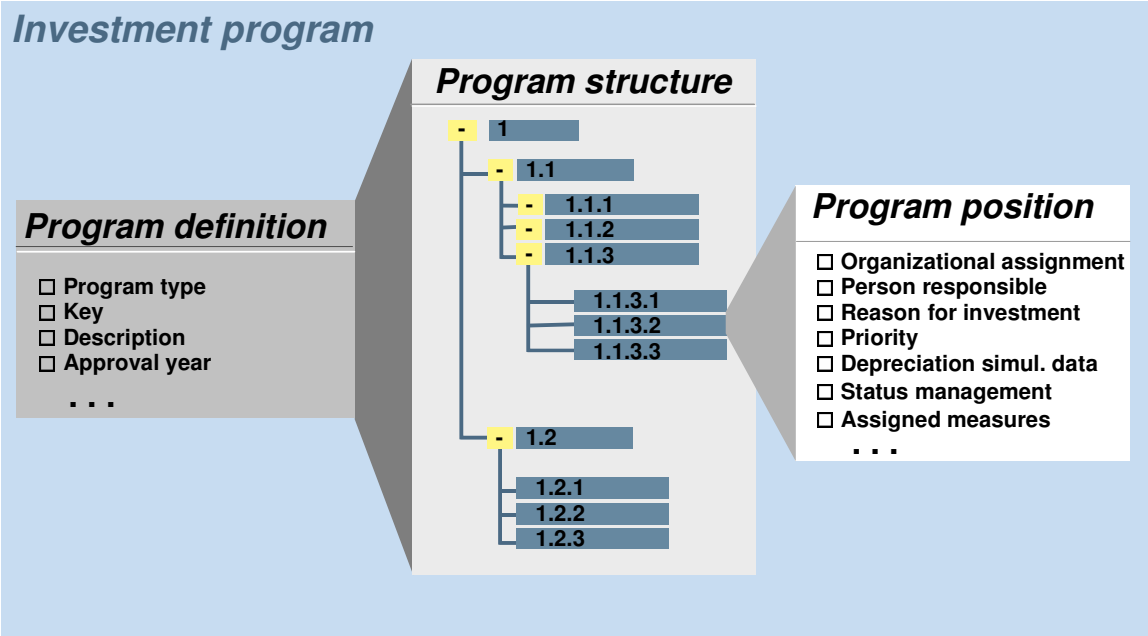
Fiscal Year Change

Master Data: Business Scenario

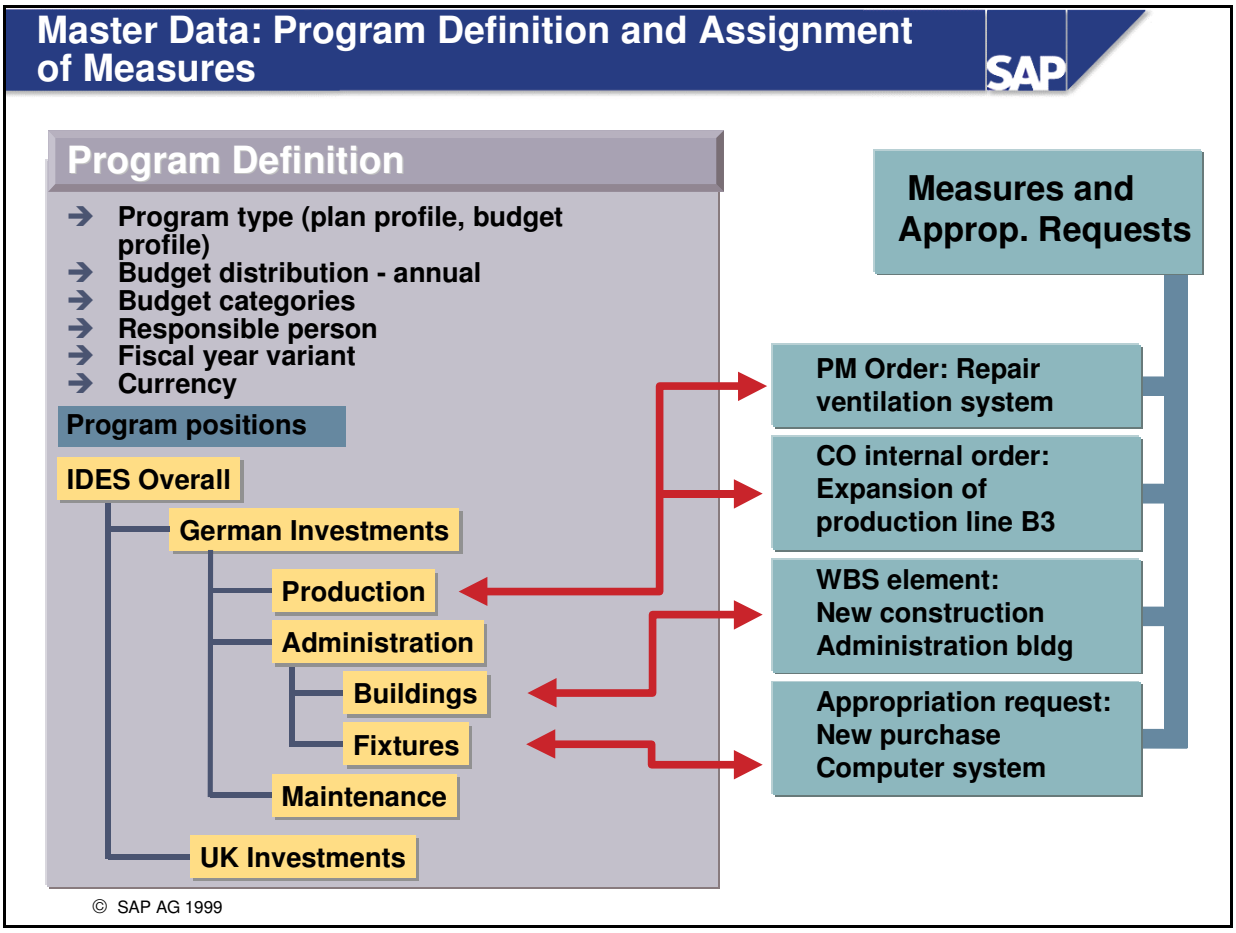


- IDES defines an investment program that will simplify investment planning and management.
- Appropriation requests are then created so that investment ideas can be reproduced in the system.
- Costs and revenues are planned for the appropriation requests, and preinvestment analysis figures can then be calculated.
- The appropriation requests are later submitted for approval. Projects or orders can be generated directly from the approved appropriation requests.

Investment Program: Structuring and Master Data Maintenance



- An investment program consists of a program definition and a program structure. The structure is made up of individual program positions. You can maintain different parameters (person responsible, reason for investment, and so on) at every level.

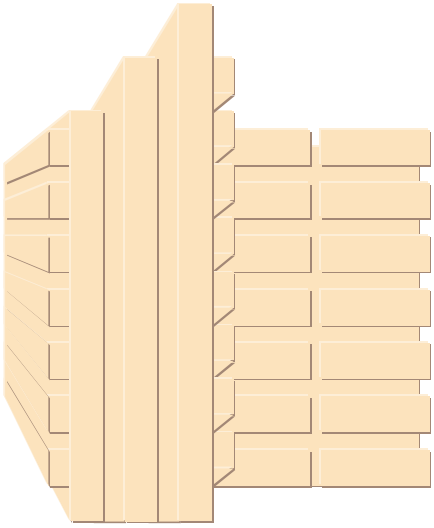


- The structure of the investment program usually reflects the structure of your enterprise or your corporate group. It therefore corresponds to a hierarchy of areas of responsibility, represented, for example, by business areas or profit centers in the R/3 System.
- The investment program is a hierarchy of program positions, which can be graphically maintained, within a framework defined by the program definition. Investment measures can be assigned to the lowest-level program positions in the hierarchy.
- You enter the following in the program definition: the person responsible, the fiscal year variant and the investment program currency. You can also specify that you want budget categories or budget distribution, also for annual values.
- When you create the investment program definition, you enter a program type. The program type specifies the budget profile and plan profile, and whether budget distribution is used or not.

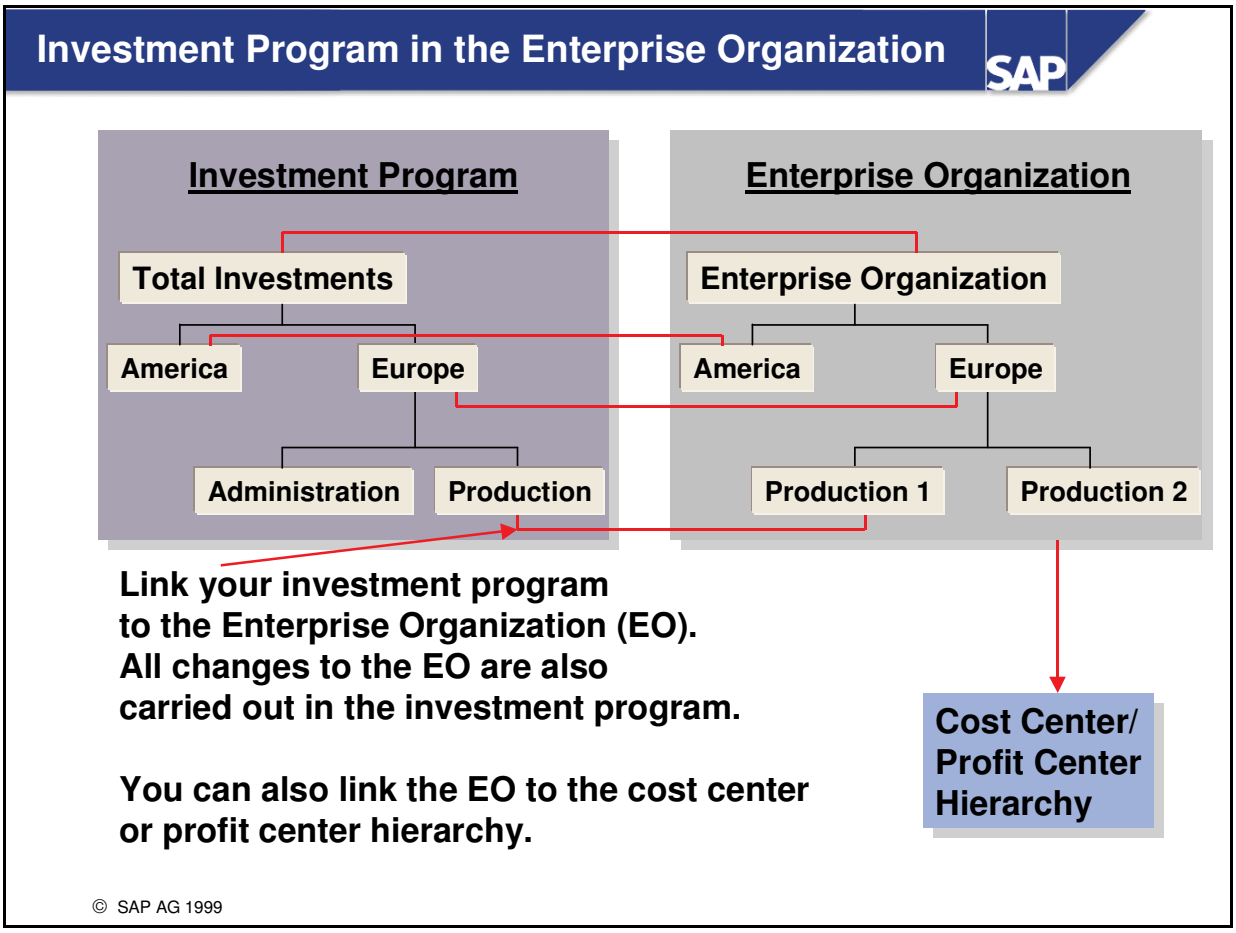
Master Data: Investment Program Positions

Program Position: Buildings

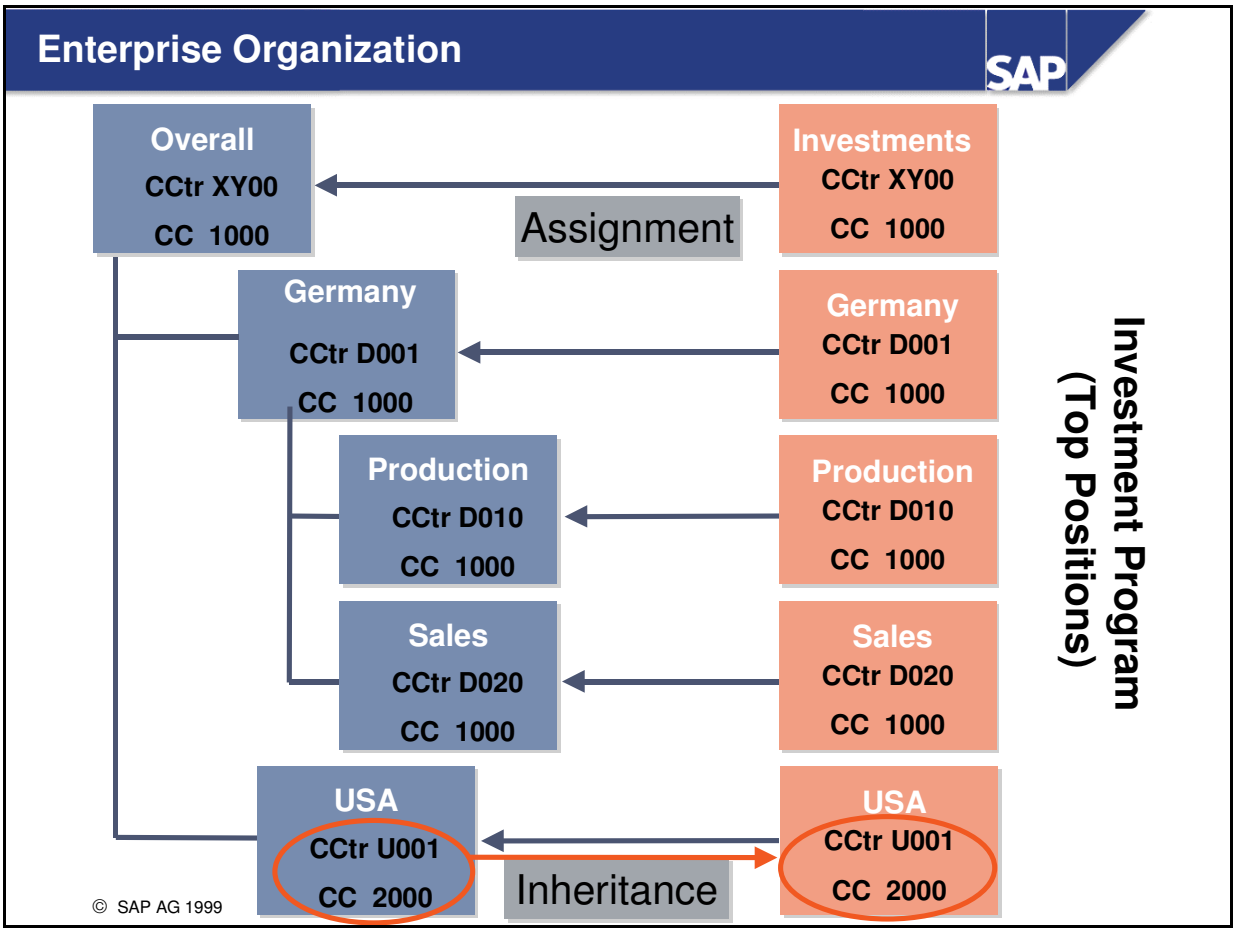
- → General data
  - → Person responsible
- → Organizational assignments
- → Allowed/assigned measures
- → Status management



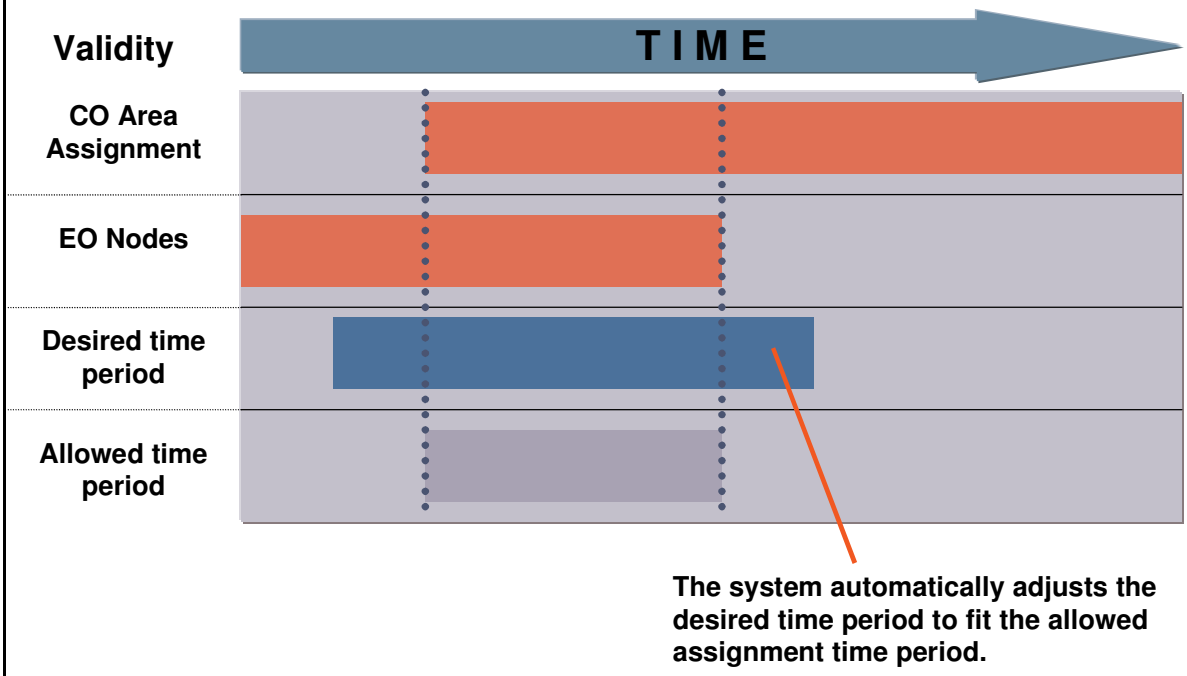
- In the master data of the investment program position, you can specify general data for the program position, for example:
  - ☒ Person responsible
  - ☒ Reason for the investment
  - ☒ Priority
  - ☒ Scale
- You can also specify for each program position whether you want to use the budget distribution for annual values (*Budget dist. annl* indicator).
- In the program position, you can specify which objects (orders, projects, appropriation requests) can be assigned, and view which objects have already been assigned.



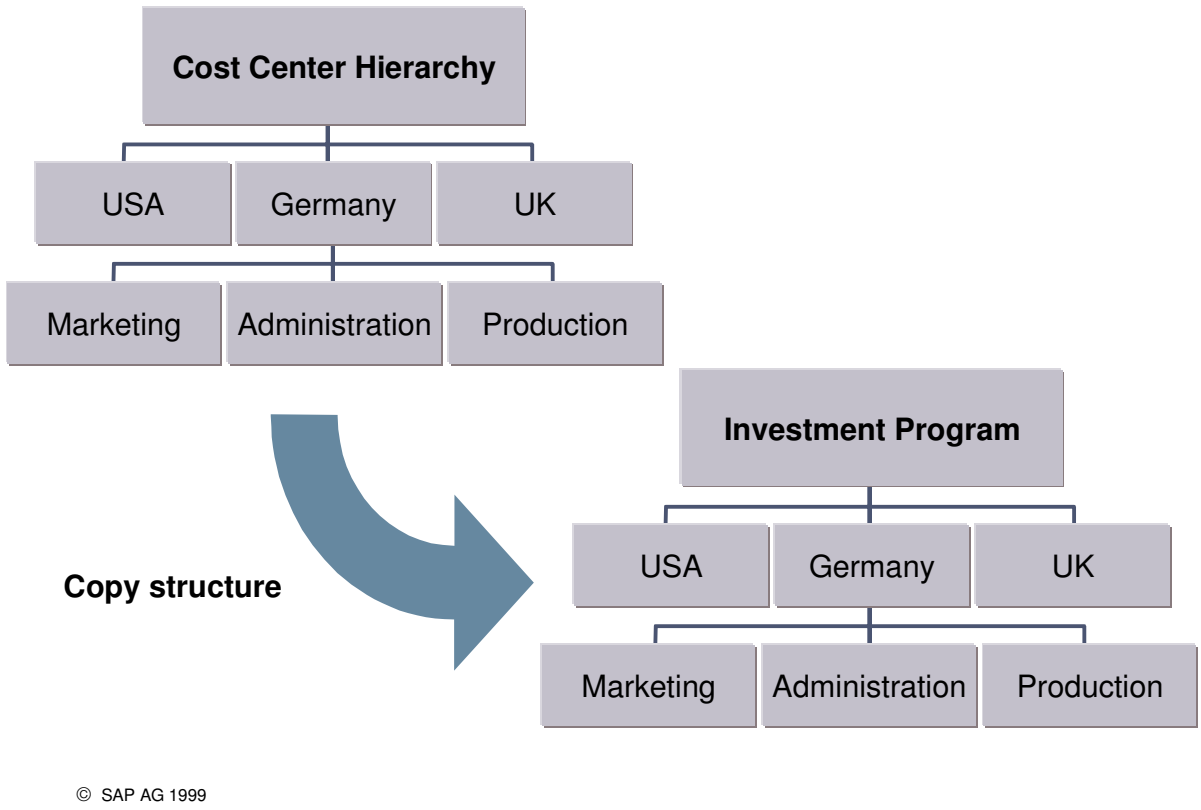
- Up to now, you maintained the hierarchical structure of the investment program in the *Investment Management* (IM) component.
- Now you can assign investment program positions to the nodes of the enterprise organization (EO). This is useful when the investment program and the enterprise organization correspond roughly to a CO standard hierarchy (cost center or profit center hierarchy).
- From the perspective of the Investment Management component, maintaining the investment program in the enterprise organization has the following advantages:
  - When you create a new program position in the enterprise organization, it automatically inherits the organizational units of the enterprise organization node to which it is assigned.
  - If the enterprise organization is restructured, duplicate maintenance is not required. For example, if the cost center of an enterprise organization node is changed, this change is automatically reflected in each program position that is assigned to that node.
  - Assignments are time-dependent. When a new program position is created, you can specify that it is assigned to different nodes of the enterprise organization at different times (and as a result has different cost centers, for example).


Enterprise Organization
SAP
Overall
CCtr XY00
CC 1000
Investments
CCtr XY00
CC 1000
Assignment
Germany
CCtr D001
CC 1000
Germany
CCtr D001
CC 1000
Production
CCtr D010
CC 1000
Production
CCtr D010
CC 1000
Sales
CCtr D020
CC 1000
Sales
CCtr D020
CC 1000
USA
CCtr U001
CC 2000
USA
CCtr U001
CC 2000
Inheritance
Investment Program
(Top Positions)
© SAP AG 1999

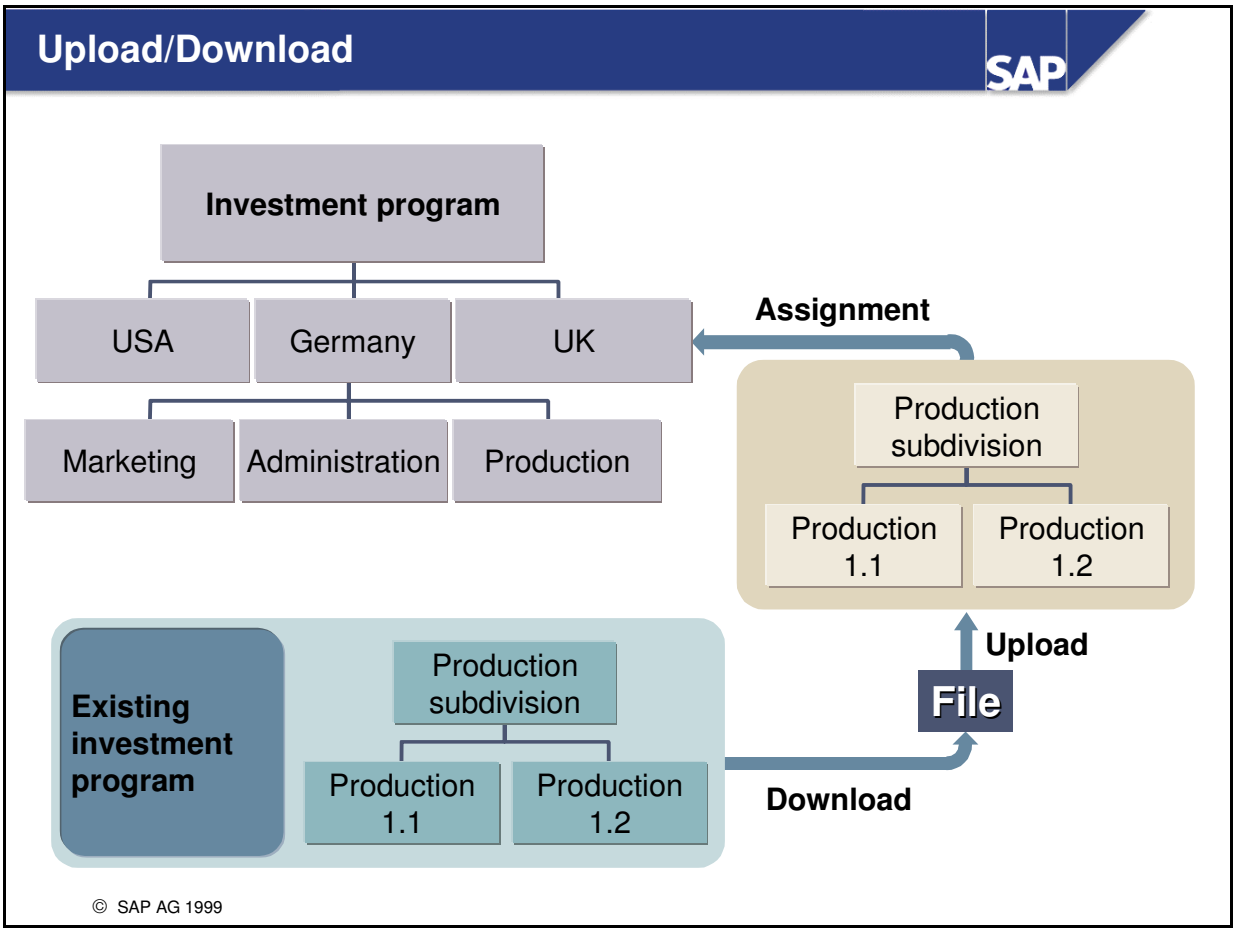
Validity of Assignment to a Program Position



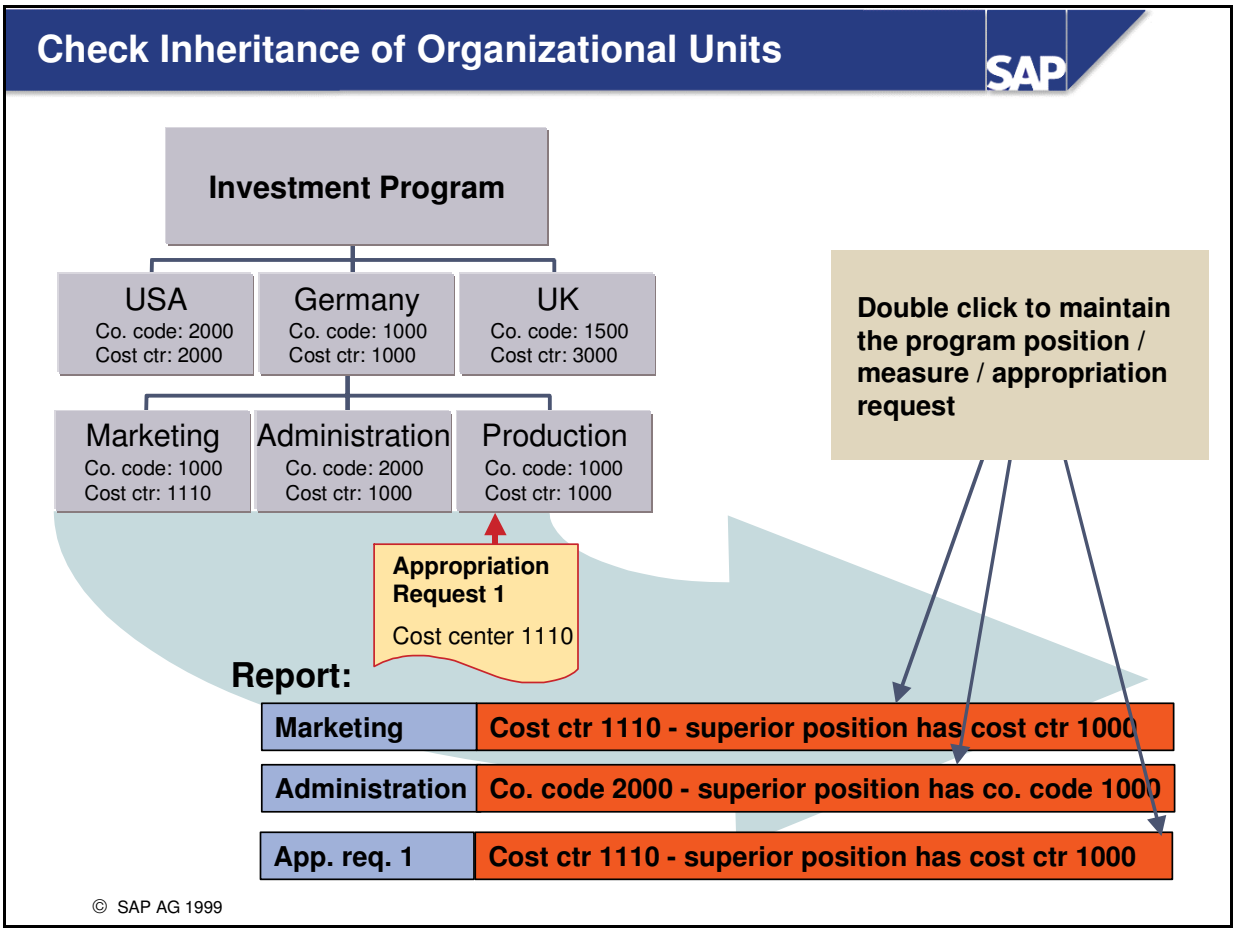
Generating an Investment Program from Cost Center Hierarchy or Profit Center Hierarchy



- Starting in Release 4.6, it possible to generate an investment program from other organizational structures (for example, from the cost center hierarchy). However, changes made subsequently to the organizational structure do not influence the investment program.
- Starting in Release 4.6C, it is possible to link an investment program to the enterprise organization hierarchy.



- Using the ABAP reports RAIM_UPLOAD and RAIM_DOWNLOAD, you can upload an investment program to a file or download it from a file.
- With RAIM_UPLOAD, you can add a subtree to a position of an existing program. You determine the location of the new subtree by entering the *Position ID of the parent* or *Position ID of the predecessor*.
- If you manage different investment programs in different systems, you can use RAIM_DOWNLOAD to download them to files, and then RAIM_UPLOAD to combine them in a central system.

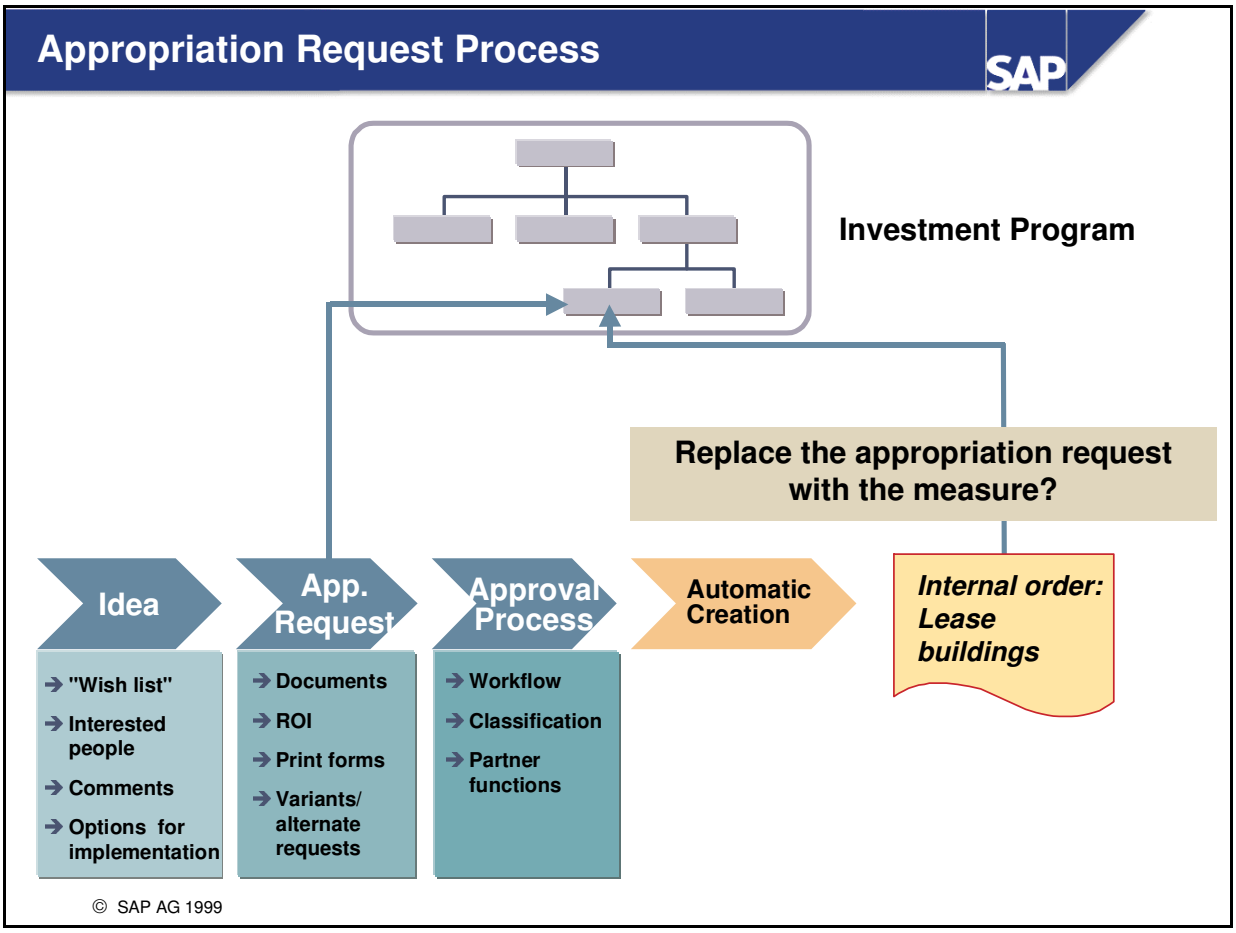


- Starting in Release 4.6A, there is a report that displays the program positions, measures and appropriation requests that have organizational units (for example, company code, cost center) that differ from those of the program positions superior to them in the hierarchy. You can then easily jump to master data maintenance for these program positions, measures and appropriation requests by double clicking on them.
- In this report, you can choose those organizational units for which you want to check inheritance.

Appropriation Requests

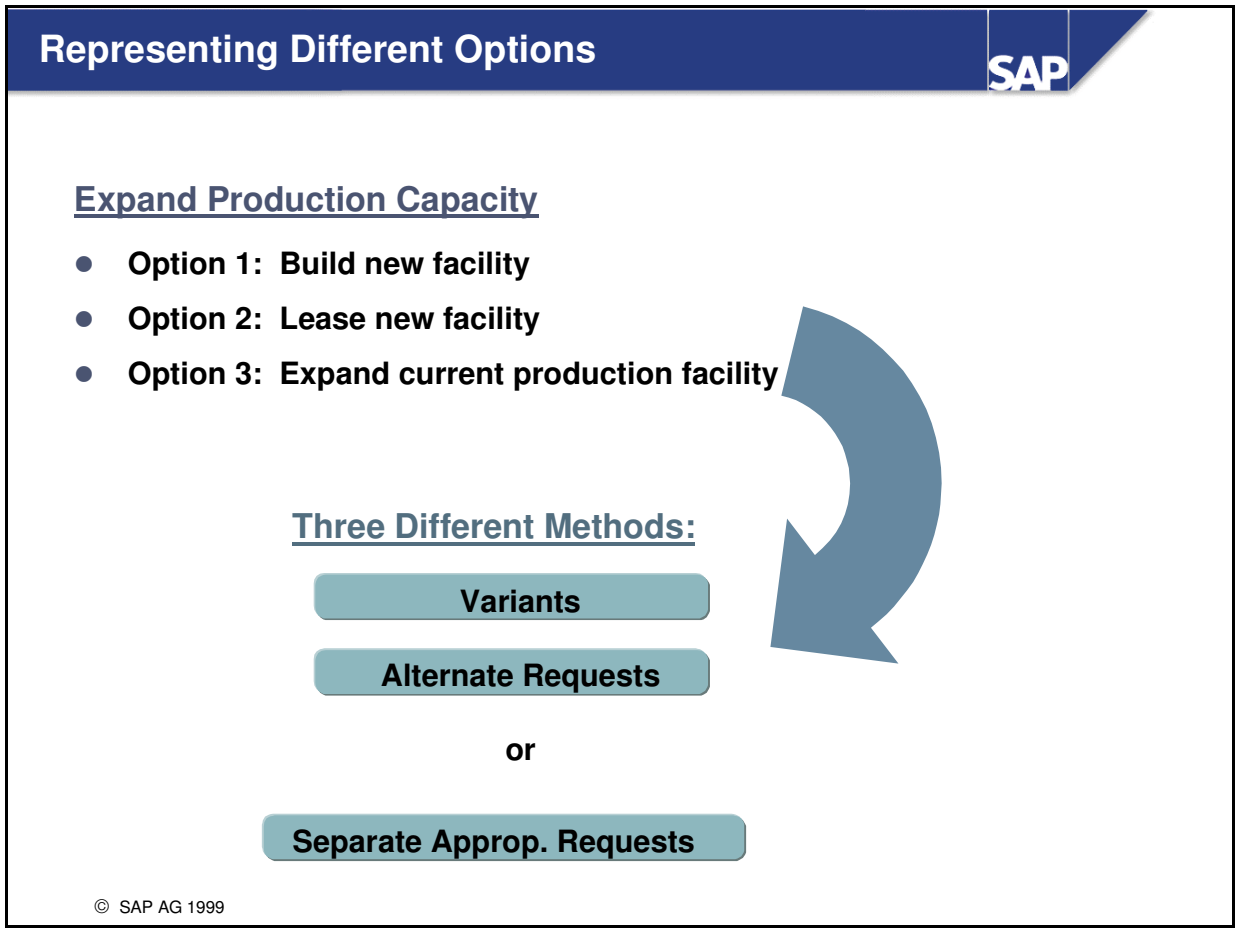
- **Appropriation request:**
  - **Idea for investment or request for expenditure**

- The following pages explain the second object that originates in IM: the appropriation request. This is an object for managing investment ideas or requests for large expenditures.

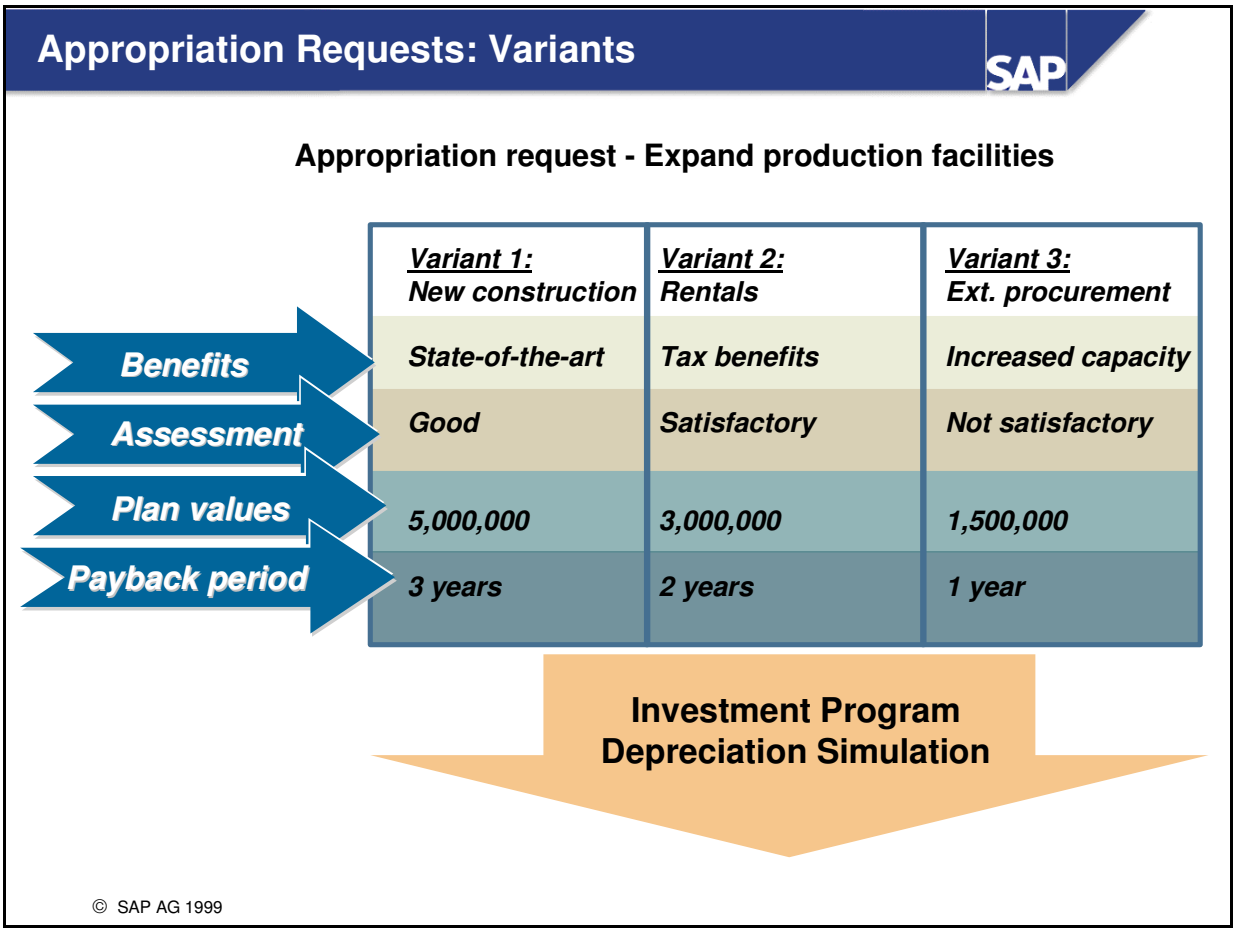


- An appropriation request is an idea or wish for carrying out a measure (such as, an investment, or research and development), which has to be individually assessed and approved by one or more positions within an enterprise, primarily because of the high costs involved.
  - Measures are not strictly limited to capital spending. They can also represent projects that primarily involve expenses.
  - Usually there is a relatively long time period between the initial application and fleshing out of the appropriation request and its final approval or rejection.
  - You can use the appropriation request to create a wish list.
- An investment measure can be created automatically from an appropriation request. For this purpose, you can specify in Customizing whether the appropriation request is replaced by the measure, or if both continue to exist.
- Appropriation requests are available since Release 4.0.

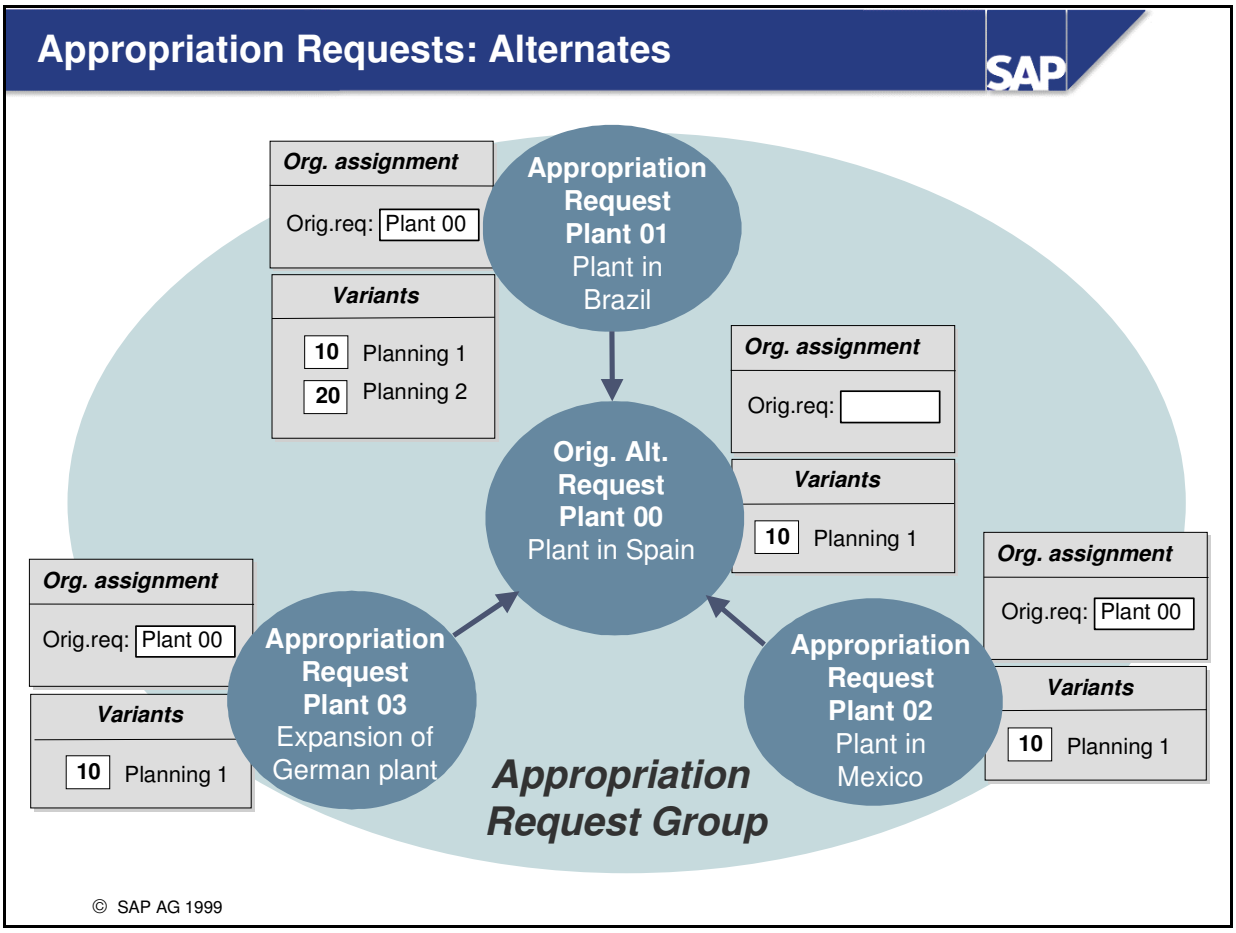
Representing Different Options



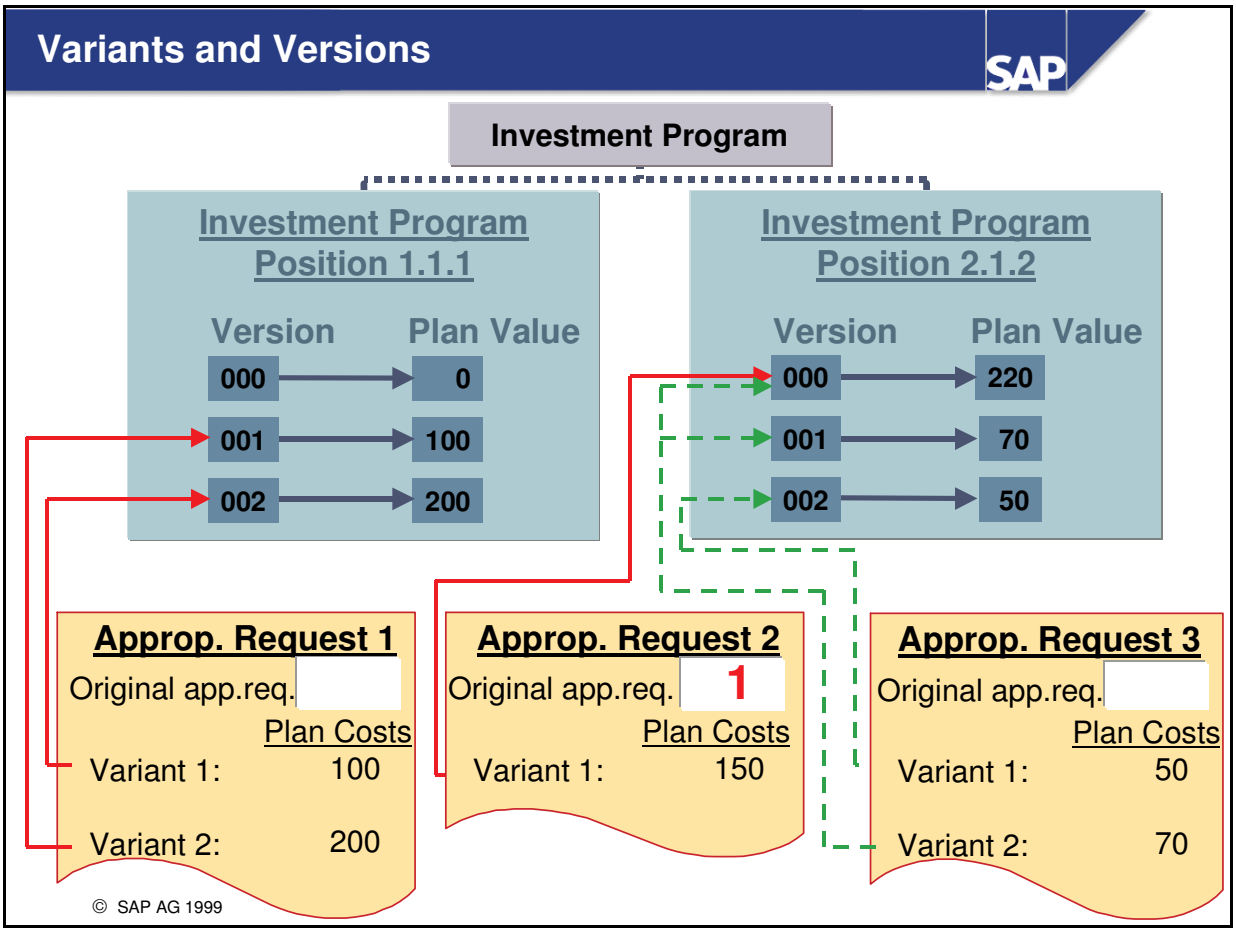
- The next slides depict various ways of representing, in the system, the different options you might have for implementing an investment idea.



- In cost planning, you can enter structure values for each variant of the appropriation request. Cost element planning and detail planning are not yet possible. Starting in Releease 4.6C, you can plan using *Easy Cost Planning* (this will be explained in more detail later). Based on the planned costs and revenues, you can calculate preinvestment analysis figures for each appropriation request variant.
- Using the normal program for inheritance of plan values on the investment program, you can roll up the values of the appropriation request on the investment program positions. You can inlcude the plan values of appropriation requests in the program for depreciation simulation.
- All variants of an appropriation request automatically have the same organizational assignments and are assigned the same investment program positions.
- Documents can be entered separately for each variant.
- The appropriation request only tells you **that** a measure should be carried out and **who** is involved at the organizational level. You need at least one variant in order to describe and plan **how** the measure should be realized.

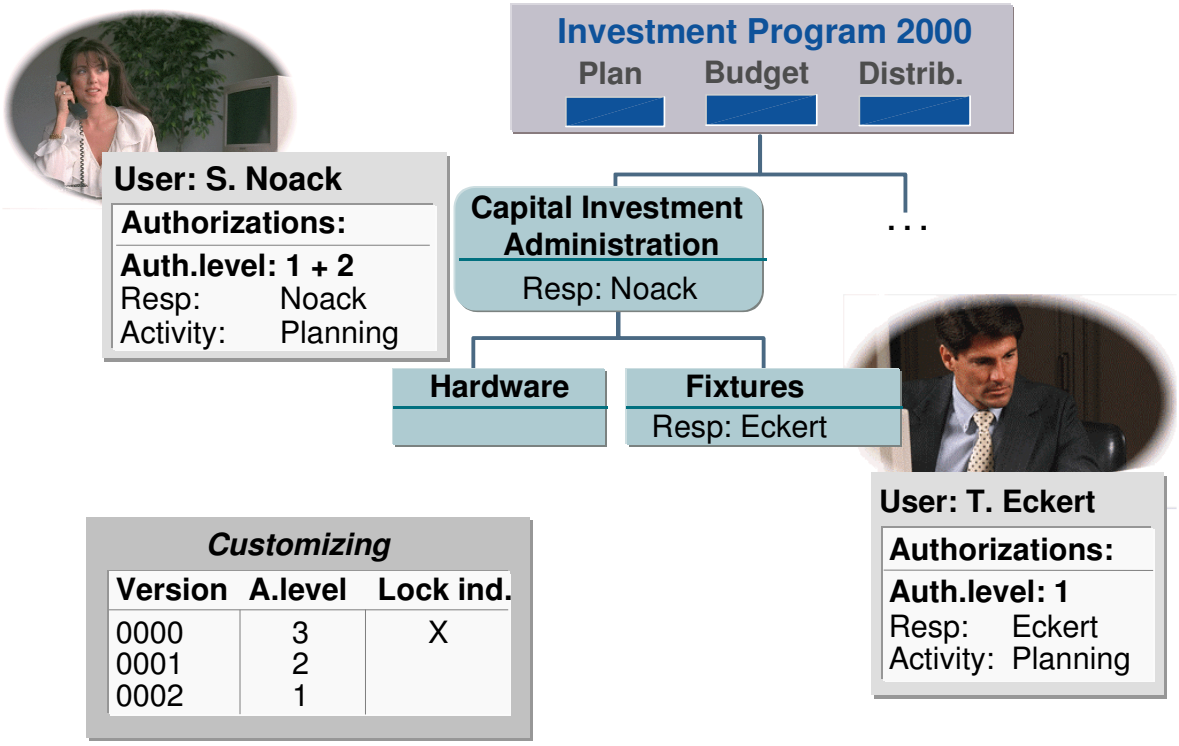


- As of Release 4.5A, you can link several appropriation requests together to represent alternate methods for implementing a measure or different alternative investment options. These alternate requests are linked by means of the original request (the first alternate that you created).
- You can normally use appropriation request variants to represent the different options for realizing an appropriation request. The main reason for using alternate appropriation requests instead is that certain master data can only be maintained for the whole appropriation request, and not for each variant individually. This applies in particular to:
  - Organizational assignments in the master data of the appropriation request (for example, the responsible cost center)
  - Assignment to an investment program position
- The original request is not a new system object with special characteristics. It is a normal appropriation request, equal to the other alternate requests in every respect. The original request is therefore essentially just another alternate. It was simply created first.
- The individual appropriation requests in an alternate group also have to belong to the same controlling area and program type.



- You can assign each appropriation request variant to a plan version of an investment program. When plan values from the appropriation request are rolled up on the investment program positions, the system transfers the values to the correct plan versions of the investment program.
- You can assign special authorizations to your versions. You can use these special authorizations to divide your planning process into three stages, for example. You could have one version that is accessible to everyone, one version that is limited to certain users, and one version that is completely fixed.
- You can only plan overall values and annual values on appropriation requests. After the appropriation request is approved and the measure is generated, the system transfers the plan values to the measure. Starting in Release 4.6C, you can use Easy Cost Planning for appropriation requests.

Authorization Levels for Plan Versions



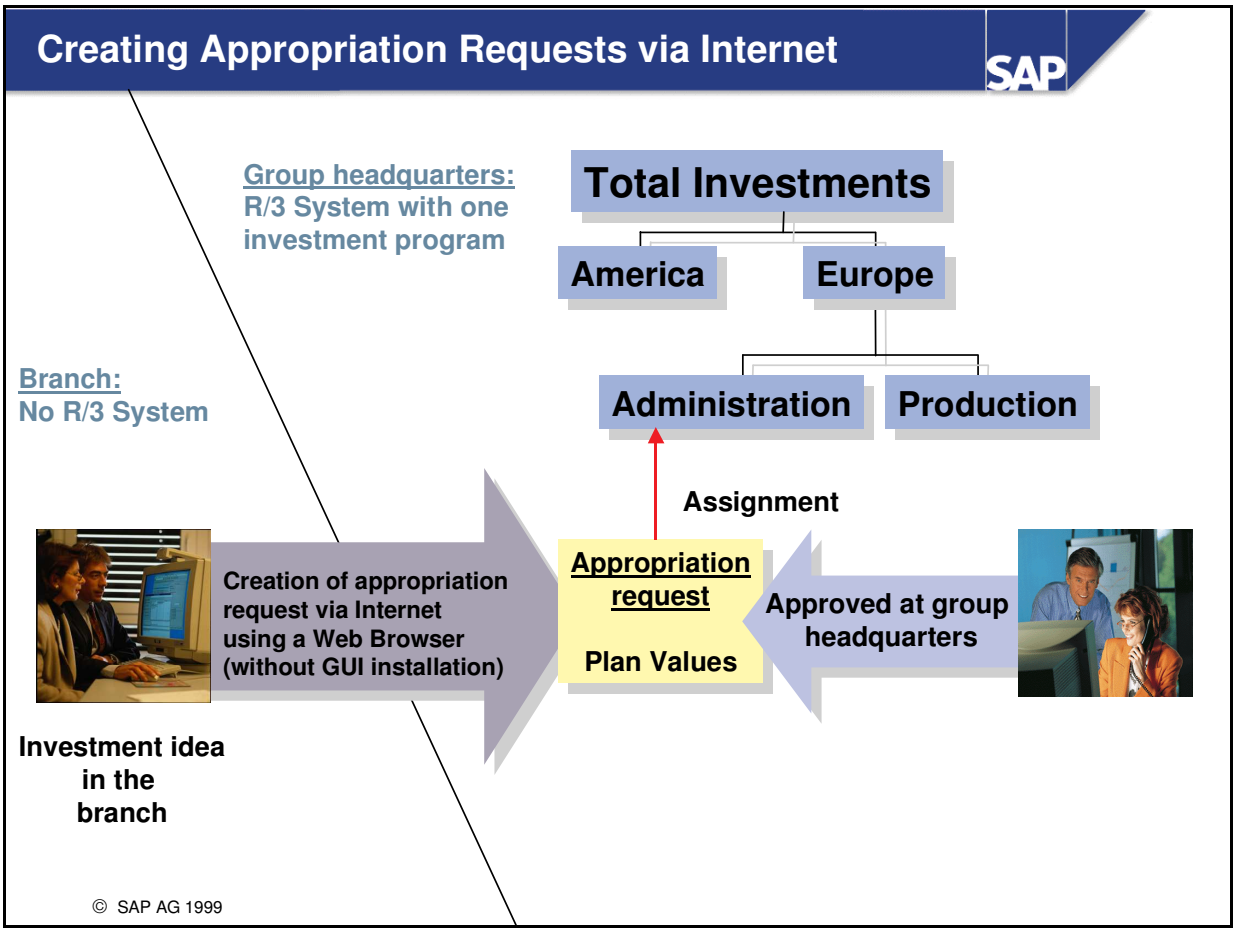
Customizing

Version	A.level	Lock ind.
0000	3	X
0001	2	
0002	1	

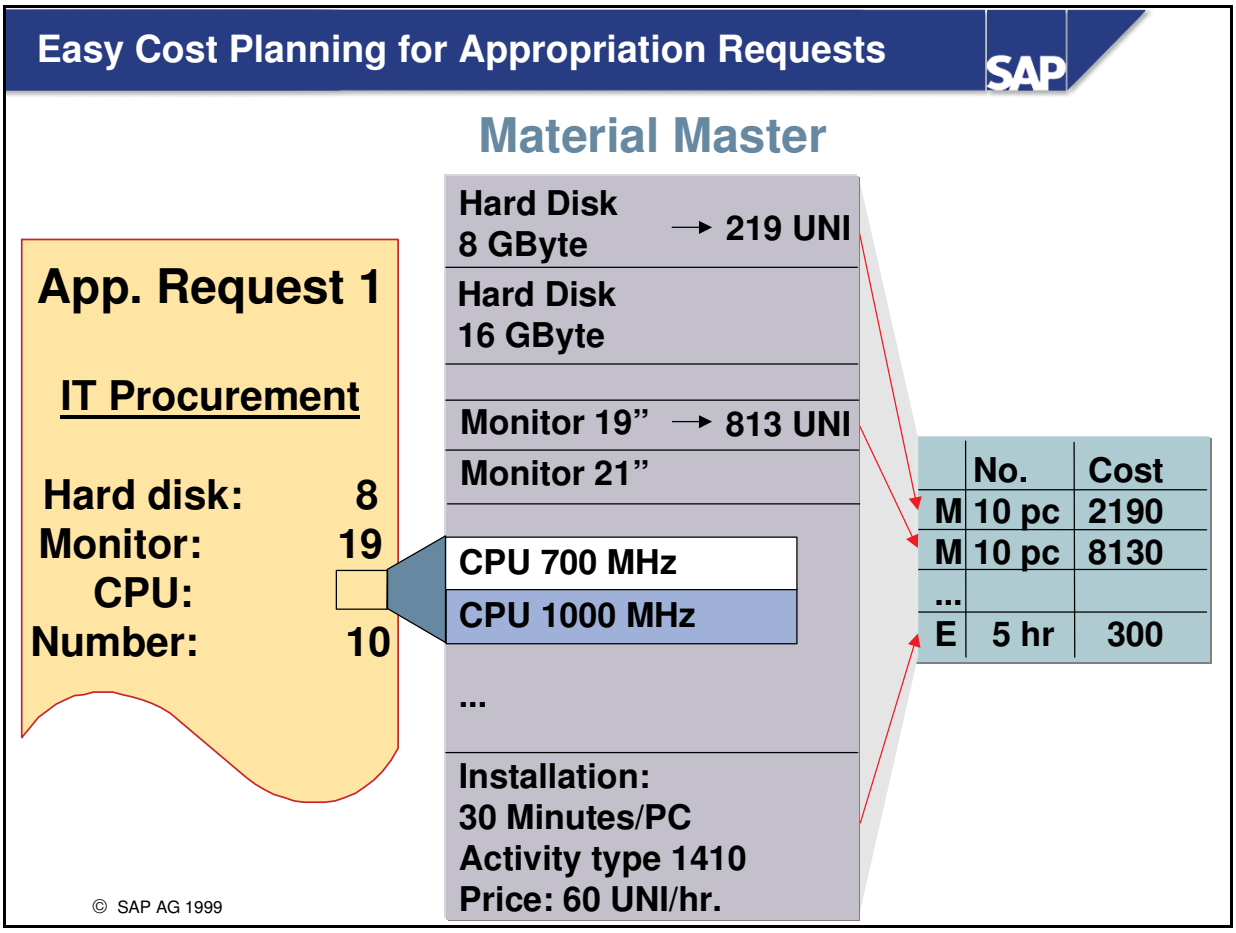
- You normally subject the plan values of a version to an approval process before adopting them in a binding budget. This approval process often runs in parallel for several versions on various levels of the investment program.
- To assist in this process, you can assign an authorization level to each plan version in Customizing. Then only those users with authorization for a given authorization level can process the plan values of that version.
- You can increase the authorization level of a plan version incrementally.
- The graphic shows an investment program that was planned using three versions. Version 0 is already locked. Version 1 can be processed solely by the user Noack, since only she has authorization for authorization level 2. User Eckert does not have authorization for this level. Therefore, he can only process version 2 (the most current version).

Variants Versus Alternate Requests

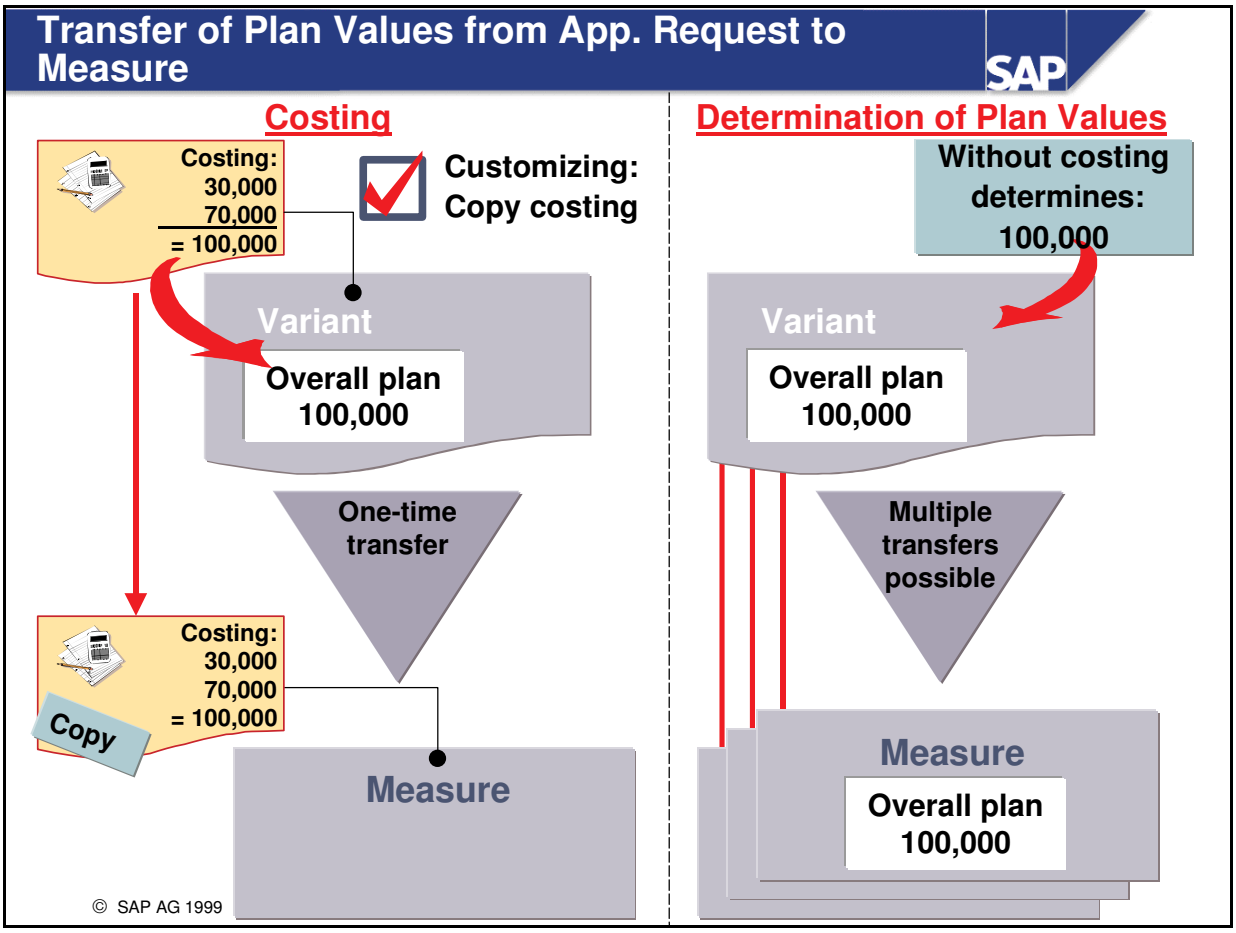
	Advantages	Disadvantages
Variants	• Org. units only need to be entered once • All variants have the same assignment to the investment program	• Completely different options cannot be reproduced • Assignment to different program positions is not possible
Alternate Requests	• Different organizational units (such as company codes) are possible, allowing, for example, options in different countries • Can be assigned to different positions in the investment program	• If all the alternate requests have the same organizational units: duplicate data entry required (workaround: create with reference)
Individual Requests	• Different organizational units (such as company codes) are possible • Can be assigned to different positions in the investment program	• Danger: more than one request might be approved! • If all the alternate requests have the same organizational units: duplicate data entry required



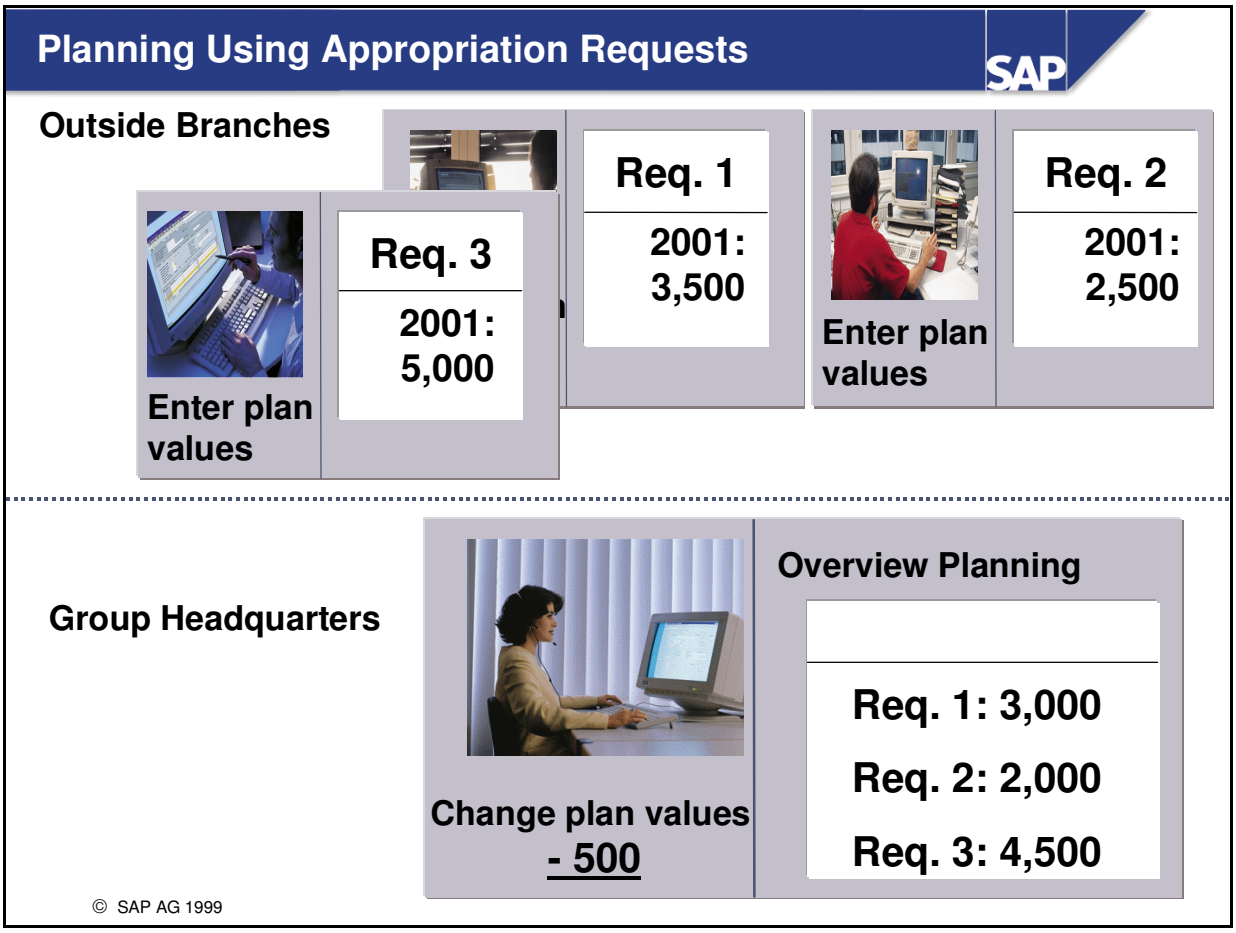
- Starting in Release 4.6C, you can create, change and display appropriation requests using the Internet. This makes it possible for employees in a branch to create appropriation requests in the R/3 System at group headquarters, although they do not have an R/3 System at their location.



- Starting in Release 4.6C, you can use Easy Cost Planning for appropriation requests.
- You can create costing models, for example to simulate the procurement of PCs. This costing model can access data maintained in the system, such as material data, the activity price for this activity type, and so on.
- Once these settings have been made in Customizing, the user can select from the options that are defined. (In the example, this is the clock frequency of the CPU.) Then the system uses the material price to calculate the overall costs.
- For more information about Easy Cost Planning, refer to SAPNet address http://service.sap.com/ecp

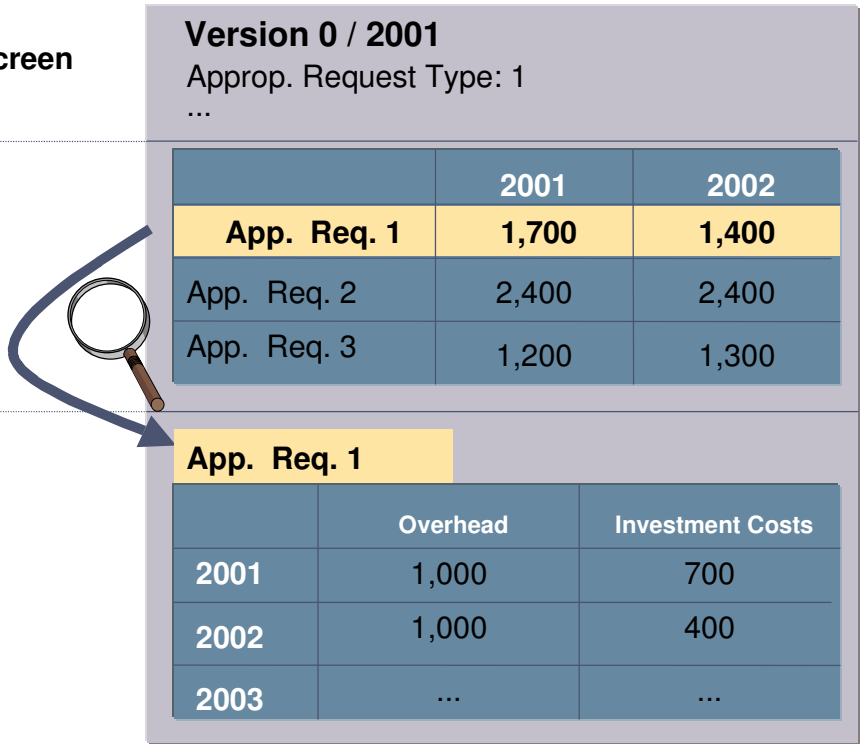


- The possibilities that exist when a measure was already created from an appropriation request are listed below:
  - Overall plan values were planned on the appropriation request, and these were changed. In this case, it is possible to transfer the new plan values of the appropriation request to the measure.
  - Overall plan values were planned on the appropriation request, and now costing is carried out. In this case, it is not possible to transfer the new plan values of the appropriation request to the measure.
  - Costing was carried out on the appropriation request and was adopted by the measure when it was created. In this case, if the costing is changed on the appropriation request, it not possible for the measure to adopt the new values.
- The above applies only when a measure was already created from the appropriation request.



- As of Release 4.6C overview planning is available for appropriation requests. When overview planning is used, a central capital investment manager (for example, at group headquarters) can easily obtain an overview of the appropriation requests in the system and their plan values. Existing plan values can also be changed in overview planning.

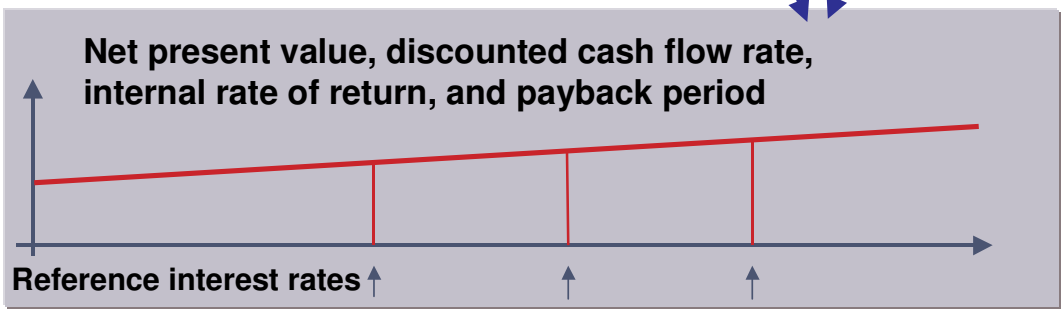
Overview Planning



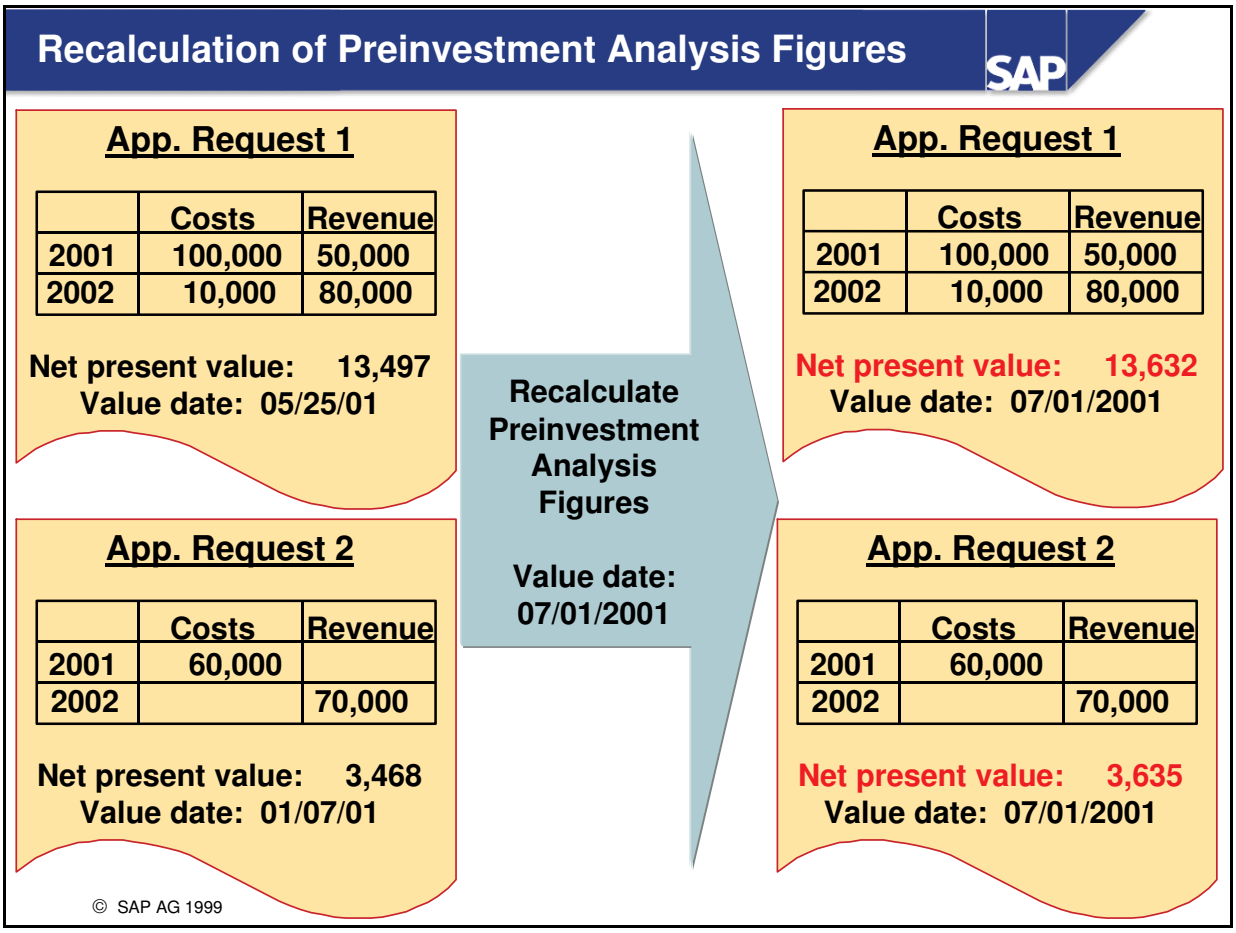
Cost and Revenues on Appropriation Requests

	Costs			Revenue
	Investment Costs	Overhead	Combined Costs	
Overall	160,000	23,000	183,000	
2001	30,000	15,000	45,000	
2002	120,000	8,000	128,000	150,000
2003				75,000

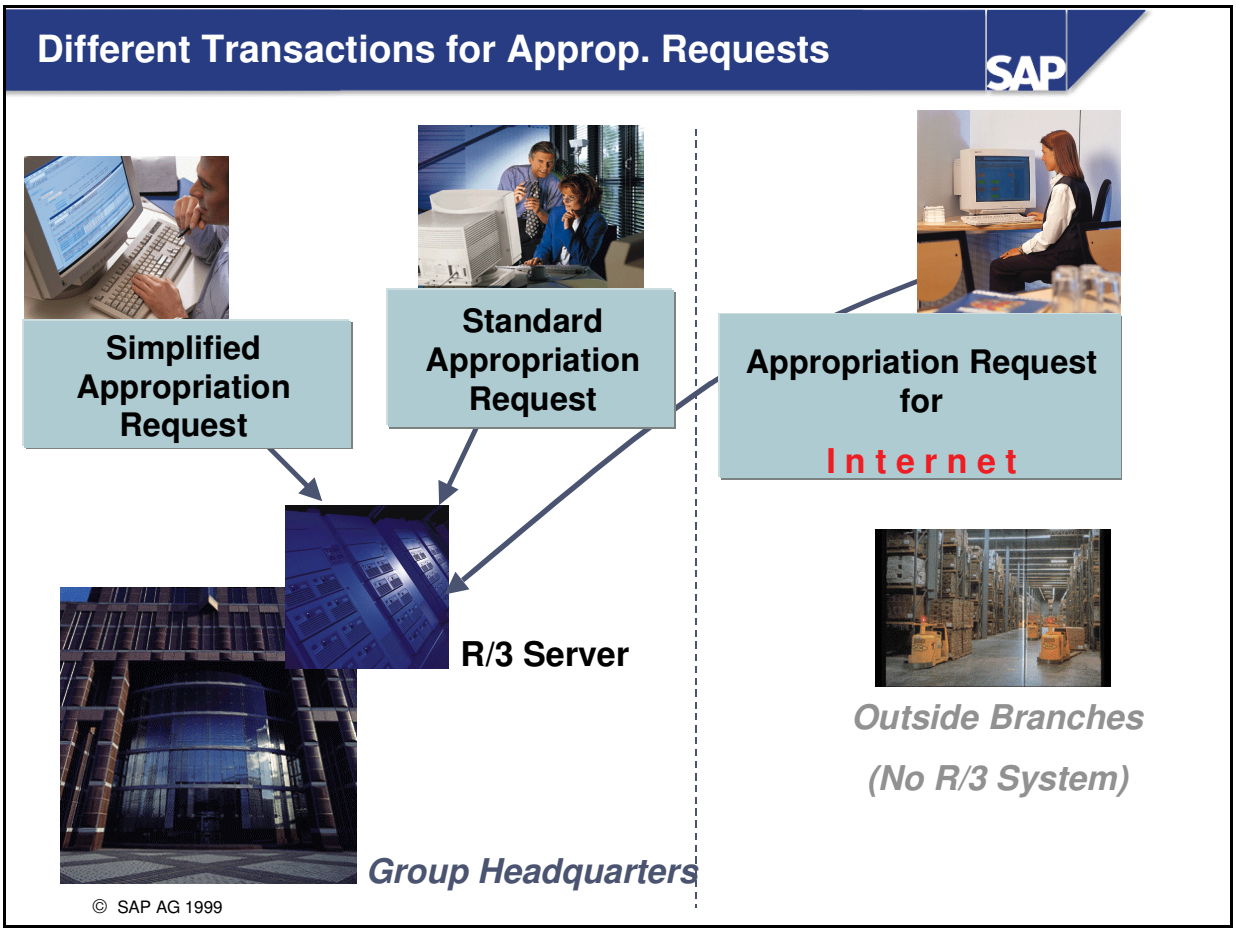
Calculation of Preinvestment Analysis Figures:



- The R/3 System can calculate the net present value for your appropriation request using the difference between the annual plan costs and revenue of the appropriation request.
- Monthly planning is currently not available, only annual planning. Therefore, the system assumes that the calculation is to be made using the entered values and the interest rate that is valid during the year.
- At the present time, the planned investment amount is only available for reporting.

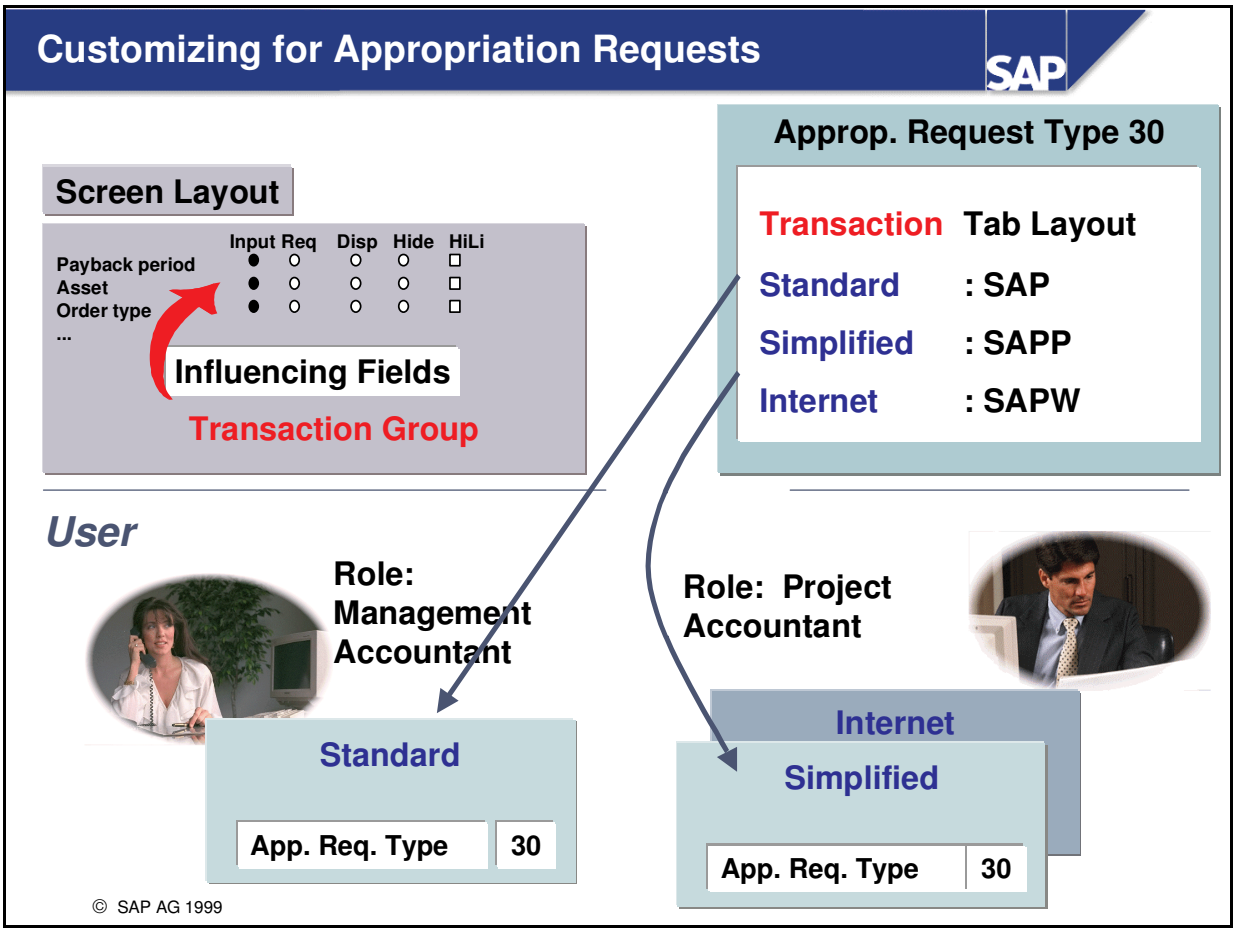


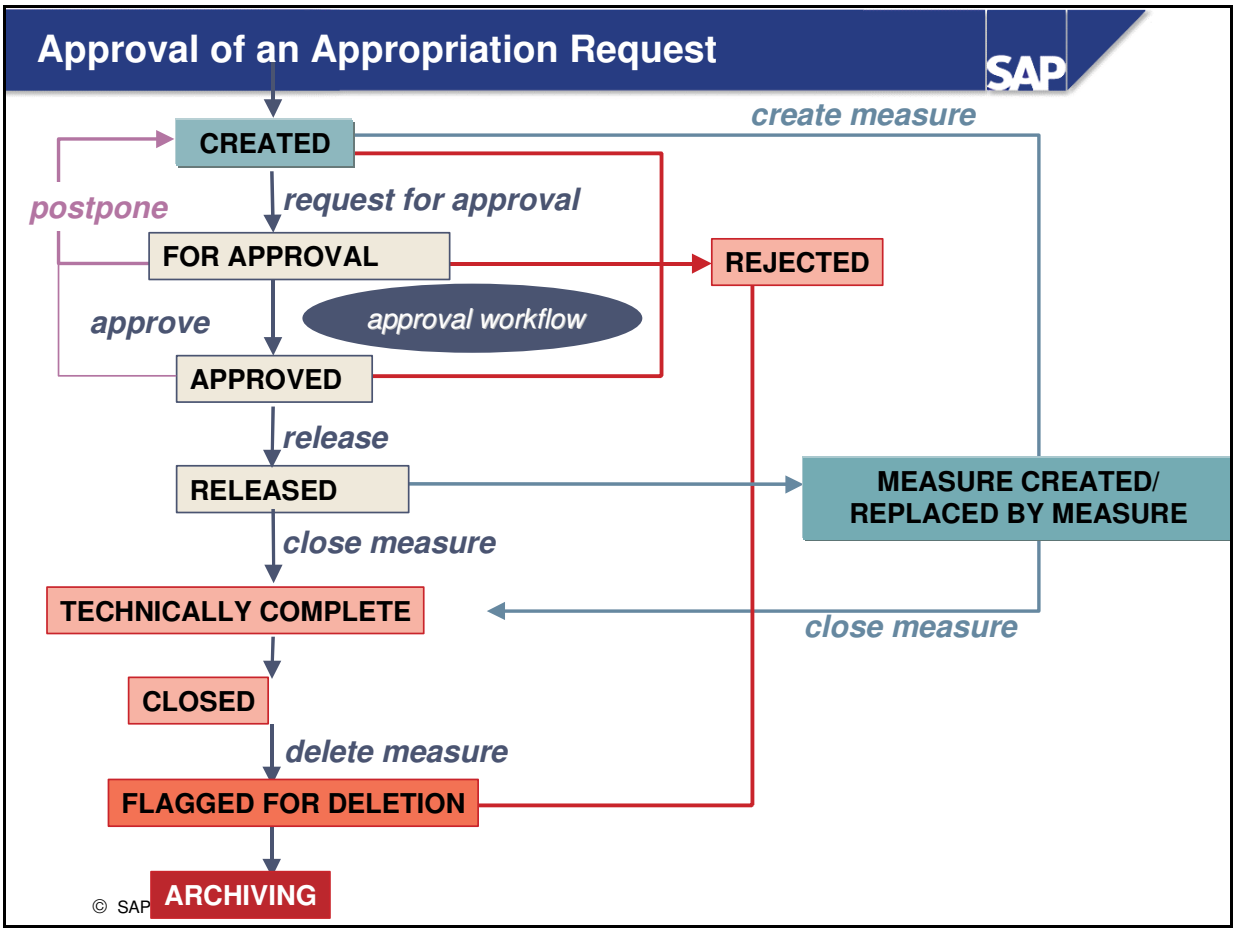
- Starting in Release 4.6A, you can recalculate the preinvestment analysis figures of all selected appropriation requests.
- This might be necessary in the following cases:
  - Changes in interest rates
  - Need to better compare the figures by setting a value date



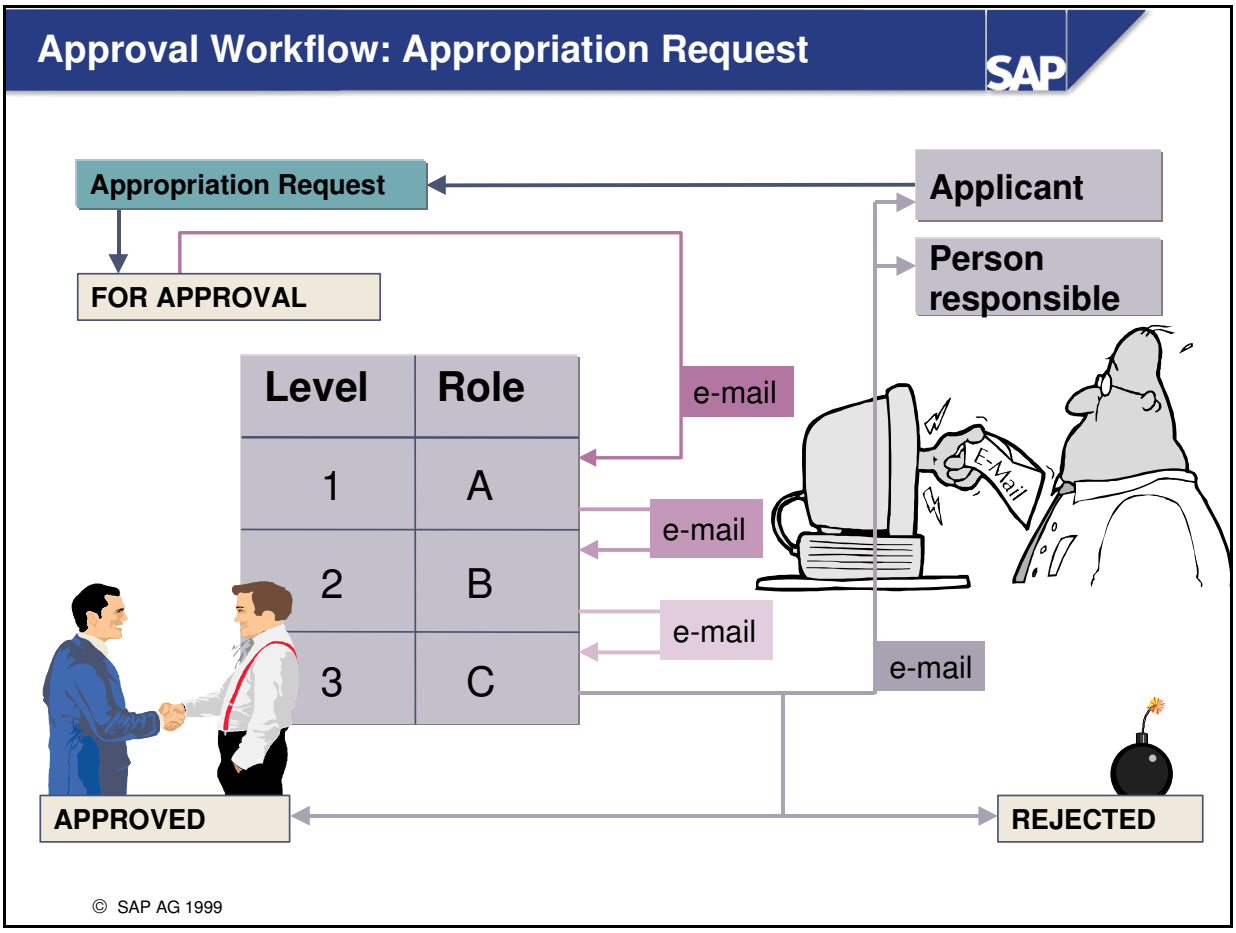
- As of Release 4.6C, it is possible to edit **the same** appropriation request using three different transactions. You can enter a different screen layout for each of the transactions. (For example, you can suppress certain fields so they do not appear for certain users, while making other fields required entry fields for another type of user.)

Customizing for Appropriation Requests

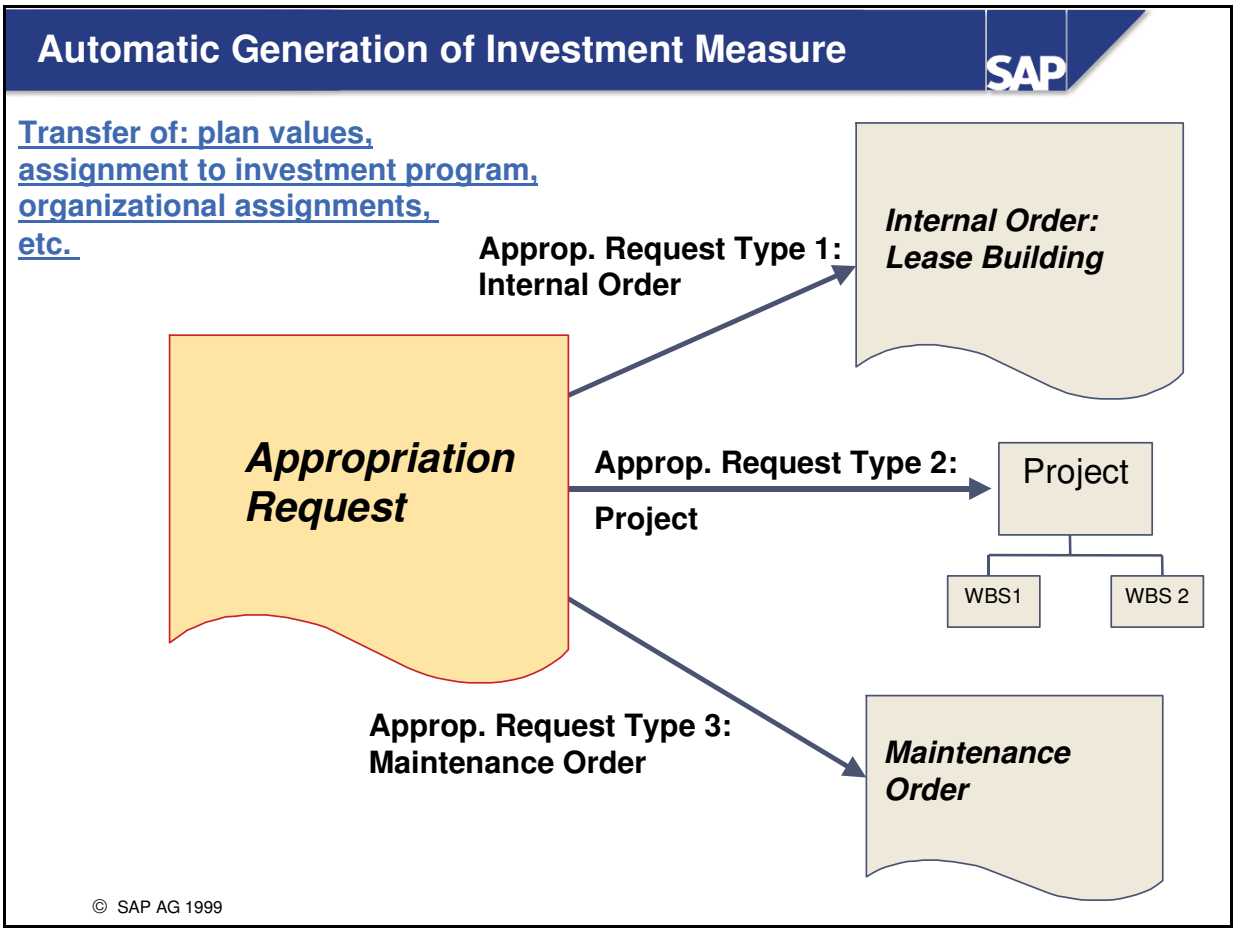




- You can specify that a measure is a *preliminary project*. When you set this indicator, you can generate a measure from the appropriation request before the appropriation request is approved. Generating a measure at this early stage might be necessary, for example, in order to collect actual costs related to the appropriation request (costs for preliminary tests, inquiries, and so on). If the appropriation request is rejected and a measure was already created, you should settle and close the measure manually.
- The sequence of the *Released* and *Measure created* statuses is dependent on whether you set the indicator for replacing the appropriation request by the measure.

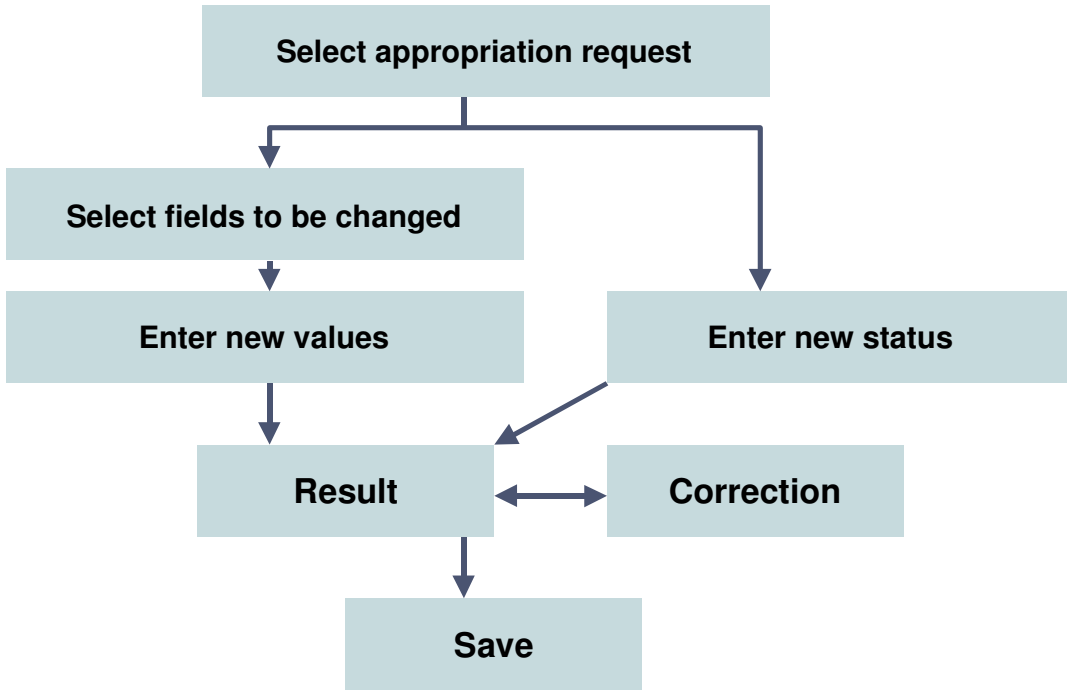


- When setting up the approval workflow, specify which partner function approves the appropriation request at what level. If one partner function rejects the request, the status of the appropriation request is set to *Rejected*. All those involved in the approval process are informed by e-mail.
- You can enter additional partner functions in the appropriation request type if , for example, you want to inform interested persons or coordinators who are not directly involved in the approval workflow.
- If any problems arise with the workflow, refer to notes 118251 and 135803.

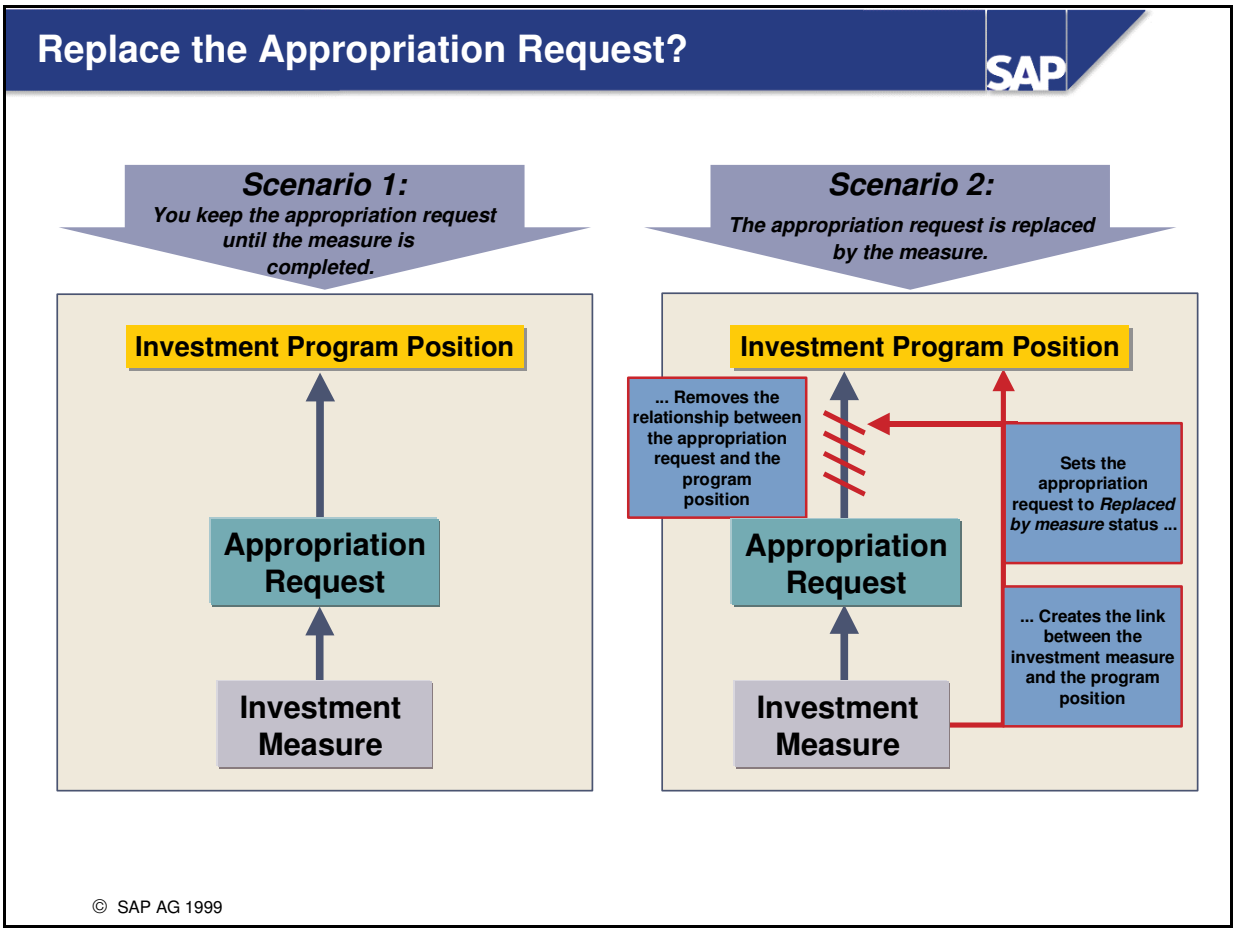


- You can have the system automatically generate orders or top WBS elements from the appropriation request.
- In the definition of the appropriation request type, you specify which objects can be generated in this way. You are required to enter an appropriation request type when you create appropriation requests.
- As of Release 4.6, you can also generate maintenance orders from appropriation requests.

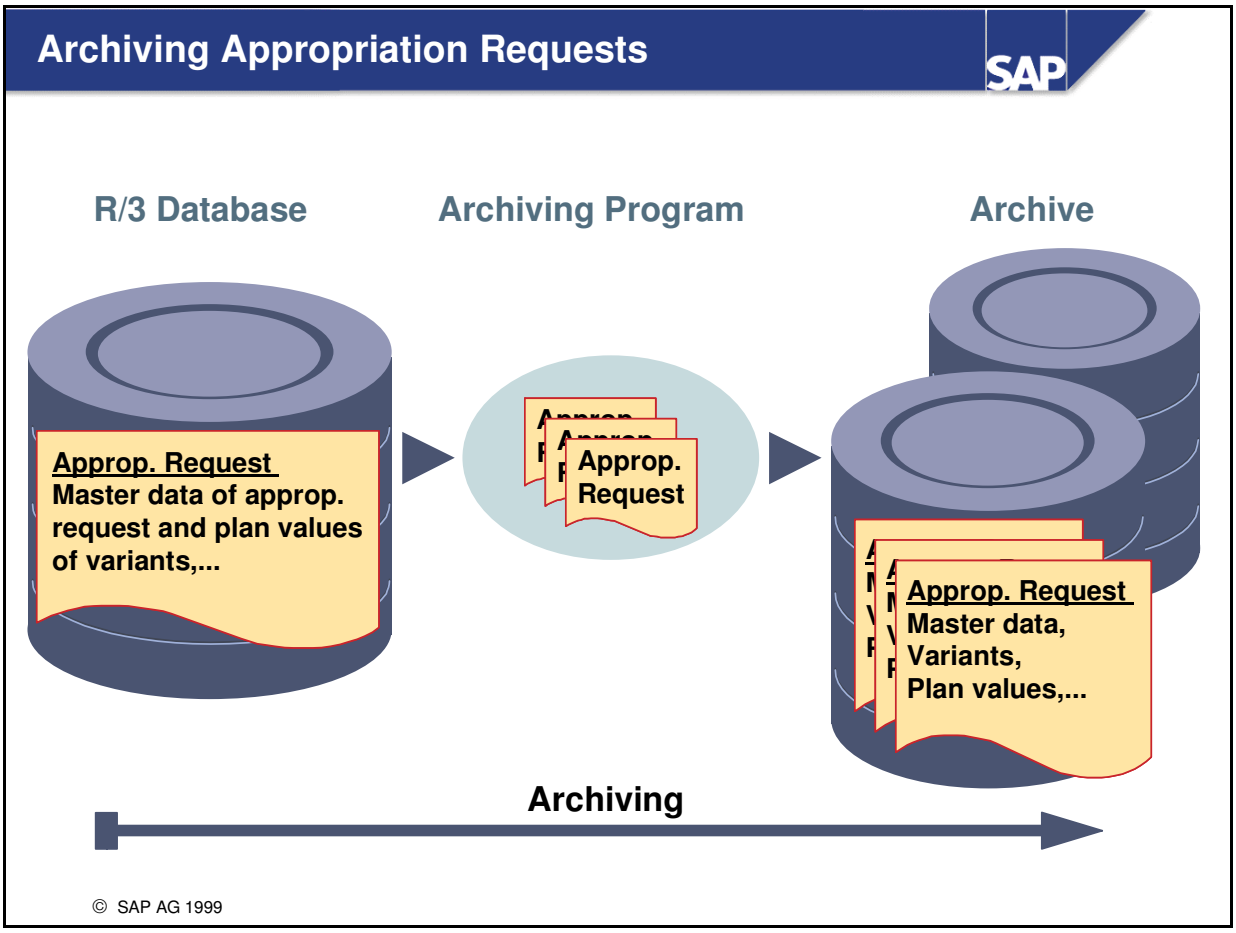
Mass Change Functions for Appropriation Requests



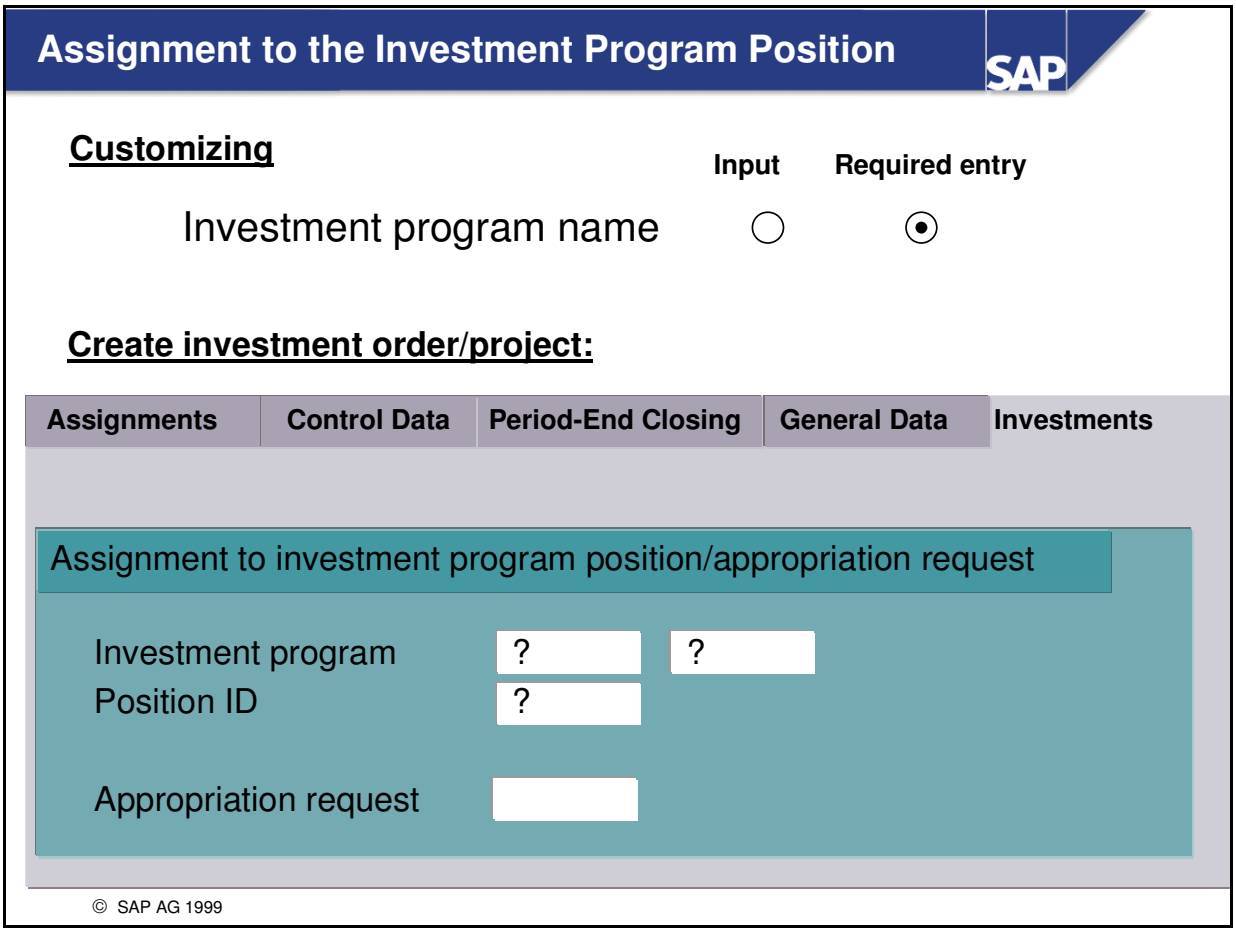
- The mass maintenance tool for appropriation requests is a cross-application R/3 tool that is also used in other components (for example, for mass maintenance of the material master record). You can find general information on mass maintenance and the associated processes in the SAP Library under *Cross-Application Components -> General Application Functions (CA-GTF) -> Cross-Application Mass Maintenance*.
- You can change the following data using mass maintenance:
  - All master data fields in the appropriation request
  - All master data fields in request variants
  - Assignment (by percentage) to an investment program
  - Assignment (by percentage) to organizational units, environment protection reasons and reasons for investment
  - Status of the appropriation request (for more information, see the SAP Library)
  - Percentage distribution, for example, to organizational units (for more information, see the SAP Library)
- You can use the function fields in mass maintenance to trigger the following functions: activate a project definition, create a WBS element, create an order, and transfer plan values from the appropriation request to the measure.



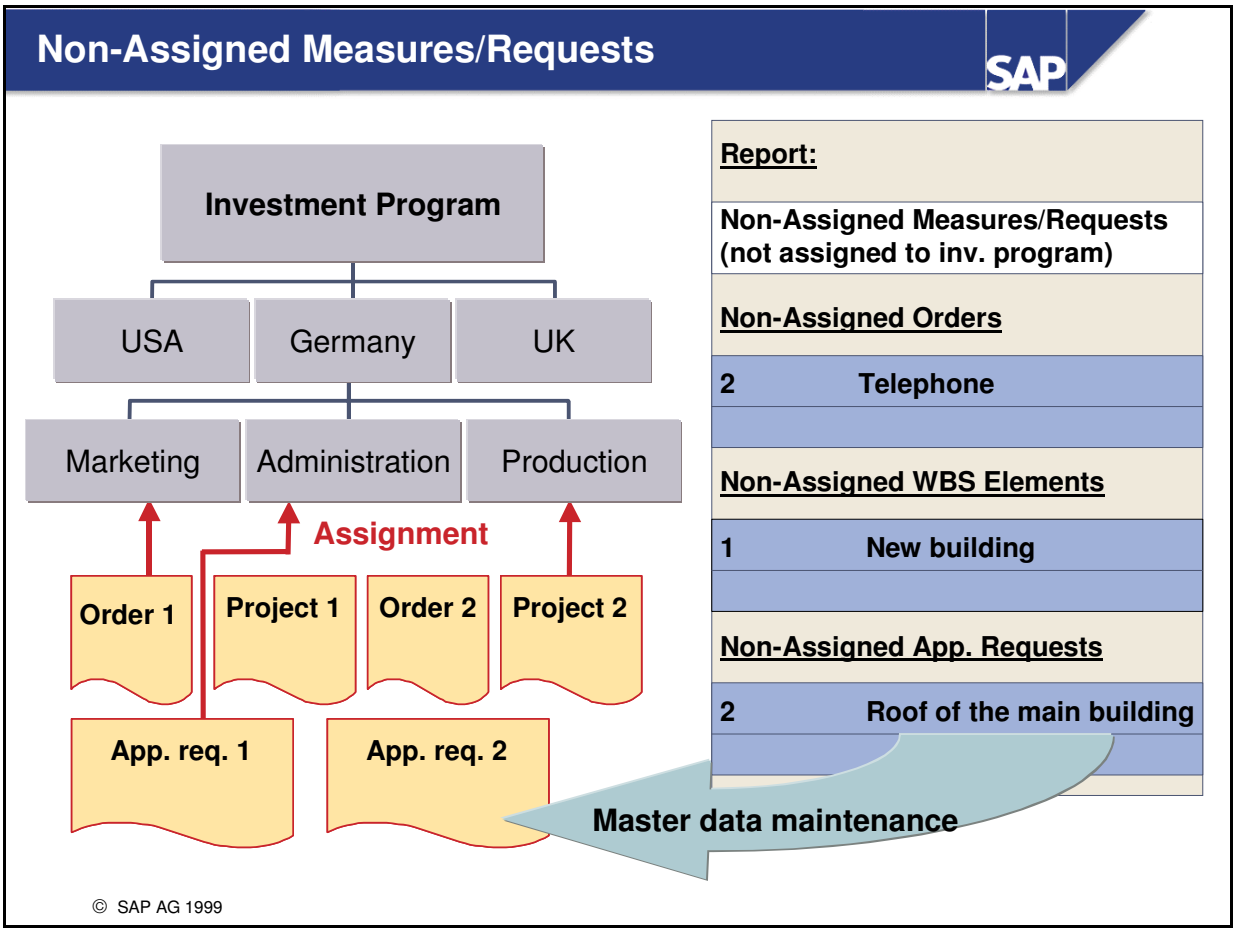
- You decide whether the appropriation request is replaced by the measure when the measure is created, or if the appropriation request should remain. If the appropriation request remains, you have an additional hierarchy level between the investment program positions and the investment measure in IM reporting.



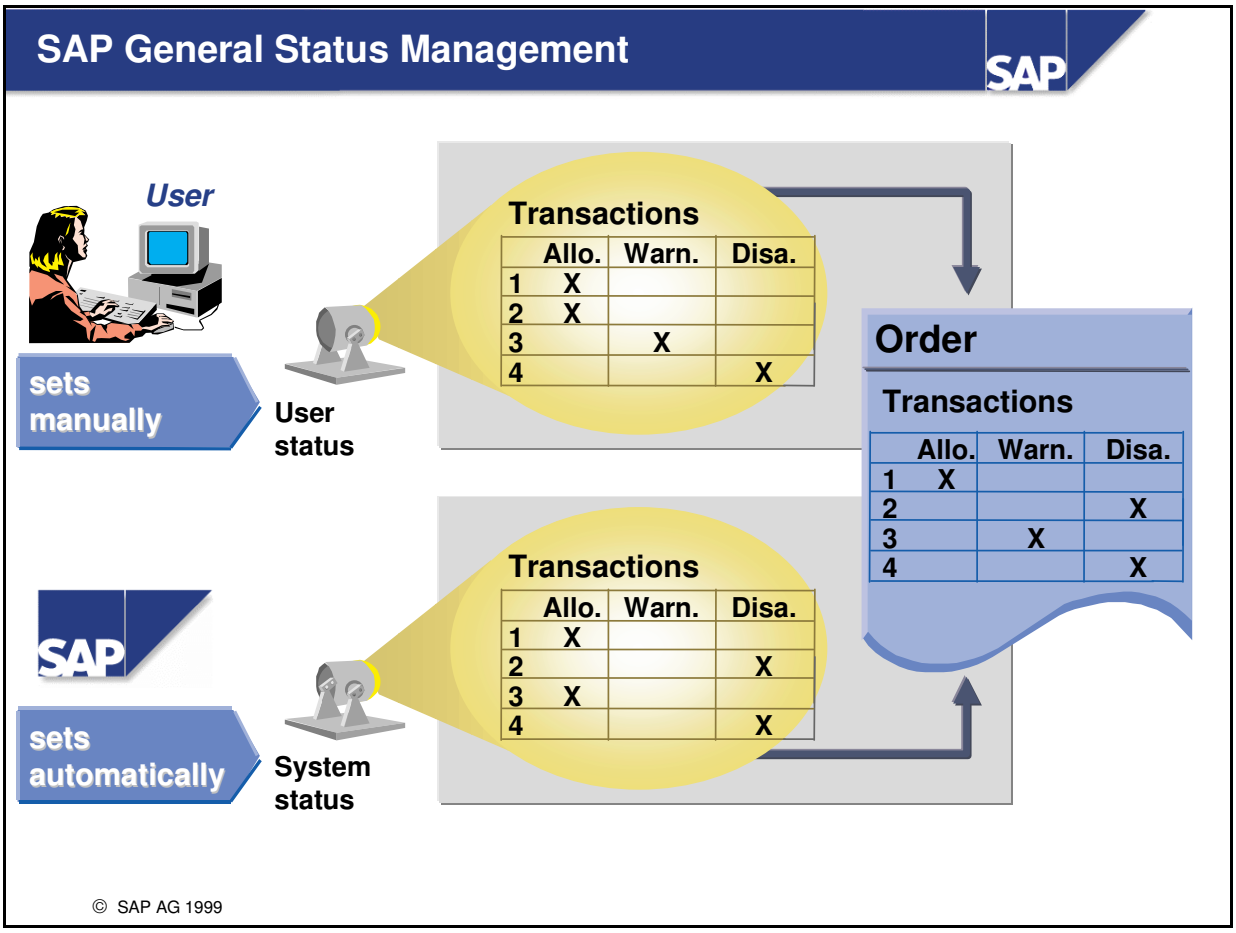
- Starting in Release 4.6, it is possible to archive appropriation requests. In this way, the planning and approval process of your investments that were managed using appropriation requests is available to you for analysis at any time.
- You can store the master data of appropriation requests and their variants, along with their plan values. Other information is archived in addition, for example the long texts of the appropriation requests.
- Archiving of data reduces possible problems with memory or runtimes. The archived appropriation requests can be displayed later, or ultimately deleted.



- As of Release 4.6, you can make the assignment of investment measures to a program position a required entry. This applies to orders and projects.
- To make this assignment a required entry, proceed as follows:
  - For investment orders:
    - Customizing: Investment Management -> Internal Orders as Investment Measures -> Master Data -> Orders -> Define Order Types
    - Select the order type, and choose *Field selection*.
  - For investment projects:
    - Customizing: Investment Management -> Projects as Investment Measures -> Master Data -> WBS Elements -> Define Field Selection
  - In both cases, you have to select *Required entry* for the *Investment program name* field.
- As of Release 4.5, you can make assignment to an investment program position a required entry for appropriation requests.
- As of Release 4.0, you can automatically assign a maintenance order to a program position that has the same master data (for example, cost center or company code) by defining an IM assignment key in Customizing.

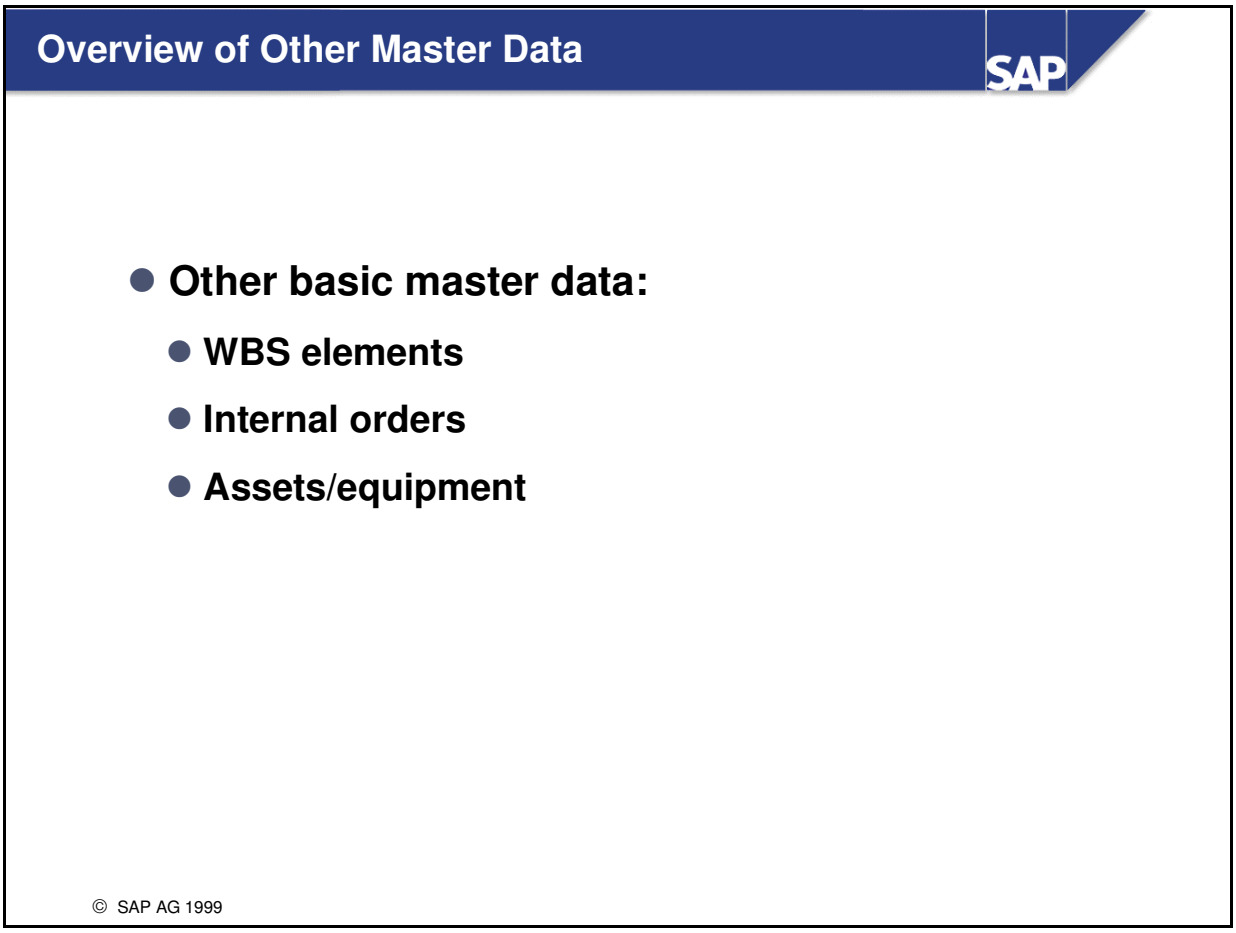


- As of Release 4.6, a report lists the measures and appropriation requests that are not yet assigned to an investment program position. You can use different selection criteria to restrict your search for objects.

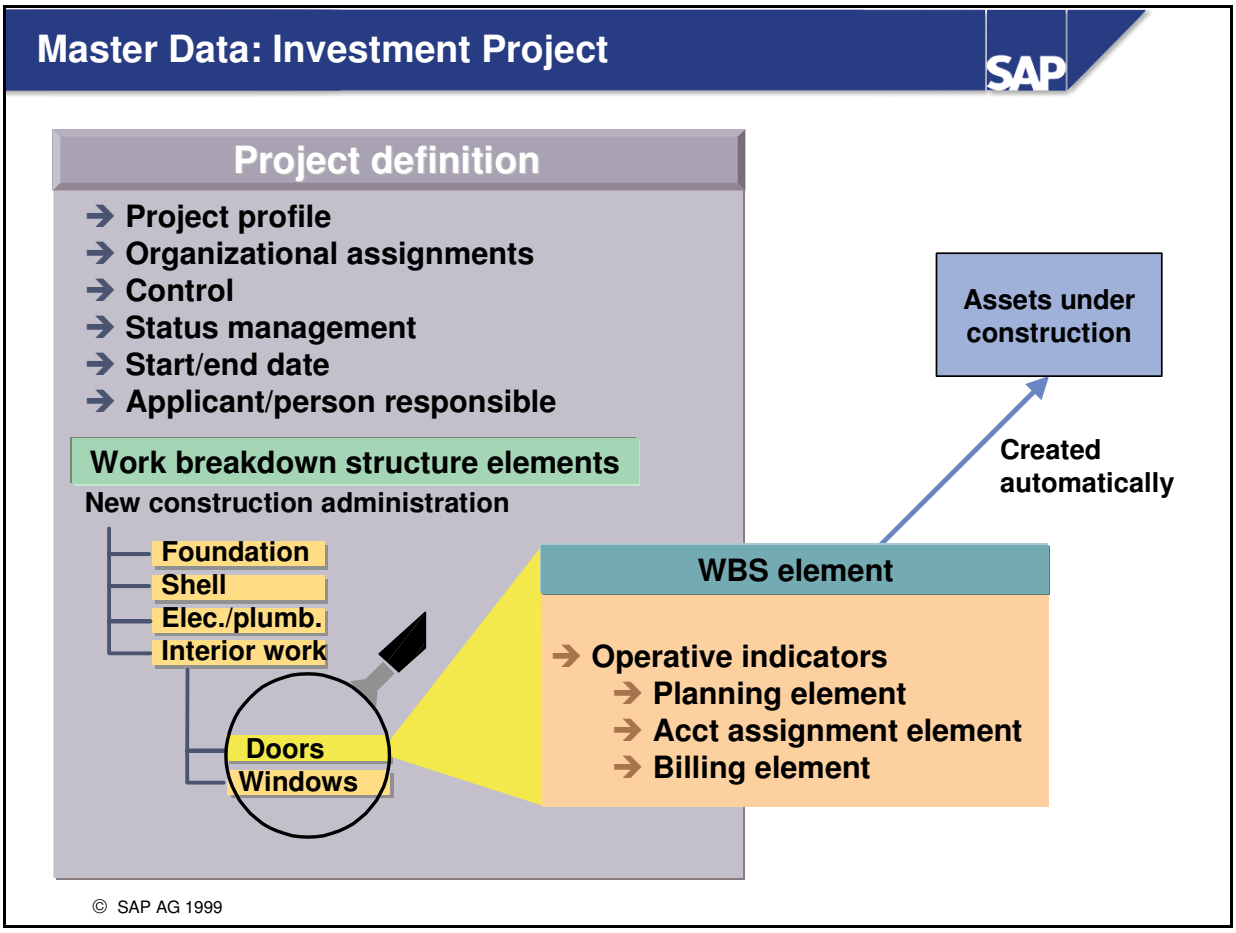


- General SAP status management is available across components.
- The system sets system statuses on the basis of actions that are carried out in the R/3 System.
- You define user statuses. In conjunction with the system status, user statuses specify the actions that are allowed or not allowed, or that trigger a warning message.
- A user status cannot allow an action that is not allowed by the system status. However, it can make an action **not** allowed that the system status allows.

Overview of Other Master Data

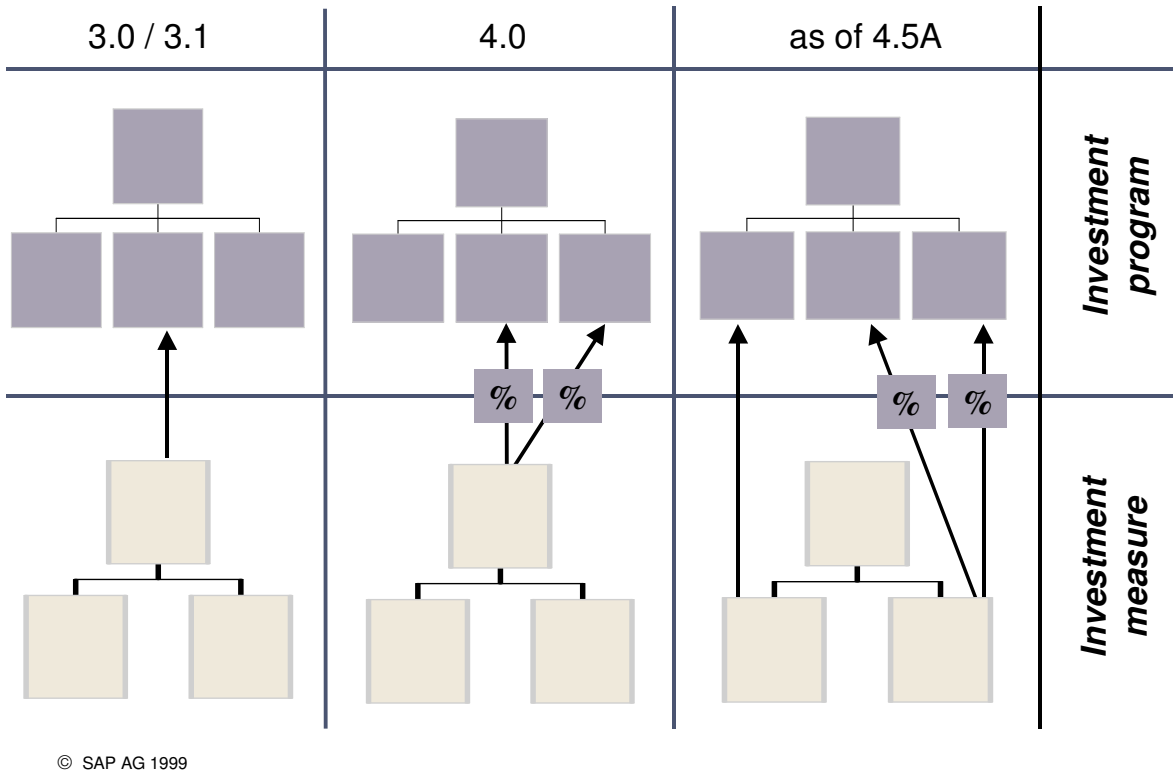


- The following objects originate in IM: the investment program and the appropriation request.

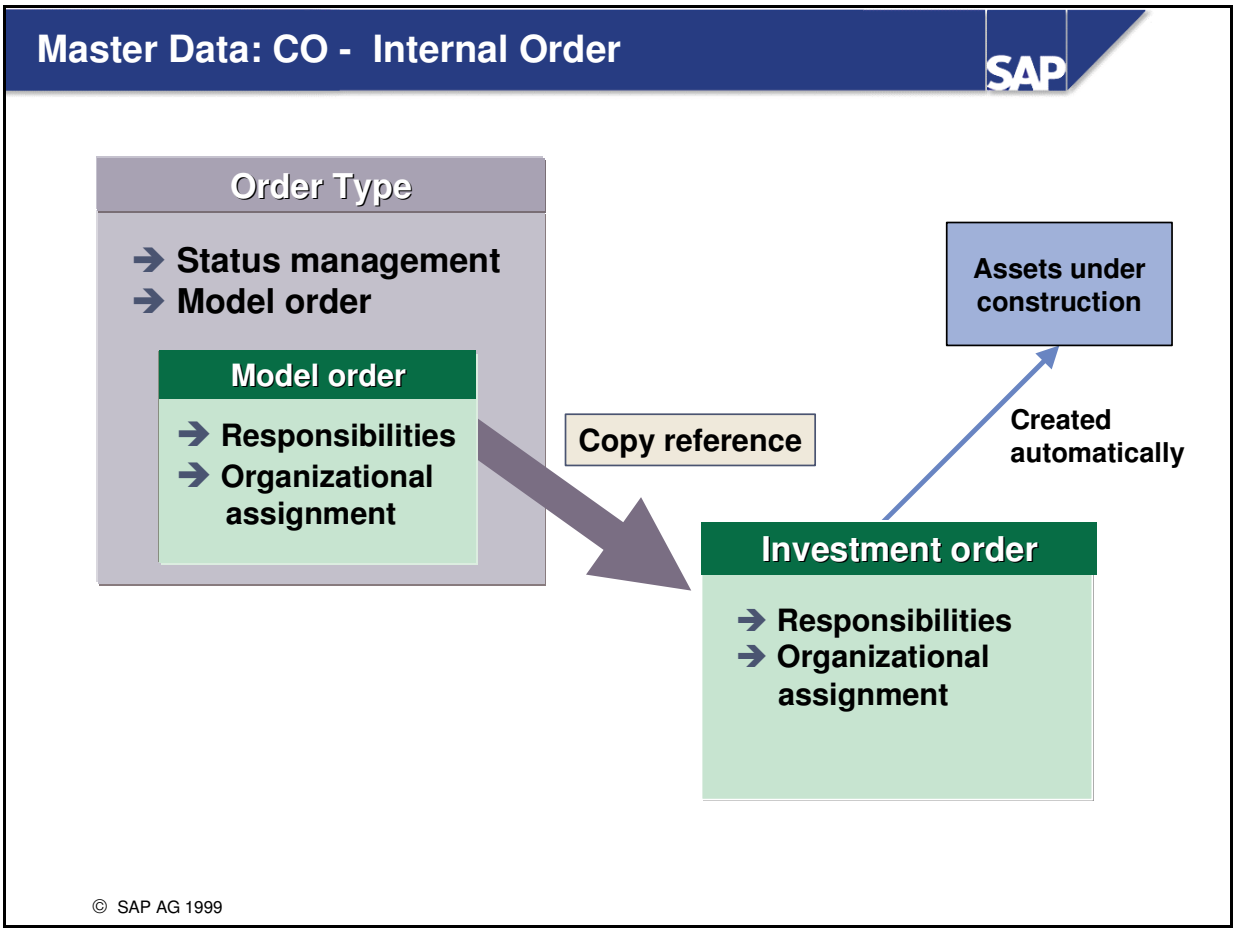


- The master data structure of the investment project is similar to the structure of the investment program. In the project definition, you first enter certain global parameters. Then you set up the work breakdown structure (WBS) with its individual elements (WBS elements).
- Graphical tools help you maintain the work breakdown structure. You can structure the project hierarchy in a graphical editor using Drag&Drop.
- Every WBS element has assignment information and is linked to SAP Status Management.
  - Operative indicators determine the function of the WBS element during the implementation of the project. These indicators are:
    - Planning element: costs should be planned
    - Account assignment element: costs should be posted
    - Billing element: revenue should be posted. This indicator is usually not relevant for investment projects. It can be used to create billing for customer projects.

Assignment of Investment Measures in R/3 Releases

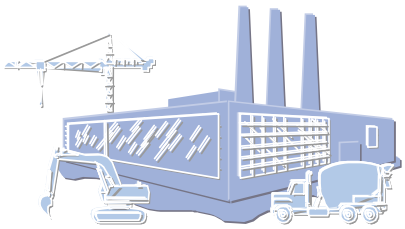


- In Release 3.0 and 3.1, only the top WBS element can be assigned to an investment program position.
- In 4.0A, you can have percentage distribution from the top WBS element to several program positions. However, when this is the case, budget distribution is no longer possible.
- In 4.5A, it is also possible to assign WBS elements that are not top WBS elements to an investment program position. This option is important if you structure your projects based on values that can or cannot be capitalized. In this case, you would assign only those parts of the project to an investment program that represent costs that can be capitalized.



- Unlike the work breakdown structure, the order always has one level. You cannot set up an order hierarchy for investment orders. The organizational assignments in orders are to large extent identical to those of WBS elements, and have the same functions as in WBS elements.
- You assign both the order and the WBS element to a company code and controlling area. If you want to create business area financial statments in Financial Accounting, you also have to enter a business area.
- If you want to transfer the values posted on investment orders to a profit center, enter the profit center in the order master record. All actual postings on the internal order are then automatically transferred to the profit center. Plan values can also be copied to profit center planning if you wish.
- The remaining data is for informational purposes only, that is, you can use these criteria for reporting in the Information System for internal orders. This data does not affect the account assignment of plan or actual costs.
- In conclusion, an order has exactly the same controlling functions that a project with only one WBS element offers you. For this reason, some customers do not set up internal orders from the IM perspective, but conduct everything using more or less complicated projects - sometimes simply using projects that only have one WBS element.

Master Data: Asset



Asset

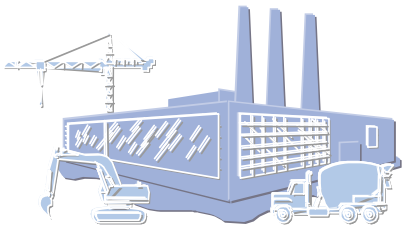
Organizational Assignment
- **Company code**
- **Business areas**
- **Cost center**

Investment Account Assignment
- **Investment project**
- **Investment order**

- The asset master record normally represents a fixed asset that can be identified individually. For organizational purposes, you first assign your fixed assets to a company code. If you want to create business area financial statements, you also assign them to business areas.
- Assigning the asset to a cost center facilitates the transfer of cost-accounting depreciation and imputed interest for standard costing and actual costing. Another option is to post depreciation and interest to an internal order, and then settle the order to the Controlling (CO) component.
- By assigning the asset to an investment project or investment order, you can have the system statistically update the values of the asset on these objects. For more information, refer to the "Implementaion of Investment Measures" unit.

- **Assets under construction**
  - **Set in investment profile: AuC can be generated automatically when measures are created**
  - **If the investment measure indicator is set, this AuC can only be posted by means of the investment measure**
- **Completed assets for settlement**
- **Direct capitalization**

Master Data: Equipment



Equipment Master Record

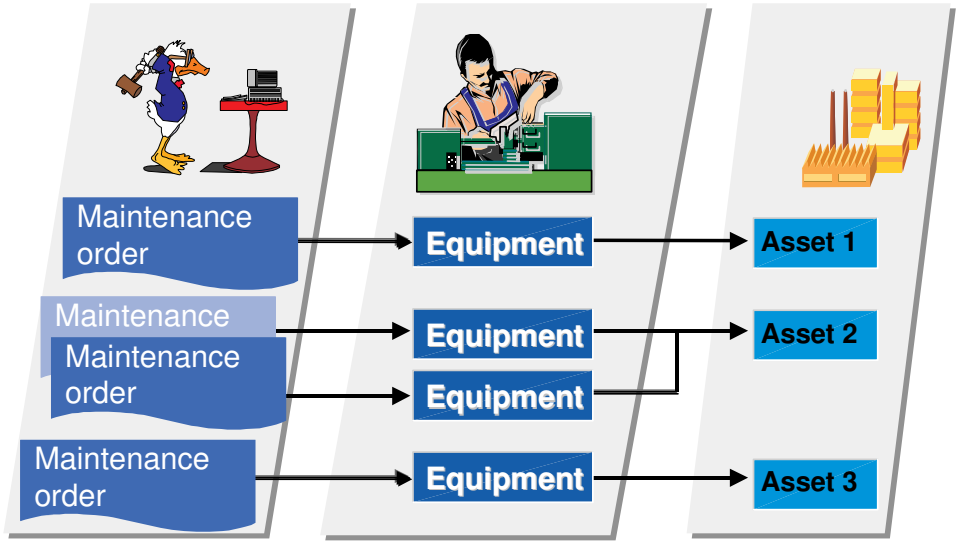
- General Data
- Location Data
- Maintenance Data
- Sales Data

Texts in Multiple Languages

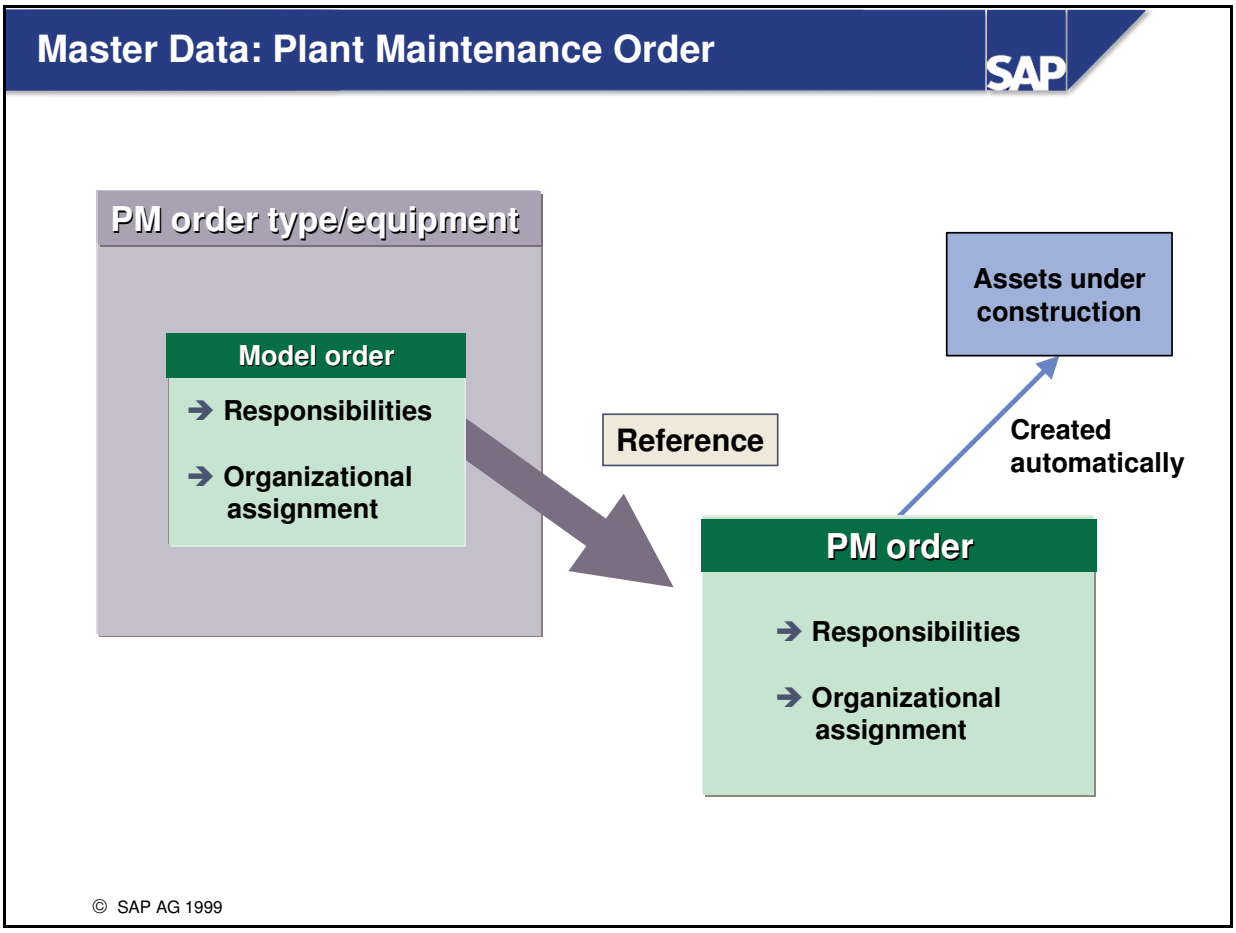
- Internal Comment
- Equipment Usage Period
- Classification
- Documents

- A piece of equipment is defined as an individual, physical object that is to be maintained as an autonomous unit (such as a pump, a motor, ...).
- In each equipment master record, you can enter the number of the asset in which the equipment is used, or to which it belongs.

Use and Maintenance

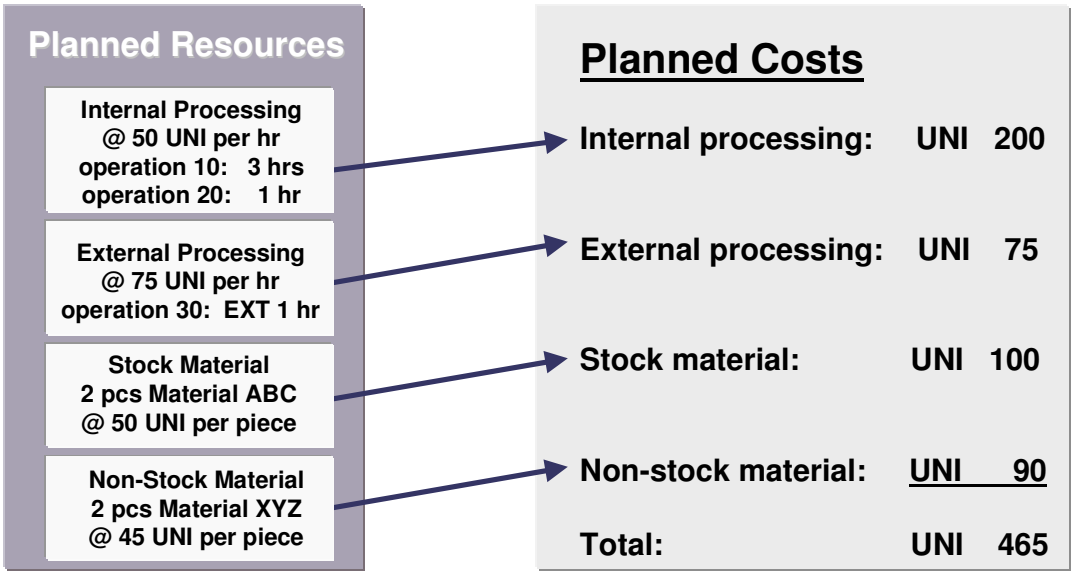


- In order to manage maintenance costs during the fixed asset's use, you can link the asset master record to equipment master records in Plant Maintenance (PM). This allows you to manage malfunction reports, maintenance orders and maintenance plans for your assets.
- As of Release 4.6C, you can automatically create an equipment master record when creating an asset master record. Any later changes to the asset master data (organizational units) are then automatically and consistently reflected in the equipment master data.



- Plant maintenance orders enable you to plan and schedule maintenance activities with relation to your equipment.
- Plant maintenance orders collect and track the costs that are associated with maintenance activities.
- You can assign plant maintenance orders automatically to a program position when you create the order, provided that certain organizational assignments of the order correspond to those of the program position. This topic is addressed in more detail in the Customizing Course AC350 (System Configuration for Investment Management).

Planned Costs on Maintenance Orders



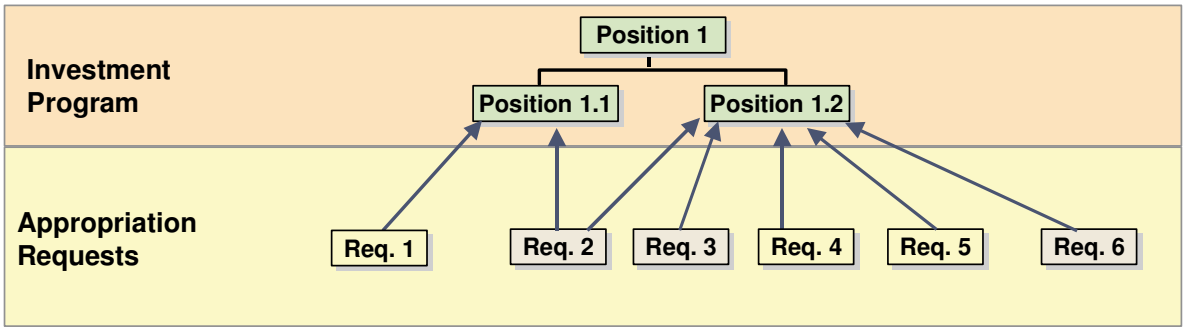
- Costs are planned on maintenance orders through activities. Activities to be performed and materials are specified in the operation and costed accordingly.

Comparison of Measures

	Characteristics
Internal order	• Cost tracking • Investment profile entered in the model order
Project	• Hierarchical structure is possible (budget can be distributed hierarchically from top to bottom) • Interest can be calculated during under-construction phase • Integration with networks/logistics functions

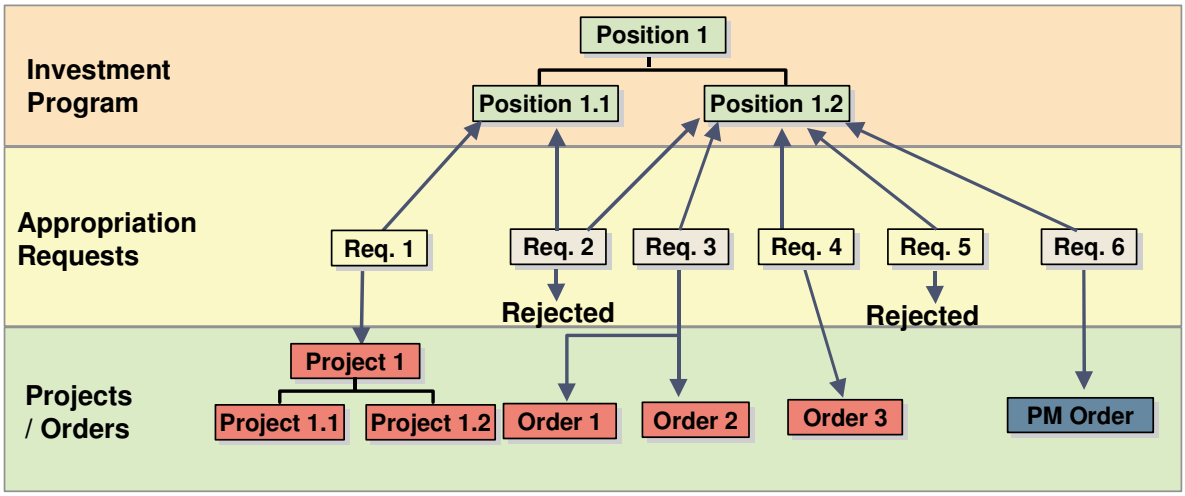
Maintenance order	• Link to
	  ◦ Materials Management
	  ◦ Project System
	  ◦ Production Planning and Control
	  ◦ FI and CO
	  ◦ Asset Accounting

Appropriation Requests in IM Context



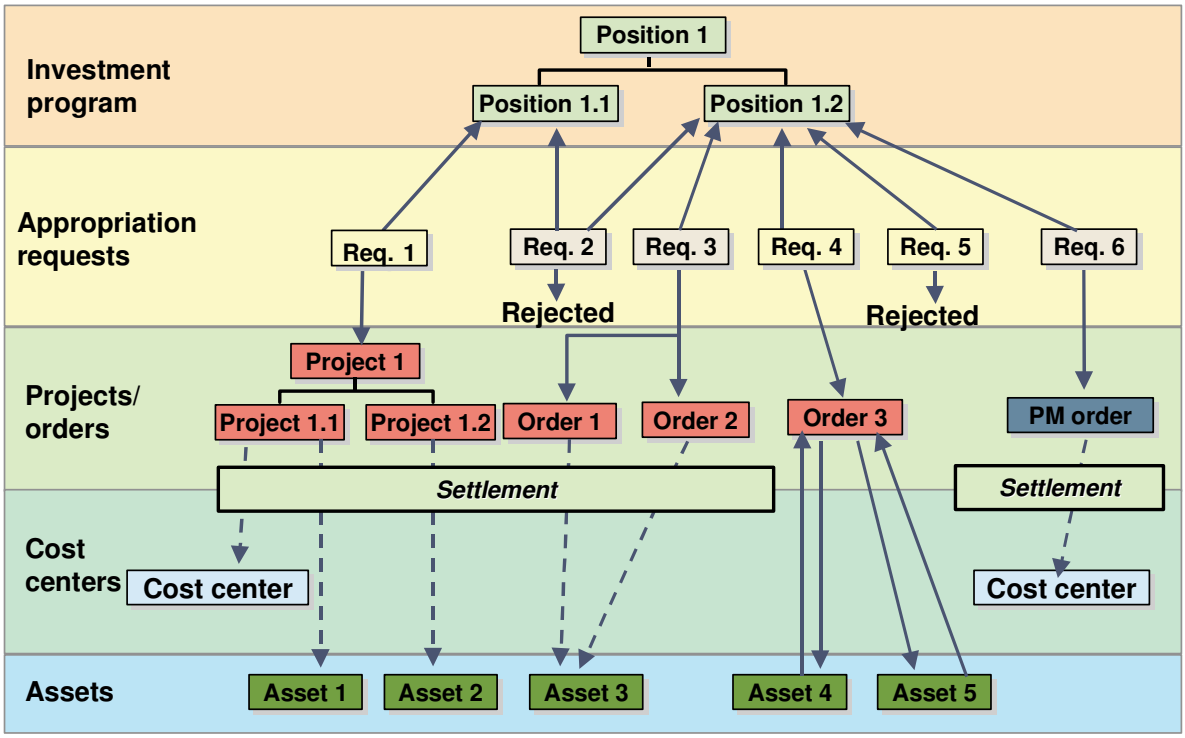
- This slide shows the hierarchical structure of the investment program, whereby the appropriation requests are attached to the end nodes of the program. Measures can also only be assigned to end node positions.
- You can distribute an appropriation request, by percentages, to several investment program positions.

Measures in IM Context



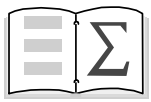
- Once an appropriation request is approved, a measure can be generated from it.
- Important: Only top WBS elements are generated directly. The rest of the project structure has to be entered manually in the Project System (PS) component.
- As of Release 4.6, you can also generate maintenance orders from appropriation requests.

Settlement and Direct Capitalization



- Settlement is explained here: during periodic settlement the system settles to cost centers and assets under construction (AuC). During full settlement values are settled from there to fixed assets.
- In the example above, assets 4 and 5 are linked to order 3. These are direct capitalizations that are posted statistically to the order for budget tracking.

Master Data: Unit Summary



You are now able to:

- **Define the basic IM master data and enter it in the system**
- **Identify additional basic master data from CO, PS, AA, and PM**

Exercise Data

Explanation of Symbols in the Exercises and Solutions

	**Exercises**
	**Solutions**
	**Course Objectives**
	**Business scenario**
	**Hints and Tips**
	**Warning or Caution**

Data in the Exercises

Type of Data	Data in Training System
Appropriation request “Packaging Assembly Line” (Exercise 1-2, Master Data Unit)	
Internal order resulting from the above appropriation request (Exercise 1-5, Planning & Budgeting Unit)	
Appropriation request “Production facility expansion project” (Exercise 1-3, Master Data Unit)	
Project resulting from the above appropriation request (Exercise 1-6, Planning & Budgeting Unit)	
Maintenance order “Expansion of computer test system”(Exercise 1-4, Master Data Unit)	
Asset number for PC (Exercise 1-7, Implementation Unit)	
Asset number for machine 1 (Exercise 1-1, Settlement Unit)	
Asset number for machine 2 (Exercise 1-1, Settlement Unit)	

Exercises

Unit: Mater Data

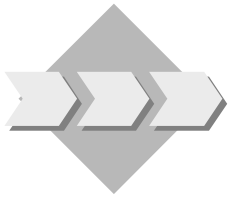
Topic: Create Mater Data

At the conclusion of this exercise, you will be able to:

reate investment programs

reate appropriation requests

reate maintenance orders



Investment programs significantly simplify investment planning and reduce administration of capital investments and other large-scale expenditures. The IDES company creates an investment program that shows all of their investments. They create two subtrees of the investment program, one which represents German investments and one which represents British investments. In the next step, two appropriation requests are created. These are used for managing information on ideas for new capital investments. Later during the exercise, you plan these appropriation requests and submit them for approval.

In addition, you create a maintenance order in this exercise.

The appropriation requests and the maintenance order are linked to investment program positions, in order to facilitate reporting on their values.

1-1 In this exercise, you create an investment program. This investment program serves to oversee costs of three investments: the construction of an automated packaging assembly line, expansion of production facilities, and expansion of the test computer system in your enterprise. You build your structure level by level and the program structure should look like this:

Level	Program Position	Description	Controlling area
1	400XX	Total investments	1000
2	400XX-1	Investments Germany	
3	400XX-1-1	Final assembly	
3	400XX-1-2	Production	
3	400XX-1-3	Maintenance	
2	400XX-2	UK Investments	
3	400XX-2-1	Administration	
3	400XX-2-2	Production	

Proceed as follows:

1-1-1 First create your investment program definition:

Create Investment Program Definition

Field Name	Input Data
Investment program	400XX (“XX” always stands for your group number)
Approval year	Current year
Program type	1000

Choose *Enter*.

Field Name	Input Data
Description	Group XX Investment Program
Budget distribution annual	Active
Budget categories	Inactive
Person responsible	XX (“XX” is your group number)
Fiscal year variant	K4
Currency	UNI

Save your investment program definition.

1-1-2 Now build your investment program structure.

Change Investment Program Structure

Field Name	Input Data
Investment program	400XX (“XX” is your group number)
Position ID	Leave blank
Approval year	Current year

Choose *Enter*.

To create your structure, place the cursor on the program definition (highlighted in green) and choose *Create*. Enter the following data for your level 1:

Position ID	Description	Controlling Area
400XX	Total investments	1000

Choose *Enter*. Next, create the level 2 position IDs by placing the cursor on the level 1 node and choosing *Create*. Enter the following data for the level 2 nodes:

Position ID	Description	Company code
400XX-1	Investments Germany	1000
400XX-2	UK Investments	2000

Choose *Copy*.
Continue to create your level 3 position IDs.

Level 2	Level 3	Input Data
400XX-1		Investments Germany
	400XX-1-1	Final assembly
	400XX-1-2	Production
	400XX-1-3	Maintenance
400XX-2		UK Investments
	400XX-2-1	Administration
	400XX-2-2	Production

Double click on nodes 400XX-1-1 and check the master data of the program position. You see that the company code was inherited.

1-1-3 After you have created your structure, release your investment program structure. To release your investment program place your cursor on the program definition. Choose *Select/deselect*. The system highlights your entire structure in red. Next, choose:

Menu Path:

Edit → Status → Release

The system status for your program structure is set to *Released*. Save your program.

1-2 In this exercise, you create an appropriation request for the construction of an automated packaging assembly line. You will create an internal order later from the appropriation request once it is approved. The order is used for entering the costs associated with the purchase of the machinery, the cement for the base, PCs for controlling the machines, etc. The order is created after the appropriation request has been approved. At this time, you create the basic data for the appropriation request along with the variant, which will be used to plan the costs for the project.

1-2-1 Create your appropriation request general data:

If the system requests a controlling area, enter 1000.

Create appropriation request

Field Name	Input Data
Appropriation request type	1

Create Appropriation Request: General Data

Field Name	Input Data
Description	Group XX Packaging assembly line
Scale	1 (investments up to 100,000)
Priority	5 (medium)
Approval year	Current year
Planned approval	Today's date
Implementation start	Tomorrow's date
IM: Applicant	Logon ID of group next to you
IM: Approver 1	Your own logon ID

1-2-2 Enter data for organizational units for your appropriation request: Choose the *Organizational units* tab page.

Create Appropriation Request: Organizational Units

Requesting Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Requesting Cost center	1000
Profit center	Derived from the cost center

If you choose *Enter* now, the system copies the data of the requesting organizational units to the responsible organizational units. You can also enter different data for the responsible organizational units, if you wish. Enter the additional data listed below.

Responsible Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Cost center	1000
Profit center	Derived from the cost center
Object class	INVST
Plant	1000

1-2-3 Assign your appropriation request to the *Final assembly* investment program position in Germany. Choose the *Control data* tab.

Assignment to Investment Program Position

Field Name	Input Data
Investment Program	400XX
Approval year	Current year
Position ID	400XX-1-1

1-2-4 Create a variant for the planned costs of your project and assign the variant to a plan version. Choose *Variants*. Enter the following data under *General Data*.

Create Appropriation Request: Variant Overview

Field Name	Input Data
Description	Construction
Assessment	2
Verbal assessment	Good
Completion date	Two months from now
Start-up date	Two months from now

Choose the *Plan versions* tab, and assign variant 1 to version 0 for the current year.

Approval year	Version	Version Text	Variant
Current year	0	Plan/actual version	1

You enter the plan values for the appropriation request later. Save the appropriation request now.

Appropriation request number: _____

1-3 In this exercise, you create an appropriation request for expanding your production facilities. Through the appropriation request, you create your project definition and level 1 WBS element that will be used to track the costs associated with the project. The project definition and the level 1 WBS element will be created after the appropriation request is approved. For this appropriation request, you enter 3 variants, which represent the options that you are currently considering. They include building a new facility, expanding the current facility, or outsourcing part of production.
At this time you create the basic master data for the appropriation request.

1-3-1 Create your appropriation request general data:

Create Appropriation Request: Initial Screen

Field Name	Input Data
Appropriation request type	3

Create Appropriation Request: General Data

Field Name	Input Data
Description	Group XX Production Facility Expansion Project
Scale	3 (investments over 2 million)
Priority	9 (Highest)
Approval year	Current year
Planned approval	Today's date
Implementation start	Tomorrow's date
IM: Applicant	Logon ID of group next to you
IM: Approver 1	Your own logon ID

1-3-2 Enter data for organizational units for your appropriation request: Choose *Organizational units*.

Create Appropriation Request: Organizational Units

Requesting Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Cost center	4110
Profit center	Derived from the cost center

Responsible Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Cost center	4110
Profit center	Derived from the cost center
Object class	INVST
Plant	1000

1-3-3 Assign your appropriation request to the investment program position *Production* in Germany. Choose *Control Data*.

Assignment to Investment Program Position

Field Name	Input Data
Investment Program	400XX
Approval year	Current year
Position ID	400XX-1-2

1-3-4 Create 3 variants for the planned costs of your project and assign the variants to a plan version. These 3 variants are used to plan the different alternatives associated with the project. These alternatives include building a new production facility, expanding the current facility, or outsourcing part of production. Choose *Variants*.

Create Appropriation Request: Variant Overview

Field Name	Input Data
Description	New construction
Assessment	1
Verbal assessment	Very good
Completion date	2 years from today
Start-up date	2 years from today

Choose *Create new variants* (blank page icon) on the *Variants* tab page. Variant 2 is used to assess the feasibility of expanding the current facility and variant 3 is used to assess the feasibility of outsourcing the additional production. These variants need to be created, and later costs will be planned for them.

Create Appropriation Request: Create Variant

Field Name	Input Data
Description	Expansion of facility
Assessment	2
Verbal assessment	Satisfactory
Completion date	1 year from today
Start-up date	1 year from today

Choose the *Create new variant* function again.

Create Appropriation Request: Create Variant

Field Name	Input Data
Description	Outsource part of production
Assessment	3
Verbal assessment	Not completely satisfactory
Completion date	6 months from today
Start-up date	6 months from today

After you have entered all your variants, you need to assign your variants to a plan version.

1-3-5 Choose the *Plan versions* tab. Assign the variants to the following CO plan versions:

Approval year	Version	Auth. Level	Description	Variant
Current year	2	2	Limited planning	3
Current year	1	1	General planning	2
Current year	0	1	General planning	1

Save your appropriation request.

Appropriation request number: _____

1-4 In this exercise, you create a maintenance order that will be used to track the costs associated with upgrading the test system for Production. In this order, you specify the equipment, the amount of labor that will be required, and the components that are needed for the new test system. You also enter the settlement rule for settling costs to the asset, which is linked to the equipment in the equipment master record. The system automatically determines the planned costs for your order based on the labor and components needed.

1-4-1 Identify the asset that is assigned to your equipment (technical object).

Menu Path:

Logistics → Plant Maintenance → Technical Objects → Equipment → Display

Display Equipment: Initial Screen

Field Name	Input Data
Equipment	10002859

Choose *Enter*.

The asset number can be found on the *Organization* tab of the equipment master record.

Asset Number: _____

1-4-2 Create PM order header data.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Order → Create (General)

Create Order: Initial Screen

Field Name	Input Data
Order type	PM01
Equipment	10002859
Planning plant	1000
Business area	8000

Choose *Enter*.

Create Maintenance Order: Central Header

Field Name	Input Data
Short text	Group XX Upgrade Test System
Costs	20,000
Main work center (Mn.wk.ctr)	5000
Start date	Today's date
Finish date	1 month from today

1-4-3 Create a settlement rule for the PM order. Choose ***Goto → Settlement rule***. Choose the *Without reference* option. Enter the following distribution rules for your PM order:

Maintain Settlement Rule: Overview

Category	Receiver	Percent
FXA	Your Asset from 1-4-1	100

1-4-4 Enter operations (work) for your PM order. Leave the maintenance of settlement rules, and choose the *Operations* tab. The system should automatically enter activity type 1410 as a default.

Create Maintenance Order: Operation Overview

Field Name	Input Data
Labor	75

1-4-5 Create the components (materials) that will be used in the upgrade of your test system. Select the row that contains the operation and choose *Components*. The components that are required to upgrade the test system include:

Create Maintenance Order: Component Overview

Field Name	**Input Data**
Material	M-11
Requirement quantity	2
Unit of measure (UM)	PC
Item category (IC)	L (stock item)
Storage location (SLoc)	0001
Plant	1000
Backflush (B)	active

Also create the following component:

Field Name	**Input Data**
Material	R-1410
Requirement quantity	1
Unit of measure (UM)	PC
Item category (IC)	Non-stock item (N)

1-4-6 Calculate plan costs by choosing *Determine costs* (calculator icon). The system calculates the planned costs for the order based on the labor and the components that you entered. When the costs have been calculated, go to the cost overview report and look at your costs.

Choose the *Costs* tab.

What are the total planned costs for your order? Make a note of the planned costs.

1-4-7 Assign your PM order to your investment program.

Menu Path:

Goto → Assignments → Investment program

Assignment to Investment Program Position

Field Name	Input Data
Investment Program	400XX
Position ID	400XX-1-3
Approval year	Current year

1-4-8 Release your PM order.

Menu Path:

Order → Functions → Release

If release is not allowed because of a missing permit, follow the steps below.

Menu Path:

Goto → Permits

Select the permit and choose *Issue*. Choose *Enter*. Then release the order again.

1-4-9 Save your order.

Maintenance order number: _____

Solutions

Unit: Mater Data

Topic: Mater Data

1-1 In this exercise, you create an investment program. This investment program serves to oversee costs of three investments: the construction of an automated packaging assembly line, expansion of production facilities, and expansion of the test computer system in your enterprise. You build your structure level by level and the program structure should look like this:

Level	Program Position	Description	Controlling area
1	400XX	Total investments	1000
2	400XX-1	Investments Germany	
3	400XX-1-1	Final assembly	
3	400XX-1-2	Production	
3	400XX-1-3	Maintenance	
2	400XX-2	UK Investments	
3	400XX-2-1	Administration	
3	400XX-2-2	Production	

1-1-1 First create your investment program definition:

Menu Path:

Accounting → Investment Management → Programs → Master Data → Inv. Program Definition → Create

Create Investment Program Definition

Field Name	Input Data
Investment program	400XX (“XX” always stands for your group number)
Approval year	Current year
Program type	1000

Choose *Enter*.

Field Name	Input Data
Description	Group XX Investment Program
Budget distribution annual	Active
Budget categories	Inactive
Person responsible	XX (“XX” is your group number)
Fiscal year variant	K4
Currency	UNI

Save your investment program definition.

1-1-2 Now build your investment program structure.

Menu Path:

Accounting → Investment Management → Programs → Master Data → Investment Program Structure → Change

Change Investment Program Structure

Field Name	Input Data
Investment program	400XX (“XX” is your group number)
Position ID	Leave blank
Approval year	Current year

Choose *Enter*.

To create your structure, place the cursor on the program definition (highlighted in green) and choose *Create*. Enter the following data for your level 1:

Position ID	Description	Controlling Area
400XX	Total investments	1000

Choose *Enter*. Next, create the level 2 position IDs by placing the cursor on the level 1 node and choosing *Create*. Enter the following IDs for the level 2 nodes:

Position ID	Description	Company code
400XX-1	Investments Germany	1000
400XX-2	UK Investments	2000

Choose *Copy*.
Continue to create your level 3 position IDs.

Level 2	Level 3	Input Data
400XX-1		Investments Germany
	400XX-1-1	Final assembly
	400XX-1-2	Production
	400XX-1-3	Maintenance
400XX-2		UK Investments
	400XX-2-1	Administration
	400XX-2-2	Production

Double click on node 400XX-1-1 and check the master data of the program position. You see that the company code was inherited.

1-1-3 After you have created your structure, release your investment program structure. To release your investment program place your cursor on the program definition. Choose *Select/deselect*. The system highlights your entire structure in red. Next, choose:

Menu Path:

Edit → Status → Release

The system status for your program structure is set to *Released*. Save your program.

1-2 In this exercise, you create an appropriation request for the construction of an automated packaging assembly line. You will create an internal order later from the appropriation request once it is approved. The order is used for entering the costs associated with the purchase of the machinery, the cement for the base, PCs for controlling the machines, etc. The order is created after the appropriation request has been approved. At this time, you create the basic data for the appropriation request along with the variant, which will be used to plan the costs for the project.

1-2-1 Create your appropriation request general data:

Menu Path:

Accounting → Investment Management → Appropriation Requests → Edit Appropriation Requests → Individual Processing

If the system requests a controlling area, enter 1000.

Choose *Create* (blank page icon).

Create appropriation request

Field Name	Input Data
Appropriation request type	1

Create the appropriation request with the following data:

Create Appropriation Request: General Data

Field Name	Input Data
Description	Group XX Packaging assembly line
Scale	1 (investments up to 100,000)
Priority	5 (medium)
Approval year	Current year
Planned approval	Today's date
Implementation start	Tomorrow's date
IM: Applicant	Logon ID of group next to you
IM: Approver 1	Your own logon ID

1-2-2 Enter data for organizational units for your appropriation request: Choose the *Organizational units* tab page.

Create Appropriation Request: Organizational Units

Requesting Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Requesting Cost center	1000
Profit center	Derived from the cost center

If you choose *Enter* now, the system copies the data of the requesting organizational units to the responsible organizational units. You can also enter different data for the responsible organizational units, if you wish. Enter the additional data listed below.

Responsible Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Cost center	1000
Profit center	Derived from the cost center
Object class	INVST
Plant	1000

1-2-3 Assign your appropriation request to the *Final assembly* investment program position in Germany. Choose the *Control data* tab.

Assignment to Investment Program Position

Field Name	Input Data
Investment Program	400XX
Approval year	Current year
Position ID	400XX-1-1

1-2-4 Create a variant for the planned costs of your project and assign the variant to a plan version. Choose *Variants*. Enter the following data under *General Data*.

Create Appropriation Request: Variant Overview

Field Name	Input Data
Description	Construction
Assessment	2
Verbal assessment	Good
Completion date	Two months from now
Start-up date	Two months from now

Choose the *Plan versions* tab, and assign variant 1 to version 0 for the current year.

Approval year	Version	Version Text	Variant
Current year	0	Plan/actual version	1

You enter the plan values for the appropriation request later. Save the appropriation request now.

Appropriation request number: _____

1-3 In this exercise, you create an appropriation request for expanding your production facilities. Through the appropriation request, you create your project definition and level 1 WBS element that will be used to track the costs associated with the project. The project definition and the level 1 WBS element will be created after the appropriation request is approved. For this appropriation request, you enter 3 variants, which represent the options that you are currently considering. They include building a new facility, expanding the current facility, or outsourcing part of production.
At this time you create the basic master data for the appropriation request.

1-3-1 Create your appropriation request general data:

Menu Path:

Accounting → Investment Management → Appropriation Requests → Edit Appropriation Requests → Individual Processing

Choose *Create* (blank page icon).

Create Appropriation Requests: Initial Screen

Field Name	Input Data
Appropriation request type	3

Create Appropriation Request: General Data

Field Name	Input Data
Description	Group XX Production Facility Expansion Project
Scale	3 (investments over 2 million)
Priority	9 (Highest)
Approval year	Current year
Planned approval	Today's date
Implementation start	Tomorrow's date
IM: Applicant	Logon ID of group next to you
IM: Approver 1	Your own logon ID

1-3-2 Enter data for organizational units for your appropriation request: Choose *Organizational units*.

Create Appropriation Request: Organizational Units

Requesting Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Cost center	4110
Profit center	Derived from the cost center

If you choose *Enter* now, the system copies the data of the requesting organizational units to the responsible organizational units. Enter the additional data listed below.

Responsible Organizational Units

Field Name	Input Data
Company code	1000
Business area	9900
Cost center	4110
Profit center	Derived from the cost center
Object class	INVST
Plant	1000

1-3-3 Assign your appropriation request to the investment program position *Production* in Germany. Choose *Control Data*.

Assignment to Investment Program Position

Field Name	Input Data
Investment Program	400XX
Approval year	Current year
Position ID	400XX-1-2

1-3-4 Create 3 variants for the planned costs of your project and assign the variants to a plan version. These 3 variants are used to plan the different alternatives associated with the project. These alternatives include building a new production facility, expanding the current facility, or outsourcing part of production. Choose *Variants*.

Create Appropriation Request: Variant Overview

Field Name	Input Data
Description	New construction
Assessment	1
Verbal assessment	Very good
Completion date	2 years from today
Start-up date	2 years from today

Choose *Create new variants* (blank page icon) on the *Variants* tab page. Variant 2 is used to assess the feasibility of expanding the current facility and variant 3 is used to assess the feasibility of outsourcing the additional production. These variants need to be created, and later costs will be planned for them.

Create Appropriation Request: Create Variant

Field Name	Input Data
Description	Expansion of facility
Assessment	2
Verbal assessment	Satisfactory
Completion date	1 year from today
Start-up date	1 year from today

Choose the *Create new variant* function again.

Create Appropriation Request: Create Variant

Field Name	Input Data
Description	Outsource part of production
Assessment	3
Verbal assessment	Not completely satisfactory
Completion date	6 months from today
Start-up date	6 months from today

After you have entered all your variants, you need to assign your variants to a plan version.

1-3-5 Choose the *Plan versions* tab. Assign the variants to the following CO plan versions:

Approval year	Version	Auth. Level	Description	Variant (ready for input)
Current year	2	2	Limited planning	3
Current year	1	1	General planning	2
Current year	0	1	General planning	1

Save your appropriation request.

Appropriation request number: _____

1-4 In this exercise, you create a maintenance order that will be used to track the costs associated with upgrading the test system for Production. In this order, you specify the equipment, the amount of labor that will be required, and the components that are needed for the new test system. You also enter the settlement rule for settling costs to the asset, which is linked to the equipment in the equipment master record. The system automatically determines the planned costs for your order based on the labor and components needed.

1-4-1 Identify the asset that is assigned to your equipment (technical object).

Menu Path:

Logistics → Plant Maintenance → Technical Objects → Equipment → Display

Display Equipment: Initial Screen

Field Name	Input Data
Equipment	10002859

Choose *Enter*.

The asset number can be found on the *Organization* tab of the equipment master record.

Asset Number: _____

1-4-2 Create PM order header data.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Order → Create (General)

Create Order: Initial Screen

Field Name	Input Data
Order type	PM01
Equipment	10002859
Planning plant	1000
Business area	8000

Choose *Enter*.

Create Maintenance Order: Central Header

Field Name	Input Data
Short text	Group XX Upgrade Test System
Costs	20,000
Main work center (Mn.wk.ctr)	5000
Start date	Today's date
Finish date	1 month from today

1-4-3 Create a settlement rule for the PM order. Choose ***Goto → Settlement rule***. Choose the *Without reference* option. Enter the following distribution rules for your PM order:

Maintain Settlement Rule: Overview

Category	Receiver	Percent
FXA	Your Asset from 1-4-1	100

1-4-4 Enter operations (work) for your PM order. Leave the maintenance of settlement rules, and choose the *Operations* tab. The system should automatically propose activity type 1410.

Create Maintenance Order: Operation Overview

Field Name	Input Data
Labor	75

1-4-5 Create the components (materials) that will be used in the upgrade of your test system. Select the row that contains the operation and choose *Components*. The components that are required to upgrade the test system include:

Create Maintenance Order: Component Overview

Field Name	Input Data
Material	M-11
Requirement quantity	2
Unit of measure (UM)	PC
Item category (IC)	L (stock item)
Storage location (SLoc)	0001
Plant	1000
Backflush (B)	active

Also create the following component:

Field Name	Input Data
Material	R-1410
Requirement quantity	1
Unit of measure (UM)	PC
Item category (IC)	Non-stock item (N)

1-4-6 Calculate plan costs by choosing *Determine costs* (calculator icon). The system calculates the planned costs for the order based on the labor and the components that you entered. When the costs have been calculated, go to the cost overview report and look at your costs.

Choose the Costs tab.

What are the total planned costs for your order? Make a note of the planned costs.

1-4-7 Assign your PM order to your investment program.

Menu Path:

Goto → Assignments → Investment program

Assignment to Investment Program Position

Field Name	Input Data
Investment Program	400XX
Position ID	400XX-1-3
Approval year	Current year

1-4-8 Release your PM order.

Menu Path:

Order → Functions → Release

If release is not allowed because of a missing permit, follow the steps below.

Menu Path:

Goto → Permits

Select the permit and choose Issue. Choose Enter. Then release the order again.

1-4-9 Save your order.

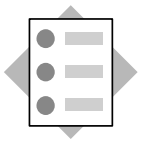
Maintenance order number: _____

Planning and Budgeting

Contents:

- Planning/budgeting comparison
- Planning scenarios
- Rolling up plan values in the investment program
- Depreciation simulation
- Creating measures from the appropriation requests
- Copying the plan values to the budget
- Distributing the budget to the measures

Planning and Budgeting: Unit Objectives

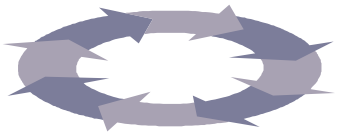


At the conclusion of this unit, you will be able to:

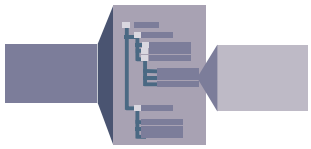
- **Roll up plan values in the investment program**
- **Describe the various planning scenarios**
- **Budget the investment program**
- **Distribute the budget from the investment program to the measures**

Course Overview Diagram - Planning and Budgeting

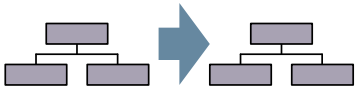
Course Overview



Investment Management Cycle

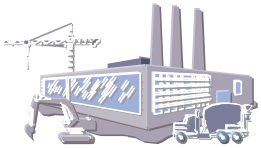


Master Data



Fiscal Year Change

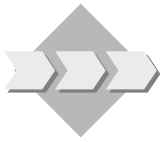
Planning and Budgeting



Implementation

Settlement

Planning and Budgeting: Business Scenario



- After planning at appropriation request level, the values are rolled up in the investment program. The approval process for the appropriation requests now begins (workflow).
  Measures are created from the appropriation requests.
- The program is budgeted, whereby the plan values (possibly with deductions) can be copied.
- The budget values are then distributed to the measures.

Terms: Planning vs. Budgeting

Planning

- ***Cost*-oriented (cost elements, activity types, period values, planning versions)**
- ***Easily changed; line items created if desired***
- ***Collected bottom-up***

➔ ***"FUNDS REQUESTED"***

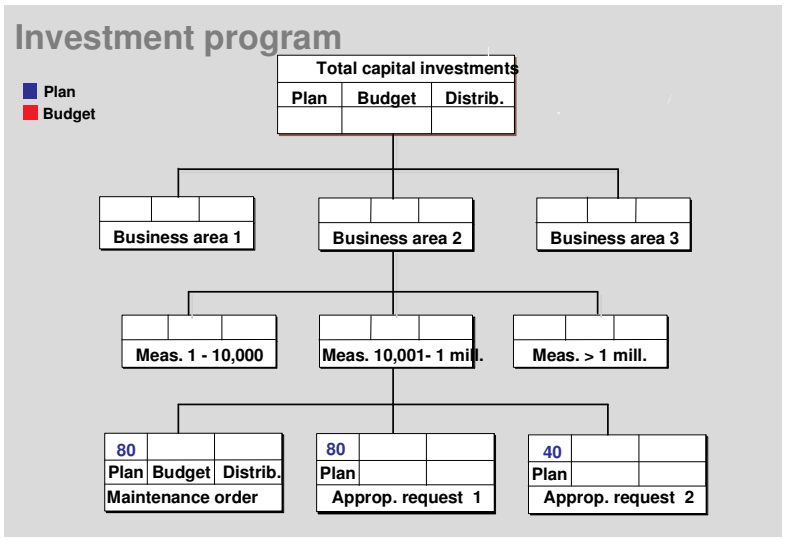
Budgeting

- ***Funds*-oriented (original, supplements, returns)**
- ***Binding values; line items for each change***
- ***Availability control***
- ***Distributed top-down***

➔ ***"APPROVED FUNDS"***

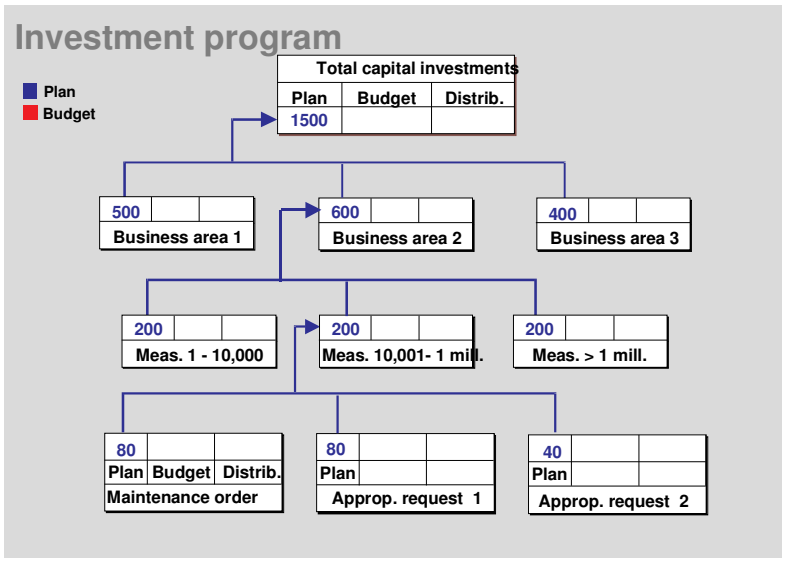
- From the viewpoint of investment planning, plan values (from CO) represent the funds that the person responsible for an investment measure requests for the implementation of the measure. Budget values, in contrast, represent the funds that this person actually receives from higher management.
- Note: Plan versions are available on investment programs.
- You can constantly monitor how the available funds compare to the budget values.
- Normally the plan is the basis for the budget. In Investment Management, you can copy the plan values to the budget (possibly while making a percentage reduction in the plan values).

Planning on Appropriation Requests and Measures



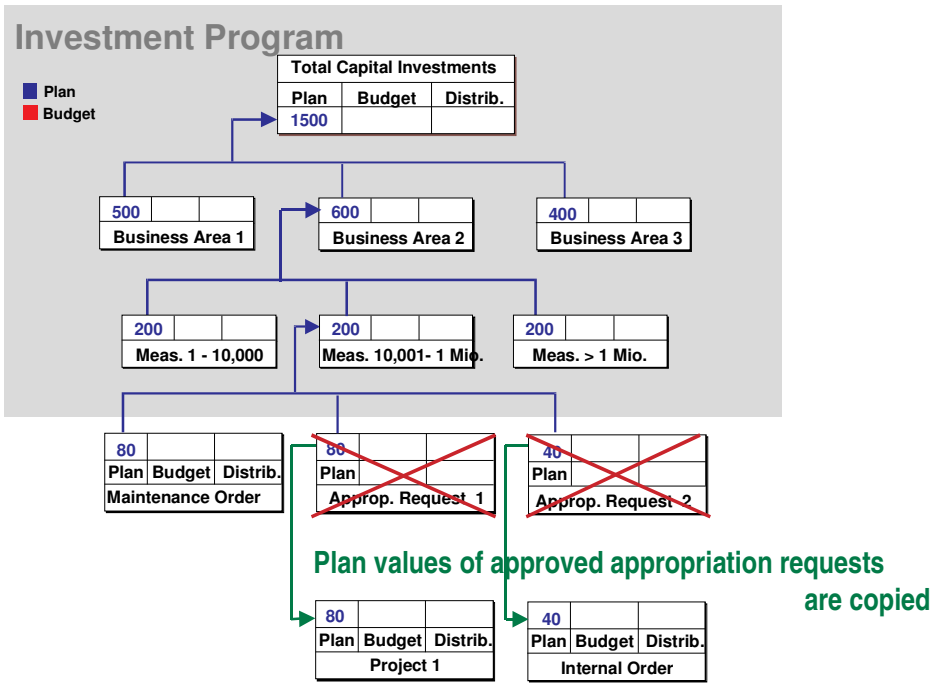
- You can plan on appropriation requests and measures. Cost element planning is only available for measures.

Planning (Rolling Up Values in the Program)



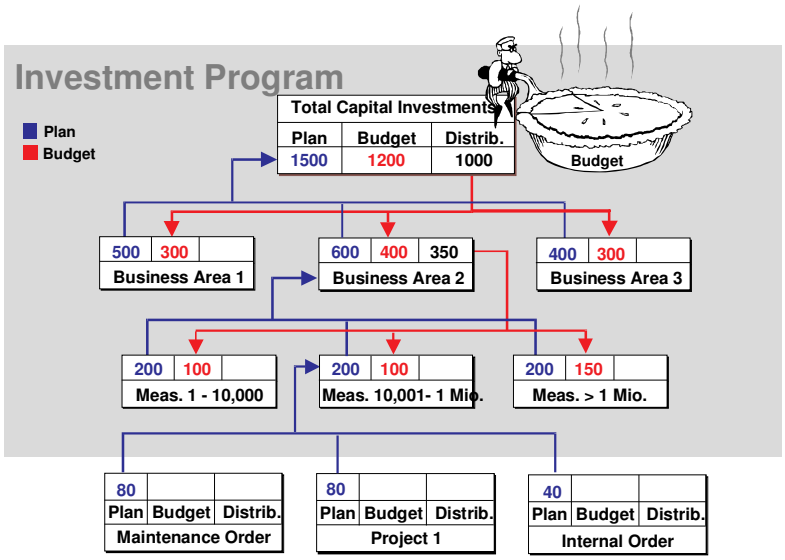
- The transaction for carrying forward plan values summarizes the plan values of measures and appropriation requests through to the top position of the investment program.
- The plan values on the program positions can still be changed manually.

Replacing Approp. Requests with Measures



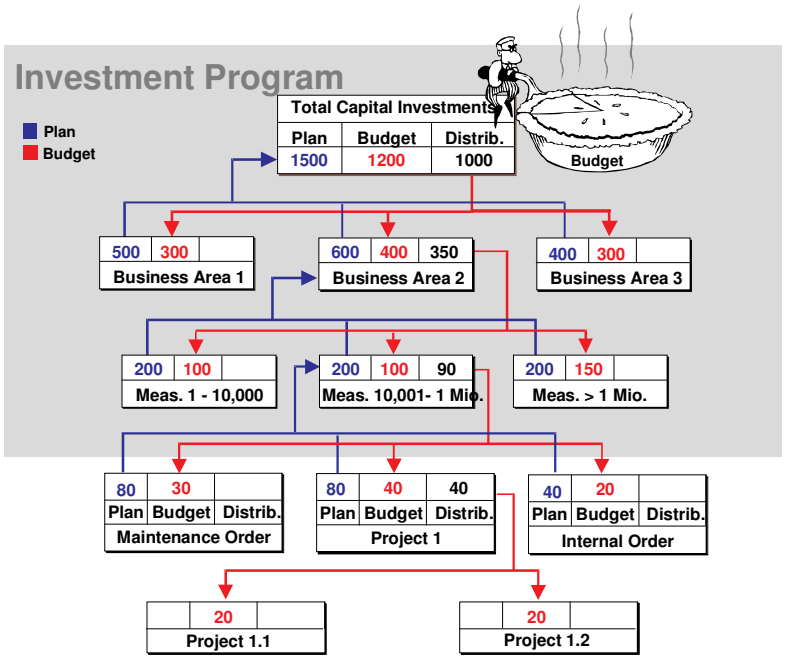
- Either you can replace your appropriation requests with measures, or you can keep both in the system.
- You can have the measures adopt the plan values of the corresponding appropriation requests.

Budgeting



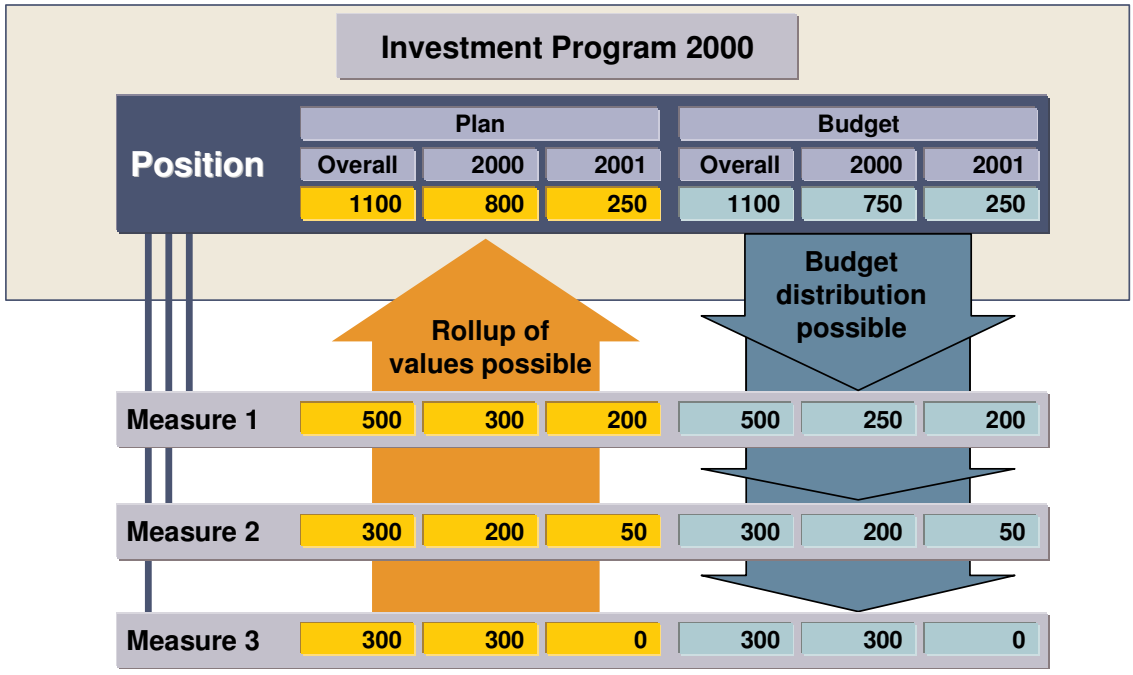
- Budgeting is not possible on appropriation requests. Appropriation requests allow planning only (costs and revenue).
- Distributed values are the sum of the budget values from the next lowest level.

Budget Distribution to Measures



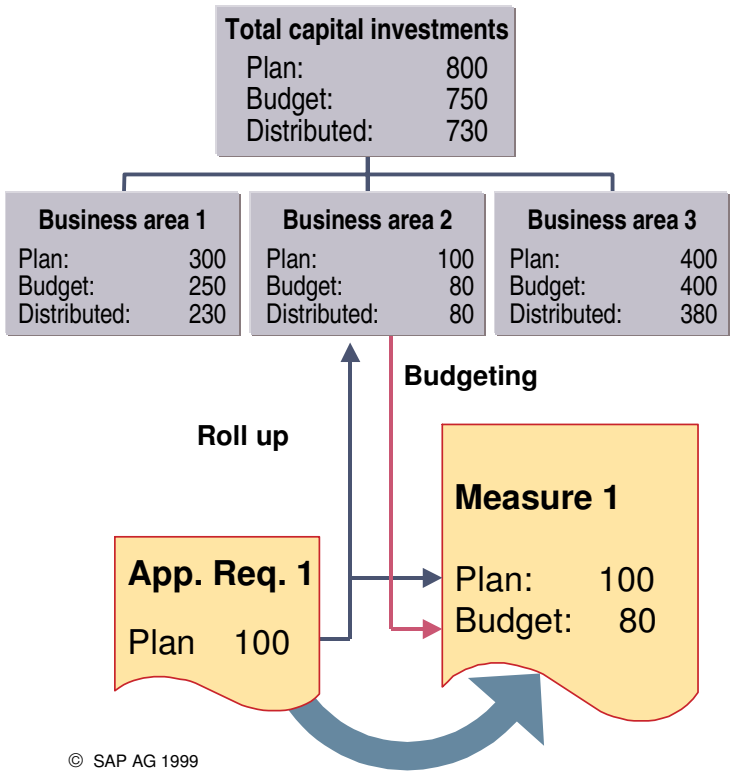
- In the final step, budget values from the end node investment program positions are distributed to the measures assigned to them.
- When you use projects, you can only budget those WBS elements that are assigned to the investment program from within the investment program.

Overall and Annual Values (Plan/Budget)



- The plan and budget values of the measures are managed separately from the values of the investment program. The plan values of the measures can be rolled up in the program (added from the bottom up through to the top position).
- You can compare the values of the investment program and the measures in reporting.
- The budget values from the program can be distributed to the assigned measures. This ensures that the total budget value of a measure is never higher than the budget value of the program position to which the measure is assigned.

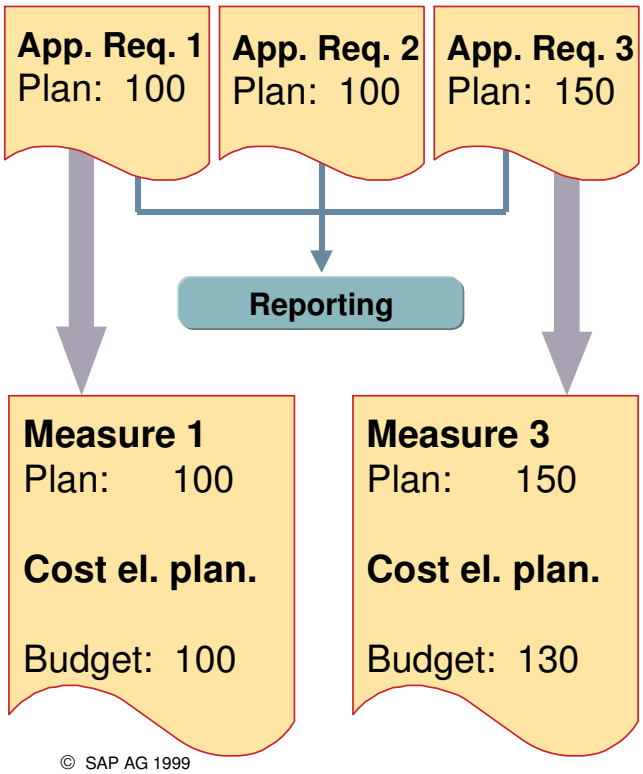
Planning Scenario: Appropriation Requests, Investment Program, and Measures



- Create and plan appropriation requests
- Roll up values in the program
- Approval process
- Create measures from appropriation requests
- Refine measure planning with CO element planning
- Budget program and measures

- After the approval process, the plan values should be rolled up once again to remove rejected appropriation requests from the planning.
- The plan values of the appropriation requests can be forwarded automatically to the measure.

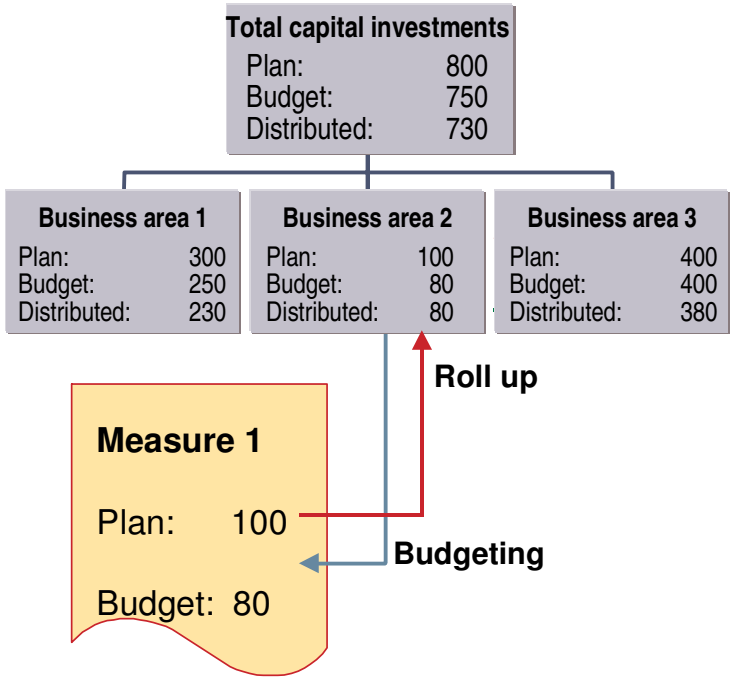
Planning Scenario: Appropriation Requests and Measures



- Create and plan appropriation requests
- Carry out reporting on appropriation requests (as of Release 4.5)
- Approve appropriation requests
- Create measures from appropriation requests
- Refine measure planning with CO element planning
- Budget measures

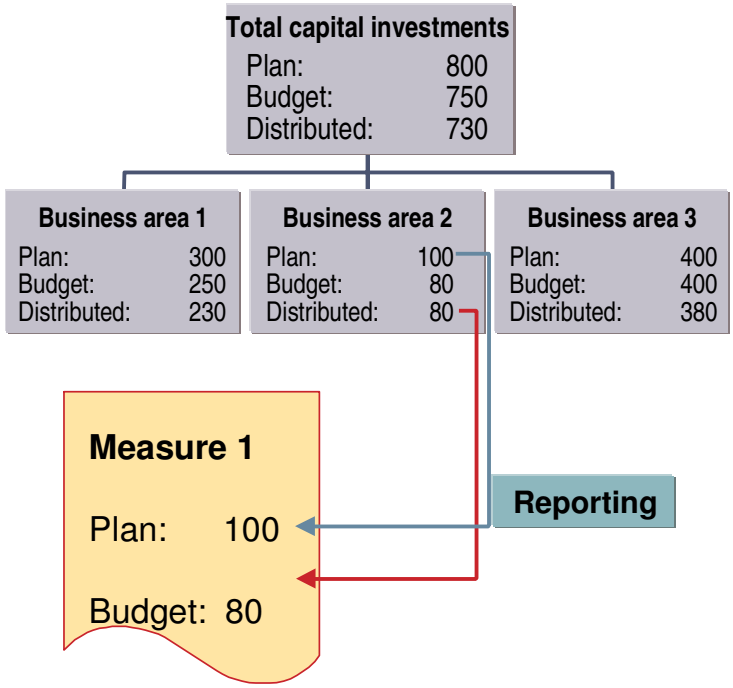
■ The plan values of the appropriation requests can be forwarded automatically to the measure.

Planning Scenario: Measures and Investment Program

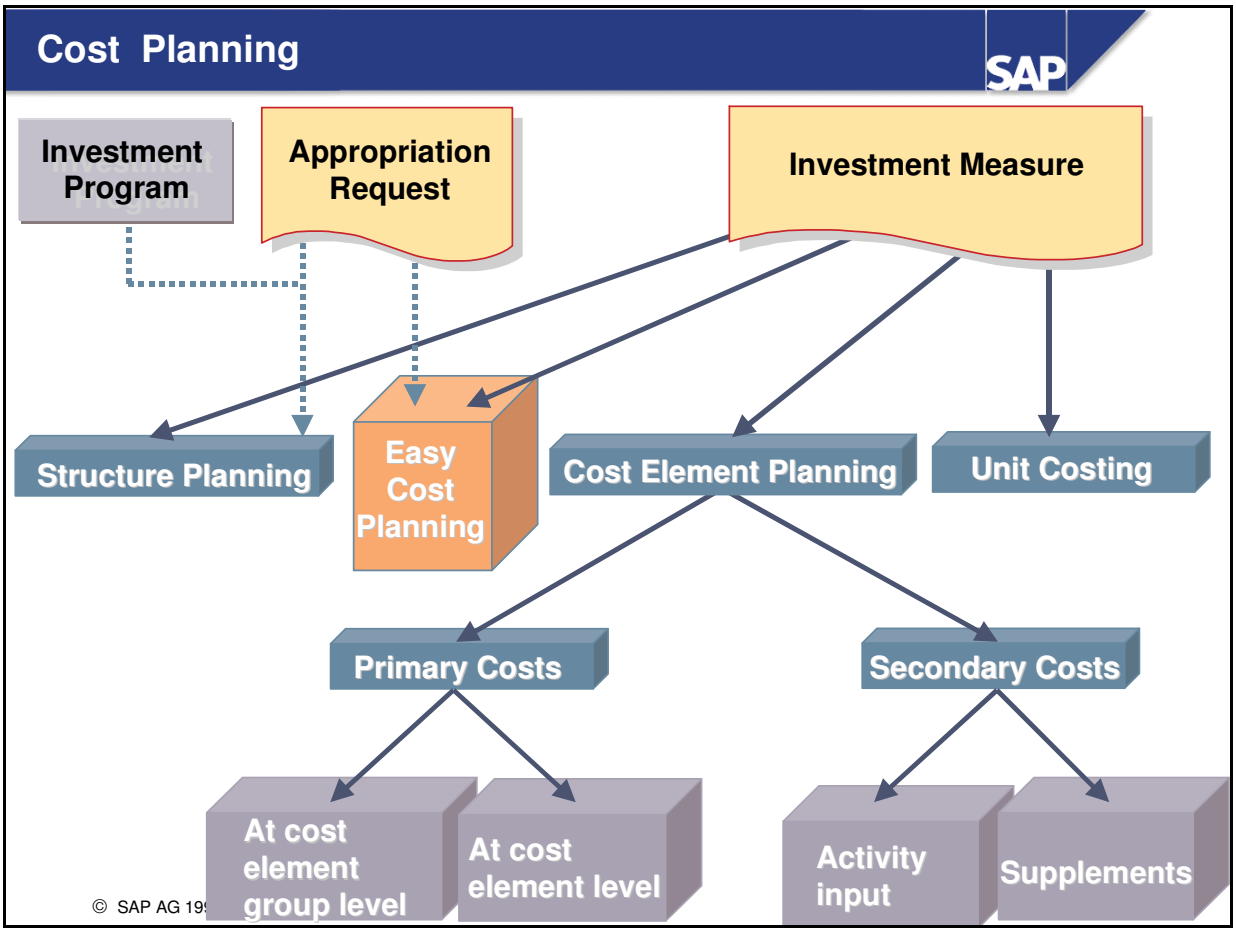


- Create measures
- Plan measures
- Roll up plan values in the program
- Budget from the program to the measures

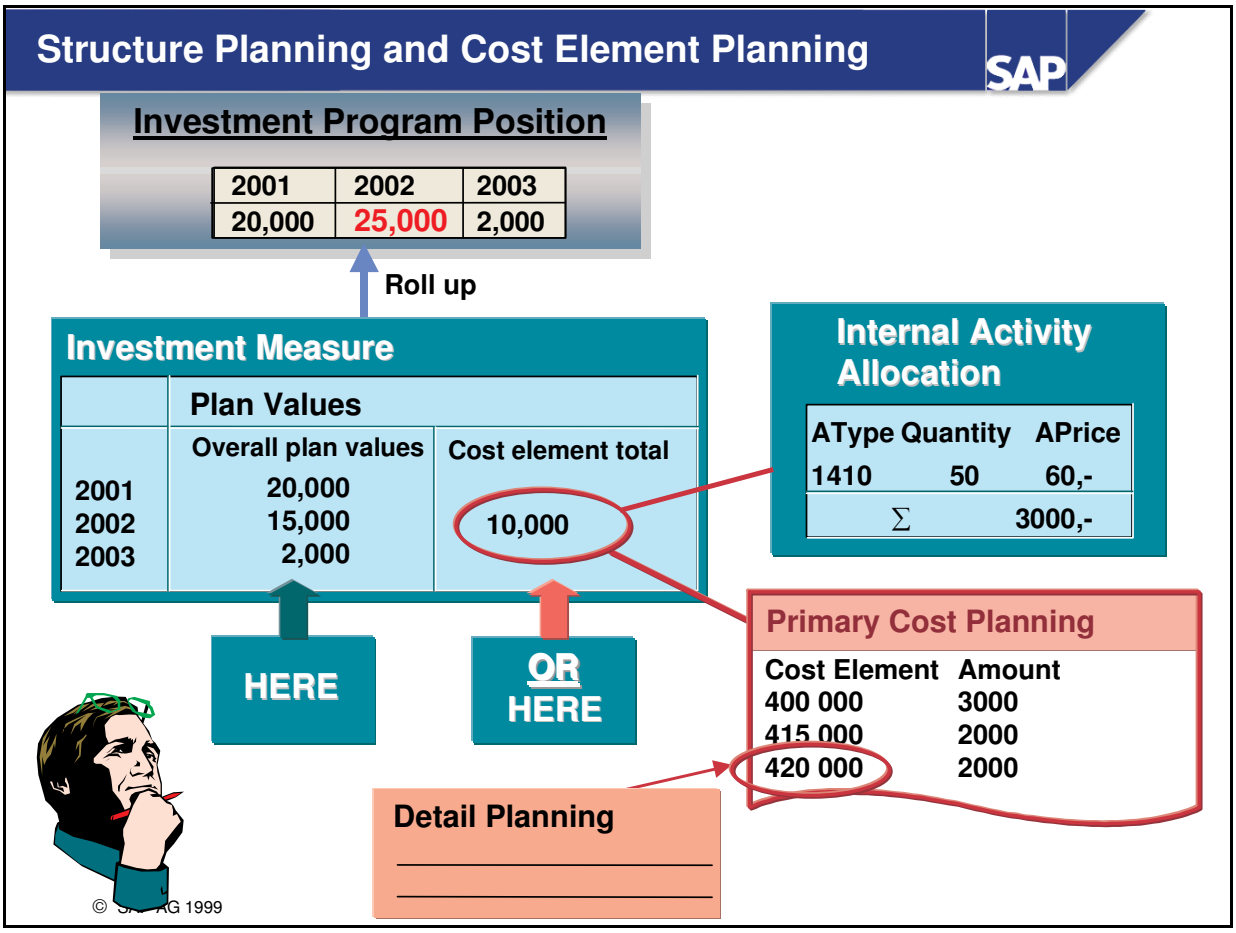
Planning Scenario: Investment Program and Measures



- Plan the program
- Plan measures (refining the program planning)
- Reporting: compare planning
- Budget from the program to the measures

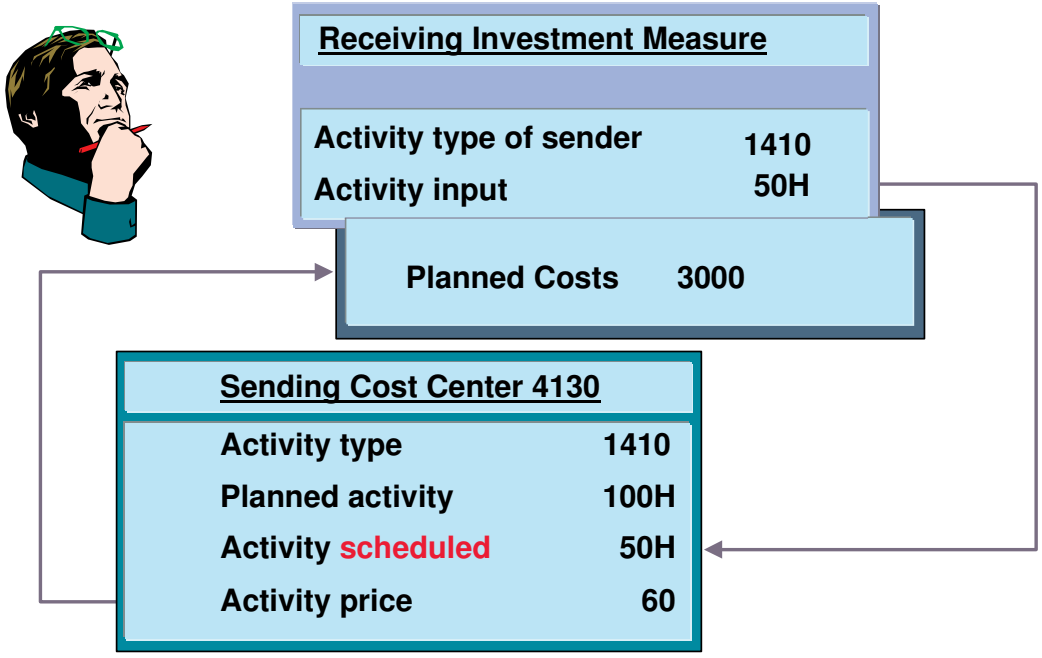


- You can carry out planning for investment measures with varying degrees of detail, and also choose the length of time that is planned. Except for the planning of revenue and overhead, planning in IM is very similar to the planning functions in Cost Center Accounting.
- The possible levels of detail in planning are as follows:
  - Structure planning: You enter the costs of the investment measures without relating them to cost elements. These values are usually rough estimates made during an early stage of planning.
  - Cost element planning: You plan each cost element separately. This allows you to see a sort of cost structure on the investment measure.
  - Unit costing: You use this type of planning to plan detailed costs of the same cost elements, for example resource planning for various materials that have the same consumption account according to their material account determination in Materials Management (MM).
- Based on how far planning has advanced, these types of planning can be used when more detailed planning information is available.
- For investment programs, only structure planning can be used.
- For appropriation requests, Easy Cost Planning can be used in addition to structure planning as of Release 4.6C (refer to the Master Data unit).



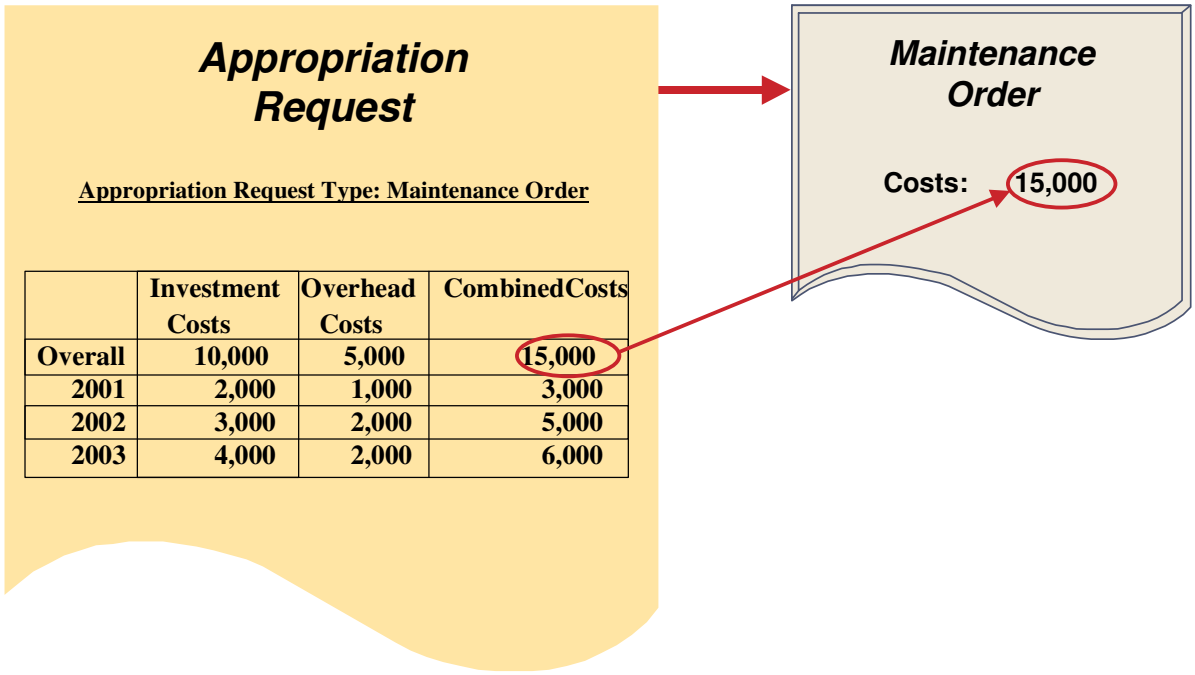
- Costs can be planned either in detail planning or at the annual level. When you roll up values to the investment program, detail planning is added to the annual plan values.

Secondary Cost Planning



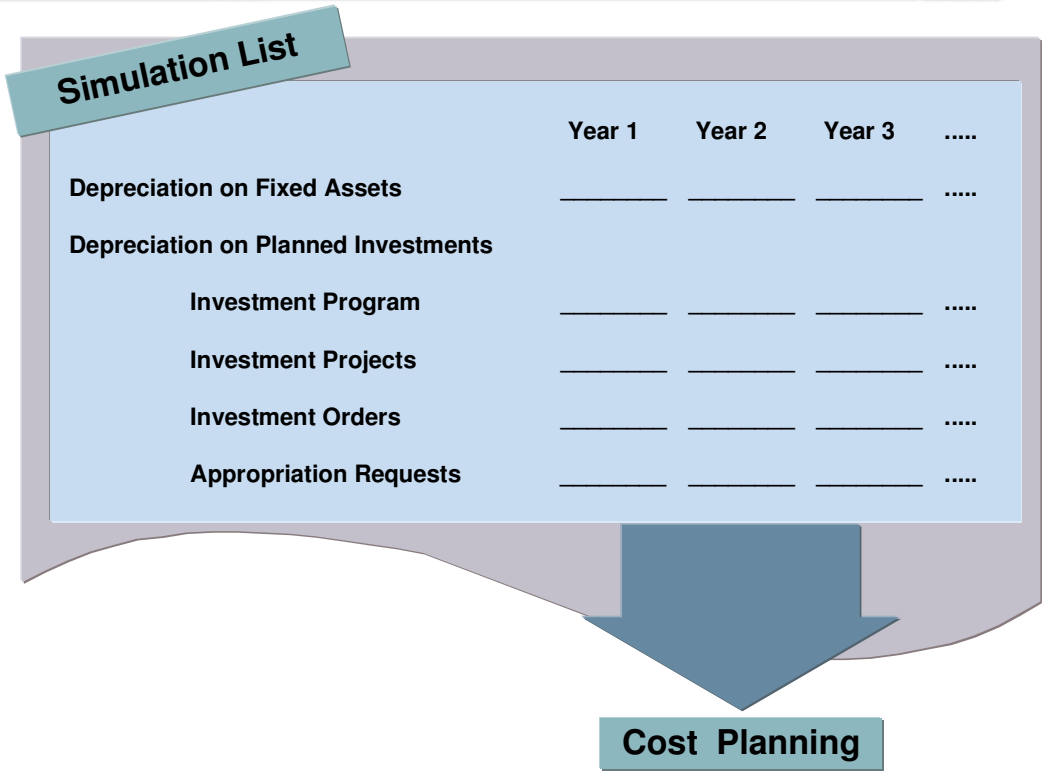
- Secondary cost planning uses secondary cost elements.
- Secondary cost elements are used to move costs from one cost object to another. They are not normally shown in Financial Accounting (FI).

Generating a Maintenance Order from an Appropriation Request

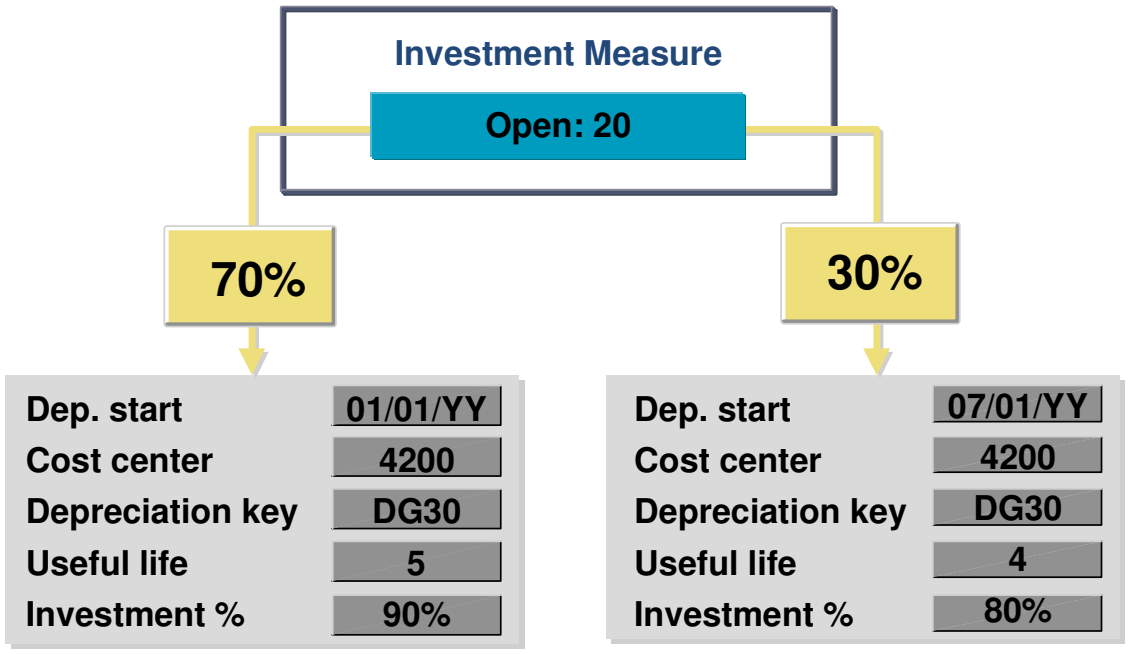


- Up to Release 4.6, it was only possible to create internal orders and projects from appropriation requests. You could create maintenance orders separately and assign them to investment program positions.
- As of Release 4.6, you can generate maintenance orders from appropriation requests if you choose an appropriation request type for maintenance orders.
- Up to Release 4.6B, combined costs (the sum of investment costs and overhead) are transferred to the maintenance order as estimated costs. It is currently not possible to display these values in reports on the plan values of investment programs or measures. In order to display the plan values of maintenance orders, you have to plan costs in the usual way, by planning cost components, activities, and so on.

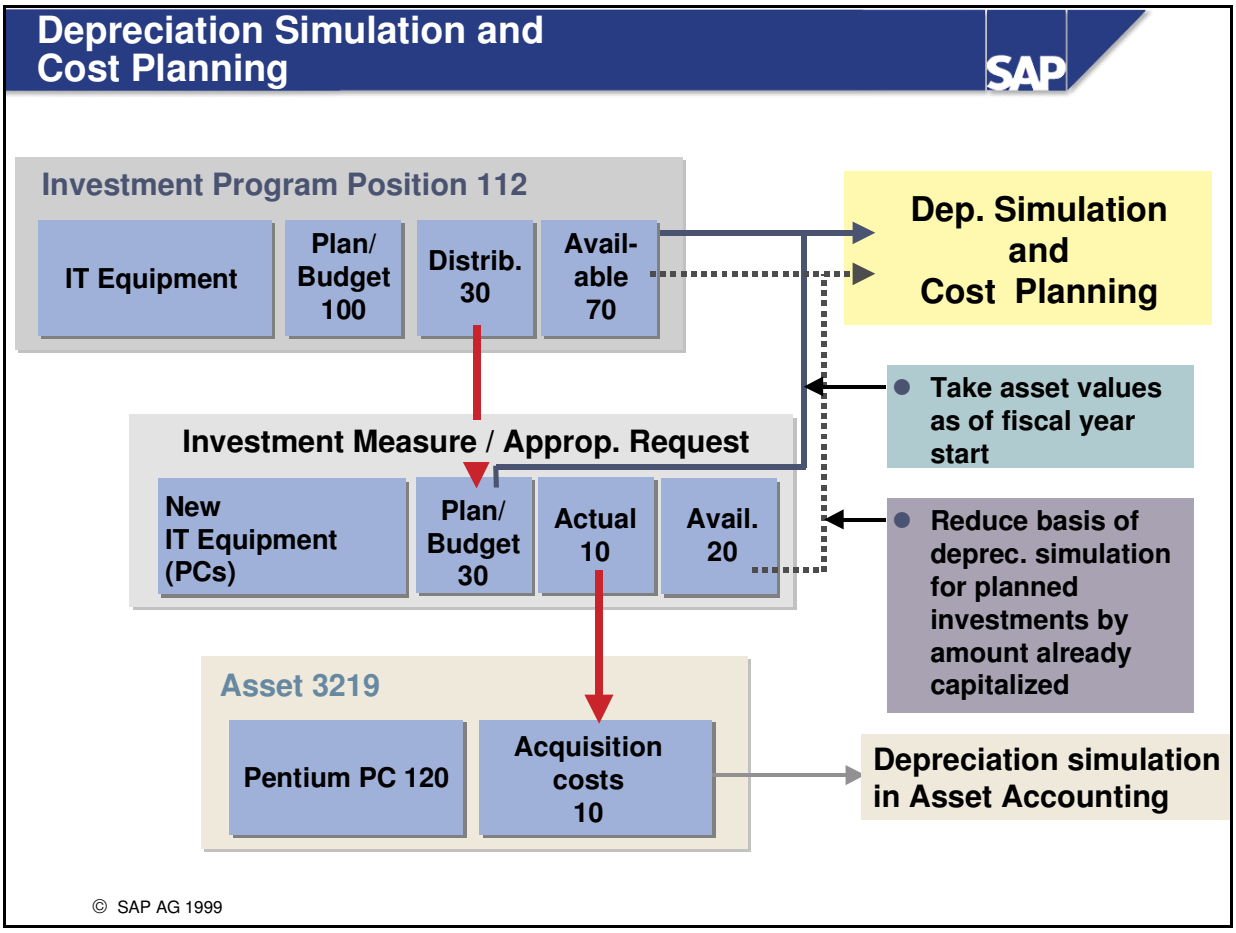
Depreciation Simulation and Cost Planning



Depreciation Simulation: Variable Parameters

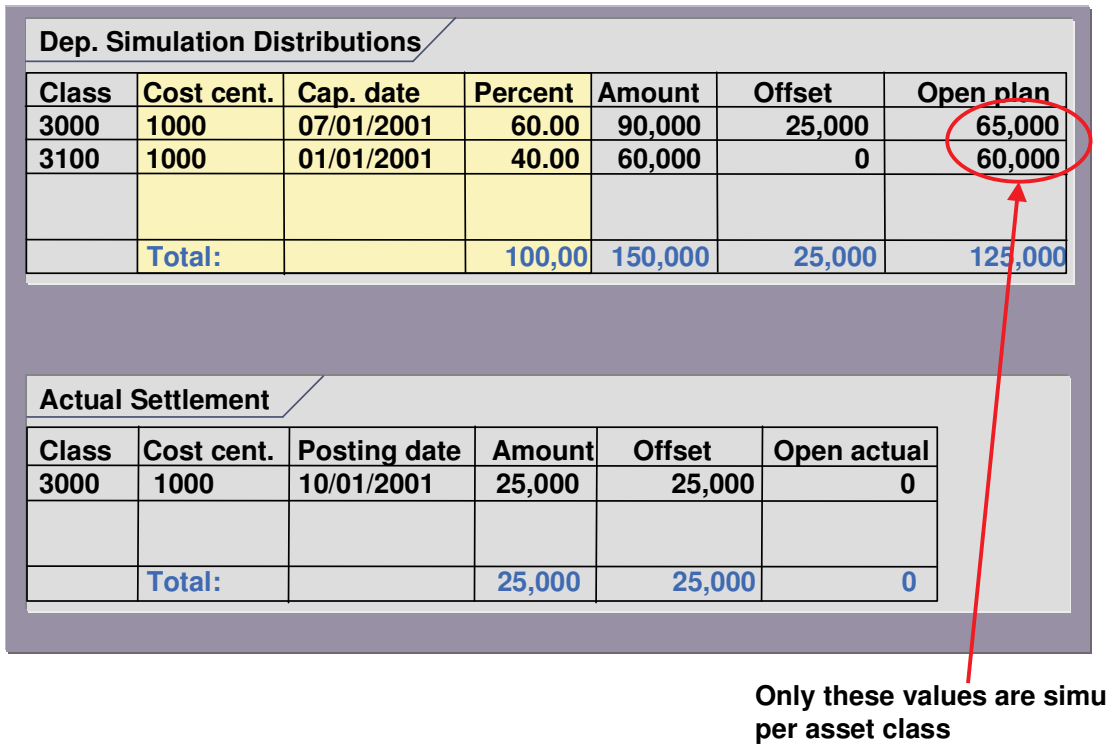


- You can maintain parameters for depreciation simulation on investment program positions / appropriation requests and investment measures. Starting in Release 4.6, it is also possible to distribute using equivalence numbers and amounts, as well as the combinations, amounts and percents or amounts and equivalence numbers. (You make this setting in the investment profile.)
- When you enter the depreciation terms for the simulation, you can distribute the values by percentages. You can then use different depreciation methods or different capitalization dates for each of these percentages.



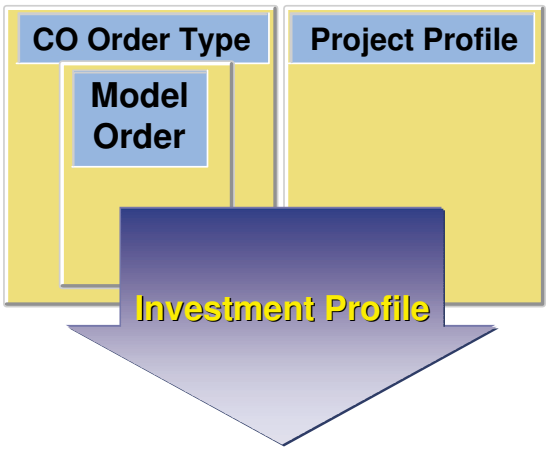
- You can maintain depreciation simulation data in program positions, appropriation requests, WBS elements and orders.
- When you maintain depreciation simulation data on several levels, the system calculates using only the amount that is still open on each level (meaning the amount that is not yet assigned or distributed).
- The depreciation calculated can be transferred automatically to cost center accounting.
- Use the *Use asset valuues as of FY start* indicator to exclude asset acquisitions in the current year from the simulation. The system then simulates acquisitions using the plan values of the orders or projects, rather than using assets. This method prevents acquisitions from being included twice.

Offsetting Actual Values with Depreciation Data



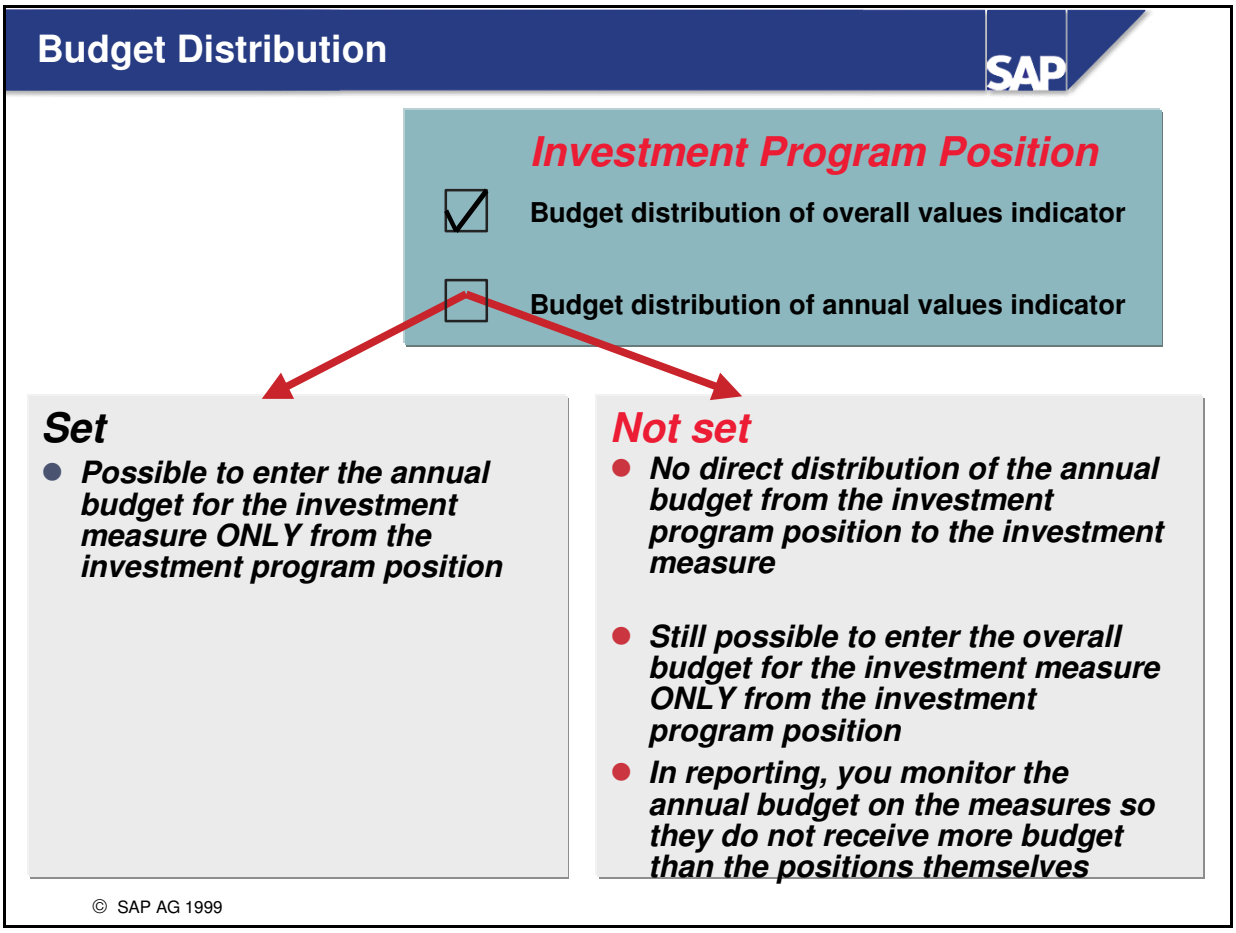
- Starting in Release 4.6, you can offset actual values (that were already settled) against planned depreciation data. As a result, the depreciation simulation is more accurate.

Depreciation Simulation: Function of the Investment Profile

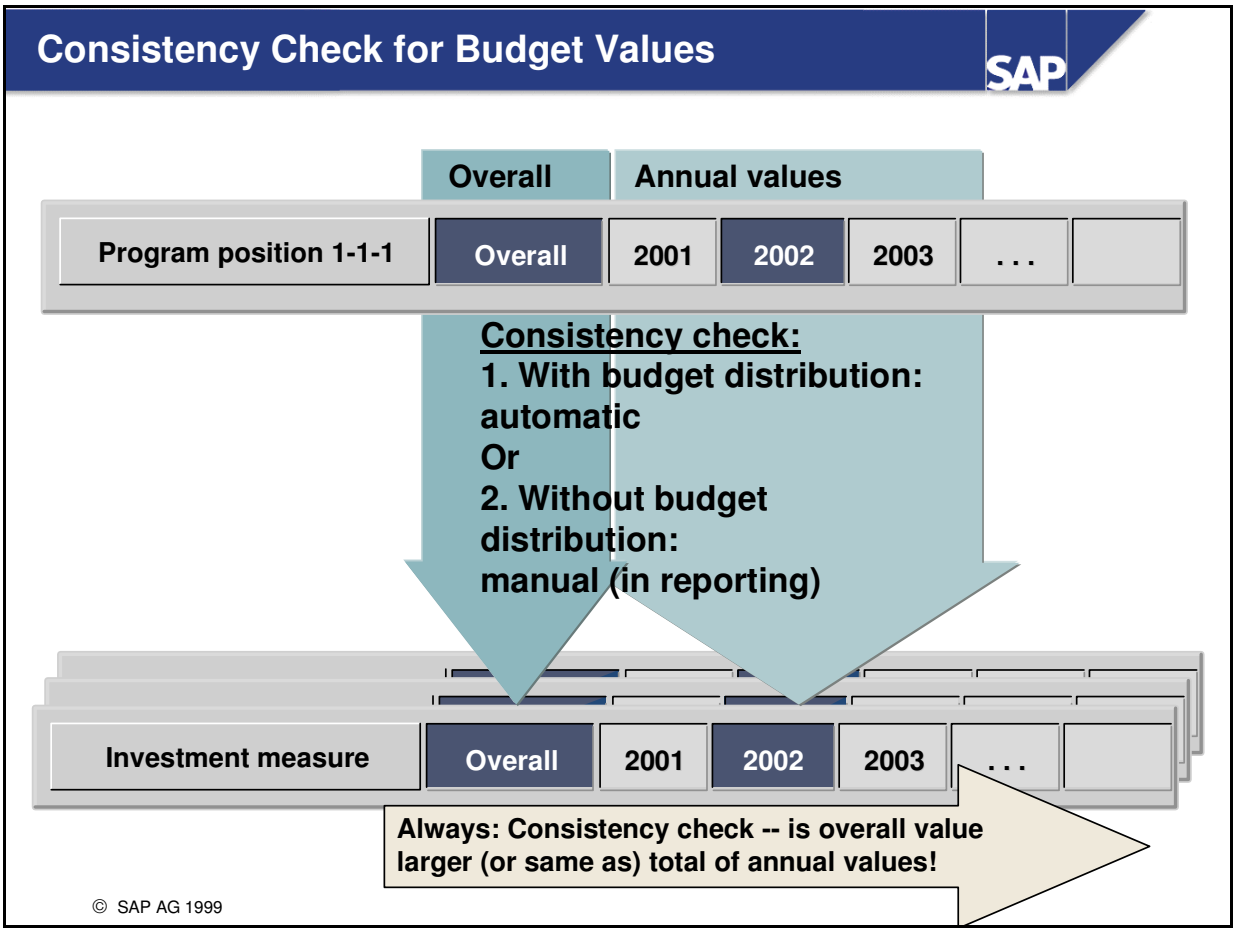


- Which asset class provides the default depreciation terms?
- Can the default be changed?
- Is valuation uniform in the class?
- Comparison with settlement of actuals
  - Type of distribution rules

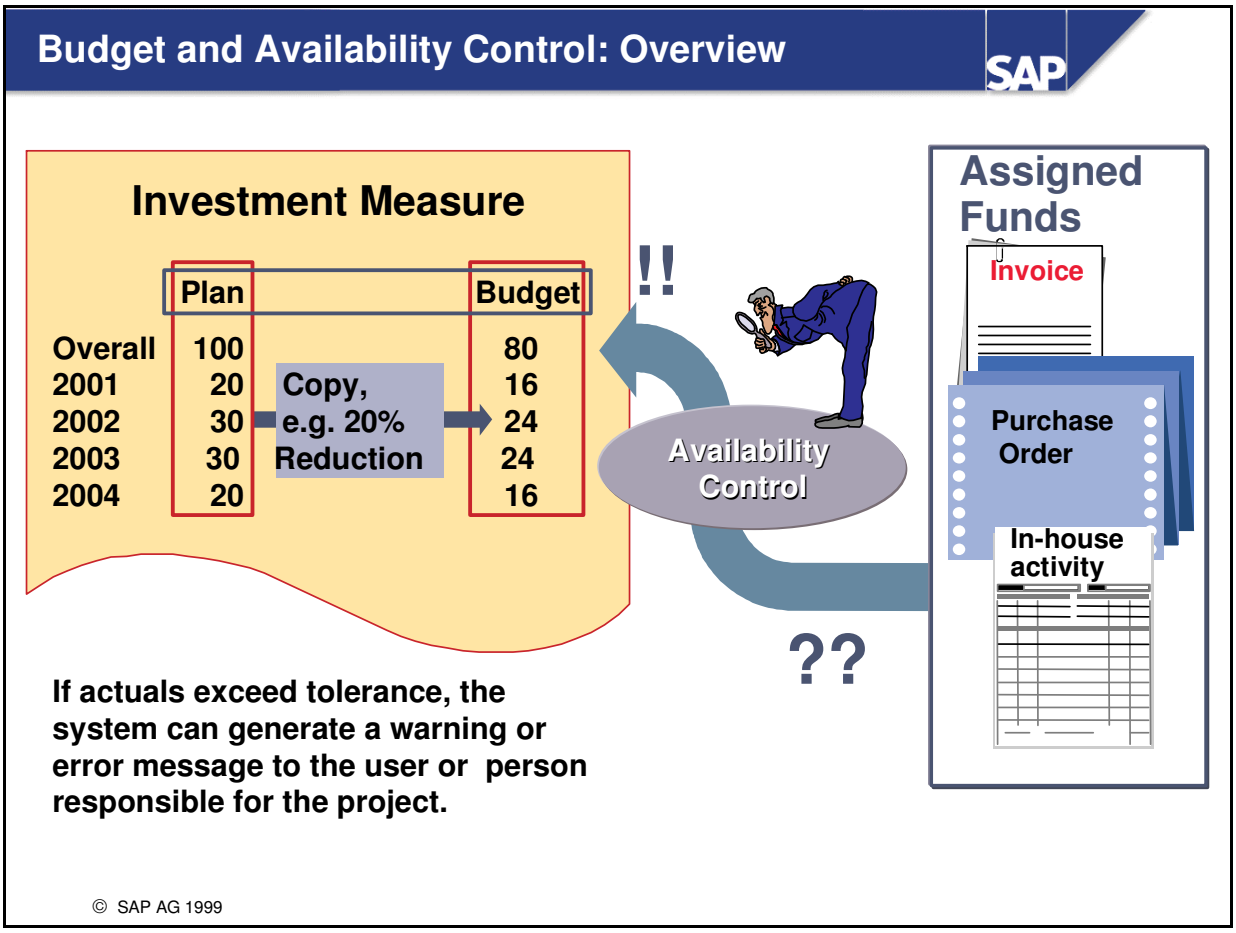
- The investment profile controls various default values for the depreciation simulation. Even if it were possible to enter the asset class manually during master data maintenance, the order or the WBS element still has to have an investment profile if you want to carry out depreciation simulation.
- The investment profile is stored in the control data of the investment measures.



- If you always need the indicator for budget distribution of overall values in your investment program positions, you can set it in the program type, so that it is supplied as a default to the program positions.
- If you need the indicator for budget distribution of annual values, you can enter it in the program definition.
- It is only possible to set the indicator for budget distribution of annual values if budget distribution for overall values is already set.

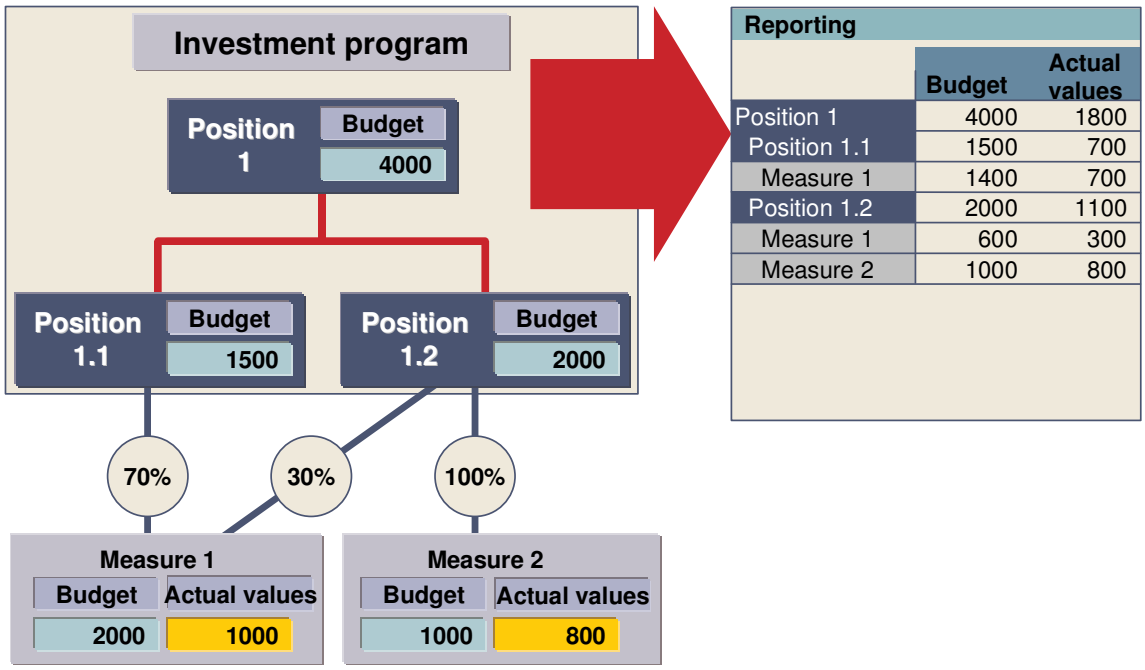


- There is an additional check between the program positions and the measures assigned to them. The system checks that the sum of the budget that is distributed to the investment measures is not higher than the budget of the program position (in the graphic this is shown as the "consistency check"). For overall values, you can apply this consistency check directly during budgeting. Simply set the budget distribution indicator in the program positions. Otherwise, this check can only be performed when you specify distribution of the annual budget.

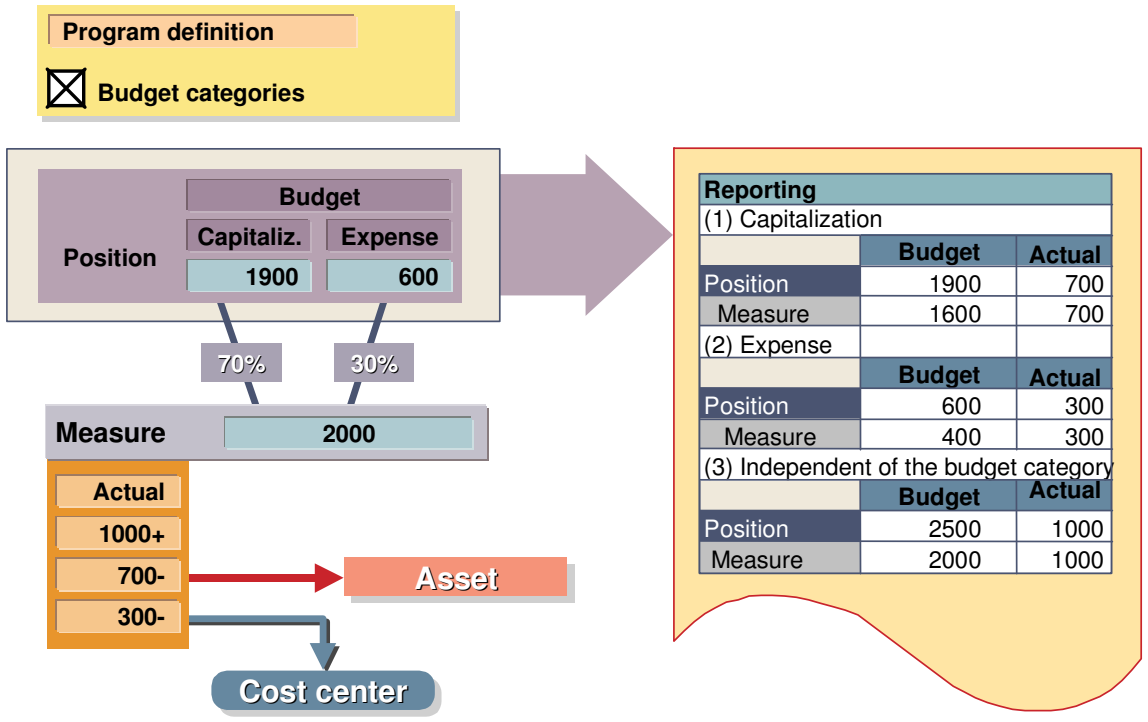


- SAP offers an active availability control. When you set up the system accordingly, checks are carried out each time funds are assigned (for a purchase requisition, material reservation, purchase order, goods receipt, invoice receipt, internal activity allocation). The system checks whether there is still enough in the budget to meet the expenditure.
- Availability control can be set to issue a warning or error message once a defined threshold has been reached. This allows you to prevent a posting that would cause the budget to be exceeded, before the posting is actually made.

Assignment of Investment Measures to Several Program Positions



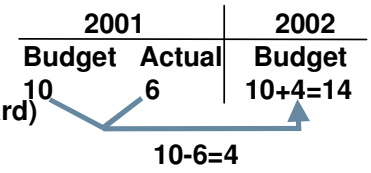
Budget Category Use



- Using budget categories, you can set up different budget pools for an investment program, for example, separate pools for portions that require/do not require capitalization.
- In this case, you can maintain the overall and annual values for the plan and the budget separately for every budget category in the investment program.
- However, you still only have one plan or budget value on the investment measures. The distribution of budget values in the measures is based on percentages in the program position.
- If you are using the standard, the distribution of budget categories "capitalization" or "expense" depends on which receiver the measure has been settled to. You can therefore only see this distribution in reporting after the periodic settlement.
- If you want to use budget categories for other purposes, you can develop a prepared customer enhancement (AAIP0001) accordingly.

Budget: Terminology

Budget Carryforward: for Measures
(previously called:
commitment carried forward)
for Investment Programs
(starting in Release 4.6C)



Supplement / Returns: Budget updates for measures / programs

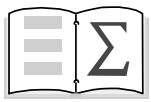
current budget = original budget + supplements - returns

Carryforward: for Programs — Accumulated annual values from previous approval years; managed separately from current budget

During year-end closing:
original budget(new) = original budget(old) + carryforward

Forecast: for Programs — Estimated annual values for future fiscal years

Planning and Budgeting: Unit Summary



You are now able to:

- **Roll up plan values in the investment program**
- **Describe the various planning scenarios**
- **Budget the investment program**
- **Distribute the budget from the investment program to the measures**

Exercises

Unit: Planning & Budgeting

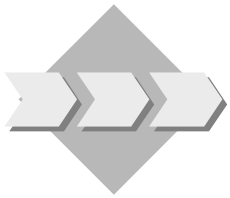
Topic: Planning & Budgeting

At the conclusion of this exercise, you will be able to plan and budget the following objects:

ppropriation requests

nvestment programs

rders and projects (budget distribution for investment measures)



In this exercise, you plan values on the appropriation requests that you created, and then propose an appropriation request for approval. After the approval, an order and a project are generated from the appropriation request, since the planned investment has now become a measure to be implemented. All of the plan values of measures are then rolled up on the investment program. These values are copied into the budget. The budget values of the investment program can then be distributed to the measures.

1-1 In this exercise you plan overall and annual values on your appropriation requests. You plan values per variant. The variants, in turn, are linked to the plan versions that were specified in the appropriation request. First you use Easy Cost Planning to plan on your appropriation request (packaging assembly line) created in exercise 1-2 in the master data unit. Then you do the same for the appropriation request created in exercise 1-3 (production facility expansion). It is not necessary to plan on the maintenance order created in 1-4 (in the master data unit) because the work and components that were created with the order carry the costs, and all planning has been done automatically by the system!

1-1-1 Plan the overall and annual values for the appropriation request (packaging assembly line) you created in exercise 1-2 the master data unit . Call your appropriation request in change mode.

In this appropriation request, there is only one variant. This variant represents the cost of remodeling. There are no other cost options. Also enter planned revenue, so that preinvestment analysis figures can be calculated.

Choose the *Variants* tab page for the appropriation request, and then choose *Plan Values*. You can now either enter the overall plan values directly, or you can use Easy Cost Planning (calculator icon). Choose *Create cost estimate*. Choose *Choose planning form* and search for the *AC020MODEL* costing model.

The number of machines should be four. Choose *Confirm*.

At the upper left of the costing structure, you see the costs that were calculated based on your entries.

Click on *PCs* (for running the assembly line) in the costing structure and choose two PCs with any hardware configuration. Choose *Confirm*. Choose *Show/Hide Item View* for a more detailed view of the line items.
Return to the appropriation request.

Now plan the revenue for the packaging assembly line:

Plan Values for Variant 1

Field Name	Revenue
Overall	
Current year	50,000
Current year + 1	50,000

On the *Preinvestment analysis* tab, calculate the preinvestment analysis figures. Save your appropriation request.

1-2 Plan the overall and annual values on the appropriation request you created in exercise 1-3 in the master data unit. In this appropriation request, there are three variants. Each variant represents the costs of the different options that are available.

Change Appropriation Requests: Initial Screen

Field Name	Input Data
Appropriation request	From Exercise 1-3 (Master Data Unit)

Choose *Variants.* Enter the following values on the *Plan Values* tab page.

Plan Values for Variant 1

Field Name	Investment Costs
Overall	5,000,000
Current year	3,500,000
Current year + 1	1,000,000
Current year + 2	500,000

If you want to calculate preinvestment analysis figures again, you have to maintain the planned revenue.

Now enter the following data for variant 2, by choosing it in the variant overview.

Plan Values for Variant 2

Field Name	Investment Costs
Overall	3,000,000
Current year	2,000,000
Current year + 1	1,000,000

Repeat, entering the following data for variant 3:

Plan Values for Variant 3

Field Name	Investment Costs
Overall	1,500,000
Current year	1,500,000

Save your appropriation request.

1-3 Now it is time to submit your appropriation requests for approval. Call each of your appropriation requests in change mode. Activate *For approval* system status on the *Control data* tab page. Save.
If your appropriation request has more than one variant, the system asks which variant you want to submit for approval (this will be the case for your appropriation request for the production expansion project). Accept variant 1 and reject variants 2 and 3 for your plant expansion appropriation request. After you have activated *For approval* system status, you should receive a message that the appropriation request was proposed for approval. Save your appropriation request. (This triggers the workflow.)

1-4 In this exercise you approve the appropriation requests that were submitted for approval. The appropriation request is sent to your inbox in the office module of the R/3 System.

Menu Path:

Office → Workplace

Choose *Inbox*.

You should have 2 appropriation requests in your inbox. Execute the first work item. The system creates a second session and displays the master data of the appropriation request. Return to the workflow document and approve the appropriation request. Repeat these steps for the second request. When your appropriation requests are approved, you can continue with the exercises.

1-5 In the next exercises, you release the approved appropriation requests and create investment measures (orders and projects) from them. First you create an internal order.

1-5-1 Release your appropriation request. Choose your appropriation request (exercise 1-2, Master Data Unit) and then choose the *Control Data* tab page. Release your appropriation request by activating *Released* status.

1-5-2 Now create your internal order. Choose the *Measures/assets* tab page. Choose *Create order*. The system proposes order type IM01. Choose *Enter*. The system issues the following message:
"Order is created when you save."
Now, save your appropriation request. When you do, the system displays the number of the internal order you created.

Number of the investment order:

1-6 Create the project definition and top level WBS element for your project in the appropriation request you created in exercise 1-3 (Master Data Unit) and then release your appropriation request.

Choose the appropriation request you created in exercise 1-3 (Master Data Unit). Then choose *Measures/assets*.
Choose *WBS element*.

Enter the following data in the dialog box:

Create WBS Element

Field Name	**Input**
Project definition	p-00XX
WBS element	p-00XX

Choose *Enter*.

The system issues a message saying that "WBS element P-00XX is created when you save."

Choose the *Control data* tab page, and release your appropriation request by activating the status *Released*.

Save your appropriation request.

1-7 In this exercise, you roll up the plan values from your appropriation requests and investment measures in your investment program.

Rollup of Plan Values from Measures/Appropriation Requests

Field Name	Input
Investment program	400XX
Position ID	Leave blank
Approval year	Current year
Version	0
Status selection profile (measures)	Leave blank

Choose *Execute*. The system issues the message that "Rollup of plan values for 400XX/current year was carried out."

1-8 Planning on PM orders does not include overall plan values, only annual values. Therefore, you need to first adjust your overall plan values on your program to include the planned costs of your PM order.

Also increase the value on program position 400XX-1-1 (final assembly).

Change Program Planning: Initial Screen

Field Name	Input
Investment Program	400XX
Position ID	Leave blank
Approval year	Current year
Version	0

Choose *Enter*.

Level	Program Position	Overall Values
1	Total investments	Do not change
2	Investments Germany	Do not change
3	Final assembly	(Increase the proposed value by 50,000)
3	Production	Do not change
3	Maintenance	19,000

Roll up the changed overall values. (Choose ***Edit*** → ***Total up***.) Save your plan values.

1-9 Perform budgeting on your investment program by copying your plan values into your budget.

Change Original Program Budget: Initial Screen

Field Name	Input
Investment Program	400XX
Position ID	Leave blank
Approval year	Current year

Choose *Enter*. Select the *Plan Total Version 0* column. Then select all program positions that have plan values. Choose ***Edit → Select → Select all***. Then choose ***Edit → Copy view***. The system requests additional information. For the percentage rate, enter 100%, and choose *Overwrite*. Choose the current year from the dropdown box and copy the annual values to your annual budget, in the same way as the overall values. Copy the plan values for all years for which you entered plan values on the appropriation request.

Change the value of program position 400XX-1-3 (plant maintenance) to 16,000 for the current year.
On program position 400XX-1-1 (final assembly) increase the value in the current year by 50,000.
Then roll up both the overall values and the annual values. Choose *Edit → Total up.*

When you have finished, save your budget.

1-10 Distribute the overall and annual budgets to your investment measures.

Budget Distribution

Field Name	Input
Investment Program	400XX
Position ID	Leave blank
Approval year	Current year

Choose *Execute*.
Distribute the following budgets to your investment measures:

Measure	Budget Amount
Order	Original budget of program position minus 30,000
P-00XX	5,000,000
Maintenance order	18,000

Choose the following years from the dropdown box and distribute the following amounts to your investment measures:

Measure	Current Year	Current Year +1	Current Year +2
Internal Order	Original budget of program position minus 30,000		
P-00XX	3,500,000	1,000,000	500,000
Maintenance order	16,000		

Save your budgets.

1-11 Now that the budgets have been distributed, you can start working on the measures. In order to charge actual costs to your order and project, these objects need to be released. The internal order was automatically released by the system when you released your appropriation request.(This setting is made in Customizing.) The project, however, was not. However, you still need to release your project.

Menu Path:

Accounting → Investment Management → Investment Projects → Master Data → Project Builder

Confirm all messages that appear. Choose *Open*.

Field Name	Input
Project definition	p-00XX The project that arose from your appropriation request in Exercise 1-6

To release your project, click on your WBS element and choose:

Menu Path:

Edit → Status → Release

After you release the project, the system creates an asset under construction for the WBS element, as you can see by the status.
Save your project.

Unit: Planning & Budgeting

Topic: Planning & Budgeting

1-1 In this exercise you plan overall and annual values on your appropriation requests. You plan values per variant. The variants, in turn, are linked to the plan versions that were specified in the appropriation request. First you use Easy Cost Planning to plan on your appropriation request (packaging assembly line) created in exercise 1-2 in the master data unit. Then you do the same for the appropriation request created in exercise 1-3 (production facility expansion). It is not necessary to plan on the maintenance order created in 1-4 (in the master data unit) because the work and components that were created with the order carry the costs, and all planning has been done automatically by the system!

1-1-1 Plan the overall and annual values for the appropriation request (packaging assembly line) you created in exercise 1-2 the master data unit . In this appropriation request, there is only one variant. This variant represents the cost of construction. There are no other cost options. Also enter planned revenue, so that preinvestment analysis figures can be calculated.

Menu Path:

Accounting → Investment Management → Appropriation Requests → Edit Appropriation Requests → Individual Processing

Select your appropriation request number in the worklist. If it is not there, search using *New selection*. Then choose *Change*.

Choose *Variants* and then the *Plan values* tab. You can now either enter the overall plan values directly, or you can use Easy Cost Planning (calculator icon). Choose *Create cost estimate*. Choose *Choose planning form* and search for the *AC020MODEL* costing model.

The number of machines should be four. Choose *Confirm*.

At the upper left of the costing structure, you see the costs that were calculated based on your entries.

Click on *PCs* (for running the assembly line) in the costing structure and choose two PCs with any hardware configuration. Choose *Confirm*. Choose *Show/Hide Item View* for a more detailed view of the line items.
Return to the appropriation request.

Now plan the revenue for the packaging assembly line:

Plan Values for Variant 1

Field Name	Revenue
Overall	
Current year	50,000
Current year + 1	50,000

On the *Preinvestment analysis* tab, calculate the preinvestment analysis figures. Save your appropriation request.

1-2 Plan the overall and annual values on the appropriation request you created in exercise 1-3 in the master data unit. In this appropriation request, there are three variants. Each variant represents the costs of the different options that are available.

Menu Path:

Accounting → Investment Management → Appropriation Requests → Edit Appropriation Requests → Individual Processing

Select your appropriation request number in the worklist. If it is not there, search using *New selection*. Then choose *Change*.

Choose *Variants.* Enter the following values on the *Plan Values* tab page.

Plan Values for Variant 1

Field Name	Investment Costs
Overall	5,000,000
Current year	3,500,000
Current year + 1	1,000,000
Current year + 2	500,000

If you want to calculate preinvestment analysis figures again, you have to maintain the planned revenue.

Now enter the following data for variant 2, by choosing it in the variant overview.

Plan Values for Variant 2

Field Name	Investment Costs
Overall	3,000,000
Current year	2,000,000
Current year + 1	1,000,000

Repeat, entering the following data for variant 3:

Plan Values for Variant 3

Field Name	Investment Costs
Overall	1,500,000
Current year	1,500,000

Save your appropriation request.

1-3 Now it is time to submit your appropriation requests for approval. Call each of your appropriation requests in change mode. Activate *For approval* system status on the *Control data* tab page. Save.
If your appropriation request has more than one variant, the system asks which variant you want to submit for approval (this will be the case for your appropriation request for the production expansion project). Accept variant 1 and reject variants 2 and 3 for your plant expansion appropriation request. After you have activated *For approval* system status, you should receive a message that the appropriation request was proposed for approval. Save your appropriation requests.

1-4 In this exercise you approve the appropriation requests that were submitted for approval. The appropriation request is sent to your inbox in the office module of the R/3 System.

Menu Path:

Office → Workplace

Choose Inbox.

You should have 2 appropriation requests in your inbox. Execute the first work item. The system creates a second session and displays the master data of the appropriation request. Return to the workflow document and approve the appropriation request. Repeat these steps for the second request. When your appropriation requests are approved, you can continue with the exercises.

1-5 In the next exercises, you release the approved appropriation requests and create investment measures (orders and projects) from them. First create an internal order.

1-5-1 Release your appropriation request. To do so, choose

Menu Path:

Accounting → Investment Management → Appropriation Requests → Edit Appropriation Requests → Individual Processing

Select your appropriation request (exercise 1-2, Master Data Unit) in the worklist and choose *Change*. Choose the *Control data* tab page, and release your appropriation request by activating the status *Released*.

1-5-3 Now create your internal order. Choose the *Measures/assets* tab page. Choose *Create order*. The system proposes order type IM01. Choose *Enter*. The system issues the following message:
"Order is created when you save."
Now, save your appropriation request. When you do, the system displays the number of the internal order you created.

Number of the investment order:

1-6 Create the project definition and top level WBS element for your project in the appropriation request you created in exercise 1-3 (Master Data Unit) and then release your appropriation request.

Menu Path:

Accounting → Investment Management → Appropriation Requests → Edit Appropriation Requests → Individual Processing

Select your appropriation request (exercise 1-3, Master Data Unit) in the worklist and choose *Change*. Then choose *Measures/assets*.
Choose *WBS element*.

Enter the following data in the dialog box:

Create WBS Element

Field Name	**Input**
Project definition	p-00XX
WBS element	p-00XX

Choose *Enter*.

The system issues a message saying that "WBS element P-00XX is created when you save."

Choose the *Control data* tab page, and release your appropriation request by activating the status *Released*.

Save your appropriation request.

1-7 In this exercise, you roll up the plan values from your appropriation requests and investment measures in your investment program.

Menu Path:

Accounting → Investment Management → Programs → Program Planning → Default Plan Values

Rollup of Plan Values from Measures/Appropriation Requests

Field Name	Input
Investment program	400XX
Position ID	Leave blank
Approval year	Current year
Version	0
Status selection profile (measures)	Leave blank

Choose *Execute*. The system issues the message that "Rollup of plan values for 400XX/current year was carried out."

1-8 Planning on PM orders does not include overall plan values, only annual values. Therefore, you need to first adjust your overall plan values on your program to include the planned costs of your PM order.

Also increase the value on program position 400XX-1-1 (final assembly).

Menu Path:

Accounting → Investment Management → Programs → Program Planning → Edit

Change Program Planning: Initial Screen

Field Name	Input
Investment Program	400XX
Position ID	Leave blank
Approval year	Current year
Version	0

Choose *Enter*. Change the existing overall values as follows:

Level	Program Position	Overall Values
1	Total investments	Do not change
2	Investments Germany	Do not change
3	Final assembly	(Increase the proposed value by 50,000)
3	Production	Do not change
3	Maintenance	19,000

Roll up the changed overall values. (Choose ***Edit → Total up***.) Save your plan values.

1-9 Perform budgeting on your investment program by copying your plan values into your budget.

Menu Path:

Accounting → Investment Management → Programs → Budgeting → Edit Original

Change Original Program Budget: Initial Screen

Field Name	Input
Investment Program	400XX
Position ID	Leave blank
Approval year	Current year

Choose *Enter*. Select the *Plan Total Version 0* column. Then select all program positions that have plan values. Choose ***Edit → Select → Select all***. Then choose ***Edit → Copy view***. The system requests additional information. For the percentage rate, enter 100%, and choose *Overwrite*. Choose the current year from the dropdown box and copy the annual values to your annual budget, in the same way as the overall values. Copy the plan values for all years for which you entered plan values on the appropriation requests.

Change the value of program position 400XX-1-3 (plant maintenance) to 16,000 for the current year.
On program position 400XX-1-1 (final assembly) increase the value in the current year by 50,000.
Then roll up both the overall values and the annual values. Choose *Edit → Total up.*

When you have finished, save your budget.

1-10 Distribute the overall and annual budgets to your investment measures.

Menu Path:

Accounting → Investment Management → Programs → Budgeting → Budget Distribution → Edit

Budget Distribution

Field Name	Input
Investment Program	400XX
Position ID	Leave blank
Approval year	Current year

Choose *Execute*.
Distribute the following budgets to your investment measures:

Measure	Budget Amount
Order	Original budget of program position minus 30,000
P-00XX	5,000,000
Maintenance order	18,000

Choose the following years from the dropdown box and distribute the following amounts to your investment measures:

Measure	Current Year	Current Year +1	Current Year +2
Internal Order	Original budget of program position minus 30,000		
P-00XX	3,500,000	1,000,000	500,000
Maintenance order	16,000		

Save your budgets.

1-11 Now that the budgets have been distributed, you can start working on the measures. In order to charge actual costs to your order and project, these objects need to be released. The internal order was automatically released by the system when you released your appropriation request.(This setting is made in Customizing.) The project, however, was not. However, you still need to release your project.

Menu Path:

Accounting → Investment Management → Investment Projects → Master Data → Project Builder

Confirm all messages that appear. Choose Open.

Field Name	Input
Project definition	p-00XX The project that arose from your appropriation request in Exercise 1-6

To release your project, click on your WBS element and choose:

Menu Path:

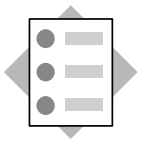
Edit → Status → Release
After you release the project, the system creates an asset under construction for the WBS element, as you can see by the status.
Save your project.

Implementation

Contents:

- Account assignment to the investment measure:
  - Purchase requisitions, purchase orders
  - Invoices
  - Internal activity allocation
- Availability control
- Direct capitalization

Implementation: Unit Objectives

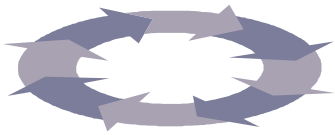


At the conclusion of this unit, you will be able to:

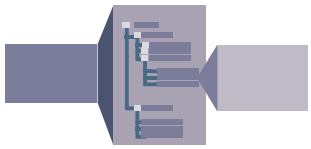
- **Post all assigned funds to investment measures**
- **Capitalize smaller procurements directly and update their values statistically on measures (direct capitalization)**
- **Use Easy Execution Services**

Course Overview Diagram - Implementation

Course Overview



Investment Management Cycle



Master Data

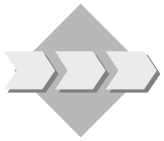
Planning and Budgeting

Implementation

Fiscal Year Change

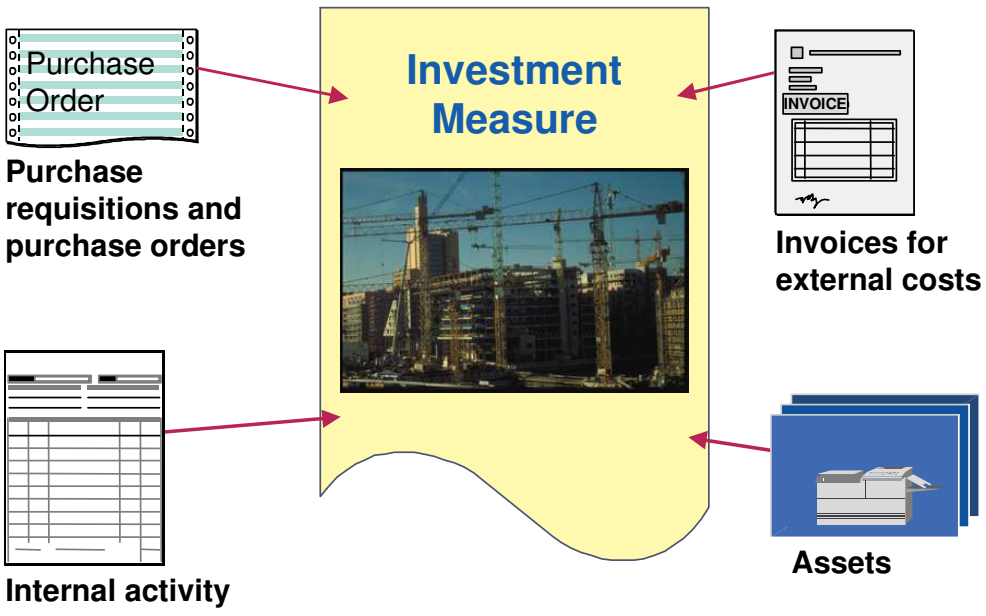
Settlement

Implementation: Enterprise Scenario

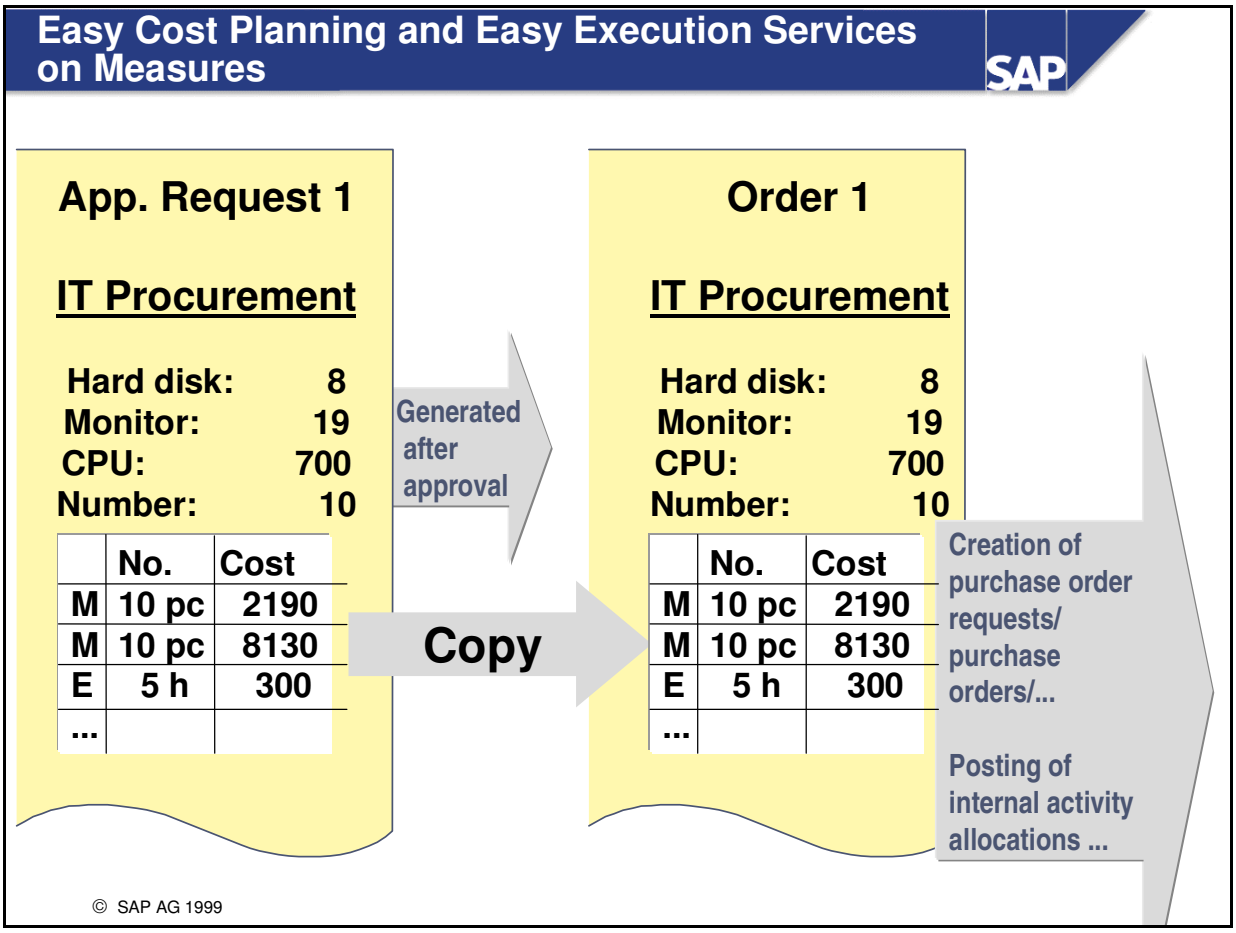


- **After creating the measures, you now post values to them during the under-construction phase.**

Assigned Funds on Investment Measures

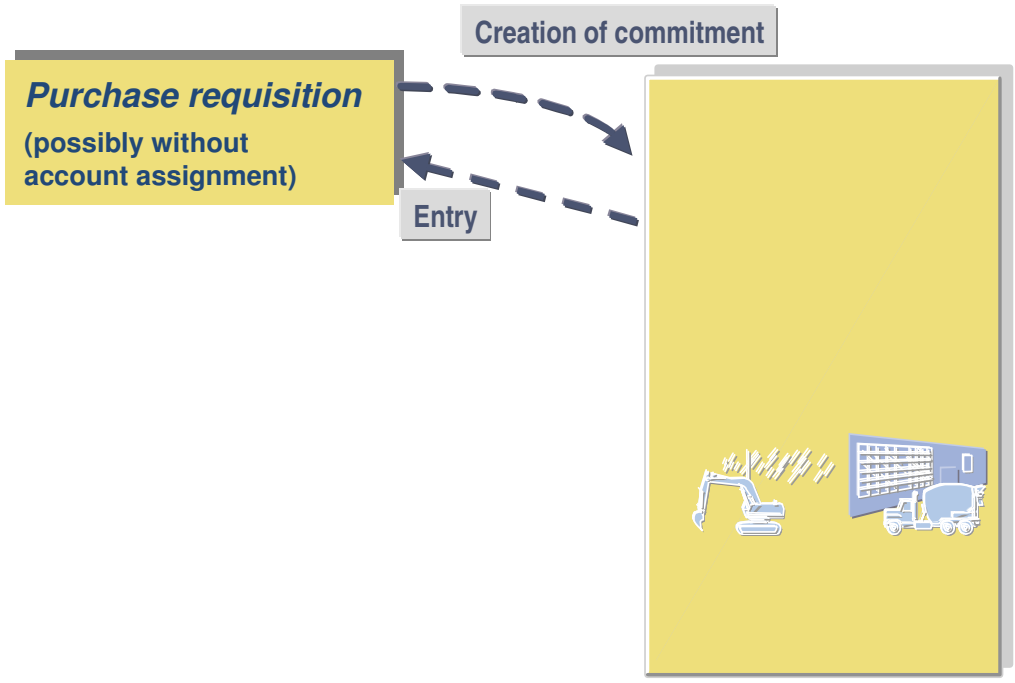


- Assigned funds are all costs or expenditures that accumulate on an investment measure. This includes internal activity, withdrawals of material, acquisition of goods from external sources, and procurement of assets.
- You always post assigned funds for your investment measure with reference to the investment measure. You also have the option of posting down payments with account assignment to the purchase order. The down payment is then automatically updated to the investment measure.
- Down payments can then be cleared against invoices.



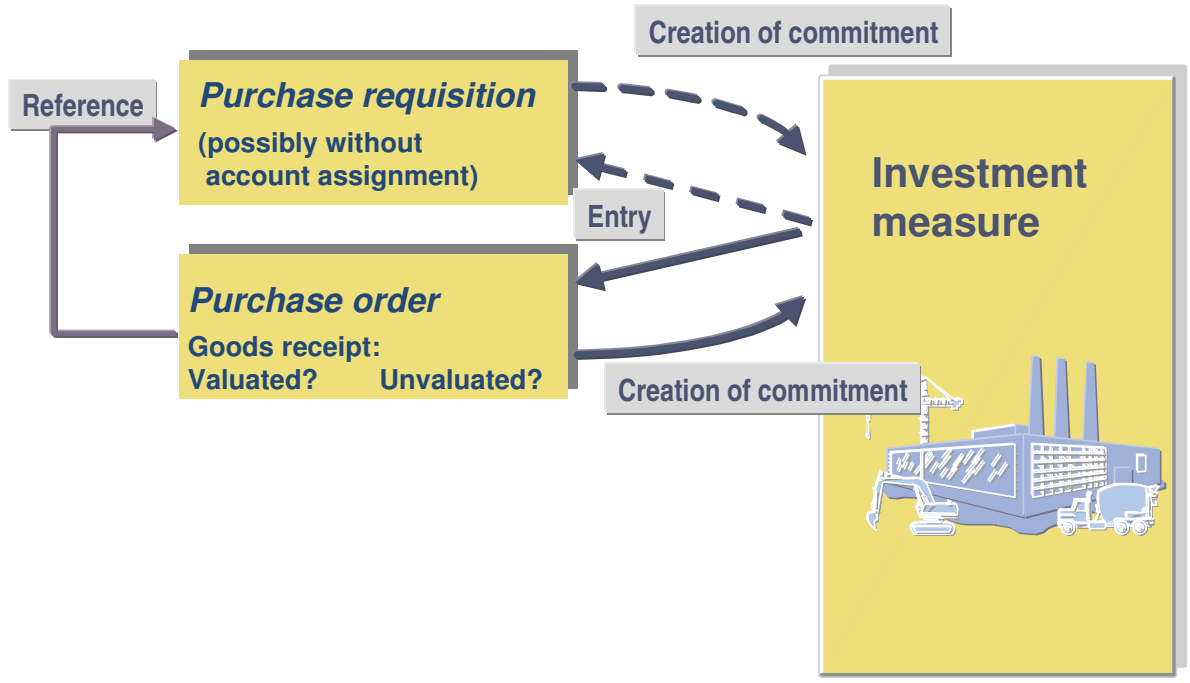
- When you create an investment measure from the appropriation request, the system copies the costing that you created on the appropriation request to the measure. Using *Easy Execution Services,* you can post purchase orders, purchase order requests, goods issues, internal activity allocation, and so on, for the planned material or internal activity directly, without jumping to the corresponding transaction.

Materials Purchase Order for Investment Measure (1)

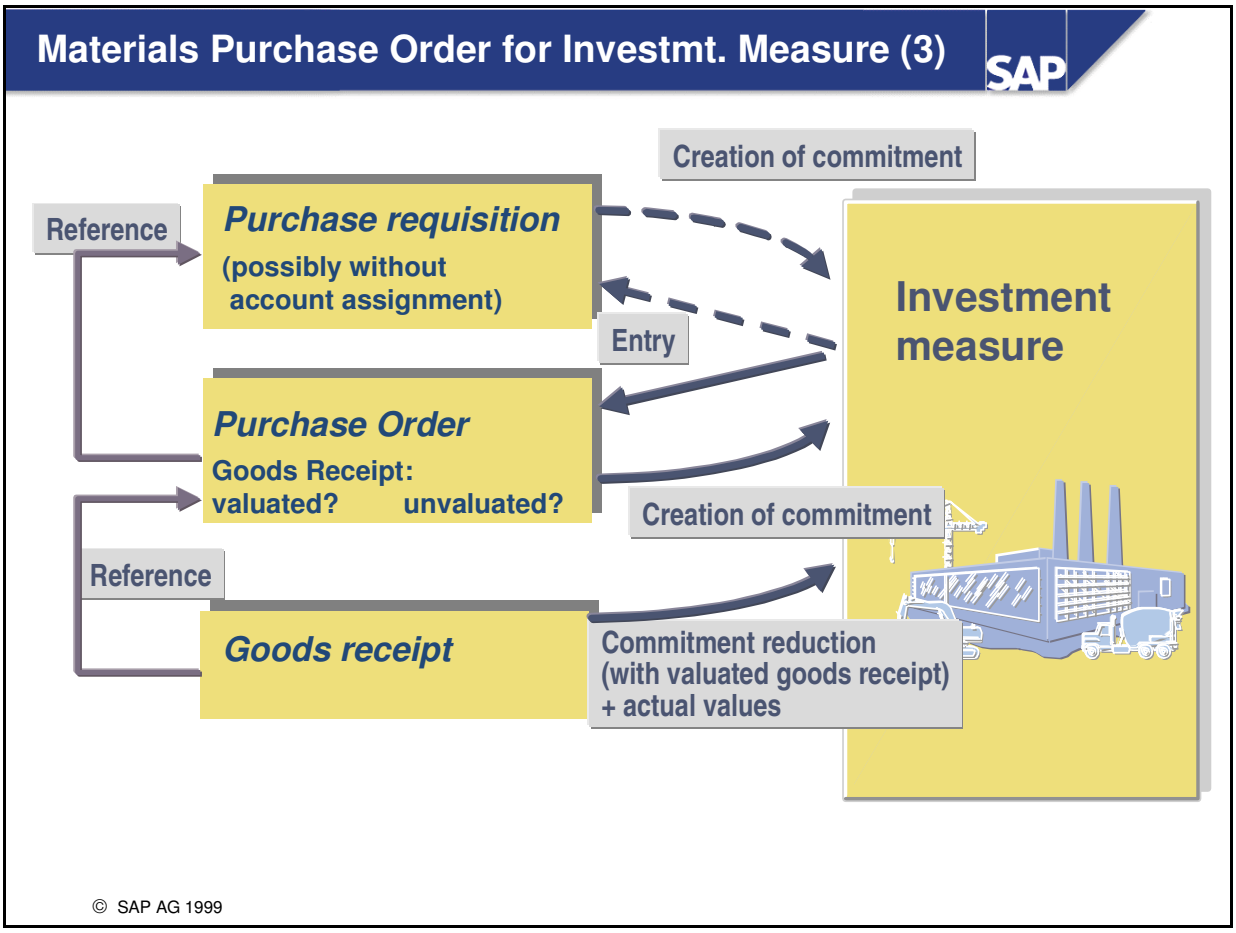


- You can enter the investment measure in the purchase requisition. Use account assignment type "P" to post purchase requisitions for investment projects. Use account assignment type "F" to post them for investment orders.
- If the investment measure is not known when you enter the purchase requisition, or it is not yet in the system, you can enter account assignment "U" for "unknown."
- As long as you enter the investment measure in the purchase requisition, the system will create a planned commitment on the investment measure for the amount of the order. The system manages commitments from purchase requisitions separately from commitments from purchase orders.

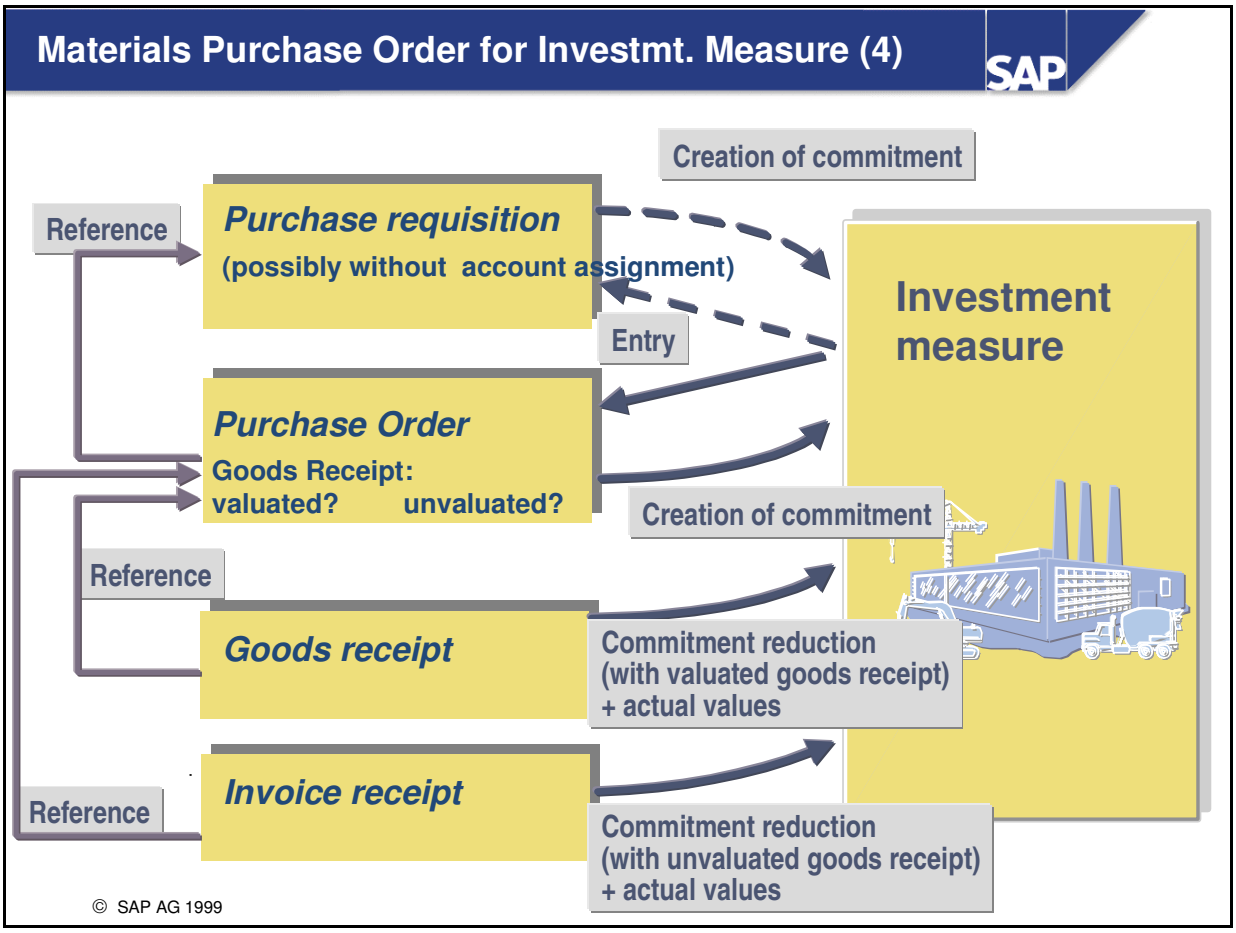
Materials Purchase Order for Investment Measure (2)



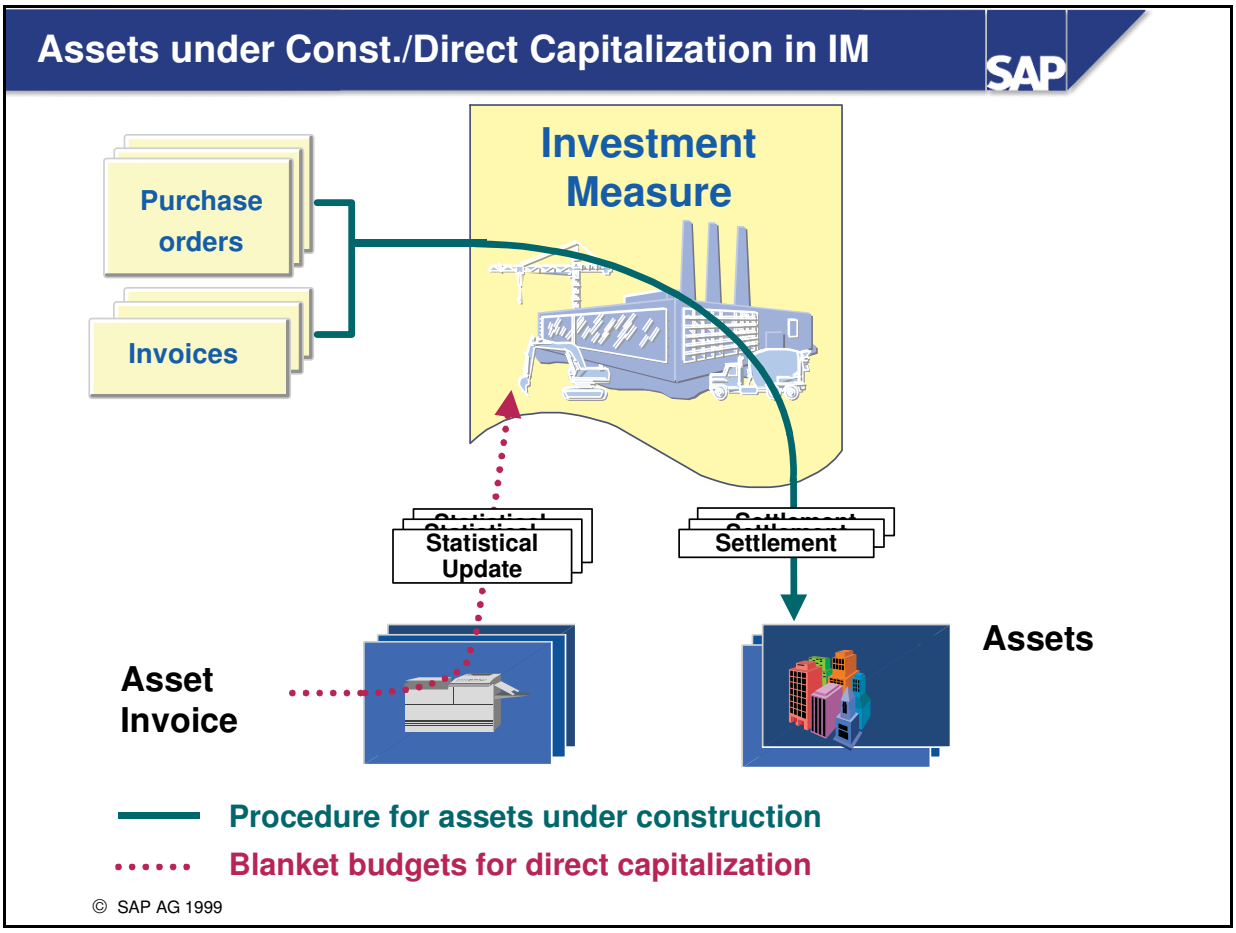
- You can use the purchase requisition as a reference when you create the purchase order.
- If you entered the purchase requisition unvaluated (that is, not posted directly to assets) then you must now enter the account assignment to the investment order or project. In addition, you specify in the purchase order whether the goods receipt should be valuated or unvaluated. The result of this choice is reflected later when the commitments are reduced.
- If you enter an investment measure in the purchase order, the system creates a commitment on the investment measure for the amount of the order. If you already entered account assignment to the purchase order in the purchase requisition, the system converts the purchase requisition commitment into a purchase order commitment.



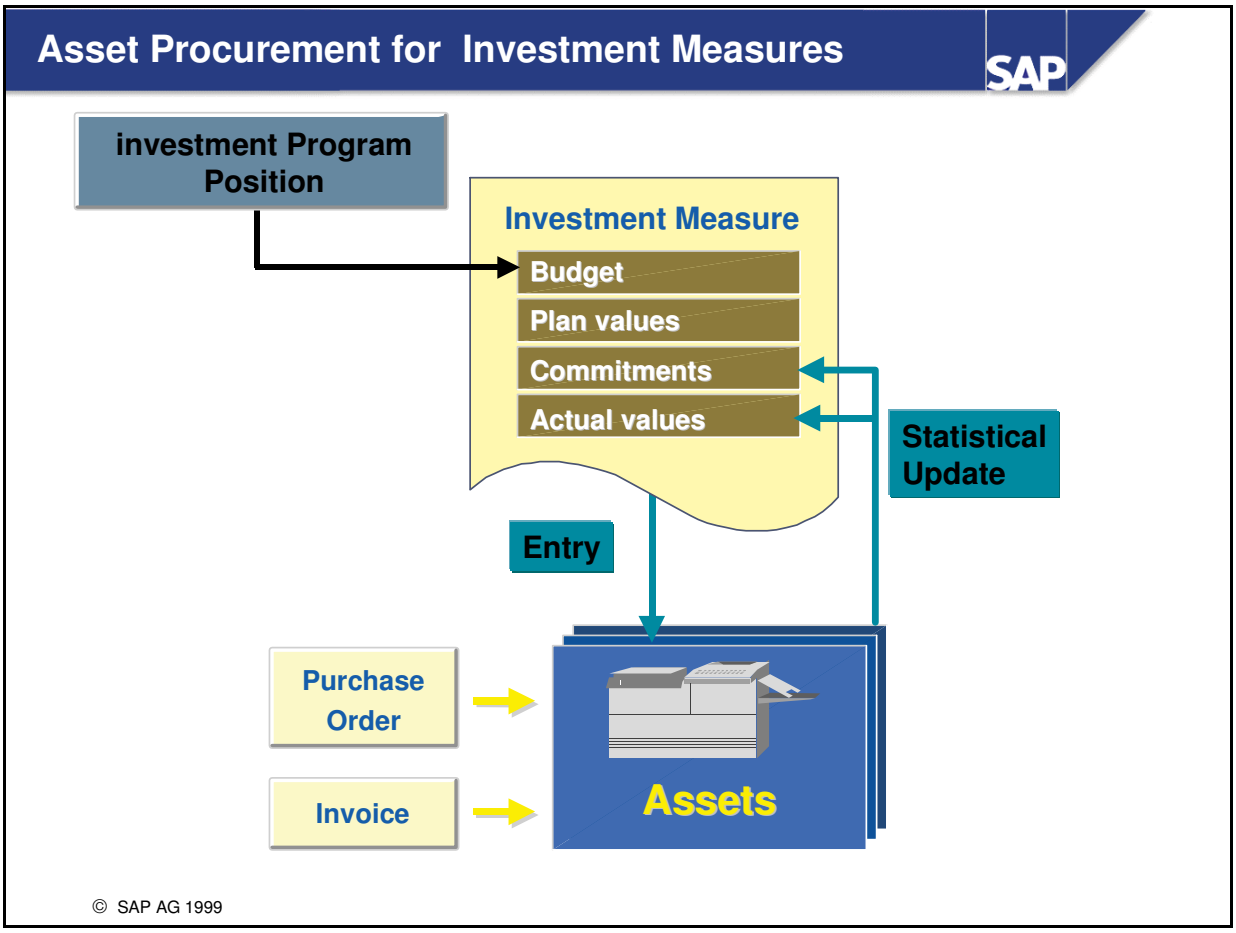
- If you did not set the *unvaluated goods receipt* indicator in the purchase order, the commitment is reduced by the goods receipt.
- When partial delivery takes place, the commitment is reduced by an amount proportional to the amount delivered. The system also offers the option of reducing the commitment based on the value.
- You may receive a partial delivery and the missing goods will not be delivered later. In this case, you can set the *final delivery* indicator in the purchase order. The commitment is then reduced completely, although the delivery was not complete.
- When you post the goods receipt, the data is automatically transferred from the purchase order. You only have to check if the amount ordered was actually delivered. If the amount of the delivery is over or under, you can correct the quantity.



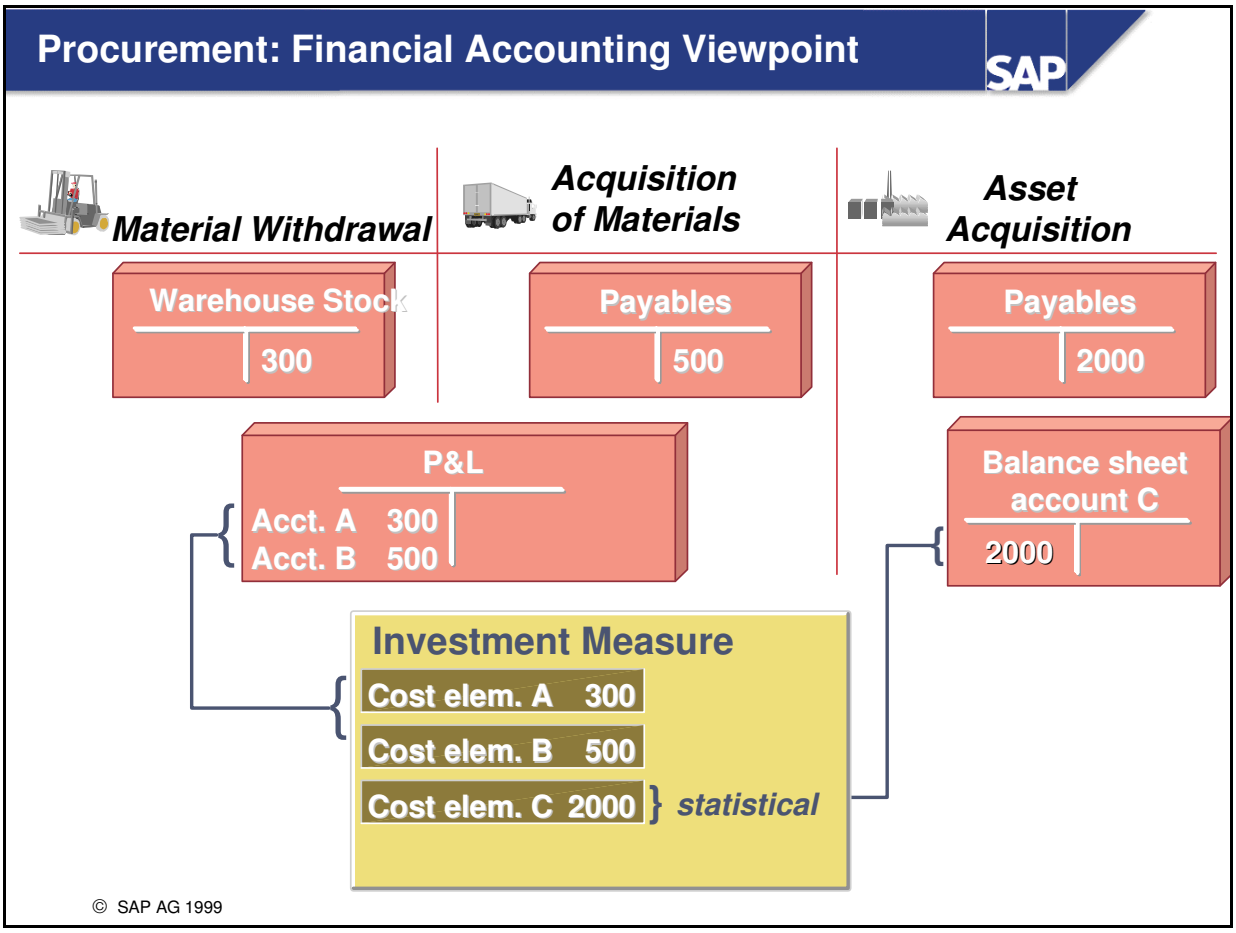
- When posting the invoice receipt, you can use the purchase order again as a reference. The system shows the purchase order price, multiplied by any existing purchase order quantity, as the invoice price.
- If you set the *unvaluated goods receipt* indicator in the purchase order, the system will reduce the commitment now.
- If you did not set the indicator *unvaluated goods receipt* indicator in the purchase order, the system corrects the price from the goods receipt when the invoice amount is higher or lower than the purchase order amount.



- When using direct capitalization (for example, for a printer for a PC) you enter the measure as the investment account assignment in the asset master record. Then, when you post the asset, the investment measure is automatically statistically updated. (However, the measure does not have to be a statistical measure!) This enables you to carry out availability checks on your budget.

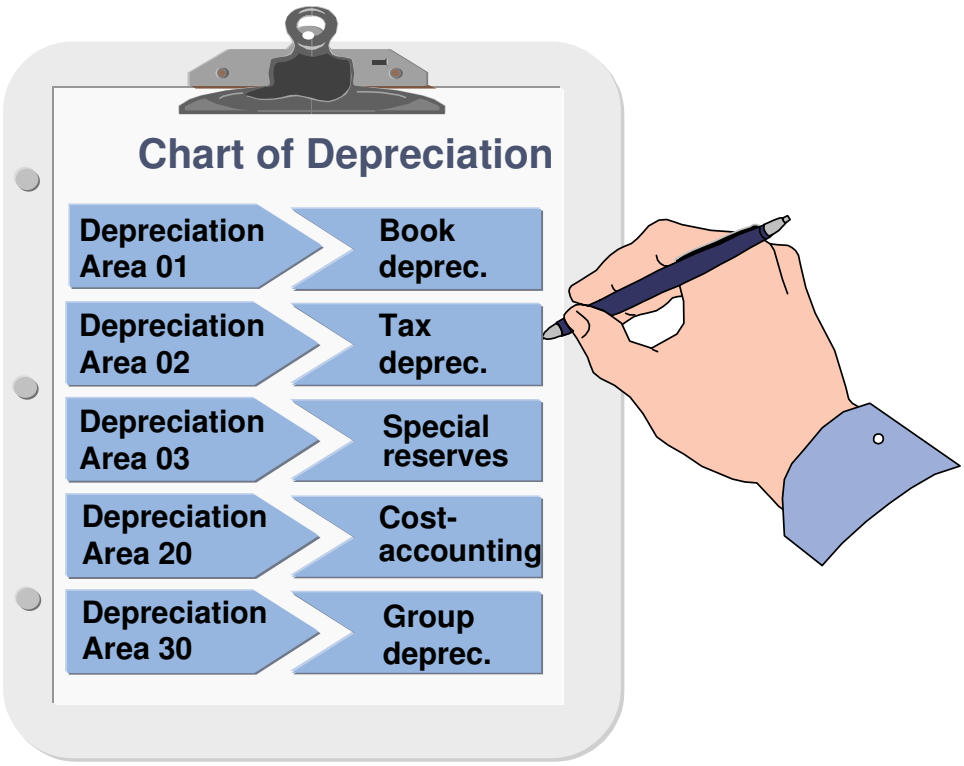


- When you purchase assets for an investment measure, first create the asset master records.
- Enter the number of the investment measure in the asset master record. You do this either when you create the master record, or, at the latest, when you make an account assignment from the purchase requisition or purchase order to the asset.
- The Asset Accounting (FI-AA) component enables you to enter the investment measure in the asset master record automatically, using freely-definable replacement rules.
- When you enter the investment measure in the asset master record, the order amount is automatically updated as a commitment on the investment measure.
- An active availability check takes place if availability control is active.
- When the invoice receipt for the purchase order is entered, the value of the asset is updated. The system also posts to the balance sheet account to which the asset is assigned.
- This increase in the asset value is statistically updated on the investment measure. This item does not have to be settled, since the value of the asset was already correctly entered through the goods receipt and invoice receipt.



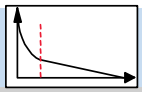
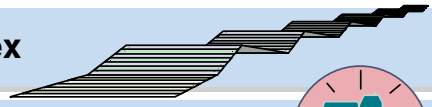
- From the Financial Accounting viewpoint, each posting on an investment measure represents an expense posting to the profit and loss statement. At the time of settlement, the portions requiring capitalization are treated as revenue from capitalized internal activity. SAP has created special functions for costs from external procurement, so that you can settle these costs to the same cost element under which the original debit was posted. In this way, you avoid artificially inflating the profit and loss statement with costs from external procurement that are shown on an investment measure, and are then settled to fixed assets.
- The procurement of assets is an exception. In this case you post the acquisitions directly to the asset. The acquisition value is statistically updated on the investment measure. The Customizing settings necessary for this are explained in training course AC350 (System Configuration for Investment Management).

The Chart of Depreciation



- It is usually necessary to determine values for fixed assets for various different business and legal purposes (for example the commercial balance sheet, cost accounting and so on). You can therefore manage values for assets in parallel in depreciation areas in the Asset Accounting (FI-AA) component in the R/3 System.
- The chart of depreciation is a directory of depreciation areas grouped according to particular business needs. You can specify the characteristics and significance of the individual depreciation areas in each chart of depreciation.
- Your company code should be assigned to precisely one chart of depreciation. The assets in this company code therefore "inherit" the depreciation areas of the chart of depreciation to which you have assigned your company code.

Depreciation Areas in the Asset and Asset Class

Depreciation Key		**What kind of depreciation ?**
Useful Life		**How long should depreciation last?**
Start of Ordinary Depr.		**When does the useful life start ?**
Changeover Year		**When is the changeover from declining-balance to straight-line depreciation ?**
Index		**Will increases in replacement value be calculated each year ?**
Variable Depr. Portion		**What portion of depreciation is weighted with a shift factor, if shift operation is used ?**
Scrap Value		**Should depreciation calculation stop when the scrap value is reached ?**

Example: Book Depreciation

Example:

Book Depreciation

➡ **Declining-balance 3X, changeover as soon as straight-line depreciation is higher**

APC: 10,000

Depreciation Area 01: Book Depreciation

Depreciation Key	**DG30**
Useful Life	**10 years**
Start of Ordinary Depr.	**01/01/YYYY**

Changes in Values

Year	Depreciation	Net book value
1	3,000.00-	7,000.00
2	2,100.00-	4,900.00
3	1,470.00-	3,430.00
4	1,029.00-	2,401.00
5	720.00-	1,681.00
6	504.00-	1,177.00
7	353.00-	824.00
8	275.00-	549.00
9	274.00-	275.00
10	275.00-	0.00

- The R/3 System provides depreciation keys for all common depreciation methods. These include: straight-line keys that calculate over the entire useful life of the asset, declining-balance keys with various percentage rates (30%, 25%, 20% and so on), and declining-balance keys with various multiplication factors (three times, 2.5 times or 2 times the straight-line rate, for example). For declining balance keys, depreciation is automatically changed over to the straight-line method as soon as this becomes more advantageous to you. A declining multi-phase depreciation key is available for depreciating buildings, as are many other keys for more unusual types of depreciation.

Example: Cost-Accounting Depreciation

Example:

Cost-accounting Depreciation

➡ **Straight-line from acquisition value, below zero, indexing of acquisition value and calculation of imputed interest**

APC: 10,000

Depreciation Area 20: Cost-Accounting Depr.

Depreciation Key	**LINA**
Useful Life	**10 years**
Start of Ordinary Depr.	**01/01/YYYY**

➔ **Interest calculation and indexing**
➔ **Negative net book value allowed**

Changes in Values

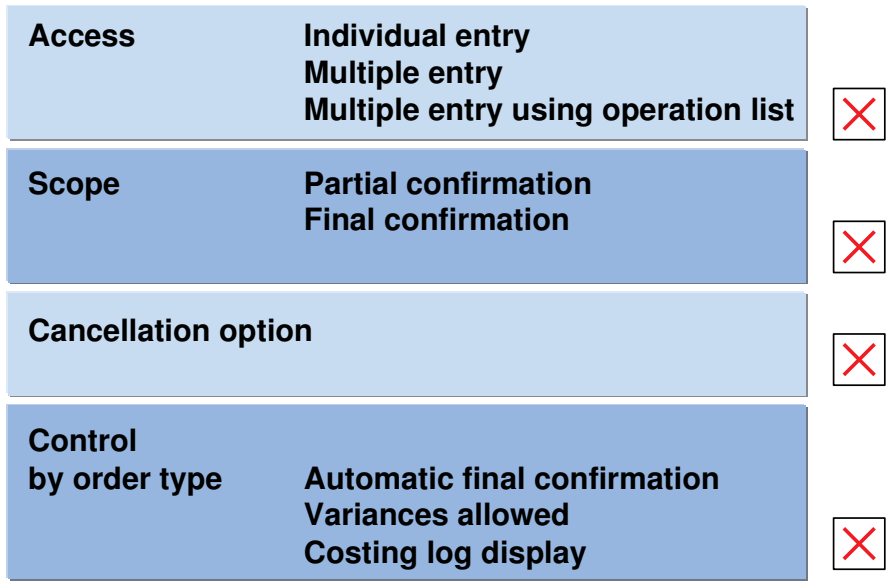
Year	Repl.val.	Depr.	NBV	Interest
1	10000	1000	9000	500
2	10300	1060	8240	515
3	10609	1123	7426	530
4	10927	1188	6556	546
5	11255	1257	5627	563
6	11593	1329	4363	580
7	11941	1404	3580	597
8	12299	1481	2457	615
9	12668	1562	1264	633
10	13048	1647	3-	652
11	13439	1614	1226-	672
12	13842	1594	2417-	692

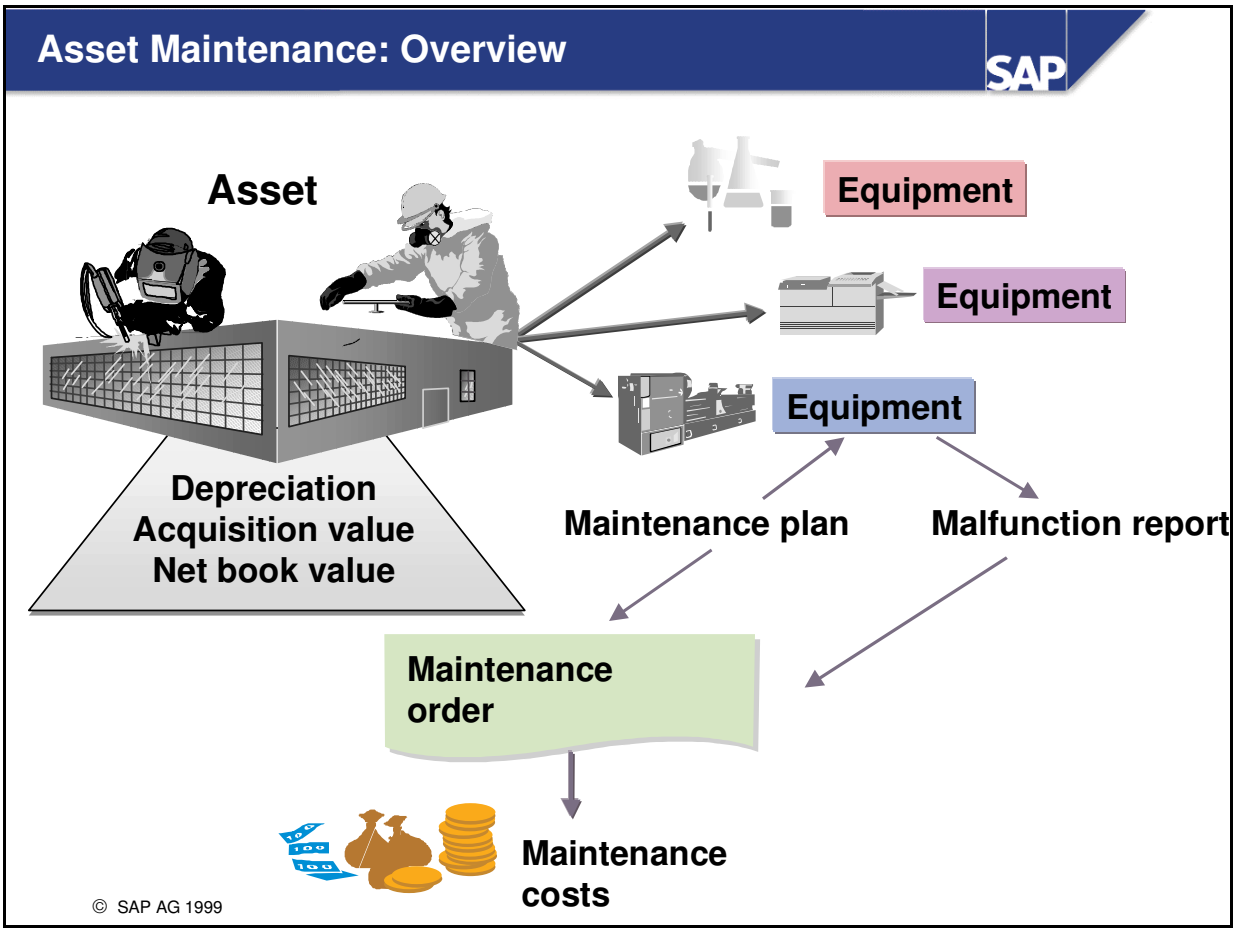
- The system offers you many additional functions for depreciating your assets according to various business criteria. These include the calculation of annually increasing replacement values, depreciation below net book value 0, the calculation of imputed interest, and numerous other options.

Internal Activity Allocation

Receiving investment measure	
Sending cost center	4130
Activity type	1410
Consumption quantity	50 H
Actual costs	DEM 3000

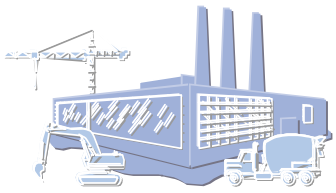
Confirmation of Activities on PM Orders





- To oversee maintenance and the technical administration of fixed assets, you can create one or more equipment master records that correspond to your assets in the Plant Maintenance (PM) component. Then malfunction reports can be entered in the system for these equipment master records. You can also create preventive maintenance plans for the planned maintenance of pieces or groups of equipment. You can use maintenance orders relating to the malfunction reports to collect the maintenance costs incurred per asset.

Material Withdrawal



Material Withdrawal through goods issue

Investment Measure
- Budget
- Plan values
- Commitments
- Actual values

Warehouse Stock

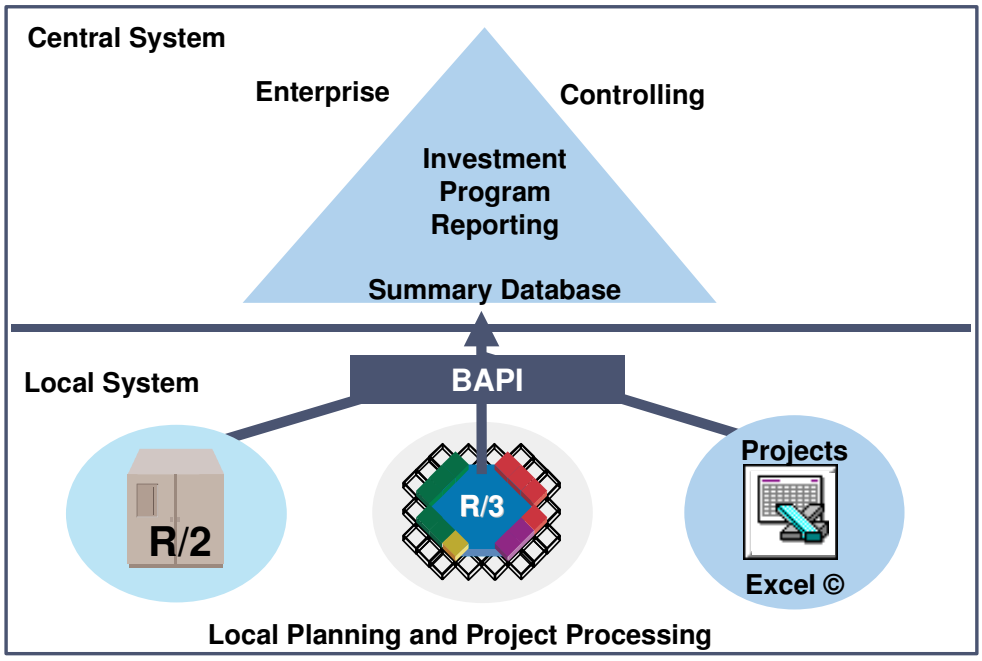
	300

Material Consumption

Acct. A	300

- When posting takes place in the warehouse, then only the material, the quantity and the receiving investment measure are entered. The system makes the transfer from current assets to expense automatically in the background. The system charges the value of the material to the investment measure.

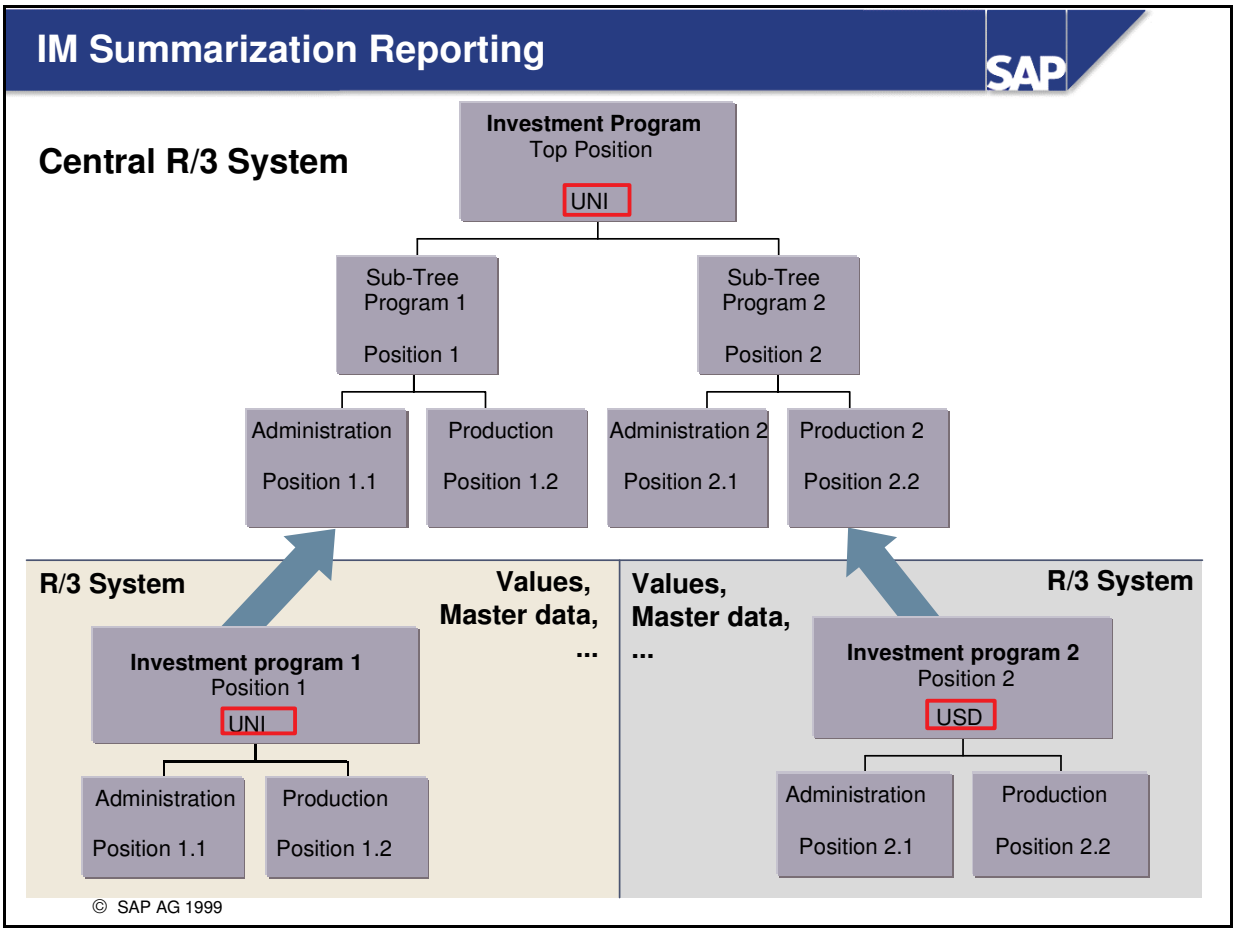
Cross-System Reporting



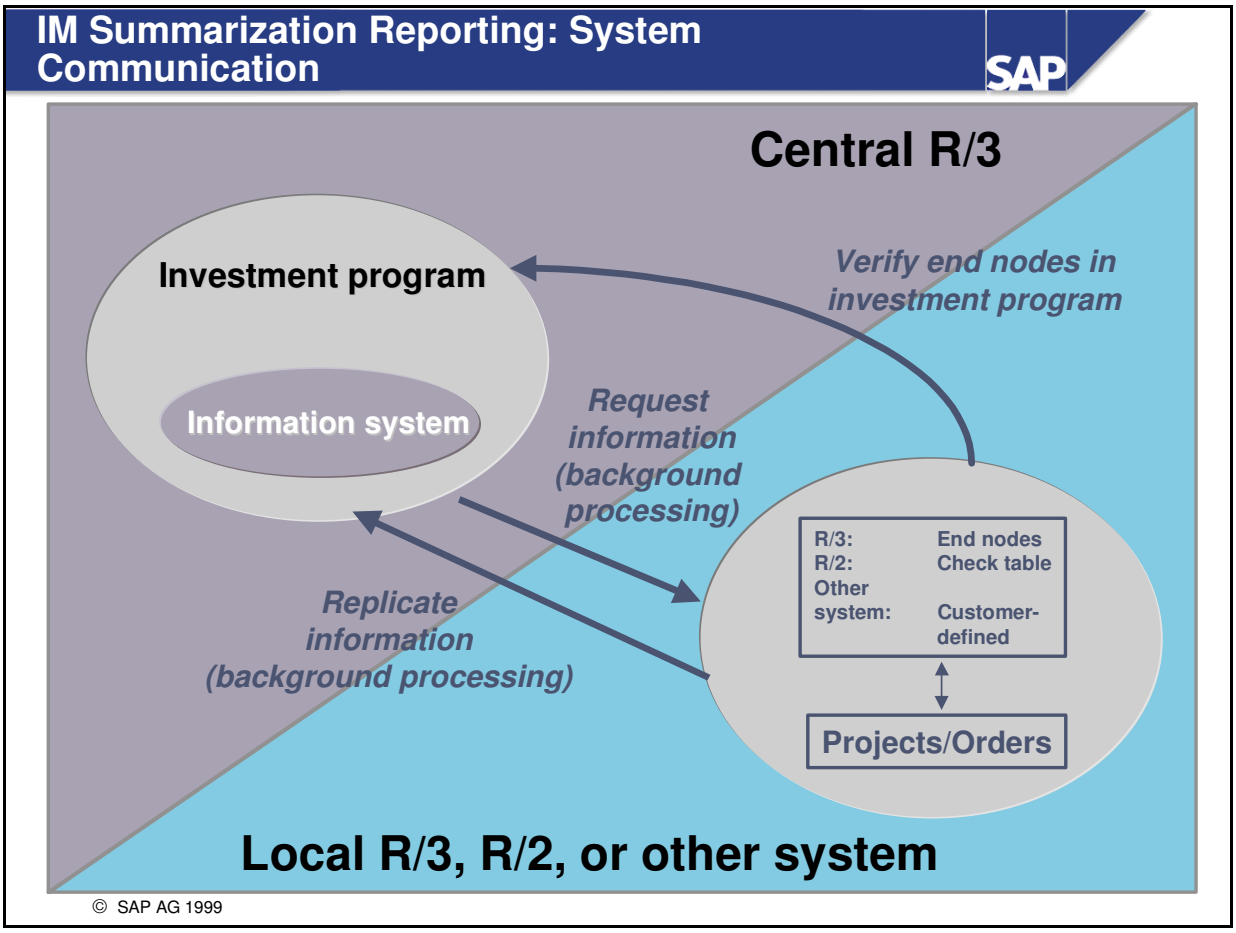
- There are two options for reporting on investment programs that are managed in different systems:
  - The summarization database in Investment Management
    This is an easy-to-use tool, with which you can summarize data of investment programs, even if they are managed in different currencies.
  - SAP Business Information Warehouse (BW)
    You can use BW to report on summarized data from different systems and with different currencies. For this purpose, SAP provides an InfoCube and a number of queries for IM.

IM Summarization Reporting: Customizing

- **Create the summarization version**
  - **The summarization version is just a data key that enables you to distinguish summarization runs. For example, you might want to create one variant per quarter, or different variants for different nodes in your capital investment program.**
- **Choose the characteristics for which you want summarized data**
  - **You will probably only want summarized data for certain areas and will choose, for example, a company code or a profit center. You can reduce the scope of your summarization database by selecting precise criteria.**

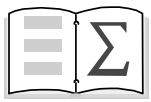


- To consolidate data from different systems in one investment program, you can either use the SAP Business Information Warehouse (BW) or the summarization database in IM. When doing so, you can translate data (measures, appropriation requests, master data of program positions...), that was managed in different currencies, into a single currency.
- It is mandatory that you create an investment program in your central system that contains the same position IDs as the sub-programs in the local systems (the position IDs have to be unique!). However, the descriptions of the program positions in the central system can be different from those in the sub-programs.
- The two reports -- RAIM_UPLOAD and RAIM_DOWNLOAD -- make it simple to create the investment program in the central system.



- The program end nodes of the investment program are needed in the local system.
  The BAPI_GET_LEAFS function transfers an internal table to the local system, where the end nodes are located. With this data, you can create a check table in any local system. If you use an R/2 System as the local system, an ATAB table is automatically generated from this internal table.
- With the BAPI_INVPROGRAM_SELECT_DATA function, you import data from the local systems. Control information (such as summarization criteria) is passed on.
- With the BAPI_INVPROGRAM_REPLICATE_DATA function, you send the summarized data back to the central system.
- Please note that owing to the large volume of data, an online solution is not currently available. Data selection and replication occurs in batch jobs.

Implementation: Unit Summary



You are now able to:

- **Post all assigned funds to investment measures**
- **Capitalize smaller procurements directly and update their values statistically on measures (direct capitalization)**
- **Use Easy Execution Services**

Exercises

Unit: Implementation

Topic: Implementation of Measures

At the conclusion of this exercise, you will be able to:

Create purchase orders

Post goods receipts

Post a goods issue

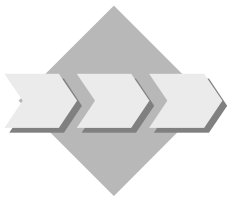
Perform activity allocation

Create fixed assets and make statistical postings to investment measures

Enter depreciation simulation data (for internal orders and on program positions)

Execute depreciation simulation run

- Post to G/L accounts
- Confirm maintenance orders



Now that the measures have received their budgets, the first actual values start to accumulate. All purchase orders, activity allocations, G/L account postings, and so on, are posted directly to the investment measure.

Also, a fixed asset is created (purchase of a PC for an investment measure). This acquisition posting is then also posted statistically on the measure.

In order to see how high planned depreciation is, depreciation simulation data is created.

1-1 In this exercise, you create a purchase order (vendor unknown) for the purchase of the packaging machines. Then you view the commitments on your investment order, post a goods receipt for your purchase order, and view the actuals on your investment order. This is to demonstrate how commitments and actual costs are shown on your investment measure.

You use Easy Execution Services for the internal order to create the purchase order.

Of course you can also create the purchase order / goods receipt / internal activity allocation, and so on, directly in the given application!

Menu Path:

Accounting → Investment Management → Internal Orders → Master Data → Order Manager

Click on *Order*. Select your order (that was generated from the appropriation request) for your personal worklist. Choose your order in your worklist. Choose *Change*.

Choose *Costing* (calculator icon). In Easy Cost Planning, you see the cost estimate adopted from the appropriation request. Choose *Show Execution Services*. Select *Purchase order* in the *Execution Service* dropdown box. In the lower part of the screen, line items appear for the cement and machines. Enter the following data for the **machines**:

Field Name	Input Data
Deliv.date	In 2 weeks
Vendor	1000
Purch.org.	1000
PGr (purchasing group)	000

Select the line item and choose *Post*. Exit the Order Manager.

1-2 View the commitment on your investment order.

You do not need to enter a cost element or cost element group in the selection screen of the commitment report.

Field Name	Input Data
Order	Your internal order from Exercise 1-5 (Planning and Budgeting Unit)
Expected debit date	Enter a range that will encompass the delivery date.
Display variant	1SAP

Execute the report.

On the **Display Commitment Line Items for Orders** screen, double click on the line item. The system displays the purchase order in which the commitment was created.

1-3 Post a goods receipt against the purchase order you just created using the following information:

Menu Path:

Logistics → Materials Management → Purchasing → Purchase Order → Follow-On Functions → Goods Receipt

Goods Receipt for Purchase Order: Initial Screen

Field Name	Input Data
Purchase order	Your purchase order number from 1-1. Use the input help to search for purchasing documents for your order.

Choose *Enter*.
The system displays your purchase order.

Reduce the quantity to two in the detail data, since not all the machines arrived with this shipment. Then the commitment is only partially reduced.

Set the *Item OK* indicator.

Save your goods receipt. Confirm if you receive a warning. Make a note of the number of the goods receipt document.

Goods receipt document number: _____

1-4 Display the line items on your investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Information System → Reports for Internal Orders → Plan/Actual Comparisons → Additional Key Figures → Orders: Actual/Plan/Commitments

Enter your investment order and start the report.

Field Name	**Input**
Or value(s)	Your investment order

Find the goods receipt entry on your order and double click on the line item.
Choose the *Orders Line Item Actuals* report.

After you double click again on the line item, the system calls up the goods receipt document in the *Materials Management* (MM) component.

1-5 In this exercise, you post a goods issue from inventory for the cement that will be used for pouring the foundation for the machines.

Go back into the Order Manager and use Easy Execution Services again. Select *Goods issue* in the *Execution Service* dropdown box.

In the line item for the cement, enter the following additional data:

Field Name	Input Data
Storage location (SLoc)	0001

Select the line item and choose *Post*.

1-6 In this exercise, you charge maintenance labor from the maintenance department for pouring the cement for your investment order (that was created from the appropriation request in Exercise 1-2, Master Data Unit). Remain in Easy Execution Services and select *Internal activity allocation* in the *Execution Service* dropdown box.

Select the line item and choose *Post*.

1-7 In this exercise, you make an asset acquisition posting for your investment order to fixed assets. The asset acquisition posting reflects the direct acquisition of PCs needed for controlling the packaging assembly line. This means that a statistical posting is made to your order and the actual costs are posted to fixed assets.

1-7-1 Create an asset master record for the PC in Asset Accounting (FI-AA).

Create Asset: Initial Screen

Field Name	Input Data
Asset class	3200
Company code	1000
Number of similar assets	1

Choose *Enter*.

Create Asset: General Data

Field Name	Input Data
Description	Group XX , PC Athlon 1GHz

Create Asset: Time-Dependent Data

Field Name	Input Data
Business area	9900
Cost center	1000
Plant	1000

Create Asset: Origin

Field Name	Input Data
Investment order	Number of your investment order

Save your asset and make a note of your asset number including the asset sub-number.

Asset number: _____

1-7-2 Post an asset acquisition posting (with automatic offsetting entry) for the cost of the PC using the following information:

Enter Asset Transaction: Acquis. w/Autom. Offsetting Entry

Field Name	Input Data
Asset	Asset you created in 1-7-1
Sub-number	0
Amount posted	7990
Document date	Today's date
Posting date	Today's date (default)

Save your document.

1-8 In this exercise, you display the line items on your investment order. When looking at the values, you should pay particular attention to how the asset acquisition posting for the direct acquisition differs from the other postings on the investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Information System → Reports for Internal Orders → Line Items → Orders Actual Line Items

Enter your investment order.

You can tell which postings are statistical and which postings are actuals by the value type. Value type = 04 are actual postings and value type = 11 are statistical postings. To see value types in the report, you need to have the system display additional fields that are not currently shown in the report. To display these hidden fields, choose ***Settings → Layout → Change***. A dialog box appears that shows you the column names displayed in the first line of the report on the left and the hidden fields on the right. You now move the *Value type* field to the *Columns* area. On the *Column set* side of the dialog box, place your cursor on any field name and choose *Find*. Enter *Value type* as the search term. Select the *Value type* field name, and click on the arrow pointing left (*Show selected fields*). This field name then moves to the *Columns* area for displayed fields below the *Name of offsetting account* field. Choose *Transfer Enter*. The system displays the report again, and the value type is shown in the last column.

1-9 In this exercise, you enter depreciation simulation data and call a report that displays the forecasted depreciation. To save time, you maintain depreciation simulation data only on the investment order and the program position to which it belongs.

1-9-1 First enter the depreciation simulation data for the investment order.

In the Order Manager worklist, select your internal order and choose *Change*.

On the *Investments* tab page, you find the following fields in the *Depreciation simulation data* group box.

Field Name	Input Data
Asset class	2000
Capitalization date	Today's date

Save the changes.

1-9-2 Now maintain the depreciation simulation data on the program position.

Menu Path:

Accounting → Investment Management → Programs → Master Data → Investment Program Structure → Change

Field Name	Input Data
Investment program	400XX
Position ID	Leave blank
Approval year	Current year

Choose *Enter*. Expand the entire program hierarchy. Double click on position 400XX-1-1. Choose the *Depreciation simulation data* tab.

Field Name	Input Data
Asset class	2000
Capitalization date	Two months from today

Choose *Enter*. Then enter cost center 1000. Go back twice and save the changes.

1-9-3 Start the *Planned Investments and Assets* report.

Choose the *All selections* in order to display all options.

Field Name	Input Data
Company code	1000
Select assets	active
Asset number	Asset number of your PC
Depreciation simulation based on budget	active
Select program positions	active
Investment program	400XX
From position	Leave blank
Approval year	Current year
Select orders and projects	inactive
Select appropriation requests	inactive
Select WBS elements	inactive
Select orders	active
Order	Your investment order

Report date	December 31 of the following year
List assets	active

Run the report twice.

- The first time, select *Use asset values as of FY start*.
- The second time, select *Reduce the basis for deprec. simulation of plan inv. by capitalizations*.

1-10 In this exercise you enter a G/L document in Financial Accounting (FI) for your project. This posting represents costs paid to a contractor to prepare the land for building.

If the system requests a company code, enter 1000.
Use the following information for your document:

Enter G/L Account Document

Field Name	Input Data
Document date	Today's date

Item Overview (first row)

Field Name	Input Data
G/L account	415000
D/C (debit/credit)	Debit
Amount	50,000
Tax code	V0
WBS element	p-00XX (Your investment project)

Item Overview (second row)

Field Name	Input Data
G/L account	113100
D/C (debit/credit)	Credit
Amount	50,000

Save your document.

FI document number: _____

1-11 In this exercise you enter confirmations for the labor and material consumed by the maintenance order that you created in Exercise 1-4 (Master Data Unit).

1-11-1 Perform activity confirmation for you PM order.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Completion Confirmation → Entry → Individual Time Confirmation

Create PM Order Confirmation: Initial Screen

Field Name	Input Data
Order	From Exercise 1-4 (Master Data Unit)

Choose *Enter*. The time worked is 75 hours. (Naturally you can reduce the number of hours in order to see the difference between plan and actuals.) Next, go to the material overview screen (choose *Goods movements*) and check the materials that were planned on the order.

Material	Quantity
M-11	2

Save your order, and all labor and material actual costs are charged to the order.

The second material (R-1410) is identified as non-stock material. Therefore a purchase requisition is created for it automatically. To display the purchase requisition, choose

Menu Path:

Logistics → Materials Management → Purchasing → Purchase Requisition → Display

1-11-2 Look at the costs on your PM order.

Display Order: Initial Screen

Field Name	Input Data
Order	From Exercise 1-4 (Master Data Unit)

Choose *Costs* and display your actual costs.

What are the total actual costs on your order? _____

Solutions

Unit: Implementation

Topic: Implementation of Investment Measures

1-1 In this exercise, you create a purchase order (vendor unknown) for the purchase of the packaging machines. Then you view the commitments on your investment order, post a goods receipt for your purchase order, and view the actuals on your investment order. This is to demonstrate how commitments and actual costs are shown on your investment measure.

You use Easy Execution Services for the internal order to create the purchase order.

Of course you can also create the purchase order / goods receipt / internal activity allocation, and so on, directly in the given application!

Menu Path:

Accounting → Investment Management → Internal Orders → Master Data → Order Manager

Click on *Order*. Select your order (that was generated from the appropriation request) for your personal worklist. Choose your order in your worklist. Choose *Change*.

Choose *Costing* (calculator icon). In Easy Cost Planning, you see the cost estimate adopted from the appropriation request. Choose *Show Execution Services*. Select *Purchase order* in the *Execution Service* dropdown box. In the lower part of the screen, line items appear for the cement and machines. Enter the following data for the machines:

Field Name	Input Data
Deliv.date	In 2 weeks
Vendor	1000
Purch.org.	1000
PGr (purchasing group)	000

Select the line item and choose *Post*. Exit the Order Manager.

1-2 View the commitment on your investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Information System → Reports for Internal Orders → Line Items → Orders Commitment Line Items

You do not need to enter a cost element or cost element group in the selection screen of the commitment report.

Field Name	Input Data
Order	Your internal order from Exercise 1-5 (Planning and Budgeting Unit)
Expected debit date	Enter a range that will encompass the delivery date.
Display variant	1SAP

Execute the report.

On the **Display Commitment Line Items for Orders** screen, double click on the line item. The system displays the purchase order in which the commitment was created.

1-3 Post a goods receipt against the purchase order you just created using the following information:

Menu Path:

Logistics → Materials Management → Purchasing → Purchase Order → Follow-On Functions → Goods Receipt

Goods Receipt for Purchase Order: Initial Screen

Field Name	Input Data
Purchase order	Your purchase order number from 1-1. Use the input help to search for purchasing documents for your order.

Choose *Enter*.

The system displays your purchase order.

Reduce the quantity to two in the detail data, since not all the machines arrived with this shipment. Then the commitment is only partially reduced.

Set the *Item OK* indicator.

Save your goods receipt. Confirm if you receive a warning. Make a note of the number of the goods receipt document.

Goods receipt document number: _____

1-4 Display the line items on your investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Information System → Reports for Internal Orders → Plan/Actual Comparisons → Additional Key Figures → Orders: Actual/Plan/Commitments

Enter your investment order and start the report.

Field Name	**Input**
Or value(s)	Your investment order

Find the goods receipt entry on your order and double click on the line item. Choose the *Orders Line Item Actuals* report.

After you double click again on the line item, the system calls up the goods receipt document in the *Materials Management* (MM) component.

1-5 In this exercise, you post a goods issue from inventory for the cement that will be used for pouring the foundation for the machines.

Return to the Order Manager:

Menu Path:

Accounting → Investment Management → Internal Orders → Master Data → Order Manager

Choose your order in your worklist. Choose *Change*.

Choose *Costing* (calculator icon). In Easy Cost Planning, you see the cost estimate adopted from the appropriation request. Choose *Show Execution Services*. Select *Goods issue* in the *Execution Service* dropdown box. In the lower part of the screen, enter the following additional data in the line item for the cement:

Field Name	**Input Data**
Storage location (SLoc)	0001

Select the line item and choose *Post*.

1-6 In this exercise, you charge maintenance labor from the maintenance department for pouring the cement for your investment order (that was created from the appropriation request in Exercise 1-2, Master Data Unit). Remain in Easy Execution Services and select *Internal activity allocation* in the *Execution Service* dropdown box.

Select the line item and choose *Post*.

1-7 In this exercise, you make an asset acquisition posting for your investment order to fixed assets. The asset acquisition posting reflects the direct acquisition of PCs needed for controlling the packaging assembly line. This means that a statistical posting is made to your order and the actual costs are posted to fixed assets.

1-7-1 Create an asset master record for the PC in Asset Accounting (FI-AA).

Menu Path:

Accounting → Fixed Assets → Asset → Create → Asset

Create Asset: Initial Screen

Field Name	Input Data
Asset class	3200
Company code	1000
Number of similar assets	1

Choose *Enter*.

Create Asset: General Data

Field Name	Input Data
Description	Group XX , PC Athlon 1GHz

Create Asset: Time-Dependent Data

Field Name	Input Data
Business area	9900
Cost center	1000
Plant	1000

Create Asset: Origin

Field Name	Input Data
Investment order	Number of your investment order

Save your asset and make a note of your asset number including the asset sub-number.

Asset number: _____

1-7-2 Post an asset acquisition posting for the cost of the PC using the following information:

Menu Path:

Accounting → Fixed Assets → Postings → Acquisition → External Acquisition → Acquis. w/Automatic Offsetting Entry

Enter Asset Transaction: Acquis. w/Autom. Offsetting Entry

Field Name	Input Data
Asset	Asset you created in 1-7-1
Sub-number	0
Amount posted	7990
Document date	Today's date
Posting date	Today's date (default)

Save your document.

1-8 In this exercise, you display the line items on your investment order. When looking at the values, you should pay particular attention to how the asset acquisition posting for the direct acquisition differs from the other postings on the investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Information System → Reports for Internal Orders → Line Items → Orders Actual Line Items

Enter your investment order.

You can tell which postings are statistical and which postings are actuals by the value type. Value type = 04 are actual postings and value type = 11 are statistical postings. To see this in the report, you need to view additional fields that are not currently shown on the report. To display these hidden fields, choose ***Settings → Layout → Change***. A dialog box appears that shows you the fields displayed for Line 1 on the left and hidden fields on the right. Bring the *Value type* field to the column contents area for Line 1. On the *Column set* side of the dialog box, place your cursor on any field name and choose *Find*. Enter *Value type* as the search term. Select the *Value type* field name, and click on the arrow pointing left (*Show selected fields*). This field name then moves to the *Columns* area for displayed fields below the *Name of offsetting account* field. Choose *Confirm*. The system displays the report again, and the value type is shown in the last column.

1-9 In this exercise, you enter depreciation simulation data and call a report that displays the forecasted depreciation. To save time, you maintain depreciation simulation data only on the investment order and the program position to which it belongs.

1-9-1 First enter the depreciation simulation data for the investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Master Data → Order Manager

Choose your order in your worklist. Choose *Change*.

On the *Investments* tab page, you find the following fields in the *Depreciation simulation data* group box.

Field Name	Input Data
Asset class	2000
Capitalization date	Today's date

Save the changes.

1-9-2 Now maintain the depreciation simulation data on the program position.

Menu Path:

Accounting → Investment Management → Programs → Master Data → Investment Program Structure → Change

Field Name	Input Data
Investment program	400XX
Position ID	Leave blank
Approval year	Current year

Choose *Enter*. Expand the entire program hierarchy. Double click on position 400XX-1-1. Choose the *Depreciation simulation data* tab.

Field Name	Input Data
Asset class	2000
Capitalization date	Two months from today

Choose *Enter*, and enter the missing cost center (1000). Go back twice and save the changes.

1-9-3 Start the *Planned Investments and Assets* report.

Menu Path:

Accounting → Investment Management → Programs → Information System → Investment Management Reports → Programs: Current Data → Depreciation Forecast → Depreciation Simulation → Planned Investments and Assets

Choose the *All selections* in order to display all options.

Field Name	Input Data
Company code	1000
Select assets	active
Asset number	Asset number of your PC
Depreciation simulation based on budget	active
Select program positions	active
Investment program	400XX
From position	Leave blank

Approval year	Current year
Select orders and projects	inactive
Select appropriation requests	inactive
Select WBS elements	inactive
Select orders	active
Order	Your investment order
Report date	December 31 of the following year
List assets	active

Run the report twice.

- The first time, select *Use asset values as of FY start.*
- The second time, select *Reduce the basis for deprec. simulation of plan inv. by capitalizations*.

1-10 In this exercise you enter a G/L document in Financial Accounting (FI) for your project. This posting represents costs paid to a contractor to prepare the land for building.

Menu Path:

Accounting → Financial Accounting → General Ledger → Document Entry → Enter G/L Account Document

If the system requests a company code, enter 1000.
Use the following information for your document:

Enter G/L Account Document

Field Name	Input Data
Document date	Today's date

Item Overview (first row)

Field Name	Input Data
G/L account	415000
D/C (debit/credit)	Debit
Amount	50,000
Tax code	V0
WBS element	p-00XX (Your investment project)

Item Overview (second row)

Field Name	Input Data
G/L account	113100
D/C (debit/credit)	Credit
Amount	50,000

Save your document.

1-11 In this exercise you enter confirmations for the labor and material consumed by the maintenance order that you created in Exercise 1-4 (Master Data Unit).

1-11-1 Perform activity confirmation for you PM order.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Completion Confirmation → Entry → Individual Time Confirmation

Create PM Order Confirmation: Initial Screen

Field Name	Input Data
Order	From Exercise 1-4 (Master Data Unit)

Choose *Enter*. The time worked is 75 hours. (Naturally you can reduce the number of hours in order to see the difference between plan and actuals.) Next, go to the material overview screen (choose *Goods movements*) and check the materials that were planned on the order.

Material	Quantity
M-11	2

Save your order, and all labor and material actual costs are charged to the order.

The second material (R-1410) is identified as non-stock material. Therefore a purchase requisition is created for it automatically. To display the purchase requisition, choose

Menu Path:

Logistics → Materials Management → Purchasing → Purchase Requisition → Display

1-11-2 Look at the costs on your PM order.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Order → Display

Display Order: Initial Screen

Field Name	Input Data
Order	From Exercise 1-4 (Master Data Unit)

Choose *Costs* and display your actual costs.

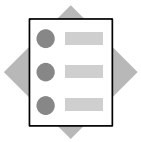
What are the total actual costs on your order? _____

Settlement

Contents:

- Settlement:
  - During the under-construction phase
  - Partial capitalization
  - Full settlement after completion
- Line item settlement/summary settlement
- Proof of origin/origins of settlement

Settlement: Unit Objectives

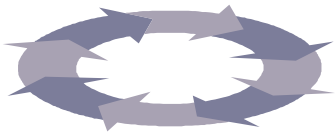


At the conclusion of this unit, you will be able to:

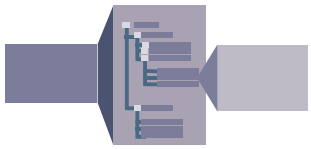
- **Settle investment measures**
- **Obtain proof of origin for completed assets**
- **Display the origins of settlement for investment measures**

Course Overview Diagram - Settlement

Course Overview

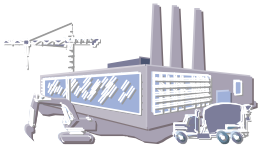


Investment Management Cycle



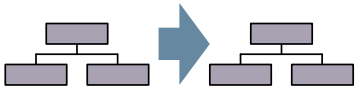
Master Data

Planning and Budgeting



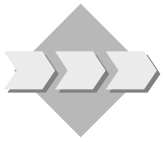
Implementation

Settlement



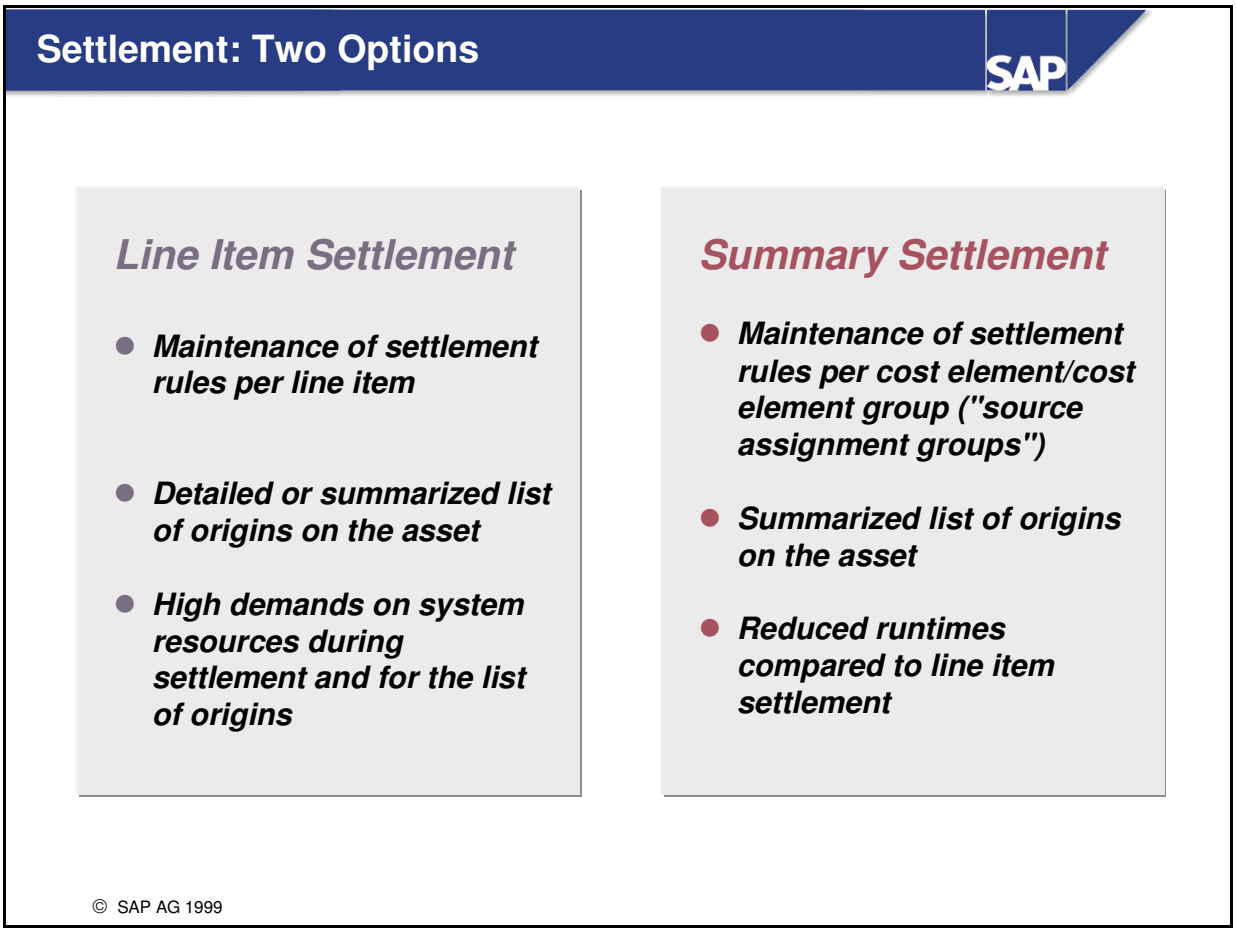
Fiscal Year Change

Settlement: Business Scenario

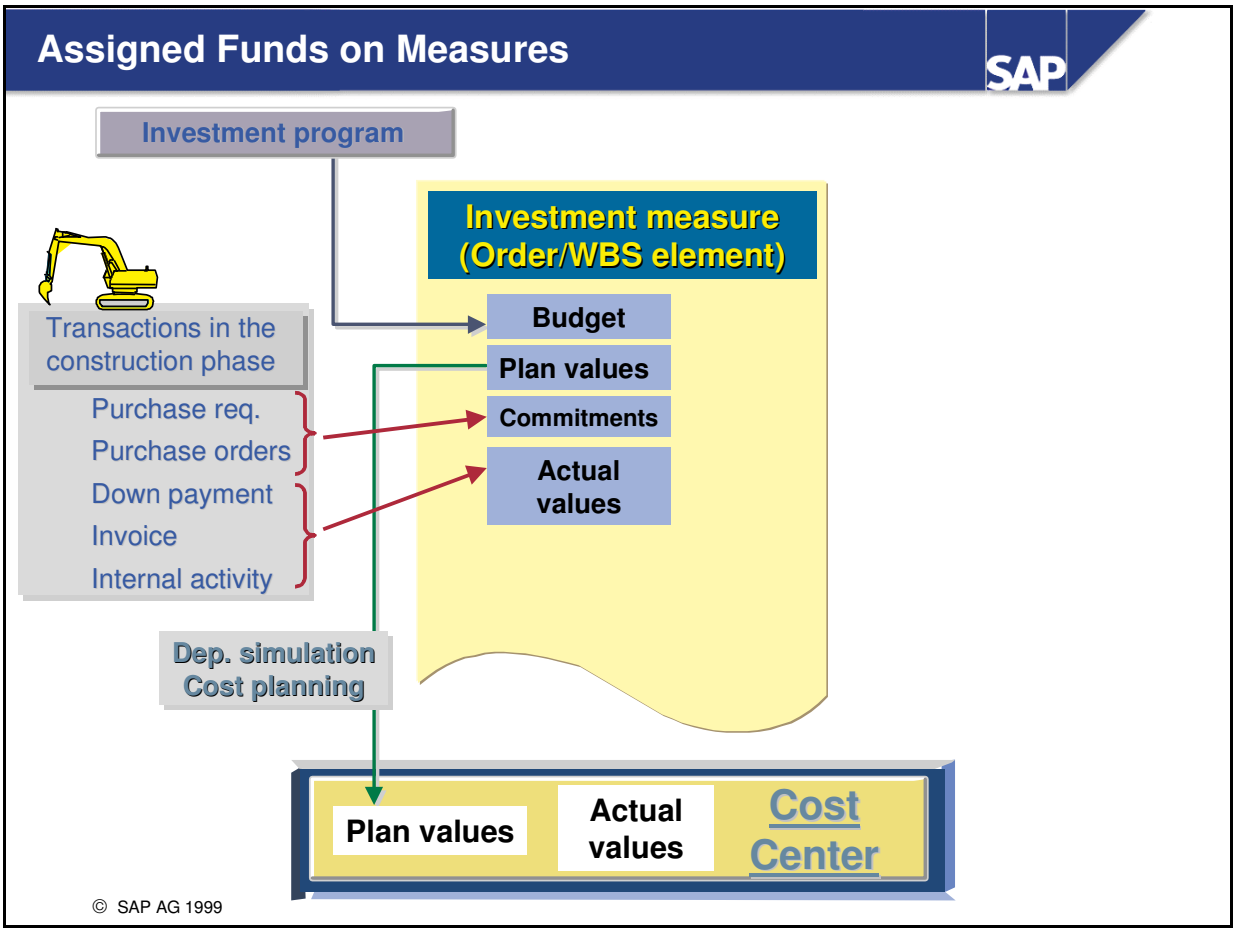


- The planned measures are implemented and the accumulated actual values are settled. This means that settlement takes place partially during the under-construction phase and partially after completion.
- After settlement to completed assets, the proof of origin for the assets is checked.

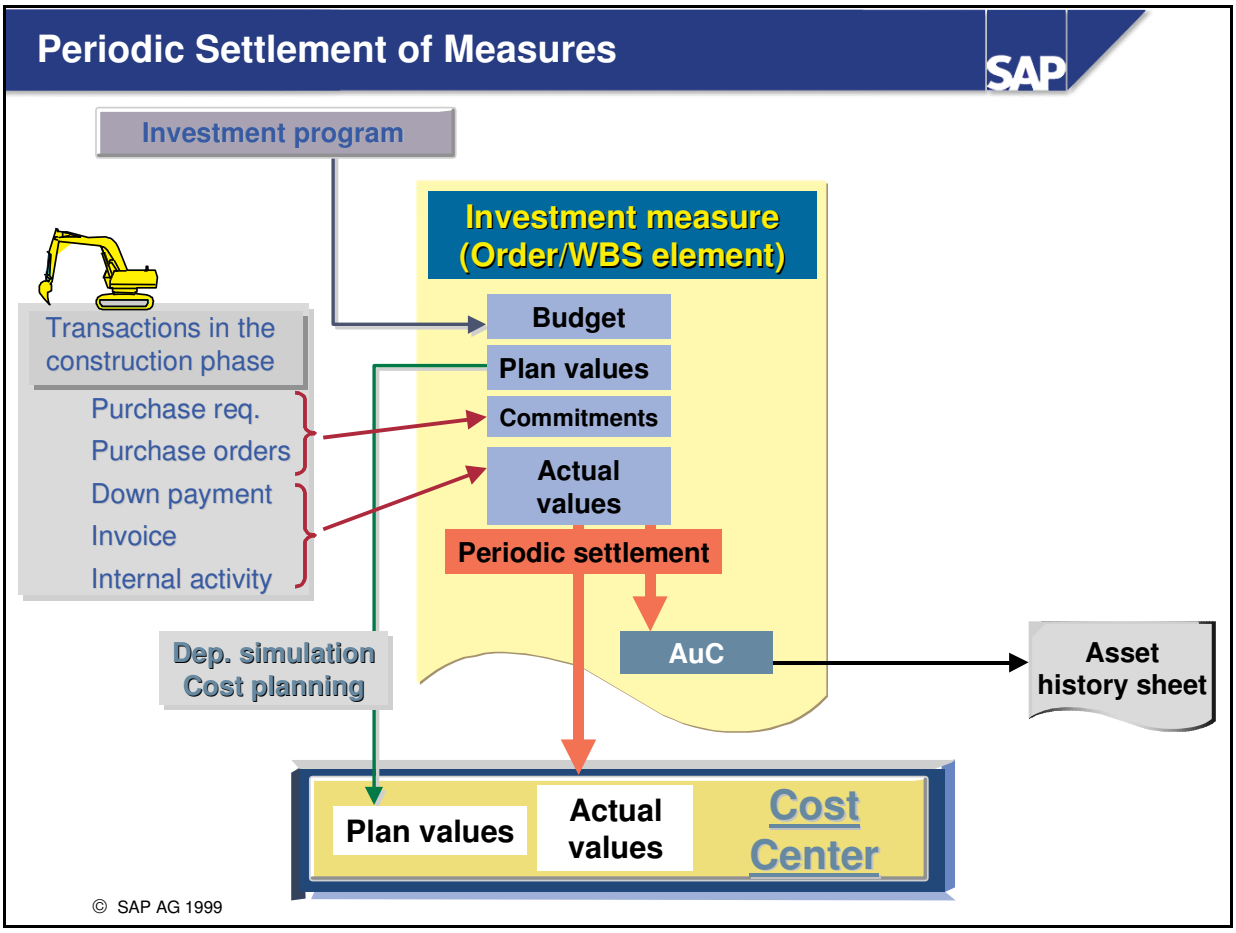
Settlement: Two Options



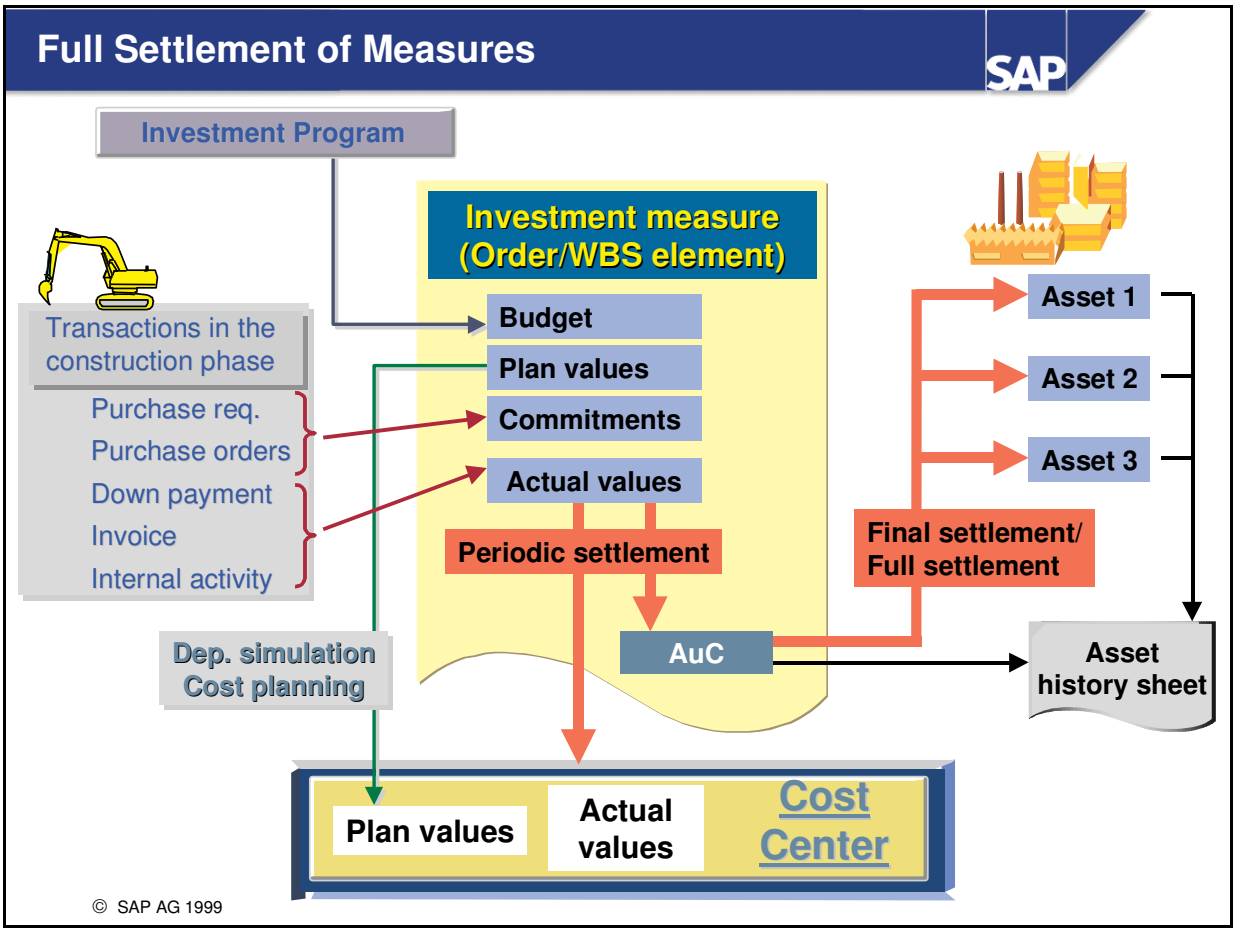
- You can choose between summary settlement and line item settlement. You make this selection in the investment profile. Summary settlement is the standard default setting.
- The system also offers the function of source assignments. These are used to allow you to enter settlement receivers per cost element or per cost element group. You can also use this function for line item settlement.
- Line item settlement is considerably more intensive in the use of system resources.
- Line item settlement is available since Release 3.0C.



- If you set the indicator for budget distribution, the investment measure receives its budget from the investment program position.
- The assigned funds are charged against the budget during the ‘under-construction’phase. During this phase, you post all transactions (purchase orders, goods issue from warehouse, internal activities, and so on) to the investment measure.
- You can carry out a depreciation simulation based on the plan values.

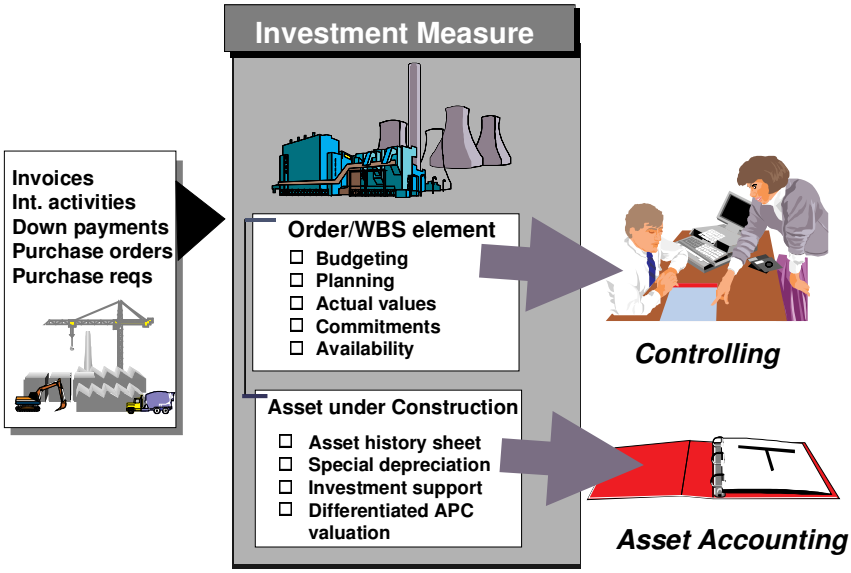


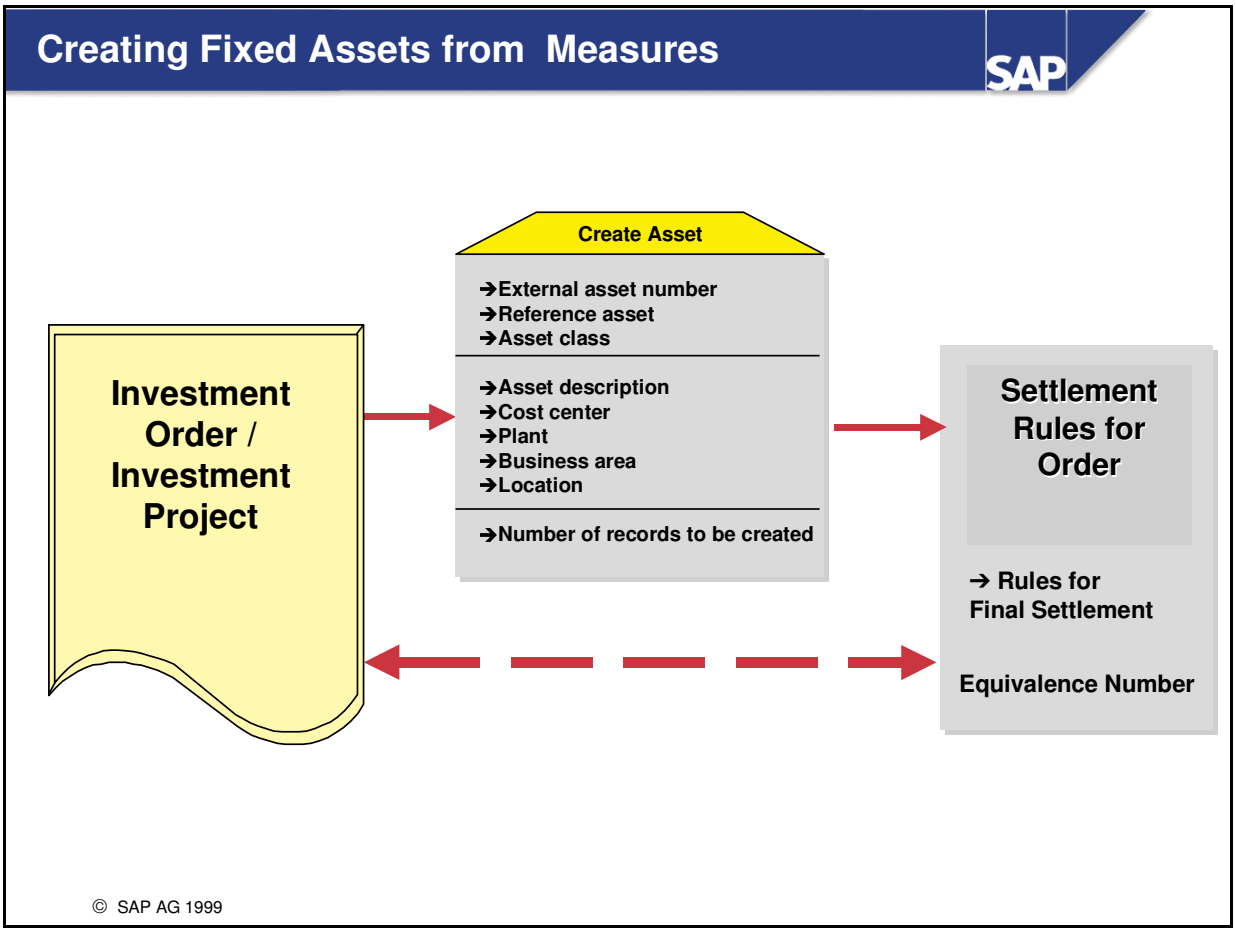
- During periodic settlement, actual values are settled to the asset under construction or to CO receivers (represented here by a cost center). The system uses this settlement to separate costs from amounts that are to be capitalized. Amounts requiring capitalization are posted to an asset under construction and later to capitalized assets. Amounts that have not been capitalized are posted to management accounting.
- After each settlement, the values for those amounts that required capitalization are contained in the asset history sheet.



- In final settlement, the amounts accumulated on the asset under construction are posted to the completed asset(s). You carry out periodic settlement before final settlement.
- Final settlement can be carried out as often as required.

Investment Order/Project and AuC



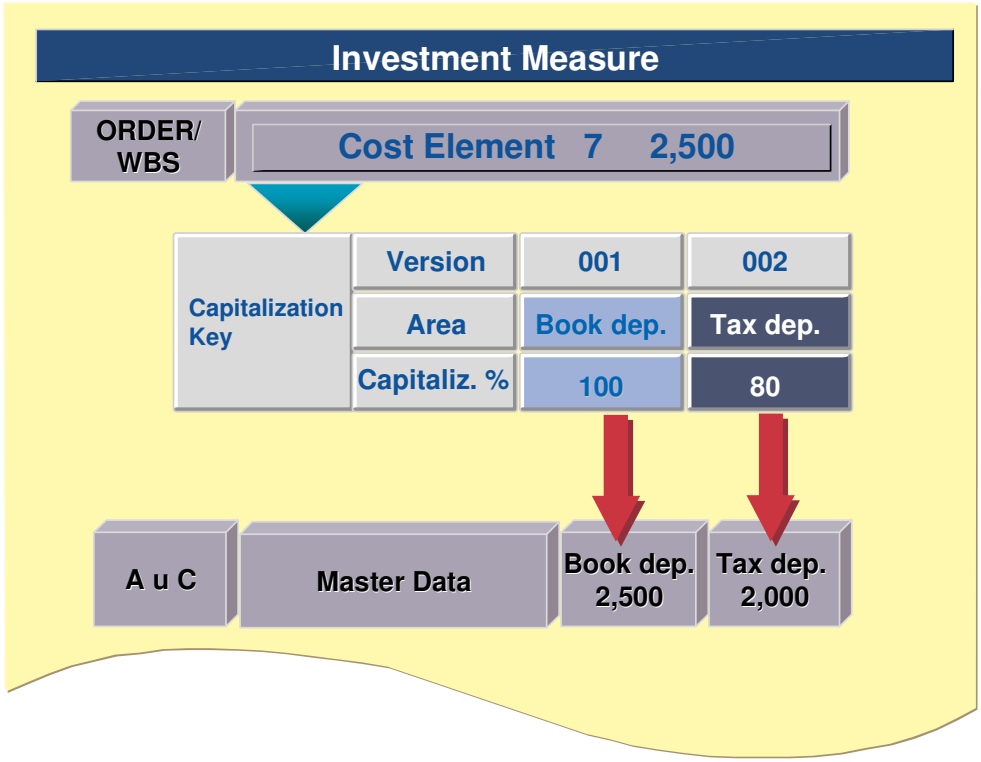


- You can generate the final fixed asset(s), to which the investment measure is to be settled, directly from the investment measure itself. Choose *Extras* in the menu.

Quantity Update on Assets

- **Requirements**
  - The unit of measure is entered in the AuC record
  - The same unit of measure is entered in the cost elements that are posted to the order/WBS element
  - The same unit of measure is entered in the master record of the completed asset
- **Effects**
  - Periodic settlement: quantity is updated in the asset under construction
  - Final settlement: quantity is updated in the completed asset(s)
- **Problems**
  - Not possible with line item settlement
  - Quantity cannot be entered in the settlement rule
  - No special rounding method (for example, a quantity of 3.5 can be assigned to an asset)

Settlement: Different Values in Different Depreciation Areas



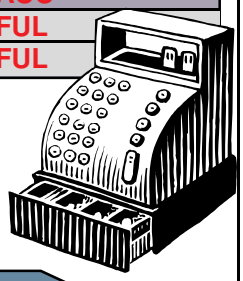
- The system enables you to settle different values in different depreciation areas (book depreciation, tax depreciation, cost accounting, group depreciation) of Asset Accounting during periodic settlement.
- Note that you always have to capitalize 100% in the depreciation area for cost accounting. The difference between this 100% and the amount capitalized in the book depreciation area is posted to nonoperating expense.

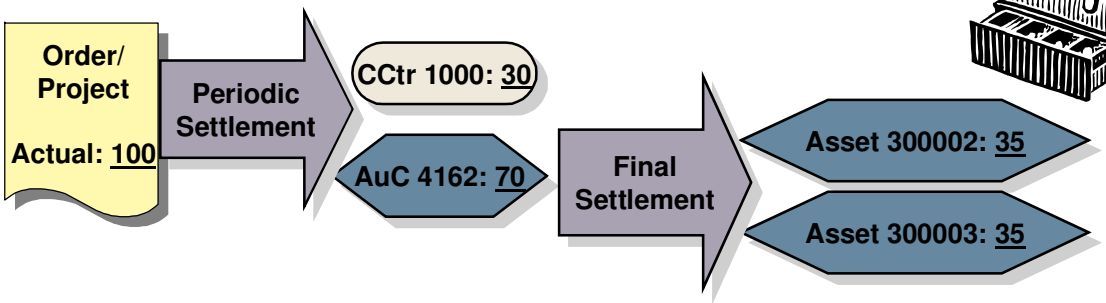
Settlement Types

Maintain Settlement Rules

Default distribution rules

Cat.	Settlement Receivers	Receiver short text	%	Equival. number	Settlement type
CTR	1000	Internal Services	30		PRE
FXA	4162	New Building	70		AUC
FXA	300002	Building K17		1	FUL
FXA	300003	Building K18		1	FUL



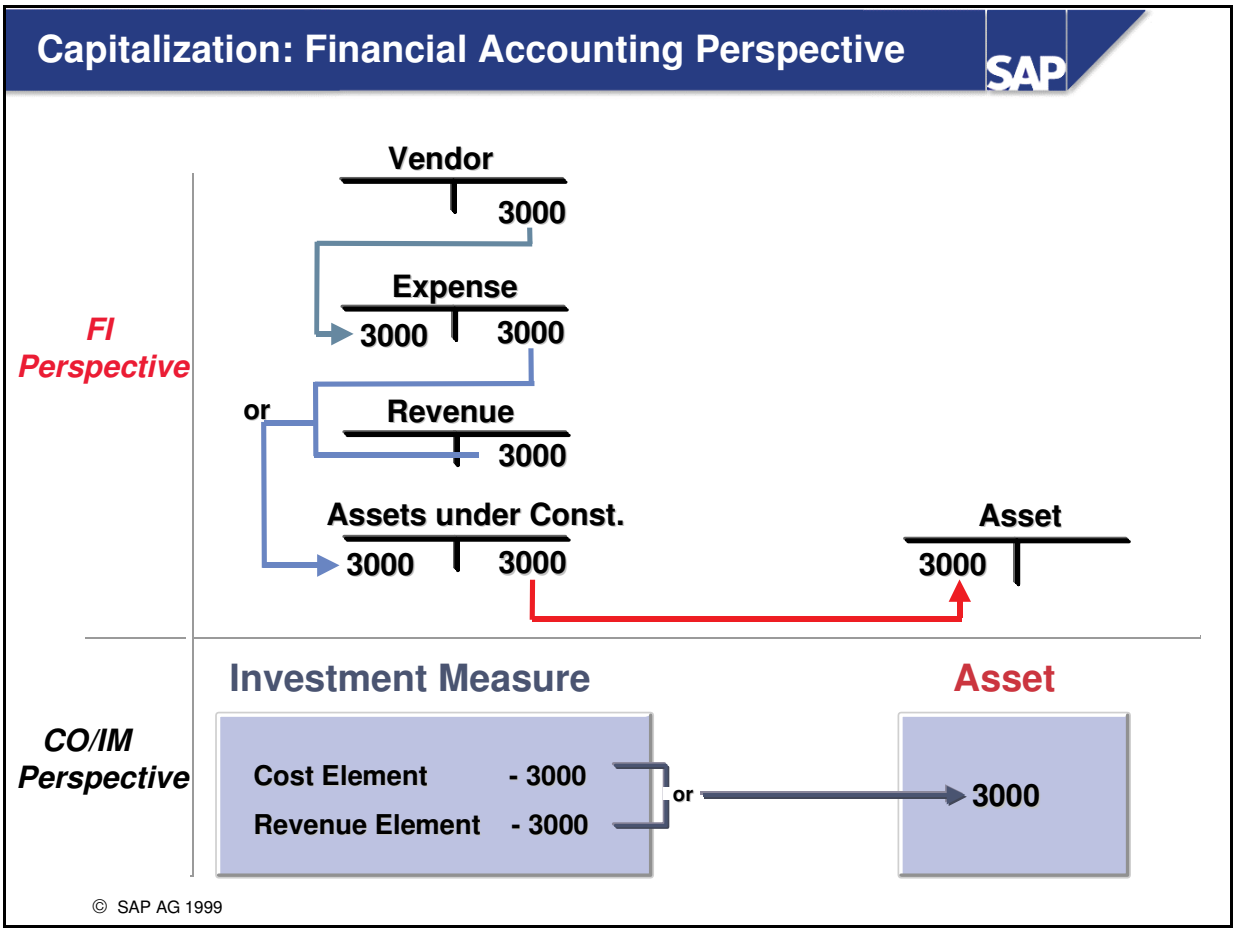


- There are three types of settlement:
  - PRE (periodic, manual): Settlement of costs for the current period only
  - AUC (periodic, automatic): Settlement type generated by the system, only for settlement of automatically created assets under construction. Settles the annual values.
  - FUL (full settlement): Settlement of annual costs

Types of Processing

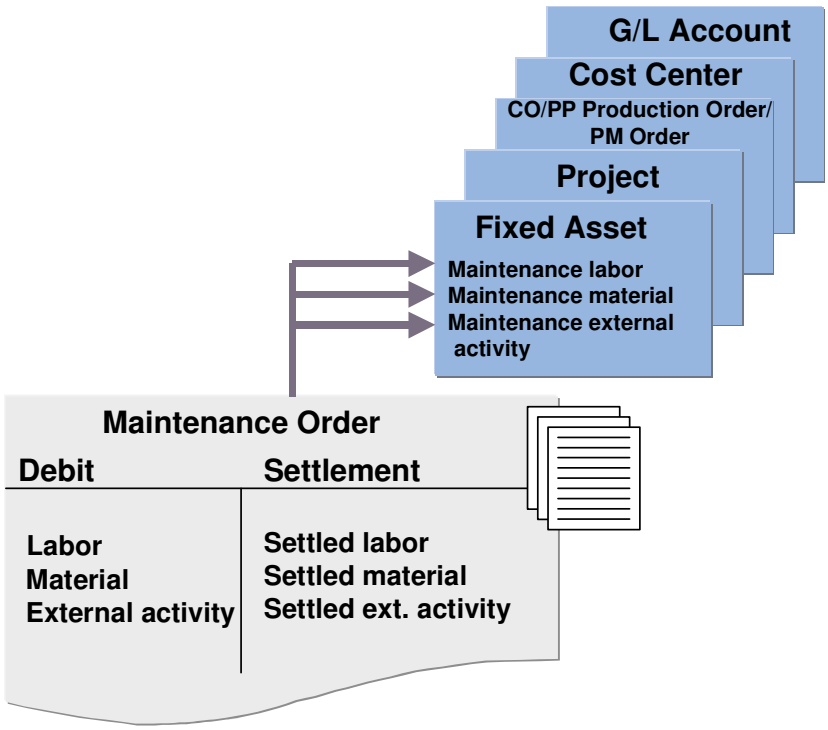
Indic.	*Description*	*Function/Use*
1	Automatic	1. Uses the rules for periodic settlement (that is, debiting CO receivers and the asset under construction) 2. Then uses the rules for full settlement, provided that the measure is technically completed
2	Periodic	Uses only the rules for periodic settlement
3	Partial capitalization	Same as 1, except: the rules for full settlement are used even if the measure is not technically completed (partial startup)

- The system status of the investment measure influences the automatic settlement type. If the measure has *technically completed* status, then the system uses the partial capitalization rule (FUL). If the status of the measure is set to any status before that, then the system uses a periodic settlement rule (AUC or PRE).
- In any case, the costs to be capitalized are settled to the asset under construction first and then to the final asset.

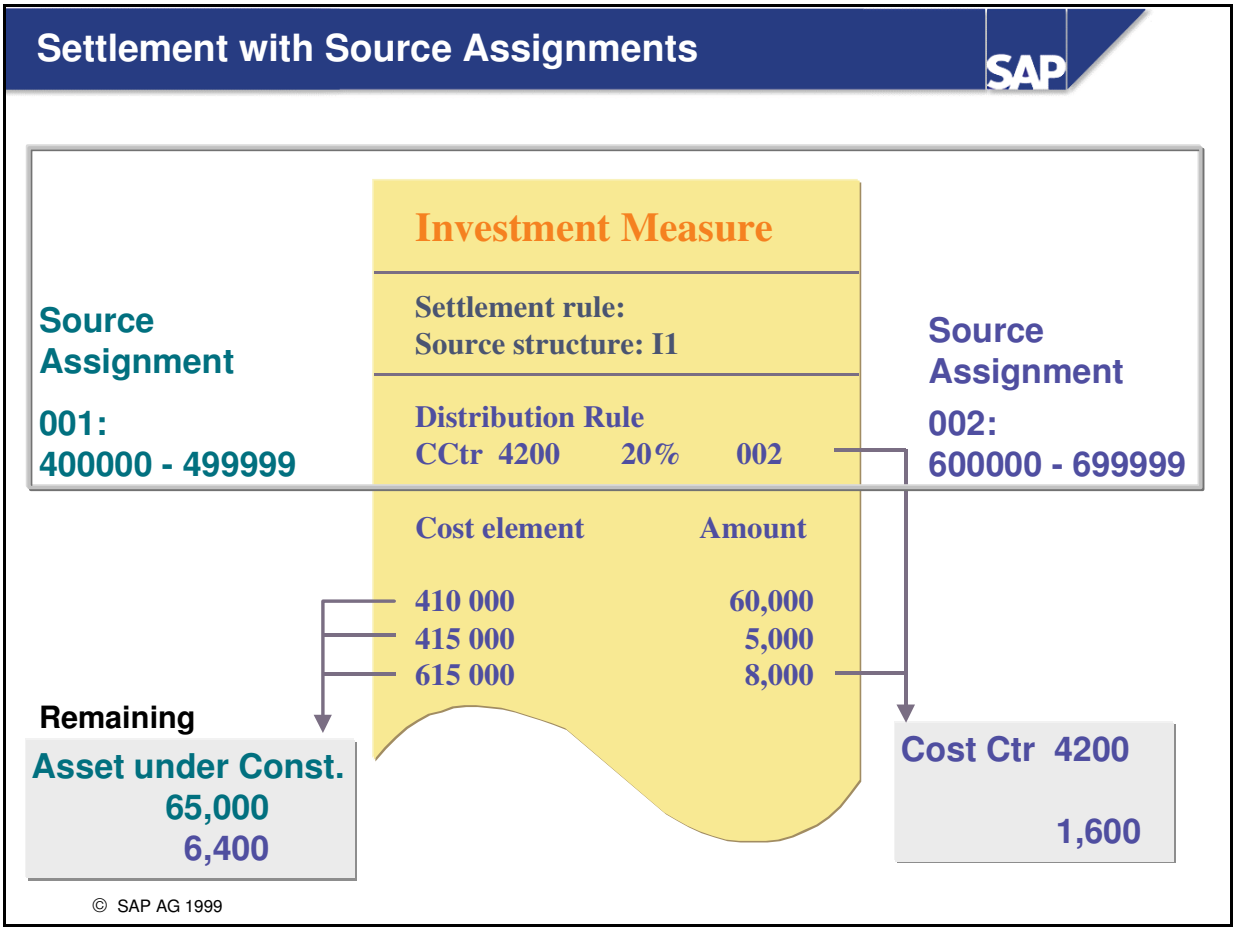


- Primary cost elements on investment measures can be settled by cost element. You settle them using the same cost elements that applied to the original debits. From the perspective of the profit and loss statement, this method of settlement prevents the debits and credits on investment measures from being listed in the P&L statement (since when you use settlement by cost element, the system posts on the credit side of the P&L expense accounts).
- However, it is not possible to settle internal activity by cost element. For internal activity, you have to show revenue from internal activity in the profit and loss statement.
- In the allocation structure, you specify per source cost element and settlement receiver whether or not you want settlement by cost element. You can enter the allocation structure in the settlement profile. And you can enter the settlement profile as a default value in the order type or the project profile.

Settlement of Maintenance Orders

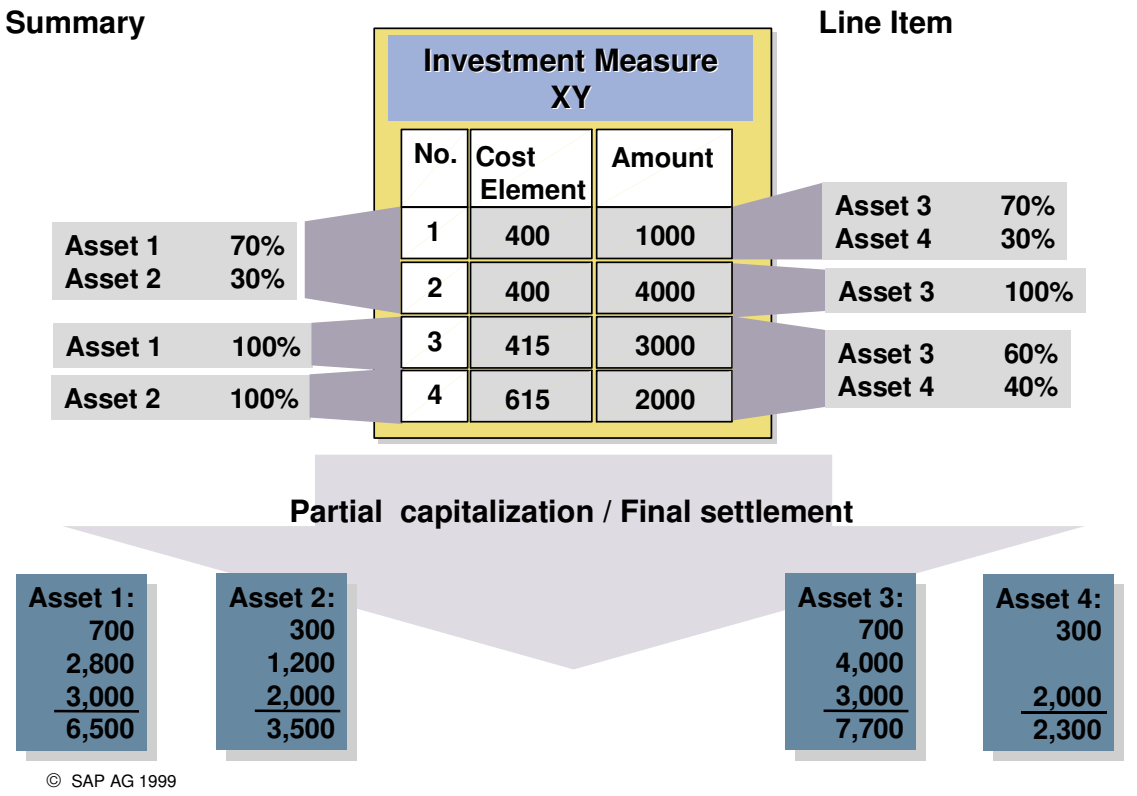


Settlement with Source Assignments



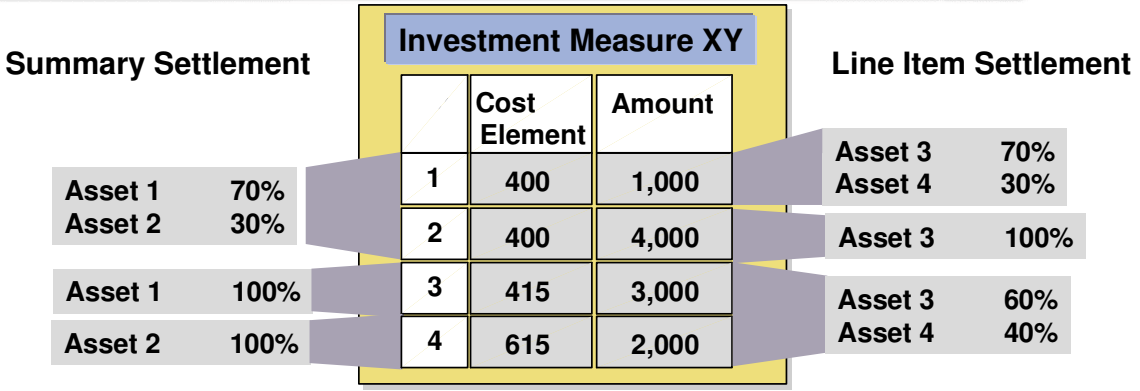
- In this example, source structure I1 was created with two source assignments, 001 and 002. Source assignment 001 includes all primary cost elements. Source assignment 002 includes all secondary cost elements.
- Twenty percent of the internal costs charged to the investment measure are to be settled to cost centers, and 80% are to be settled to the asset under construction.
- All external costs are settled to the asset under construction.
- Source structures allow you to settle costs to various receivers in a cost element or cost element group.

Summary Settlement/Line Item Settlement



- You can use a source structure for investment measures managed for summary settlement. This enables you to distribute the costs of a given cost element (or cost element group / interval) to certain receivers.
- For investment measures managed for line item settlement, you can **also** enter settlement rules for different line items belonging to **one** cost element.
- You specify in the investment profile whether an investment measure is managed for line item settlement or summary settlement.

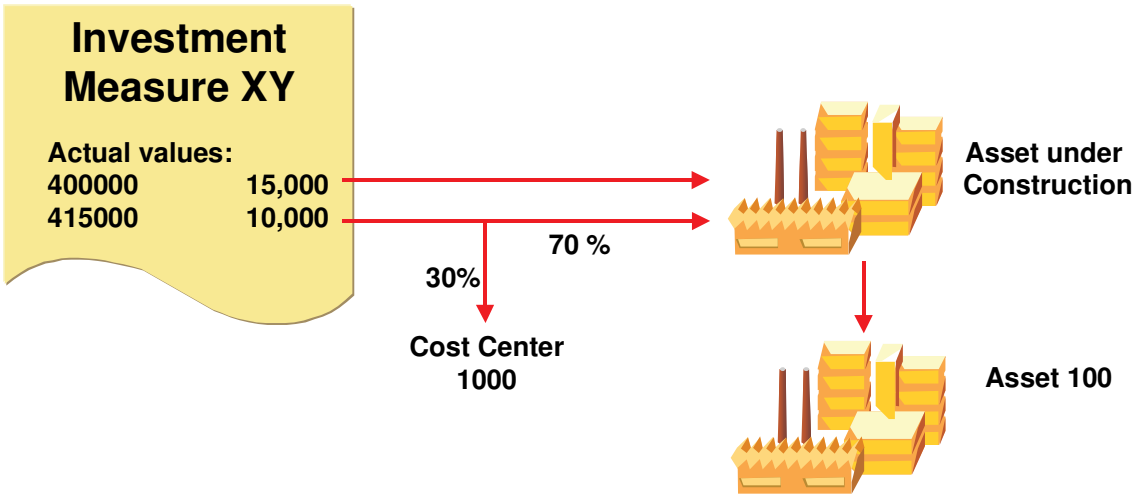
Proof of Origin



Main number DocNo.	Description	Original Amount	Aqcuis. Settlement Amount	Origin
1	Asset 1		6,500	
100000265			6,500	Inv. meas. XY
3	Asset 3		7,700	
100000266			7,700	Inv. meas. XY
100000213		1,000	700	
100000234		4,000	4,000	
100000256		3,000	1,800	
100000261		2,000	1,200	

- When you call the proof of origin for a fixed asset that was maintained as a receiver for summary settlement in an investment measure (Asset 1 in the above example), you see that the various settlements appear as acquisition postings. The document number is number of the settlement document. When the investment measure was managed for line item settlement, then you also see the document numbers of the line items that were posted to the measure.
- You can carry out settlement to fixed assets more than once, if the investment measure is completed in stages. The capitalization posting does not automatically close the investment measure.

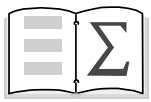
Display Origins of Settlement



Report: Settlement Overview, Measure XY			
Settlement to Asset/AuC	**Actual Costs**	**Settlmt to AuC**	**Settlmt to Asset**
Asset 100	22,000		22,000
Settlement to Cost Center	**Actual Costs**	**Settlmt to Cost Center**	
Cost Center 1000	3,000	3,000	

- As of Release 4.6B, there is a report that displays the receivers to which an investment measure was settled.

Settlement: Unit Summary



You are now able to:

- **Settle investment measures**
- **Obtain proof of origin for completed assets**

Exercises

Unit: Settlement

Topic: Settlement

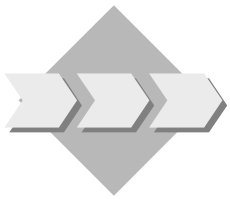
At the conclusion of this exercise, you will be able to:

reate completed assets from investment measures

erform line item distribution for investment measures

ettle investment measures (both periodic and full settlement)

ettle maintenance orders



Now that the measures have actually been implemented, they are ready to be settled. The first step is to create the fixed assets, to which settlement will take place, from within the measures. Then the line items are distributed and settled to fixed assets or to cost centers.

In addition, you also settle the maintenance order that was created and confirmed.

1-1 Create your final completed assets for two packaging machines based on the investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Master Data → Order Manager

Choose your investment order from the worklist. Choose *Change*.

Choose ***Extras → Create Completed Asset***

Create 2 completed assets (one after the other) using the following information:

Asset class	Description	Cost center
2000	Machine 1	1000
2000	Machine 2	1000

When you start to create your second asset, the system tells you that the assets have already been created. Choose *Continue* to create more assets. The system also creates the distribution rule for the order that you use in the next exercises. Save your order.

1-2 Set up line item settlement for your investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Period-End Closing → Single Functions → Settlement → Investment Order: Line Items

Enter your investment order and enter variant 1SAP. Choose *Execute*. The system displays the line items charged to the order and the value of each line item. At this point, you can drill back to the original document for each line item by double clicking on it .
First you create the distribution rule for the line item that is to be partially settled to the cost center. Of the three line items listed (provided you have done all the exercises), select the line item containing cost element 619000 (activity allocation). Then choose ***Edit → Prelim. settlement → Enter dist. rules***.

Enter the following distribution rule:

Category	Receiver	%
CTR	4110	50%

Go back to the line items screen and select the line item for the packaging machines. Choose ***Edit → Final Settlement → Assign Distribution Rules.***

Select one of the assets (these rules were created when you created the completed assets from the order), and choose *Copy*. Go back to the line item and edit the distribution rule group. Choose ***Edit → Final settlement → Create dist. rule.*** Choose *Change* in the resulting dialog box. If you wish, change the equivalence numbers.

Go back and do the same for the cement. Save your distribution rules.

1-3 Run settlements for your investment order. First, run individual settlement in test mode for your investment order for the current period (processing type: *Automatic*). The test run ensures that the settlement configuration is correct and verifies the receivers of the order costs.

Enter the following data in the selection screen

Actual Settlement: Order

Field Name	Input Data
Order	Your investment order
Settlement period	Current period
Posting period	Current period

Fiscal year	Current year
Processing type	Automatic
Test run	active

Check your receivers by choosing *Detail list*. Then run the settlement again in update mode (*Test run* indicator inactive).

Next, run partial capitalization to your completed (depreciable) assets for your investment order, since the two machines have been placed into service. First run the partial capitalization for your order in test mode. Enter the current period and *Partial capitalization* as processing type.

After a successful test run, run the settlement again in update mode (*Test run* indicator inactive).

The system defaults the processing type back to *Automatic* after your test run. Therefore you have to change this value before you carry out the final settlement. Otherwise, the system will say there is nothing to settle.

1-4 Settle your project.

Enter the following data in the selection screen

Actual Settlement: Project/WBS Element/Network

Field Name	Input Data
Project definition	p-00XX Your investment project
Settlement period	Current period
Posting period	Current period
Fiscal year	Current year
Processing type	Automatic
Test run	active

Then carry out the settlement in update mode (*Test run* inactive).

1-5 Settle your plant maintenance order to settle the costs to the asset for the current period.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Completion → Individual Processing → Settle

Actual Settlement: Order

Field Name	Input Data
Order	Your order from Exercise 1-4 (Master Data Unit)
Settlement period	Current period
Posting period	Current period
Fiscal year	Current year
Processing type	Automatic
Test run	Inactive

Confirm all warning messages that appear. All the costs on the PM order should have been settled to the asset that is identified in the master record of the equipment.

Solutions

Unit: Settlement

Topic: Settlement

1-1 Create your final completed assets for two packaging machines based on the investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Master Data → Order Manager

Choose your investment order from the worklist. Choose *Change*.

Choose ***Extras → Create Completed Asset***

Create 2 completed assets (one after the other) using the following information:

Asset class	Description	Cost center
2000	Machine 1	1000
2000	Machine 2	1000

When you start to create your second asset, the system tells you that the assets have already been created. Choose *Continue* to create more assets. The system also creates the distribution rule for the order that you use in the next exercises. Save your order.

1-2 Set up line item settlement for your investment order.

Menu Path:

Accounting → Investment Management → Internal Orders → Period-End Closing → Single Functions → Settlement → Investment Order: Line Items

Enter your investment order and enter variant 1SAP. Choose *Execute*. The system displays the line items charged to the order and the value of each line item. At this point, you can drill back to the original document for each line item by double clicking on it .

First you create the distribution rule for the line item that is to be partially settled to the cost center. There should be three line items, if you have done all the exercises. From these three, select the row containing the line item with cost element 619000 (activity allocation). Then choose ***Edit → Prelim. settlement → Enter dist. rules***.

Enter the following distribution rule:

Category	Receiver	%
CTR	4110	50

Go back to the line items screen and select the line item for the packaging machines. Choose ***Edit → Final Settlement → Assign Distribution Rules.***

Select one of the assets (these rules were created when you created the completed assets from the order), and choose *Copy*. Select the line item again and edit the distribution rule group. Choose ***Edit → Final settlement → Create dist. rule.*** Choose *Change* in the resulting dialog box. If you wish, change the equivalence numbers.

Go back and do the same for the cement. Save your distribution rules.

1-3 Run settlements for your investment order. First, run individual settlement in test mode for your investment order for the current period (processing type: *Automatic*). The test run ensures that the settlement configuration is correct and verifies the receivers of the order costs.

Menu Path:

Accounting → Investment Management → Internal Orders → Period-End Closing → Single Functions → Settlement → Individual Processing

Enter the following data in the selection screen

Actual Settlement: Order

Field Name	Input Data
Order	Your investment order
Settlement period	Current period
Posting period	Current period
Fiscal year	Current year
Processing type	Automatic
Test run	active

Check your receivers by choosing *Detail list*. Then run the settlement again in update mode (*Test run* indicator inactive).

Next, run partial capitalization to your completed (depreciable) assets for your investment order, since the two machines have been placed into service. First run the partial capitalization for your order in test mode. Enter the current period and *Partial capitalization* as processing type.

After a successful test run, run the settlement again in update mode (*Test run* indicator inactive).

The system defaults the processing type back to *Automatic* after your test run. Therefore you have to change this value before you carry out the final settlement. Otherwise, the system will say there are no assets for settlement.

1-4 Settle your project.

Menu Path:

Accounting → Investment Management → Investment Projects → Period-End Closing → Single Functions → Settlement → Individual Processing

Enter the following data in the selection screen

Actual Settlement: Project/WBS Element/Network

Field Name	Input Data
Project definition	p-00XX Your investment project
Settlement period	Current period
Posting period	Current period
Fiscal year	Current year
Processing type	Automatic
Test run	active

Then carry out the settlement in update mode (*Test run* inactive).

1-5 Settle your plant maintenance order to settle the costs to the asset for the current period.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Completion → Individual Processing → Settle

Actual Settlement: Order

Field Name	Input Data
Order	Your order from Exercise 1-4 (Master Data Unit)
Settlement period	Current period
Posting period	Current period
Fiscal year	Current year
Processing type	Automatic
Test run	Inactive

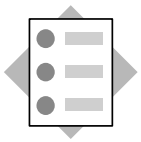
Confirm all warning messages that appear. All the costs on the PM order should have been settled to the asset that is identified in the master record of the equipment.

Fiscal Year Change

Contents:

- Open New Approval Year
- Commitment Carryforward for Measures
- Budget Carryforward for Measures
- Budget Carryforward for Investment Programs
- Close Old Approval Year

Fiscal Year Change: Unit Objectives

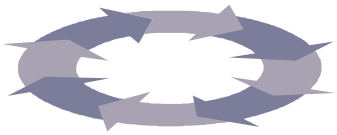


At the conclusion of this unit, you will be able to:

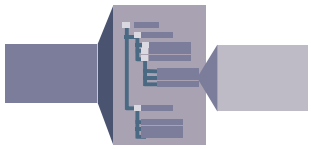
- **Open a new approval year for investment programs**
- **Describe carryforward of commitments and budget for measures**
- **Describe budget carryforward for investment programs**
- **Close the old approval year for investment programs**

Overview Diagram - Fiscal Year Change

Course Overview

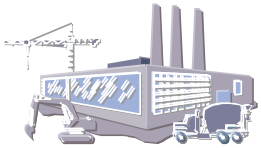


Investment Management Cycle



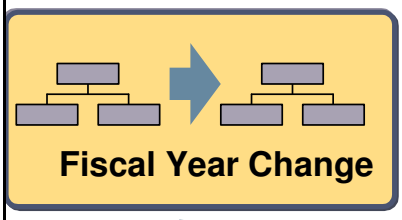
Master Data

Planning and Budgeting

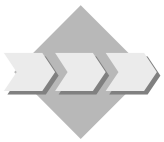


Implementation

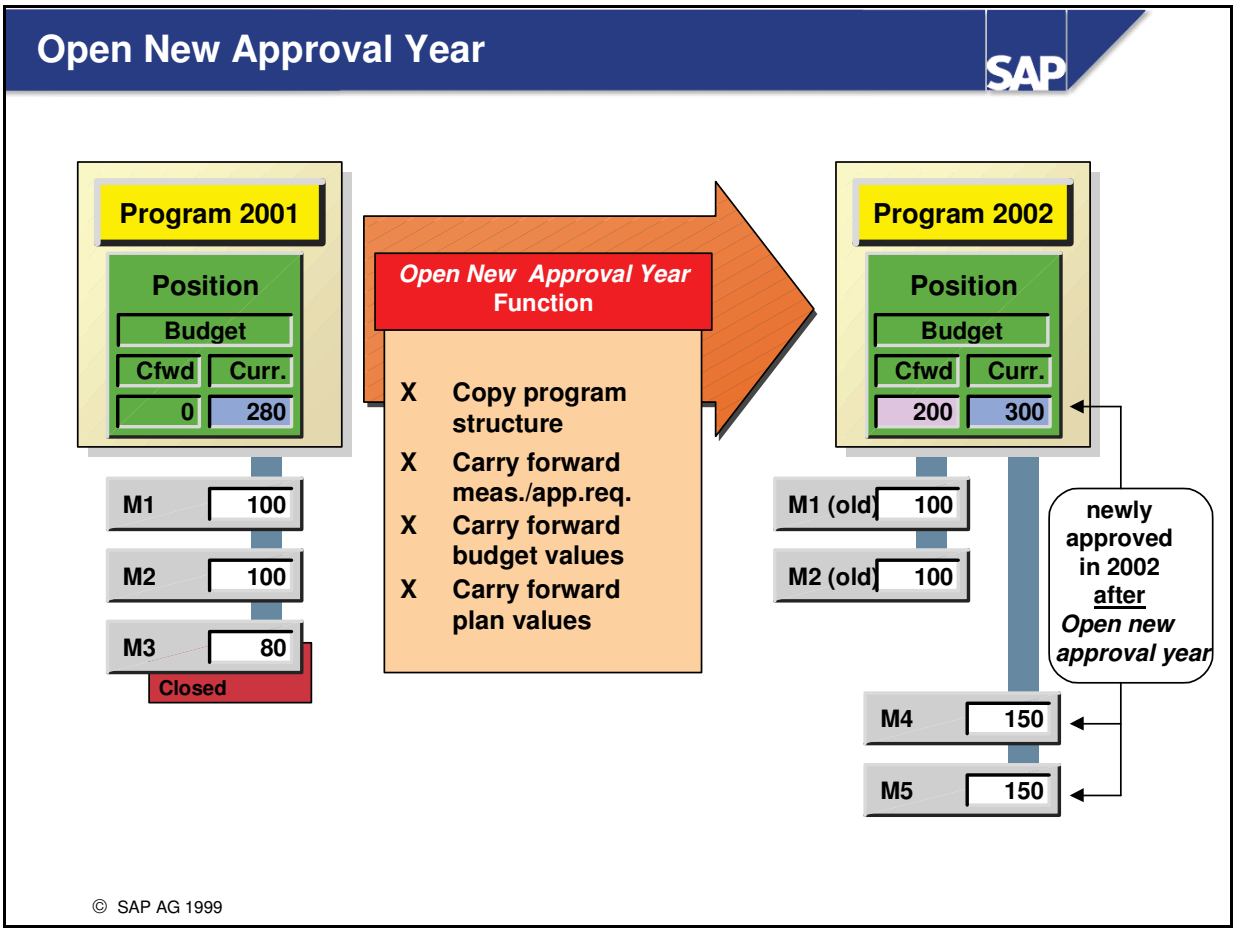
Settlement



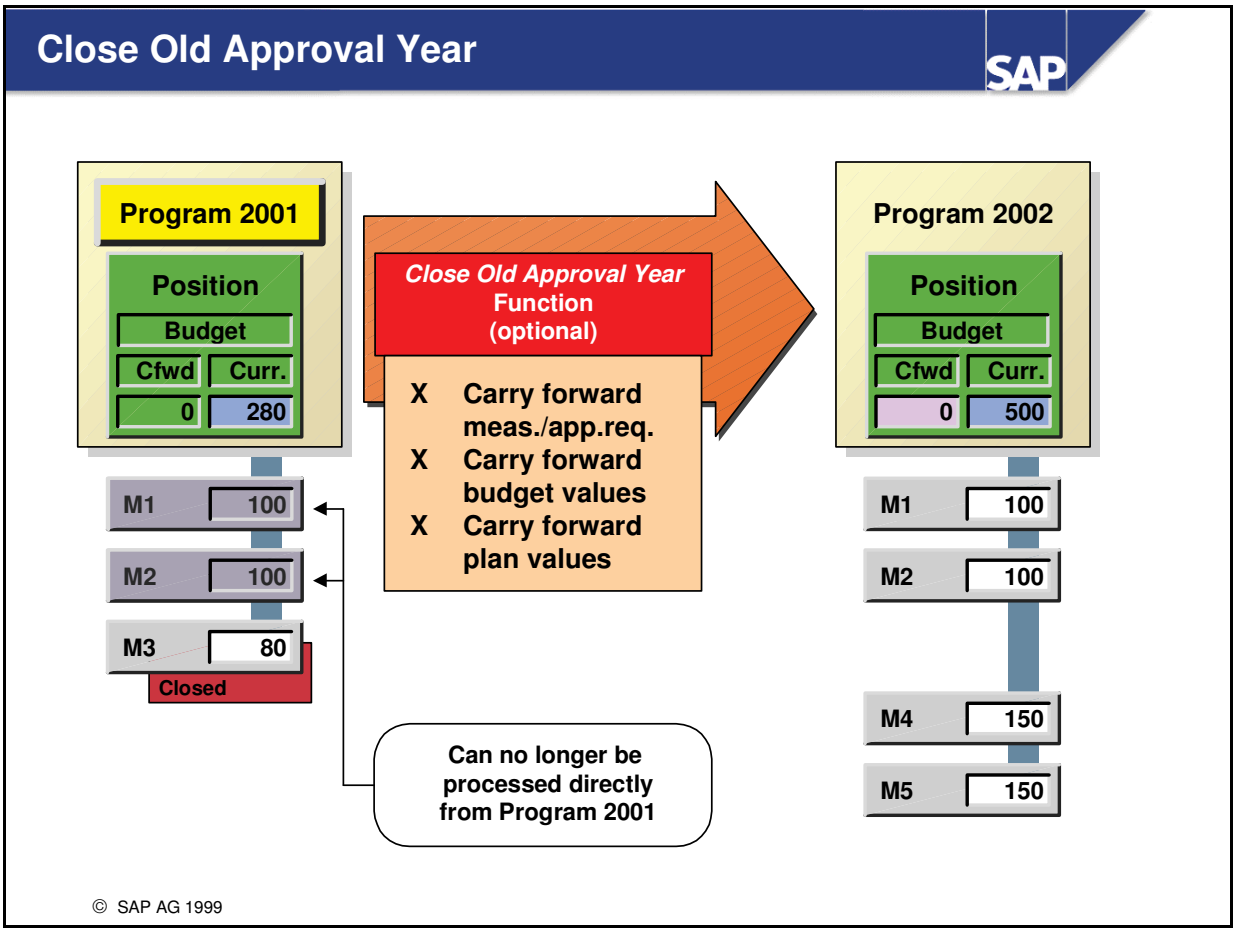
Fiscal Year Change: Business Scenario



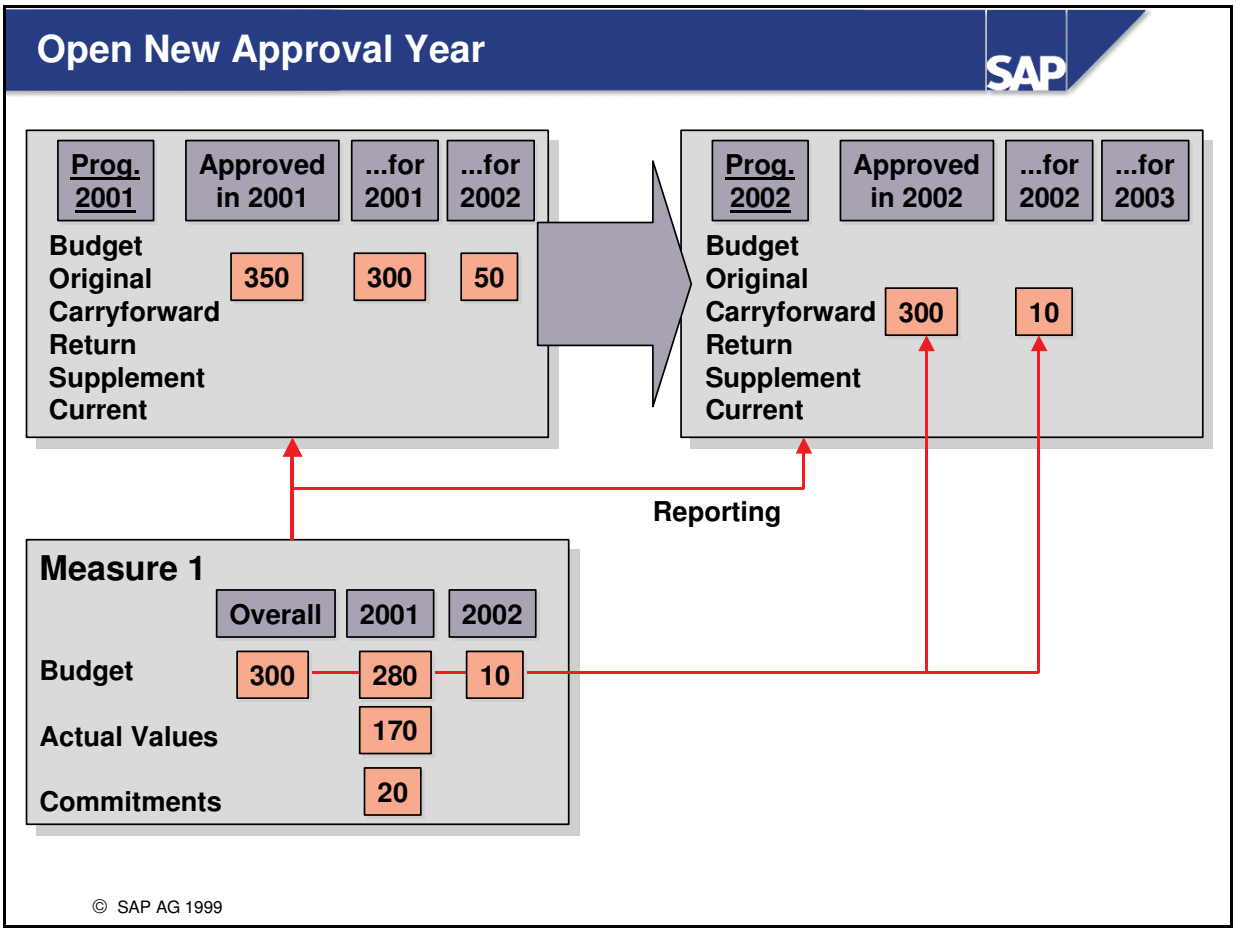
- While the measures that were approved over the last years are still running, you begin to plan your investments for the next year and upcoming years. Since a new approval year is opened, a new investment program is created.
- At the end of the year, you carry forward commitments and budgets of measures.
- You also carryforward the budget of the old investment program.
- At the start of the new year, you close the old approval year.



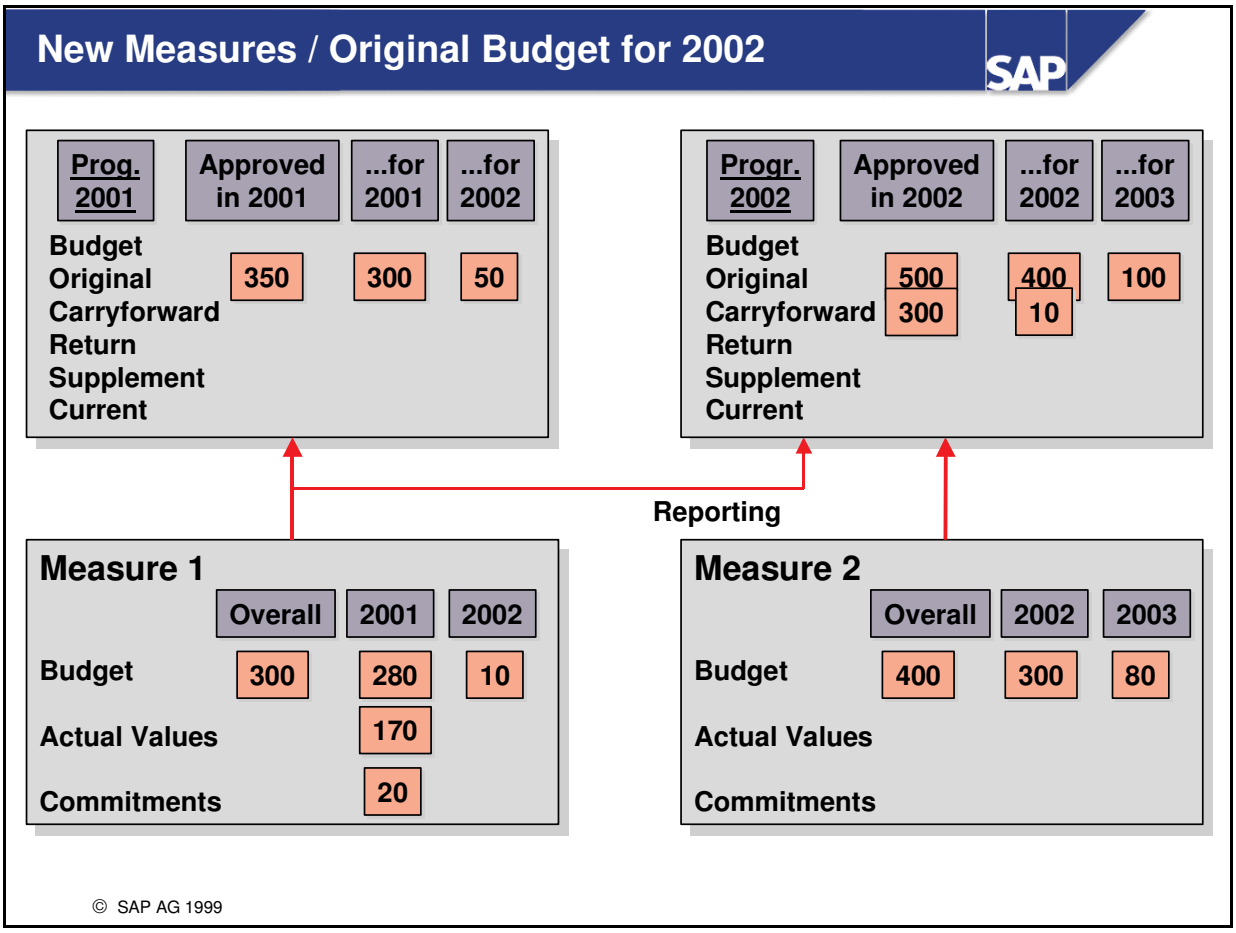
- The system transfers the longer running measures of the old approval year to the new approval year as "old" measures. During this transfer, the system recognizes only those measures that do not yet have the status *closed*.
- The total of the values of these measures is managed as a value carryforward on the new program position. The system determines the carryforward for plan and budget, as well as overall and annual values, in the same way.



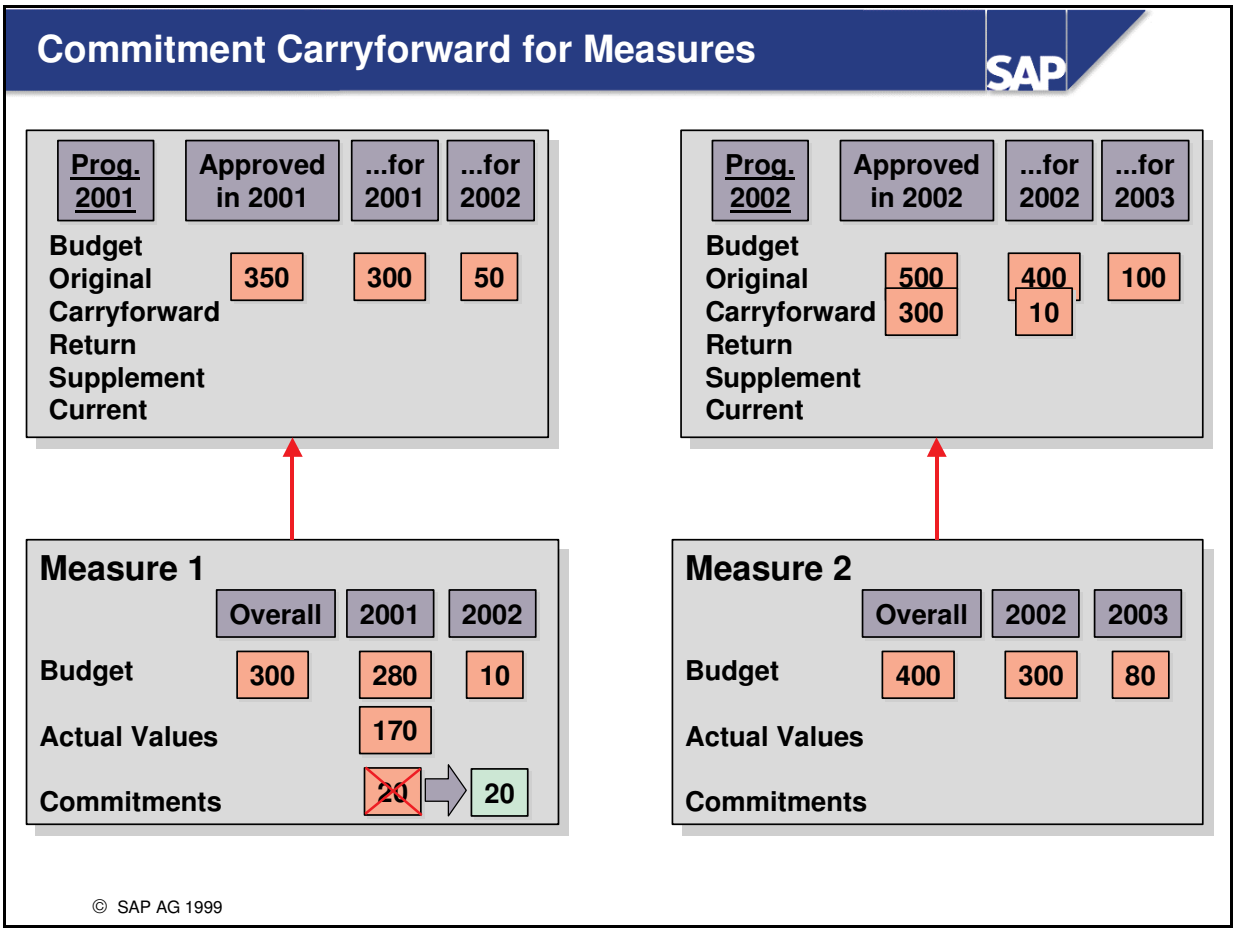
- Using the year-end closing function, you can merge the previously separate budgets for old and new measures (that is, carryforward from old year and original budget in new year). Afterward, all of the values are managed together as original budget.



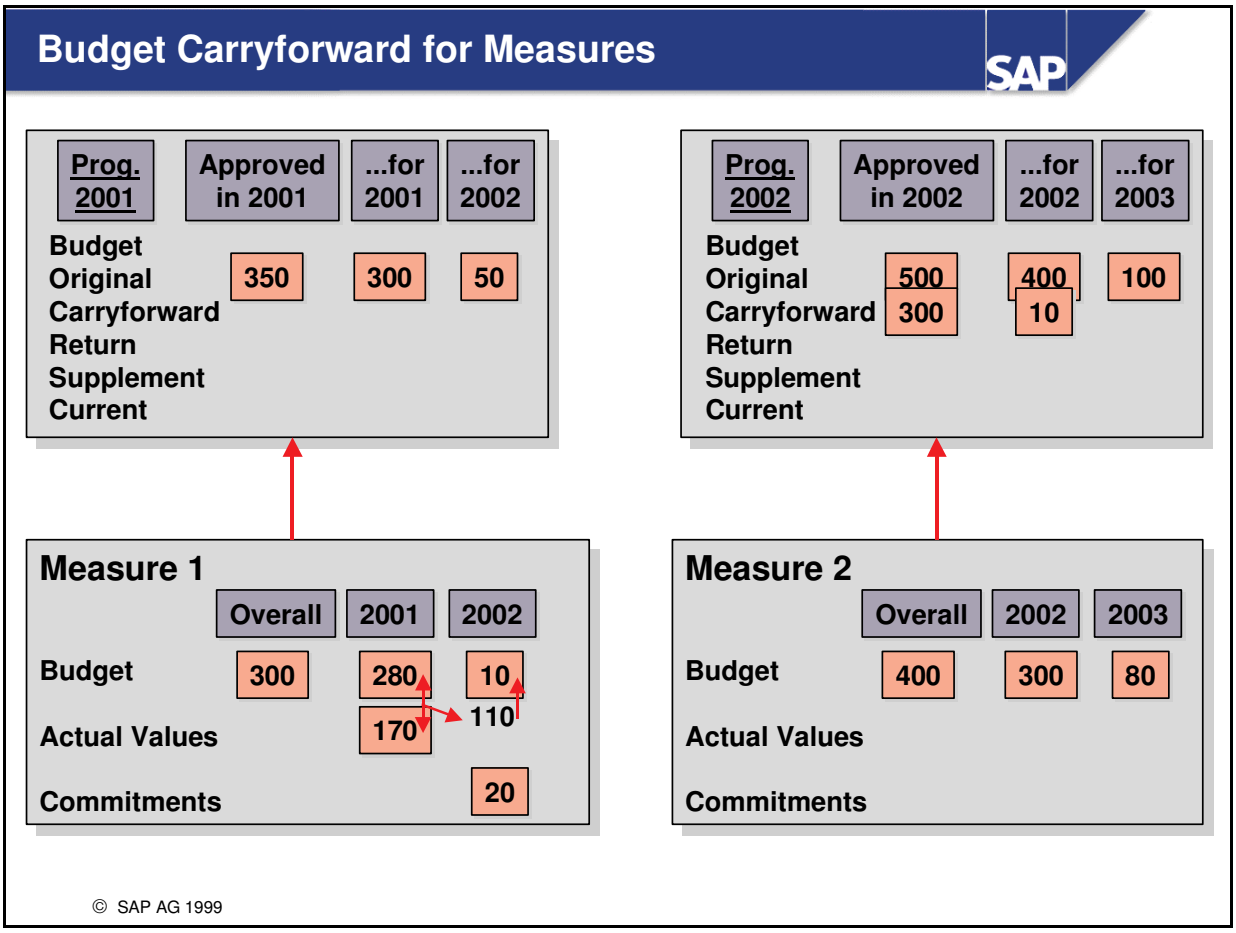
- When you open a new approval year, the system transfers those measures that are not closed to the new investment program.
- The budget values of the old program positions, which were already distributed to measures, are managed as budget carryforward on the new program positions.



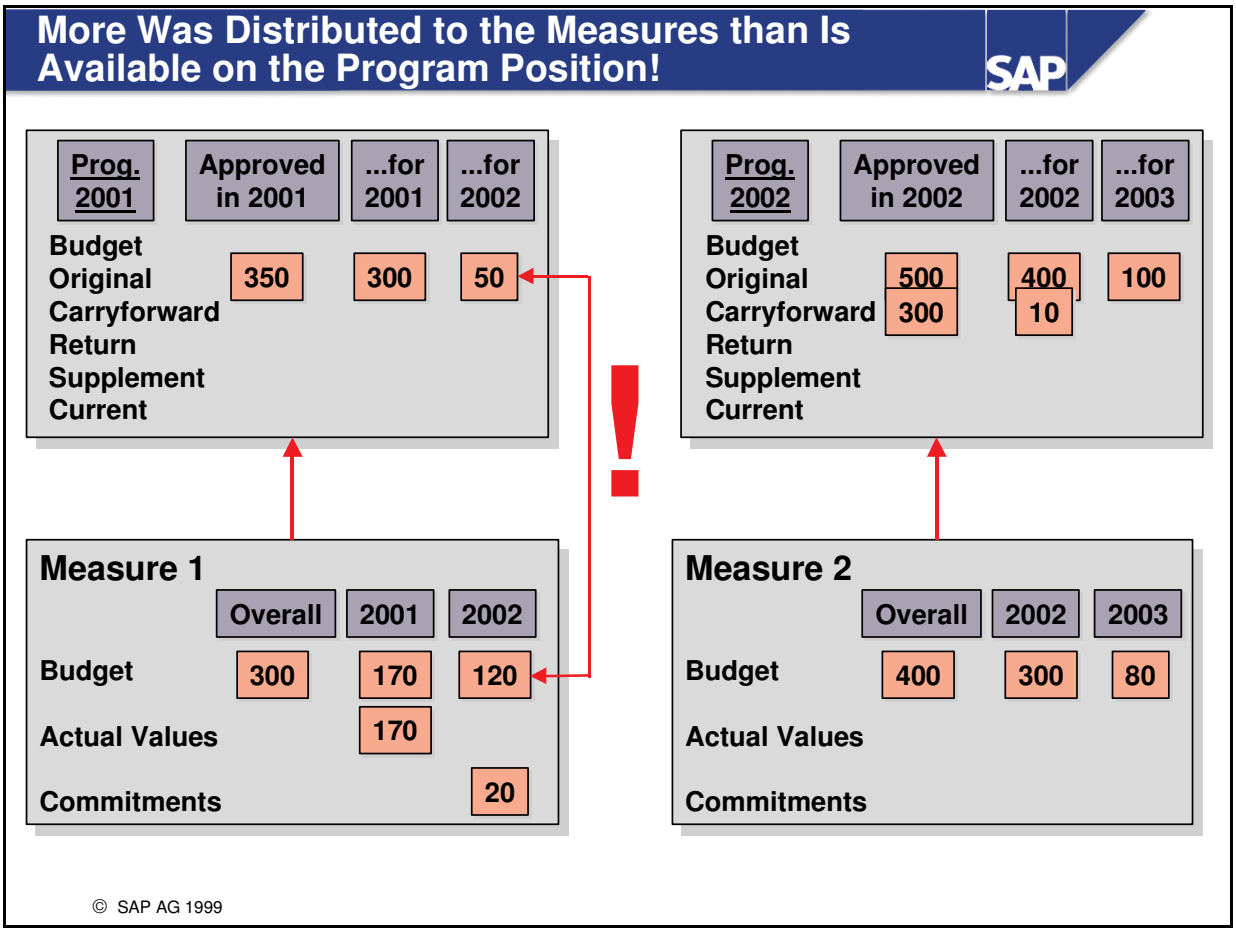
- After the fiscal year change, you can enter new plan and budget values for the new investment program. These values are managed separately from the values carried forward from the previous year.
- You can also assign new measures to the program positions.



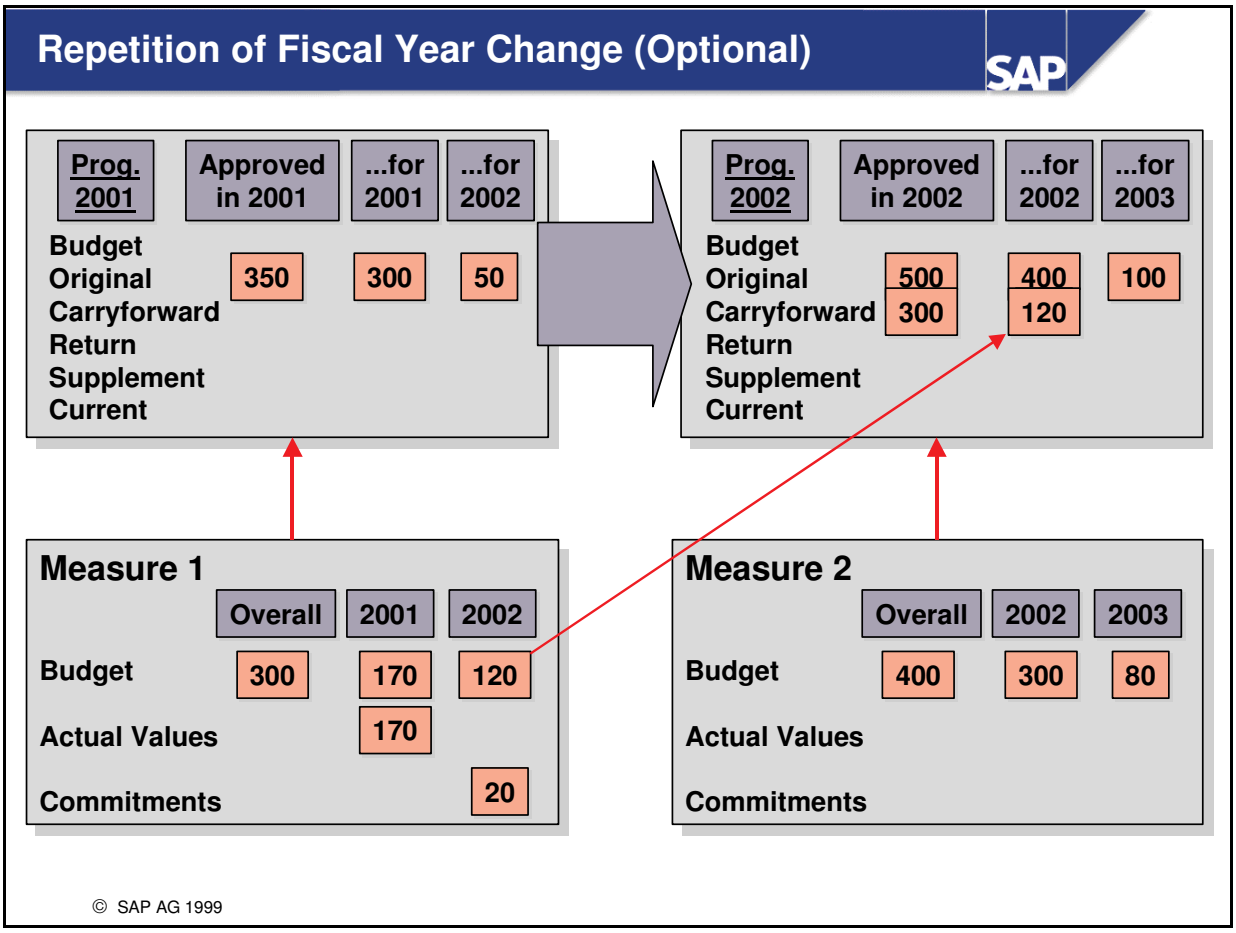
- Before carrying forward the measure budgets, you should first carry forward their commitments.



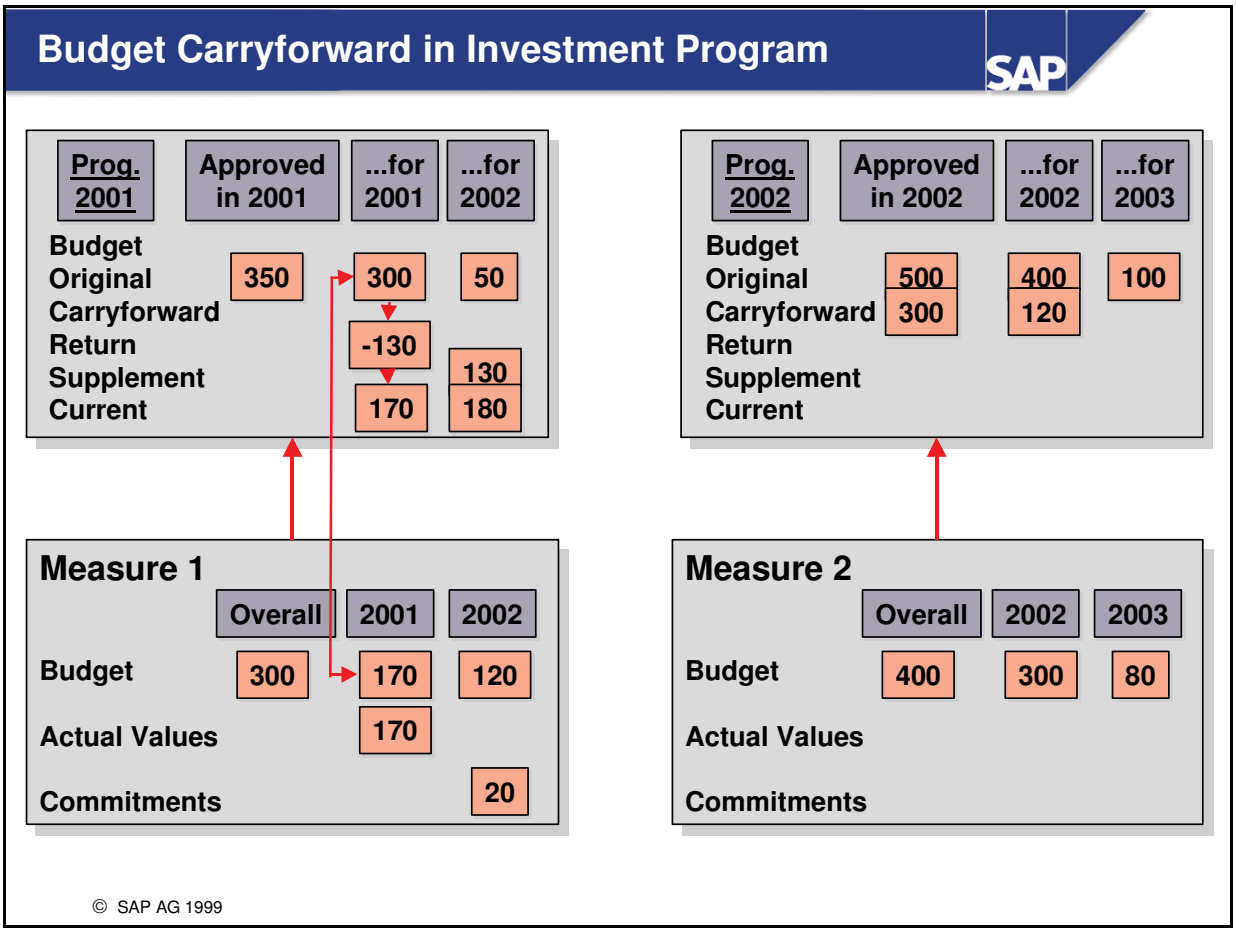
- The budget carryforward for measures is the difference between their actual values and their budget values. This amount is carried forward to the next year.



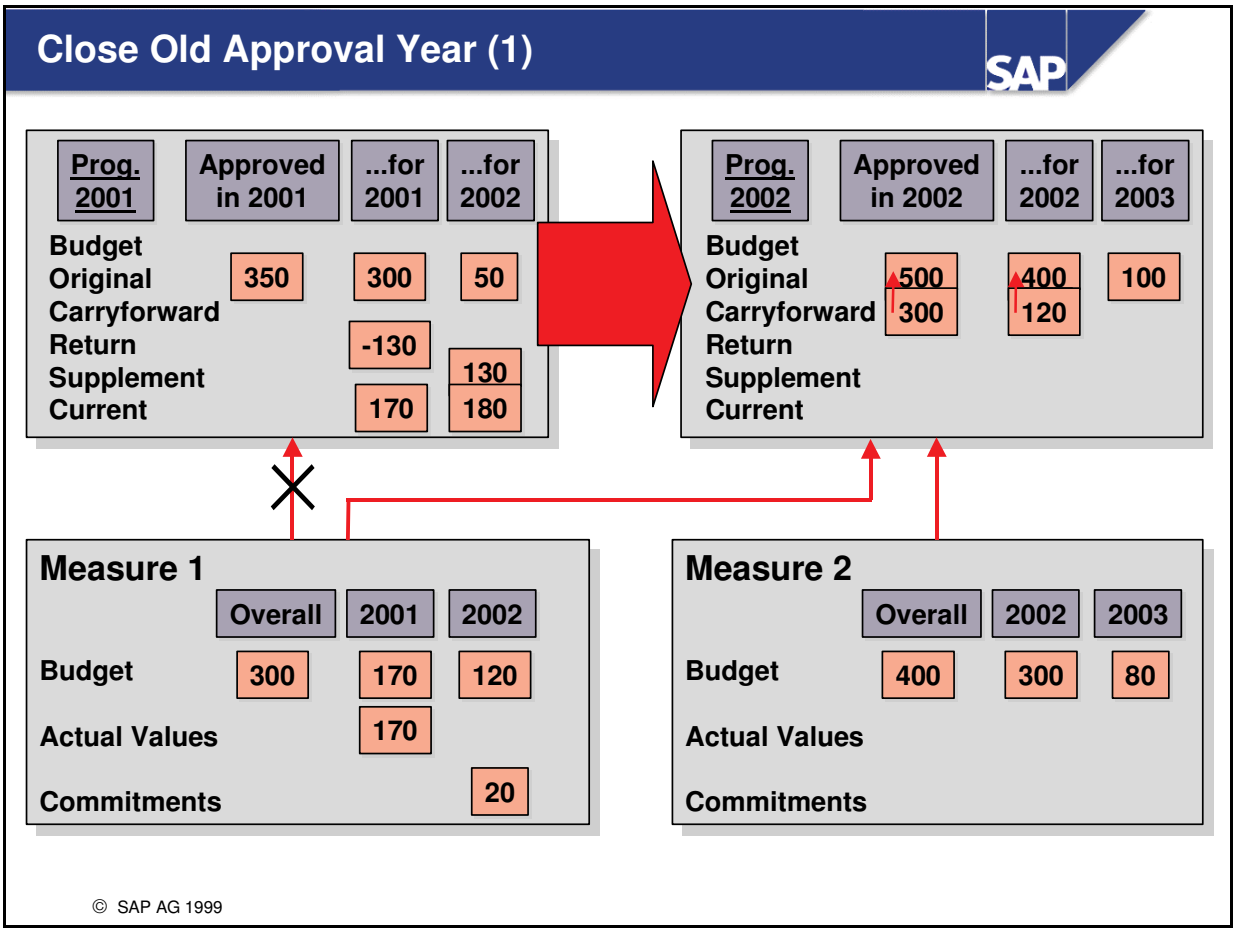
- As a result of the budget carryforward, it is possible that the budget value distributed on the measures in a given year can be higher than the budget on the program position.



- The fiscal year change can be repeated as often as you like.

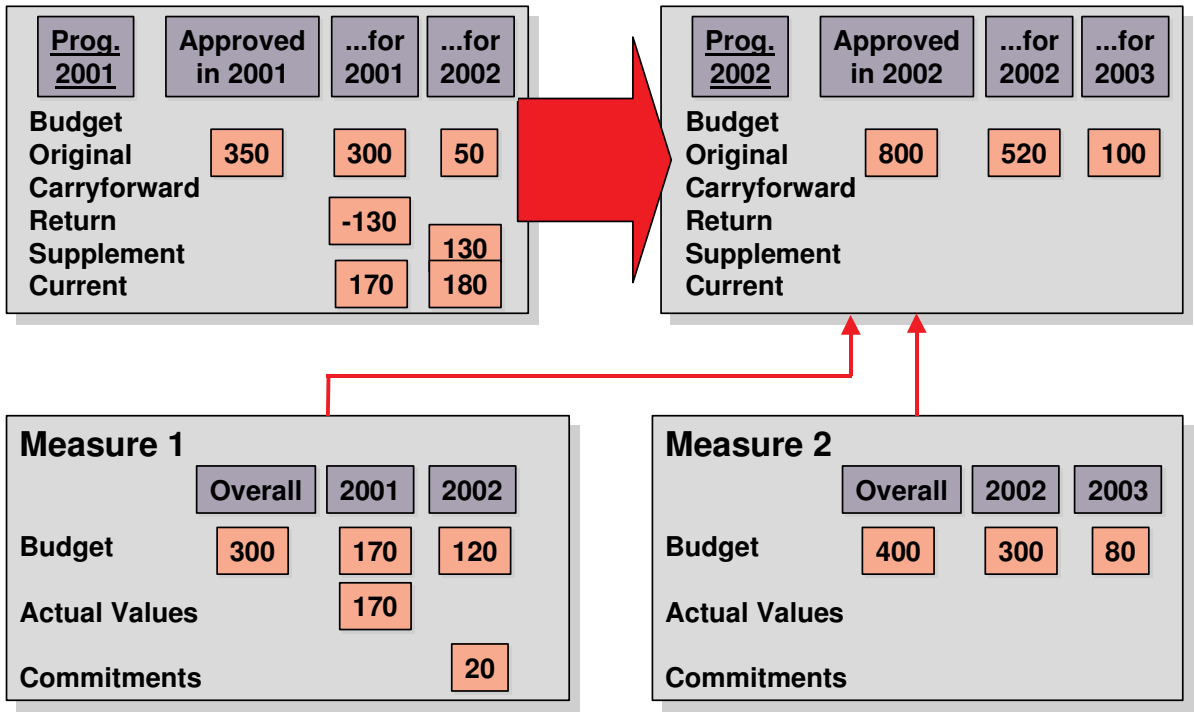


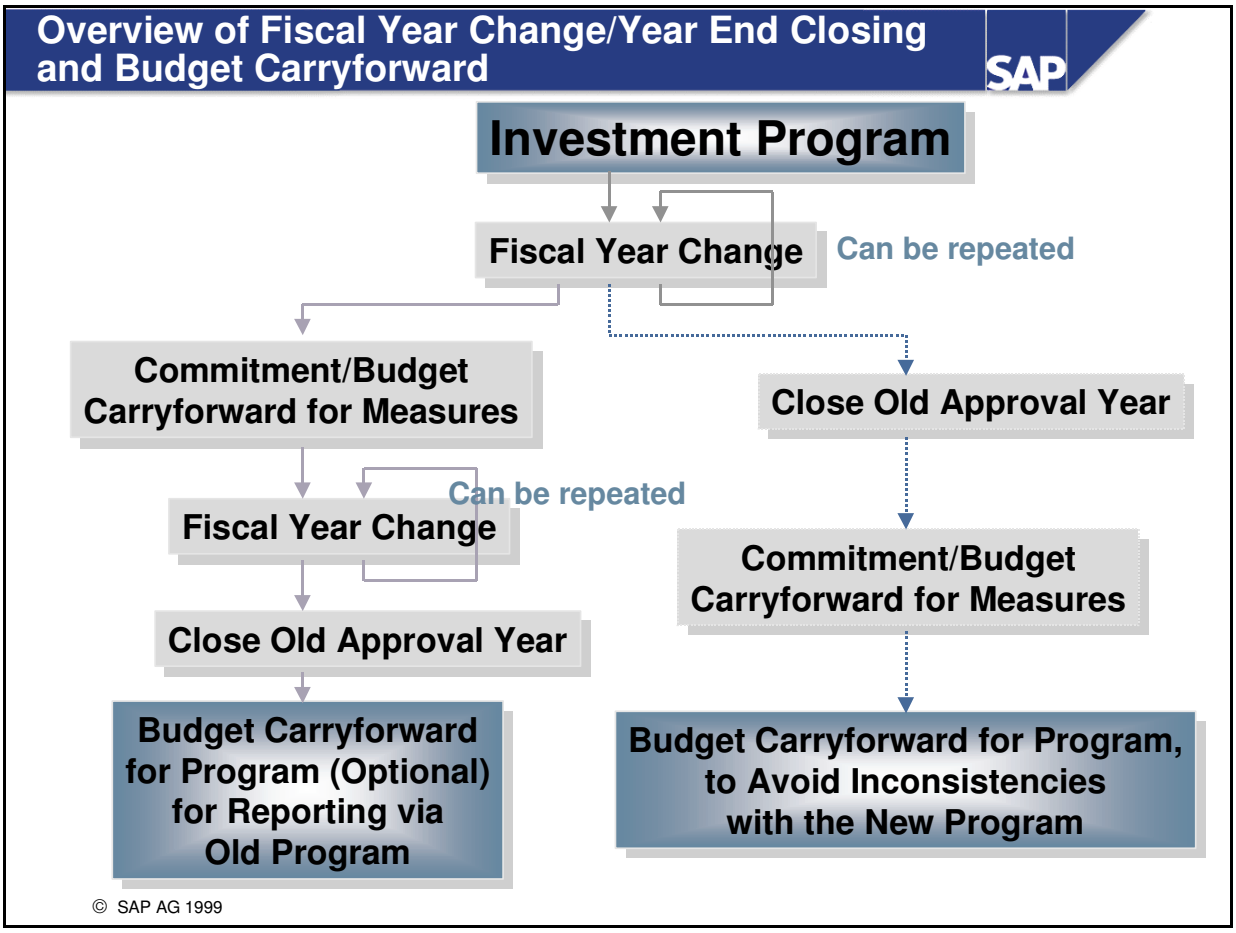
- In order to avoid inconsistencies in the old investment program, you can (starting in Release 4.6) perform a budget carryforward for the investment program. During this budget carryforward, the difference between the distributed budget and the remaining budget is forwarded to the next year (by means of returns and supplements).



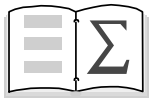
- You can close the old approval year only once. During the closing, the system transfers those measures that are not closed to the new investment program, and adds the budget carryforward to the original budget.

Close Old Approval Year (2)




Overview of Fiscal Year Change/Year End Closing and Budget Carryforward
SAP
Investment Program
Fiscal Year Change
Can be repeated
Commitment/Budget Carryforward for Measures
Close Old Approval Year
Can be repeated
Fiscal Year Change
Commitment/Budget Carryforward for Measures
Close Old Approval Year
Budget Carryforward for Program (Optional) for Reporting via Old Program
Budget Carryforward for Program, to Avoid Inconsistencies with the New Program
© SAP AG 1999

Fiscal Year Change: Unit Summary



You are now able to:

- **Open a new approval year for investment programs**
- **Describe carryforward of commitments and budget for measures**
- **Describe budget carryforward for investment programs**
- **Close the old approval year for investment programs**

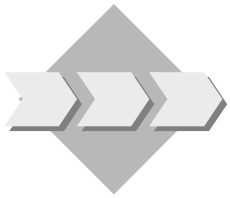
Exercises

Unit: Fiscal Year Change

Topic: Fiscal Year Change

At the conclusion of this exercise, you will be able to:

- Open a new approval year
- Explain commitment carryforward and budget carryforward for measures
- Describe budget carryforward for investment programs
- Close an old approval year



The planning phase for the next approval year is beginning. The first step is to copy the investment program by opening a new approval year. Then you can begin the next round of planning (creation of appropriation requests and measures).
At the end of the year, you carry forward commitments and budget for measures.
In addition, it is possible to carry forward budget values of the investment program, which were not yet distributed, to the next year.
The last step is closing the approval year for the old investment program. Until you close the old approval year, the budget carryforward for the investment program is managed separately from the current values.

1-1 Fiscal Year Change

In this exercise, you carry out a fiscal year change. After you conduct the fiscal year change, you close your maintenance order and then start the fiscal year change again. This demonstrates how the system removes completed measures from consideration.

Menu Path:

Accounting → Investment Management → Programs → Periodic Processing → Fiscal Year Change → Open New Approval Year

Field Name	Input Data
Investment program	400XX
Approval year	Current year
Copy program structure	active
Carry fwd	active

meas./app.req.	
Carry forward budget values	active
Carry forward plan values	active
to version(s)	0

Execute the report. Confirm if you receive a warning. After the program has run, open another session and call a report that compares the budget values and assigned values.

Field Name	Input Data
Investment Program	400XX
Approval year	Current year +1

You see your maintenance order on program position 400XX-1-3.

Now change the status of your maintenance order to *Business completion*.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Order → Change

Field Name	Input Data
Order	Your maintenance order

Choose *Enter*.

Change the status to *Completed*:

Choose ***Order → Functions → Complete → Complete (business)***

Confirm the message that appears, and carry out the fiscal year change (*Open new approval year*) a second time (see above). **Make sure that the approval year is the current year.**

Start the report again (Budget Availability on Measures) for the next year. Notice that the maintenance order no longer appears in the report.

Up to now, the budget values carried forward during the fiscal year change are managed as carryforward values.

Accounting → Investment Management → Programs → Budgeting → Edit Original

Field Name	Input Data
Investment Program	400XX
Approval year	Current year +1

Do **not** confirm the values entered. Instead choose the *Forward* timeframe.

Choose Settings → Approval period

In the dialog box, select *Forward*.

In order to see the budget values in the new investment program as current budget, you have to carry out a year-end closing.

Menu Path:

Accounting → Investment Management → Programs → Periodic Processing → Fiscal Year Change → Close Old Approval Year

Field Name	Input Data
Investment program	400XX
Approval year	**Current year**
Carry forward budget values	active
Carry forward plan values	active
All meas./app.req.	active

Choose *Execute* and confirm the warning.

Now display the original budget for the investment program for the next year:

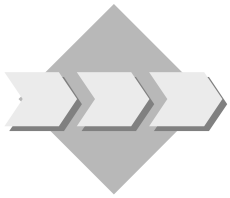
Accounting → Investment Management → Programs → Budgeting → Edit Original

Field Name	Input Data
Investment Program	400XX
Approval year	Current year +1

Solutions

Unit: Fiscal Year Change

Topic: Fiscal Year Change



1-1 **Fiscal Year Change**

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Menu Path:

Accounting → Investment Management → Programs → Periodic Processing → Fiscal Year Change → Open New Approval Year

Field Name	Input Data
Investment program	400XX
Approval year	Current year
Copy program structure	active
Carry fwd meas./app.req.	active
Carry forward budget values	active
Carry forward plan values	active
to version(s)	0

Execute the report. Confirm if you receive a warning. After the program has run, open another session and call a report that compares the budget values and assigned values.

Menu Path:

Accounting → Investment Management → Programs → Information System → Investment Management Reports → Programs: Current Data → Availability → Budget Available for Measures

Field Name	Input Data
Investment Program	400XX
Approval year	Current year +1

You see your maintenance order on program position 400XX-1-3.

Now change the status of your maintenance order to *Business completion*.

Menu Path:

Logistics → Plant Maintenance → Maintenance Processing → Order → Change

Field Name	Input Data
Order	Your maintenance order

Choose *Enter*.

Change the status to *Completed*:

Choose ***Order → Functions → Complete → Complete (business)***

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Menu Path:

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Field Name	Input Data
Investment program	400XX
Approval year	**Current year**
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Carry forward plan values	active
All meas./app.req.	active

Choose *Execute* and confirm the warning.

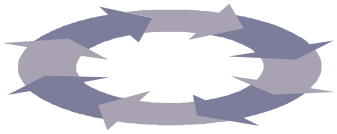
Now display the original budget for the investment program for the next year:

Accounting → Investment Management → Programs → Budgeting → Edit Original

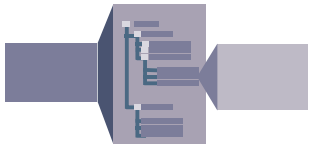
Field Name	Input Data
Investment Program	400XX
Approval year	Current year +1

Summary

Course Overview

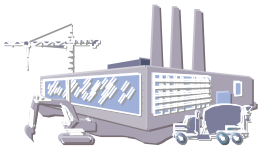


Investment Management Cycle



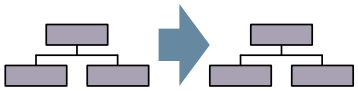
Master Data

Planning and Budgeting



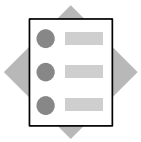
Implementation

Settlement



Fiscal Year Change

Course Objectives



You are now able to:

- **Create the basic master data (investment program, appropriation request, and investment measures) in the R/3 System**
- **Plan your investment measures and display a summary of the values in the investment program**
- **Budget the investment program and measures**
- **Post actual values to the measures and then settle these in Asset Accounting**
- **Perform the fiscal year change in Investment Management**

Future Developments

- Multiple currencies for
  - Investment programs
  - Appropriation requests
- Corporate Investment Management
  - Plan in multiple R/3 Systems
  - Load data to Business Information Warehouse (BW) and Strategic Enterprise Management (SEM)
  - Change and approve data in SEM
  - Transfer changed data back to multiple R/3 Systems

Recommended Follow-up Courses

- **AC350 - System Configuration for Investment Management**

Recommended Follow-Up Activities

- Repeat the exercises using IDES data or your own data.
- For more information on the most recent developments (for customers and partners), refer to http://sapnet.sap.com/im
- Read the online documentation.
- Read IMG documentation.
- Read release notes.