

= exact

And it all comes together.

Exact Globe Next | Project

User Guide



A group of four people are gathered around a table in a meeting. A woman in a red long-sleeved top is smiling and gesturing with her hands. To her right, a woman in a blue top is also smiling and looking towards the woman in red. On the left, a woman with glasses is looking down at a laptop. In the foreground, the back of a man's head and shoulders in a light blue shirt is visible. The background is a bright, modern office space with a person standing near a railing.

Exact Globe Next Project

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Welcome to

Exact Globe Next!

This guide provides the information you need to work effectively with Exact Globe Next. It is part of the series of user guides for Exact Globe Next. The goal of this documentation is to help you to get quickly acquainted with the product and the possibilities it offers. It will help all users, especially those without much experience with our software, to get started with and benefit

from the product straightaway. Exact Globe Next is an integrated software solution; its modules of related business processes function together in an integrated manner. Besides the user guides, there are several information sources, related to the software, available to you. You can access online help documents on Exact Globe Next functionalities while working with the software by just pressing the F1 key. The list of help document also contains release notes related to the product. They inform you of the improvements and functional additions in the various releases of the product.

You can also access the help documents, release notes and other related documents online through the Exact Customer Portal on www.exact.com. The Customer Portal is a protected part of the Exact Software internet site, which has been specially developed to provide you with information and to help you get the maximum yield from your software. This portal informs you about our contacts, downloads, FAQs, and the latest product news. We invite you to use the portal as often as you wish!

Thank you for using Exact Globe Next and this user guide!

Introduction

Every project is unique, with different customer expectations and requirements. Consequently, it is crucial for project organizations to have the flexibility when presenting information. The **Projects** module of Exact Globe Next provides the solution whereby project managers have complete control over their projects to suit different expectations and requirements. It is a standard package that can be set up to handle the uniqueness of every project. All relevant project data can be viewed at a single project master card.

This module allows you to keep track of costs and revenue on project basis. It is fully integrated with other modules in Exact Globe Next. The **E-Account** license, which is the financial module, is a pre-requisite to start up **Projects**. By combining the **Projects** module and **E-Budget** license, the actual versus the budget analysis can be done at project level.

The advantages of the **Projects** module are:

- **Flexible set-up of project administration**
The company can create different types of projects in different project master cards, which record all the relevant individual project data. Each project can define different methods to determine the work in progress.
- **Cost control through budgeting at different levels**
If **E-Budget** is included in the license, the company can define the budget costing for each project. In addition, if the **E-Cost Analysis** is also included in the license, the company can define the budget costing at the cost center and/or cost unit levels. This allows the project managers to verify the actual costs against the budget costs while executing the project.
- **Time saving through fast and well-defined recording**
When defining hours, a company can choose to define the hours on a daily, weekly, or per cost center basis. This can save time when defining hours in a full week or for a specific cost center.
- **Different types of reports to monitor the progress of projects**
To enable project managers to analyze records from different dimensions, the **Projects** module provides different types of reports for use by different managers. Each report layout is customizable, for example, on a daily, weekly, or monthly basis.

In general, project management is defined as the planning, monitoring and control of all aspects of a project and the motivation of all those involved in it to achieve the project objectives on time and to the specified cost, quality and performance. Although the projects and the content can be very specific per company, the overall project management needs are quite standard.

This user manual will cover the following chapters:

- Chapter 1: Setting Up
- Chapter 2: Project Management
- Chapter 3: Work In Progress
- Chapter 4: Advanced Features
- Chapter 5: Management Information

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Chapter 1

Setting Up



1. Setting Up

In this chapter, the setup procedures for the use of the **Projects** module will be explained. These settings are important to ensure that projects are managed according to your current environment.

The following are the topics relevant to the setting up of the **Projects** module:

- System settings
- Creating labor hours
- Creating items
- Defining work schedules and generating MRS
- Creating projects

1.1 System Settings

1.1.1 Setting up document settings

In this section, you can define the document layouts to be used when printing receipts, delivery notes, and invoices. Apart from defining the document layouts, you can also create layouts or modify the existing layouts according to your preferences. By default, the system provides several standard layouts. You can link each document to a specific layout in order to use this layout whenever the document is printed. Only **Receipt**, **Delivery note**, and **Invoice** are applicable when managing projects.

The screenshot shows the 'Documents settings' window with the following sections and settings:

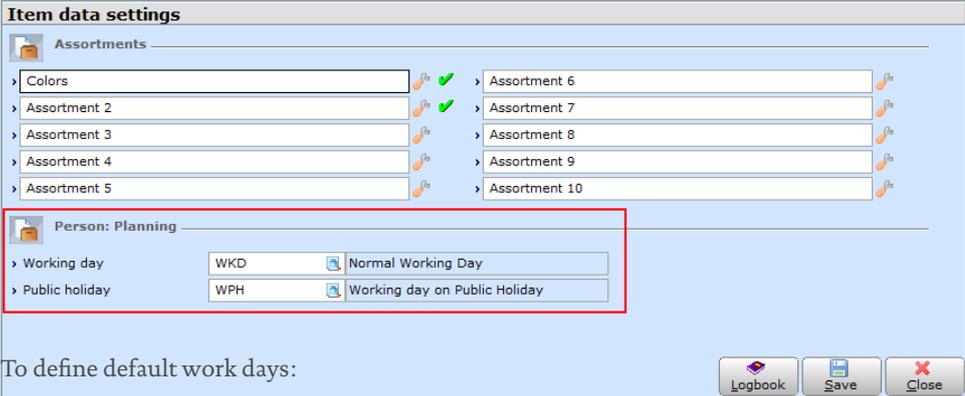
- General:** Store attachment as: PDF; PDF generator: Exact PDF; Covering letter (Format): Image.
- Financial:** Reminder: Debiteur herinnering layout 1; Debtor labels: Debtor labels; Creditor labels: Creditor labels; Debtor statements: (empty).
- Cash flow:** Payment: (empty); Payment specification: Payment specification; Receipt: (empty); Deposit report: (empty).
- CRM:** Quotations: Offerte; Letter: (empty).
- HRM:** Payroll slips: Layout 5; Jaaropgaven: (empty); Arbeidsovereenkomst: (empty); People labels: Resource label; Letter: (empty).
- Service:** Service slips: Service order.
- Logistics:**
 - Item labels: Item labels
 - Purchase order: Bestelbon
 - Blanket SO: (empty)
 - Blanket PO: (empty)
 - Receipt: Receipt label
 - Receipt labels: Purchase: Receipt label
 - Returns: Supplier: Return
 - Returns: Employee: Return
 - IBT delivery note: Interbranch Transfer Note
 - Confirmation: Orderbevestiging
 - RMA order confirmation: Confirmation
 - Picking list: Pick list
 - Collective picking list: Collective pick list
 - Fulfillment: Fulfillment
 - Delivery note: Pakbon
 - Invoice: Factuur layout
 - Direct invoice: (empty)
 - Credit note: (empty)
 - Direct credit note: (empty)
 - POS: POS
 - POS (Receipts): (empty)
 - Giro collection slips: Giro collection slip
 - Returns: Customer: Return
 - Production order: Production order
 - Operation: Operation Slip
 - Receipt labels: Production: (empty)

To set up documents settings:

1. Go to System → General → Settings.
2. Click **Documents** settings in the **Settings** section.
3. In the **Logistics** section at **Receipt**, click  **Select**. In the **Layout** screen, select the layout for the receipt, and then click **Select**.
4. At **Delivery note**, click  **Select**. In the **Layout** screen, select the layout for the delivery note and click **Select**. You will see the message "Link this layout to all debtors?" Click **Yes** to use the same delivery note layout for all your debtors or **No** to cancel.
5. At **Invoice**, click  **Select**. Select the layout for the invoice, and then click **Select**. You will see the message "Link this layout to all debtors?" Click **Yes** to use the same invoice layout for all your debtors or **No** to cancel.
6. Click **Save** to save the documents settings.

1.1.2 Defining work days

You need to define the hour items used for generating capacity in order to create a planning for the employees.



Item data settings

Assortments

> Colors	 	> Assortment 6	
> Assortment 2	 	> Assortment 7	
> Assortment 3		> Assortment 8	
> Assortment 4		> Assortment 9	
> Assortment 5		> Assortment 10	

Person: Planning

> Working day	WKD	 Normal Working Day
> Public holiday	WPH	 Working day on Public Holiday

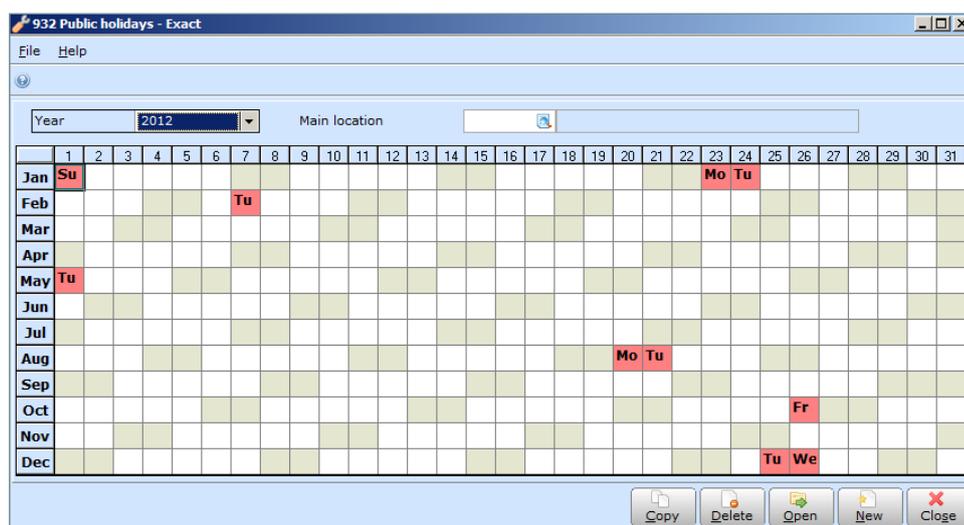
To define default work days:

1. Go to System → General → Settings.
2. Click **Item data settings** in the **Settings** section.
3. Go to the **Person: Planning** section. At **Working** day, type or select the work day item which is used to generate the capacity for resource planning. For more information on creating labor hour items, see 1.2 *Creating Labor Hours*.
4. At **Public holiday**, type or select the public holiday item to generate the capacity for staff planning on public holidays.
5. Click **Save** to save the item data settings, and then **Close** to exit.

1.1.3 Defining public holidays

Before you generate the working hours, it is important to define the public holidays. Public holidays are non-working days which can be omitted in planning of tasks and activities.



To define public holidays:

1. Go to System → General → Countries → Public holidays.
2. At **Year**, select the year in which you want to define the public holidays.
3. At **Main location**, type or select the location to display or create all the national public holidays and specific holidays for the selected location. You may need to create a location if you have not already done so.
4. On the calendar, click the required date column box of the public holiday, and then click **New**. Alternatively, you can double-click the required date box to do this. The selected date is then displayed. You can edit the date by typing or selecting a new date.
5. At **Description**, type the description of the public holiday.
6. At **Main location**, type or select the main location where the public holiday applies to. If you leave the field blank, it means that the public holiday is a national public holiday.
7. Click **Save** to save the public holiday you have created.
8. Click **Close** to exit.

Tips: The public holidays will be indicated in the **Absence** tab of the personal profile at HR → People → Maintain.

1.1.4 Defining financial journals

You must define the specific journals which you want to use in recording of the financial transactions when working with the **Projects** module.

General ledger settings

Tax

Disable VAT

Flexible VAT system

VAT type Invoice system

Use separate GL to close VAT balances

GL to report VAT

Entry

Print posting report immediately Check Analytical values Processing

Unique GL per bank/cash journal

Enforce balancing on cost center

Year-end closing process

Process balance sheet Result 0040 Profit for Current

Closing offset B/S account

General ledger

Payment differences

Calculation differences

Accruals and prepayments 2400 Prepayments

Euro calc dif (Debit) 9150 Calculation differ

Invoices / items to be received 2500 Invoices to be Re

Suspense account : Logistics 2650 Logistics Suspen

Landed costs

Bank costs

Production : Costs

Production : Revenue

Production : Waste

Production : Results

Production : WIP

Production : Scrap

Journal

Sales invoice	60	Sales Journal	Project (Realizations)	50	General Journal
Cash journal (POS/Direct invoices)	10	Cash Journal	Depreciation	52	Depreciation Jou
Item transactions	50	General Journal	Work in progress	50	General Journal
Purchase journal (Electronic invoicing)					

Logbook Save Close

To define financial journals:

1. Go to System → General → Settings.
2. Click **General ledger settings** in the **Settings** section.
3. In the **Journal** section at **Sales invoice**, define the journal to be used when printing final sales invoices, project (realizations) and work in progress transactions.
4. At **Project (Realizations)**, type or select the journal to be used when processing realizations for projects
5. At **Work in progress**, type or select the journal to be used when generating work in progress transactions.
6. Click **Save** to save the journal settings.

1.1.5 Setting up project settings

Before you can record the WIP transactions in general ledger accounts, you must define the general ledger accounts to be used. You can also define the default WIP method to be used in the system. For more details on the WIP calculations based on different WIP methods, see 3 *Work in Progress*.

To define WIP general ledger accounts (Profit & Loss and Balance sheet-type):

1. Go to System → General → Settings.
2. Click **Project settings** in the **Settings** section.
3. In the **Entry** section at **Work in progress (Change)**, type or select the general ledger account (Profit & Loss-type) to be used for recording and releasing WIP entries based on the WIP method as defined under the **Basics** tab at Projects → Projects → Maintain projects when you click **Open** at a project.
4. Type or select the general ledger account (Balance sheet-type) at **Work in progress (Balance)**. This general ledger account will be used for recording and releasing WIP entries based on the WIP method as defined under the **Basics** tab at Projects → Projects → Maintain projects when you click **Open** at a project. This general ledger account must be a neutral account.
5. Type or select the general ledger account (Profit & Loss-type) at **Recognized costs**. This general ledger account will be used for recording and releasing WIP entries for transactions without item linked based on the defined option **Cost of sales method** selected at **WIP method** under the **Basics** tab at Projects → Projects → Maintain projects when you click **Open** at a project.
Note: This **Recognized costs** field is available in the license for all countries except the Netherlands.
6. Click **Save** to save the general ledger accounts settings for WIP.

To use the resource planning application:

1. Go to System → General → Settings.
2. Click **Project settings** in the **Settings** section.
3. In the **Planning** section, select the **Resource planning** check box to use the resource planning application in the system. If you do not select the check box, all the tasks will be planned to the phantom staff (a person with identification number -3).
4. Click **Save**.
5. Click **Close** to exit.

To define the default WIP method:

1. Go to System → General → Settings.
2. Click **Project settings** in the **Settings** section.
3. In the **WIP method** section at **WIP method**, select the default WIP method to be used when you create a project. The available options are **Percentage of completion cost recognition**, **Percentage of completion revenue recognition**, **Completed contract method**, **Cost of sales method**, **No : WIP**, **To be invoiced**, **Percentage of completion cost recognition (budget)**, **Percentage of completion revenue recognition (budget)**, **WIP cost and revenue transfer**, and **WIP cost and revenue**.
For more details on the WIP methods, see 3 *Work in Progress*.
4. Click **Save**.
5. Click **Close** to exit.

Tips: The selected WIP method will be shown at **WIP method** when you create a project at Projects → Projects → Maintain projects, and then click **New**. However, you can still change the WIP method when you create a project.

1.2 Creating Labor Hours

In an organization, it is important to allow your staff to register the hours they have realized when completing the tasks which have been planned for them. In order to do this, you need to create labor hours. Realization of labor hours is essential in project management as you allocate your staff to perform specific tasks in a specified time.

The screenshot shows the '034 Hours - Exact' window with the following details:

- Hour code:** ASSEMBLAGE
- Description:** assemblage
- Type:** Labor hour
- Status:** Active
- From:** 01/12/2002
- Created by:** Eugene Versart

The **Sales** section contains a table with the following data:

Qty.	Unit	Factor	Unit	Price	Curre	Tax	Cost price	Active from	Active
1	uur	1	uur	80.000	EUR	0	40.000	01/12/2002	
2									
3									
4									

The **Taxes** section shows VAT 0% and a cost price of 40.000. The **Attributes** section has the **Text** checkbox checked. The **Business unit** is 'Delft' and the **Project** is '20300001_2 Introduce Deltabike 2004 lijn'.

To create labor hours:

1. Go to Projects → Items → Hours.
2. Click **New**.
3. Under the **Basics** tab at **Hour code** and **Description**, type a unique code and description for the new hour item. These are mandatory. The description serves as the full name of the hour item code.
4. At **Type**, select **Labor hour** to indicate that the new hour item is a type of labor hour.
5. Select **Active** at **Status** to activate the new labor hour item.
6. At **From**, type or select the date which you want to make the defined status for the new labor hour item valid. Type or select the end date for the validity of the defined status if there is an end date for it. In case of a new active item, you may want to keep this item active for as long as you desire, and will only define an end date when your business requires so. Hence, it is common not to define an end date when you create an hour item.
7. Click **New** to define the sales price of the hour item and the validity date for the sales price in the **Sales prices** screen, and then click **Save** and **Close**. To change the sales price, you can type the new price directly in the table under the Price column or click **New** again to type the new price, and then click **Save** and **Close**. Click **Edit** or **Delete** to edit or delete the selected sales price respectively. However, this two buttons will be disabled if you select **Default(Pricelist)** at **Price lists**.
8. At **Taxes**, type or select a default tax code for the hour item. This information is mandatory.
9. Type the cost price of the hour item at **Cost price**.
10. At **Sales unit**, type or select the sales unit of the hour item. This information is mandatory.
11. In the **Attributes** section, select the **Text** check box to set the hour item with the corresponding attribute. With this attribute selected, the **Enter text item** screen will be displayed when the hour item is defined during the creation of orders.

12. Click the **Financial** tab. At **Item group**, type or select the item group which the hour item belongs to. At **Revenue, Salary payment, and Realizations**, type or select the general ledger (GL) account for revenues, coverage, and cost of goods sold respectively. These are mandatory. Generally, you need to define the appropriate general ledger accounts to be used for recording of transactions involving the hour item. With these accounts, whatever revenue recorded will be credited into the revenue account when an invoice is printed with the offset balance debited in the accounts receivable. Meanwhile, salary payment will create a credit entry in the salary payment GL account when the hour items are realized or fulfilled with the offset balance debited in the realizations GL account.
13. Click **Save** to save the item.

To define settings under the Purchase/ Sales tab:

You can define more settings for the purchase and sales transactions of the hour items under the **Purchase/ Sales** tab. In the **Attributes: Sales** section, select the **Sales: (Can be used in sales transactions)** check box to allow the hour item to be used in sales transactions. To disallow discount on the sales price list of the hour item to be given in sales transactions, select the **No discount: (Not allowed to give discount)** check box. This check box is enabled only if you select the **Sales: (Can be used in sales transactions)** check box. In the **Attributes: Purchase** section, you can select the **Buy** check box to indicate that the hour item can be purchased. The check box is enabled only if there is a supplier added to the hour item card. Select the **Requires approved supplier** check box to allow the hour item to be purchased only from approved suppliers. In the **Supplier** section, click  **Add**,  **Edit**, or  **Delete** to add, edit, or delete the selected supplier of the hour item. You can also click  **Select: Main** supplier to select a supplier as the main supplier of the hour item and click  **Creditor card** to view the creditor card of the selected supplier.

To define settings under the People tab:

Go to the **People** tab to maintain the people linked to the hour item. Click  **Add** to assign a person for the hour item,  **Add: All** to add all the active people to the hour item,  **Edit** to edit the details of the hour item linked to the selected person,  **Delete** to delete the selected person, and  **Person Card** to view the card of the selected person. When the cost price under the **Basics** tab is filled, it will automatically be copied to the price of the hour item linked to the people.

To define extra information under the Extra tab:

Under the **Extra** tab, you can type or select the extra information about the hour item in the **Free values** and **Free fields** sections. You can view all the details of the changes you have made to the hour item by clicking the **Log** tab. After you have filled up all the necessary information under the tabs that have been described, click **Save** again to save all the additional information you have defined.

1.3 Creating Items

You must create items in your administration to manage projects related to items. Items are products or things which you can sell, purchase, produce, or use as parts in the production process. In addition, items may not necessarily be physical. For example, they can be commissions, phantom items, travel expense claims, and other things that you use in projects. You can create entries for every new item that has been added into the operations of your company.

The screenshot shows the '034 Items - Exact' window with the following details:

- Item code:** AB1010-VER1.0
- Description:** Gel saddle
- Search code:** AB1010-VER1.0
- Type:** Standard
- Status:** Active
- From:** 17/03/2005
- Price:** 49,000 EUR
- Classification ESL:** 2 (VAT 19% excl.)
- Cost price:** 19,000 EUR / stuks
- Margin:** 69.39 %
- Purchase price:** 16,500 EUR / stuks
- Assortments:** Assortment 1 through 5 (all empty)
- Attributes:** Text (checked), Divisible (unchecked)
- Description NL:** Zadel
- Description FR:** (empty)
- Description ES:** (empty)
- Description DE:** (empty)

To create items:

1. Go to Projects → Items → Items.
2. Click **New**.
3. At **Item code** and **Description**, type a unique code and description for the new item. The item code will be used as an identification code for the item while the description is the full name of the item or item code and it will form a label. These are mandatory.
4. At **Search code**, the box is automatically filled in with the item code. However, you can edit the search code. Similar items can have the same search code to enable a list of the similar items to be displayed when the search code is defined under the Item column when an order is created.
5. At **Type**, select **Standard** or **Bulk issue** to define the type of the item. Generally, most items are of the Standard type. **Standard** items are used in normal business operations where they can be purchased and/or sold. These items can be your stock, cost items like stationery, mileage claims, or assets. Meanwhile, bulk issue items are usually items that come in bulk like boxes of nails, screws, or maybe paint that are used in a manufacturing process.
6. At **Status**, select one of the following options to define the status of the item:
 - **Active** — Items can be sold, purchased, manufactured, received, and delivered.
 - **Blocked** — Items can be used in stock counts, creation of Bill of Materials, and budget scenarios, but cannot be used in sales, purchase, and financial transactions.
 - **Discontinued** — Items can be used in stock counts, sales, creation of Bill of Materials, and budget scenarios, but cannot be used in purchases.
 - **Inactive** — Items can be used in stock counts, but cannot be used in sales, purchase, financial transactions, creation of Bill of Materials, and budget scenarios.
 - **Future** — Items that are not made active.

7. At **From**, type or select the date range for the validity of the defined status. In case of a new active item, you may want to keep this item active for as long as you wish, and only define an end date when your business requires so. Therefore, it is common not to define an end date when you create an item.
8. Under the **Basics** tab at **Sls. unit, Price**, type or select the sales unit and price of the item.
9. At **Sales VAT** code, type or select the sales VAT code for the item. However, this does not apply to the US legislation, where **Tax Classification** and **Multiple Tax** are used.
10. Type the cost price of the item at **Cost price. Markup** automatically displays the markup percentage of the item price based on the sales price and the cost price you have defined. Calculation of the markup percentage is based on the difference between the sales price and the cost price that is divided by the cost price and multiplied by 100. **Purchase price** automatically displays the purchase price of the item which is extracted from the purchase price of the main supplier defined under the **Purchase/ Sales** tab.
11. Click  at **Picture** to insert a picture of the item. After you have inserted a picture, you will see the **Delete** icon. Click this to delete the picture of the item.
12. In the **Attributes** section, select the **Text** check box to set the item with the corresponding attribute. With this attribute selected, you can type a long description of this item when the item is defined during the creation of orders. With this attribute selected, the **Enter text item** screen will be displayed when the item is defined during the creation of orders. Meanwhile, select the **Divisible** check box to allow the quantities to be defined in decimals.
13. Click the **Financial** tab to define the appropriate GL accounts for recording of transactions involving the item. In the **Financial** section at **Item group**, type or select the item group which the item belongs to. This information is mandatory.
14. Type or select the GL account for revenues, stock, and cost of goods sold at **Revenue, Stock, and Cost of goods sold** respectively. These are mandatory. The revenue GL account is credited when an invoice is printed and the accounts receivable debited with the same amount. Meanwhile, during fulfillment of the item, the stock GL account is credited while the cost of goods sold GL account is debited to complete the double entry accounting principle.
15. Click **Save** to save the item.

It is important to define the settings under the **Purchase/ Sales** tab in order to maintain the purchase or sales transactions of the item.

To define settings under the **Purchase/ Sales** tab:

1. In the **Attributes: Sales** section, select the **Sales** check box to allow the item to be used in sales transactions. To disallow discount on the sales price list of the item that is to be given in sales transactions, select the **No discount** check box. This check box is enabled only if you select the **Sales** check box.
2. Click **Sales prices** to create and maintain the sales price list of the item. Meanwhile, you can select the **Service** check box to allow the item to be used in service management and service orders. Select the **Explode - Fulfillment** check box to indicate that the item has the **Explode - Fulfillment** attribute. An item with this attribute is an item consisting of several components in the Bill of Materials (BOM) used in the manufacturing process of a product where the components are registered individually at the time of fulfillment instead of the item itself. This check box is enabled only if the **Make** check box is selected under the **Manufacturing** tab.
3. You can select the **From stock** check box to disallow creation of sales order for this item if there is insufficient stock. This check box is enabled only if you have selected the **Stock controlled** check box under the **Inventory** tab.
4. In the **Suppliers** section, click  **Add** to add a supplier for the item,  **Edit** to edit the purchase details of the item linked to the selected supplier,  **Delete** to delete the selected supplier,  **Select: Main supplier** to select a supplier as the main supplier of the item, and  **Creditor card** to view the creditor card of the selected supplier.

- In the **Attributes:Purchase** section, select the **Buy** check box to allow the item to be purchased. The check box is enabled only if there is a supplier added to the item card.
- You can select the **Requires approved supplier** check box to allow the item to be purchased only from approved suppliers. Click  **Purchase prices** to view the purchase price agreements of the item.

Under the **Inventory** tab, you can define the attributes of the inventory and warehouses that handle the inventory.

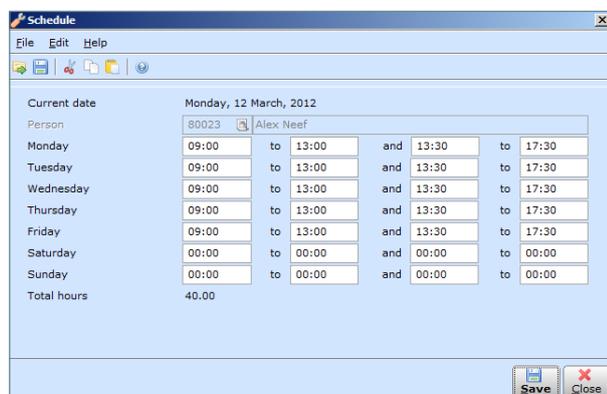
To define settings under the Inventory tab:

- In the **Attributes** section, select the **Batch** check box if the item is a batch item, the **Serial** check box if the item is a serial item, and the **Stock controlled** check box if the item is a "Make to Stock" item.
- After you have defined the settings under the various tabs, click **Save** again to save the settings.
- Click **Close** to exit.

1.4 Defining Work Schedules and Generating MR

Before you can plan your staff in projects, you must first define the default weekly working schedule using the **HR** or **Payroll** module. By creating the work schedule, you can generate the Master Resource Schedule (MRS) which is the available labor capacity so that you can plan whatever tasks/ requirements to your staff in the projects you are going to undertake.

1.4.1 Defining work schedules for specific person



Day	Start	End	Break Start	Break End	End	
Monday	09:00	13:00	13:30	17:30	17:30	
Tuesday	09:00	13:00	13:30	17:30	17:30	
Wednesday	09:00	13:00	13:30	17:30	17:30	
Thursday	09:00	13:00	13:30	17:30	17:30	
Friday	09:00	13:00	13:30	17:30	17:30	
Saturday	00:00	00:00	00:00	00:00	00:00	
Sunday	00:00	00:00	00:00	00:00	00:00	
Total hours						40.00

To apply different work schedules to a specific person:

- Go to HR → People → Maintain, Payroll → People → Maintain, or HR → Planning → Personal.
- Select a person whose working hours need rescheduling and click **Schedule**. The **Schedule** screen will be displayed.
- At **Monday** to **Sunday**, type the range of daily work hours for the person. Type the start and end work time for the first half of the day in the first and second column respectively. Next, type the start and end work time for the second half of the day in the third and fourth columns respectively. The difference in time between the second and third columns indicates a break time. For non-working days, leave the columns as "00:00". At **Total hours**, the total number of working hours per week is automatically calculated based on the time you filled in for every working day.

4. Click **Save** to save the changes made in the work schedule.
5. Click **Close** to exit.

Tips: You can create a standard work schedule that applies to all your staff at System → General → Countries → Schedule

1.4.2 Generating MRS for people

To generate MRS for people:

1. Go to HR → People → Maintain or Payroll → People → Maintain.
2. Select a person who you want to generate the MRS for, and then click **Generate**.
3. In the **MRS** screen, the ID of the selected person will be automatically displayed at **Person**. Select the **All** check box to generate the MRS for everyone.
4. At **Date**, type the date range within which you want to generate the MRS.
5. Click **Generate**.
6. Click **Close** to exit.

1.5 Creating Projects

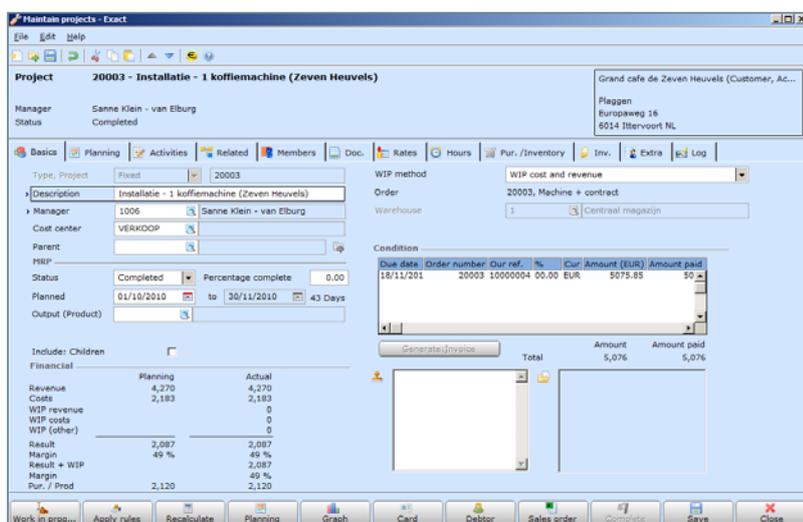
A project can be defined as an effort undertaken to achieve a particular objective. Generally in the business realm, a project involves a project manager, team members, time, financial resources and others that will contribute to the project.

A project is usually initiated from a sales order, production order, purchase order, or internal order. Examples of projects may include the research and development of a new drug, the engineering and construction of a building, or the design, coding, testing, and documentation of a computer software program. Meanwhile, the time span of a project or the start and end date of a project could vary from days, weeks, months, or even throughout several years.

You can generate the projects from quotations, sales orders, service orders, production orders, and project orders if you have the relevant modules in your license. Alternatively, you can also create projects directly at Projects → Projects → Maintain projects. With the second option, you need to define the data under the **Basics** tab. You can also define extra information about the project under the **Extra** tab while the other tabs are used to view and define data for existing projects.

There are various types of projects used in Exact Globe Next. They are:

- **Fixed** — This type of project is based on fixed costs. Costs of extra resources (time or materials) used in the project will not be charged to the customer of the project.
- **Time & Material** — This type of project is based on the resources (time or materials) used in the project and will be charged to the customer of the project accordingly. The costs can include costs of extra resources.
- **Internal** — This type of project is for cost management within your company. An internal project does not need to have a sales order linked, but purchase orders and internal use requests can be linked to it. For example, an internal project to gauge the costs of internal use requests made within a specified period.
- **Production** — This type of project is automatically generated when a production order is created. A production project cannot be created without a production order.
- **Training** — This type of project is used only to register the costs of a training held within your company, which consist of an output, for example, the labor hours of the trainer. When creating a training project, the output must be specified.



To create projects:

1. Go to Projects → Projects → Maintain projects.
2. Click **New**.
3. Under the **Basics** tab at **Type**, select the project type to be created: **Fixed**, **Time & Material**, **Internal**, **Production**, or **Training**.

4. At **Project**, type a unique project code. This is mandatory. If the project is of the **Time & Material** or **Fixed** type, the system will prompt you to create a sales order when you press the TAB key to go to **Project**. After creating the sales order and closing it, the sales order number will be defined as the project code at **Project**. If the project is of the **Production** type, the system will open the **Production orders** screen when you press TAB to go to **Project**. After creating the production order and closing the screen, the production order number will be defined as the project code at **Project**. However, if the project is of the **Internal** or **Training** type, you can type a new project code at **Project**.
5. Type a description of the project at **Description**.
6. At **Manager**, type the ID or select the person who will become the project manager. A project manager has total management control of the overall operations of a project. Among his important roles are planning tasks to project members, realizing the hours on behalf of the project members, authorizing the realizations, and adding or removing project members from a project. **Cost center** will be automatically defined with the cost center of the selected person. However, you can edit the cost center of the project by typing or selecting a new cost center.
7. At **Parent**, type or select the parent for this project. Only active and proposed projects can be selected as a parent. A parent project can be used for grouping sales orders.
8. In the **MRP** section at **Status**, select **Active**, **Blocked**, **Completed**, or **Proposed** to define the corresponding status of the project.
9. At **Planned**, type or select the start and end date of the project. The system will calculate the total number of days allocated for the project from the start to the end date.
10. Type or select the output or product of the project at **Output (Product)**. For **Fixed** and **Time & Material** type projects, standard and hour items can be selected. However, you can only select standard items for **Internal** and **Production** type projects. As for **Training** type projects, phantom items cannot be selected. Phantom items are items created at Manufacturing → Setup → Extra charges. Other items can be selected.
11. Select the **Include: Children** check box to include the financial data of the children
12. At **WIP method**, select **Percentage of completion cost recognition**, **Percentage of completion revenue recognition**, **Completed contract method**, **Cost of sales method**, **No : WIP**, **To be invoiced**, **Percentage of completion cost recognition (budget)**, **Percentage of completion revenue recognition (budget)**, **WIP cost and revenue transfer**, or **WIP cost and revenue** to define the Work in Progress (WIP) method for the project. You can define the default WIP method at System → Settings → General under **Project settings** at **WIP method**. For further details on every WIP method, see 3 *Work in Progress*.

Notes :

- If you select any WIP method other than **Percentage of completion cost recognition**, **Percentage of completion revenue recognition**, **Percentage of completion cost recognition (budget)**, or **Percentage of completion revenue recognition (budget)**, you will see **Percentage complete** besides **Status**. Here, you can type the percentage of completion of the project. Only figure of between 0.00 and 100.00 is acceptable.
 - You can only select **WIP cost and revenue** for **Fixed**, **Time & Material**, or **Internal** type of projects. The **WIP method** field will be disabled once you generate the WIP entries of the project using this method.
13. Type or select the warehouse for the project at **Warehouse**. For **Time & Material**, **Fixed**, or **Production** type projects, you cannot select the warehouse. The warehouse will be copied from the sales order or production order.

14. At **Compress: Sales order**, select one of the following options to set the Invoice Proposal to compress the sales order lines with hour items, linked to this project:
 - **None** — Select this option if you do not wish to perform any compression to the sales order.
 - **Item, Date, -3** — Select this option if you only need item and date related information for certain projects.
 - **Person, Date, Output (Product)** — Select this option if you only need people and date related information for certain projects.
 - **Create sales order lines: Skipped** — Select this option to let the sales order lines to constantly remain as unchanged or static.

The **Compress: Sales order** field is available only when you are creating a **Time & Material** project. However, it will no longer be available once a realization is authorized.

15. If the project is of the **Time & Material** or **Fixed** type, you will see the **Condition** section, which displays the payment terms of the sales order linked to the project. Click at any of the payment term line which you have not generated an invoice for and the **Generate: Invoice** button will be enabled. Click this to generate an invoice for the selected payment term line.
16. Under the **Extra** tab, you can define additional information about the project in the predefined fields and free fields for the project card. At **Item group**, type or select an item group to group the current project to the corresponding group. The item group you have selected will impact the list of selectable items at **Output (Product)** under the **Basics** tab. This means only items that are under the corresponding item group can be selected at **Output/Product**. On the contrary, if you select an item at **Output/Product** under the **Basics** tab and after that you select an item group which the item does not belong to under the **Extra** tab, you will see an error message of "Not linked - Item group".
17. Click the **Log** tab to display the information about the changes you have made to the project master card. After you have defined extra information or make changes, click **Save** again to save the new information and changes made to the project.
18. Click **Save** to save the project.

You can also create projects automatically from project orders.

To create projects automatically from project orders for standard or hour items:

1. Go to Projects → Entries → Project orders.
2. Click **New**.
3. In the **Project orders** screen, type or select the necessary information, such as the type, item, account, description, and planned date(s).
4. Click **Generate** to generate the project order.
5. Click **Close**.
6. A **Time & Material** or **Fixed** project is automatically created, based on the selection in the **Project orders** screen. You can find the project at Projects → Projects → Maintain projects, whereby the project code is the same as the created project order.

Notes:

If you have selected **Time & Material** in the **Project orders** screen, a **Time & Material** project is automatically created.

- If you have selected **Fixed** in the **Project orders** screen, a **Fixed** project is automatically created.
- The project type selected in the Project orders screen will overwrite the invoice method selected at System → General → Settings → Order settings in **Entry** section.

To create projects automatically from sales orders for make items:

1. Go to Order → Entries → Sales orders.
2. Click **New**.
3. In the sales order header, define the necessary information, such as the debtor, description of the sales order, and the sales order date.
4. In the sales order sub lines, type or select a make item and fill in the necessary information under the respective columns.
5. Click **Authorize** to authorize the sales order.
6. Click **OK** in the **Stock check** screen.
7. Click **Conditions**.
8. In the **Conditions** screen, click **Produce**.
9. In the **Generate** production order screen, select the **Include: Stock controlled** check box.
10. Click **Produce** to proceed with producing the items.
11. A production order is created for the make item. The **Created: Order** screen will list the production orders created. Click **Close** to return to the **Conditions** screen.
12. Click **Close** to close the **Conditions** screen.
13. Click **Close** again to close the sales order.

You can find two projects at Projects → Projects → Maintain projects.

Notes:

- The first project is a **Time & Material** or **Fixed** project. If you have selected **Time & Material** for **Invoice method** in the **Entry** section at System → General → Settings → Order settings, a **Time & Material** project is automatically created. However, if you have selected **Fixed for Invoice method** in the **Entry** section, a **Fixed project** is automatically created. For both types of projects, the project code is the same as the created sales order.
- The second project is a **Production** project, which is a child to the **Time & Material** or **Fixed** project. This project is also linked to the created production orders.
- Even if you have cleared the **Generate project** check box at System → General → Settings → Order settings, the projects will still be automatically created when you create sales orders for make items.

To create projects automatically from sales orders for hour items:

1. Go to Order → Entries → Sales orders.
2. Click **New**.
3. In the sales order header, define the necessary information, such as the debtor, description of the sales order and the sales order date.
4. In the sales order lines, type or select an hour item and fill in the necessary information under the respective columns.
5. Click **Close** to save the sales order. You can find the project at Projects → Projects → Maintain projects whereby the project code is the same as the created sales order.

Notes:

- If you have selected the **Generate project** check box at System → General → Settings → Order settings, a project is automatically created when you create a sales order for an hour or standard item.
- If you have cleared the **Generate project** check box at System → General → Settings → Order settings, a project is automatically created when you create a sales order for an hour item.
- If you have selected **Time & Material** for **Invoice method** under the **Entry** section at System → General → Settings → Order settings, a **Time & Material** project is automatically created.
- If you have selected **Fixed** for **Invoice method** under the **Entry** section at System → General → Settings → Order settings, a **Fixed** project is automatically created.

To create projects automatically from sales orders for training items:**Step 1:** Create a **Training** project

1. Go to Projects → Projects → Maintain projects.
2. Click **New**.
3. Under the **Basics** tab, type or select at least the following mandatory information:
 - Type or select **Training** at **Type** to create a **Training** project.
 - At **Project**, type up to 20 characters of a unique alphanumeric code to identify the new project.
 - Type the description of the project at **Description**.
 - Type or select any item to link this item as an output of the project at **Output (Product)**.
4. Click **Save** to save the project.

Step 2: Create a sales order for a training item

Note: A training item is an item, which is defined as an output of a **Training** project.

1. Go to Order → Entries → Sales orders.
2. Click **New**.
3. In the sales order header, define the necessary information, such as the debtor, description of the sales order and the sales order date.
4. In the sales order lines, type or select a training item and fill in the necessary information under the respective columns.
5. Click **Close** to save the sales order. You can find the project at Projects → Projects → Maintain projects whereby the project code is the same as the created sales order. Click **Open** to view the new project. Under the **Basics** tab at **Parent**, a project which is linked to the selected training item is automatically defined as the parent to the newly-created project.

Notes:

- If you have selected **Time & Material** for **Invoice method** in the **Entry** section at System → General → Settings → Order settings, a **Time & Material** project is automatically created.
- If you have selected **Fixed** for **Invoice method** under the **Entry** section at System → General → Settings → Order settings, a **Fixed** project is automatically created.

A woman with short blonde hair, wearing a light blue button-down shirt, is looking towards the camera with a slight smile. She is holding a white document with both hands and pointing at it with her right index finger. In the background, another person is partially visible, looking at a laptop screen. The scene appears to be a professional meeting or office setting.

Chapter 2

Project Management

2 Project Management

In general, project management involves the planning, monitoring, and controlling of all aspects of a project in an attempt to achieve the objectives on time, and to the specified cost, quality, and performance. These are the common strategies applied by companies. Although the projects and the content can be very specific per company, the overall project management needs are quite standard. This chapter will describe project management and its implementation based on the following topics:

- Generating projects
- Budgeting projects
- Planning tasks for resources
- Adding tasks to projects
- Realizing actual Time and Materials
- Authorizing and correcting realizations
- Invoicing realizations
- Completing projects

2.1 Generating Projects

Besides creating projects directly at Projects → Projects → Maintain projects, Exact Globe Next also allows you to generate projects automatically when you create quotations, sales orders, production orders, service contracts, or service orders. The projects will be generated based on the following scenarios:

G/L	Amount (EUR)
There is an item in the quotation, sales, or service order that is also defined as an Output item for an existing project of Training type.	The system will generate a Fixed or Time & Material project based on the Invoice method setting at System → General → Settings, under Order settings . The project is linked to the parent project that contains the item, which is defined as the Output item.
There is an item in the quotation, sales order, or service order that is a labor or machine hour item.	The system will generate a Fixed or Time & Material project based on the Invoice method setting at System → General → Settings, under Order settings .
There is a make item in the quotation, sales, or service order, and a production order generated from the quotation, sales or service order (after authorization using the Produce button in the Conditions screen).	The system will generate two projects: <ul style="list-style-type: none"> – a Production project that is linked to the production order – a Fixed or Time & Material project (based on the Invoice method setting) that is linked to the sales order.

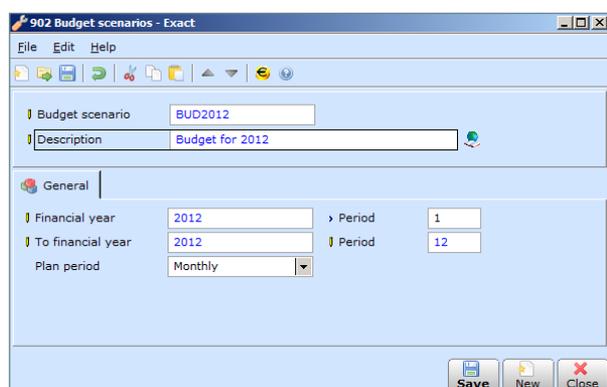
G/L	Amount (EUR)
The user generated a purchase order from the sales or service order.	The system will generate a Fixed or Time & Material project based on the Invoice method setting at System → General → Settings, under Order settings .
The user defined a service contract.	The system will generate a Fixed or Time & Material project based on the Invoice method setting at System → General → Settings, under Order settings .
The user selected the Generate project check box in System → General → Settings, under Order settings in the Entry section.	The system will generate a project for any order created in the system. The project generated will be of Fixed or Time & Material type based on the Invoice method setting at System → General → Settings, under Order settings . If the Generate project check box is not selected, only orders created for hour items will generate projects.

The generated project is automatically linked to the document and assigned a project code similar to the number of the other document. For example, the project code will take the sales order number of the sales order from which it is generated from. You can find the generated projects at Projects → Projects → Maintain projects. The project enables you to manage the delivery of the order as well as the resulting tasks/activities, costs, and revenue via a project.

2.2 Budgeting Projects

Budgeting is a way to determine the financial guidelines for a project. Based on the cost and revenue, the budgeting management can give approval for the execution of a project. You can determine the level of details needed for a budget. Once the budget is created and approved, it is normally not changed anymore as it is only used as a baseline for the actual costs/revenues which are realized during the projects. However, you can still change the budget anytime you like based on different scenarios.

If you have the **E-Budget** license, you can plan the budget for costs and revenues, and view the information from the project master card. You can create a budget scenario at System → Finance → Budget scenarios. Then, the budget for a project based on the budget scenario can be created at System → Finance → Budgets. Once a budget is created, you can allocate it to the child project, periods, items, or resources at System → Finance → Budget. To do this, you need to have the **E-Budget** and **E-Project** licenses. Allocation can only be done for a budget that is linked to a project.



To create budget scenarios:

1. Go to System → Finance → Budget scenarios.
2. Click **New**.
3. Type a unique code for the budget scenario at **Budget scenario**. This information is mandatory. Once you have clicked **Save**, you cannot edit this.
4. Type the start of the financial year for the budget scenario at **Financial year** and the start period at **Period**. Period refers to month, hence you can type a value between “1” and “12”.
5. Type the financial year which the budget scenario will end at **To financial year** and the end period at **Period**.
6. At **Plan period**, select **Daily**, **Weekly**, **Bi-weekly**, **4-weekly**, **Monthly**, or **Quarterly** to plan the budget on the defined frequency. Once you have clicked **Save**, you cannot edit this.
7. Click **Save**. You will see a message "This action can't be undone. Plan period = *the selected plan period*. Continue?" Click **Continue**.
8. Click **Close** to exit.

Tips: The start and end financial year for the budget scenario must be within the range of the lowest and highest financial year you have defined at System → General → Settings, under **General settings** in the **Period and year control** section at **Financial year**.

902 Budgets - Exact

Project: 23000072 Fix monitor

Budget scenario: BUD2006 BUD2006

Date: 13/03/2012

Item:

	Quantity	Amount (EUR)	GL account
Costs	6,000.00	12,000.00	
Revenue	10,000.00	50,000.00	

Details

Person: 3 Maria Baker

Debtor: 1200 Ursus Major

Creditor:

Warehouses: MAIN Default warehouse

Cost center: 001CC001 Default cost center

Cost unit:

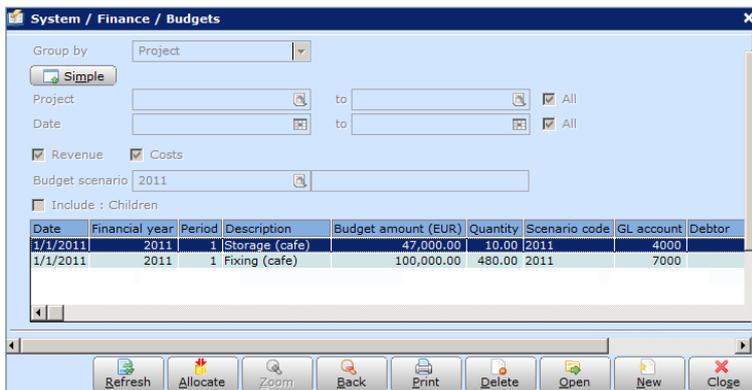
Description:

Save New Close

To create budgets for projects:

1. Go to System → Finance → Budgets.
2. At **Budget scenario**, type or select the budget scenario which will be used to create the new budget.
3. Click **New**. The **Budgets** screen will be displayed.
4. At **Project**, type or select the project code which you want to create the budget for. You will see that the **Debtor** and **Warehouses** fields are automatically filled in with the debtor and the default warehouse of the project. The budget scenario you have selected for this budget will be shown at **Budget scenario**. It is possible for you to change the budget scenario by typing or selecting another budget scenario for the budget.
5. At **Date**, type or select the date for the new budget line.
6. You can type or select an item code at **Item** to create the budget for a particular item. After you have selected an item, the cost and revenue GL accounts of the item will be automatically filled in at **Costs and Revenue** under the **GL account** column respectively. For hour items, the cost and revenue GL accounts are defined in Projects → Items → Hours under the **Financial** tab at **Realizations** and **Revenue** respectively. As for standard items, the cost and revenue GL accounts are defined in Projects → Items → Items under the **Financial** tab at **Cost of goods sold** and **Revenue** respectively. In the **Details** section of the **Budgets** screen, **Description** will be automatically filled in with the description of the selected item. You can change the description.
7. At **Costs** and **Revenue** under the **Quantity** column, type the budgeted cost and revenue in quantity. The budgeted costs and revenue amount will be automatically filled in under the **Amount** column. The system calculates the budgeted cost amount by multiplying the budgeted quantity (cost) with the cost price of the item. For budgeted revenue amount, it will multiply the budgeted quantity (revenue) with the sales price of the item. Click **Save**.
8. To create other budget entries for other dates, click **New**. Change the date at **Date** and type the new budgeted cost and revenue in quantity and/or amounts (refer to step 7). Click **Save**, and then **Close** to exit. Repeat these steps for the subsequent budget entries.
9. To view the budget for a project, go to Projects → Projects → Maintain projects, select a project, and then click **Open**.
10. Under the **Planning** tab, type or select the date range to view the planning record of the project within the date range. Select the **Budget** check box to display the budget entries for the project. **Budget scenario** will be automatically filled in with the budget scenario which you use for the budget.

11. Select the **Planning** and **Actual** check boxes to display the planning, and actual revenue and cost of the project. At **Show**, select **Amounts** to view the budgeted, planned, and actual revenue and cost in amount or **Quantities** to view the budgeted, planned, and actual revenue and cost in quantities of items.
12. At the drop-down list box used to define the grouping order of the planning records, select **Item** to group the data by items. Click **Refresh**. You will see the budget figures for different dates under the **Budget** column.



To allocate budgets:

1. Go to System → Finance → Budgets.
2. At **Group by**, select **None**. If you select other grouping order options, you need to select the budget, and then click **Zoom** before you can select any budget line for allocation.
3. Select the line with the budgeted cost or revenue to be allocated.
4. Click **Allocate**. The **Budgets** screen will be displayed.
5. Type the allocation quantity and amount.
6. Click **Close**. You will see the message "Save changes?". Click **Yes** to save the allocation.

Case scenario:

Distribute the budgeted cost and revenue that you have defined evenly throughout the 12 months in year 2011. At System → Finance → Budget, you have to allocate the budgeted cost or budgeted revenue one at a time. For a start, select the line for the budgeted cost and click **Allocate**. You will see the following screen:

932 Budgets - Exact

File Edit Help

20049 - Weekend storing (Cafe Hout)

Budget(Costs) 120,000.00 EUR Budget scenario : 2011
 Quantity 8000.00 Item : Program

Allocate to

	Period	Quantity	Amount
1	1	667.00	10,005.00
2	2	667.00	10,005.00
3	3	667.00	10,005.00
4	4	667.00	10,005.00
5	5	667.00	10,005.00
6	6	667.00	10,005.00
7	7	667.00	10,005.00
8	8	667.00	10,005.00
9	9	667.00	10,005.00
10	10	667.00	10,005.00
11	11	667.00	10,005.00
12	12	663.00	9,945.00

Unallocated

Amount 0.00 EUR
 Quantity 0.00

Allocate the budgeted cost quantity evenly throughout year 2011 by selecting **Periods** at **Allocate to** and typing the average quantity under the **Quantity** column. If the item maintenance card has cost price information, the amount corresponding to the defined quantity will be automatically calculated when you press the TAB key at each period. Nevertheless, if the item maintenance card does not have a cost price, you will have to calculate and define the amount manually. In this case, the cost price of hour item **Program** is defined as "EUR 15.00" in the hour item maintenance card. Hence, the amount for the first period is $667 \times 15 = 10,005$. If you do not want to type the quantity and amount manually, click **equal to** and the system will define the average rounded off quantity and amount automatically for each period. For example, 8,000 **Program** hours divided by 12 months is 666.67 but the system will round it up to 667. Period 12, which is December, will have the balance quantity of 663, which is derived from the calculation formula of $8,000 - (667 \times 11) = 663$. After the system has defined the figures, the quantity and amount can still be edited.

Click **Close** and then you will see the message "Save changes?" Click **Yes** to save the allocation. At System → Finance → Budgets, you will see that the budgeted quantity has been allocated into 12 periods. To allocate the budgeted revenue, go to System → Finance → Budgets, select the line with the budgeted revenue and repeat the same steps as you allocate the budgeted cost.

You can view the budgeted cost and/or revenue of a project under the **Planning** tab of a project master card at Projects → Projects → Maintain projects. The **Planning** tab allows you to view all the cost and revenue of a project in terms of planned/budgeted, actual, and WIP. Select the **Budget** check box to see the budget created for the project based on a budget scenario, and select the budget scenario at **Budget scenario**.

2.3 Planning Tasks for Employees

Tasks are work that needs to be done in a project. You create tasks when creating sales quotations, sales orders, production orders, project orders, or internal use requests. Alternatively, you can add new tasks after creating a project.

Initially, all tasks are not planned to any employee unless they have been specified in the order lines of the sales quotations, sales orders, project orders, or internal use requests. In order to control the available capacity and to compare the planning with realizations, the tasks have to be planned to your employees.

The screenshot displays two SAP screens. The top screen is '902 Person: Planning - Exact' showing resource planning for Manager 7 from 13/06/2012 to 18/06/2012. It lists two employees: Jennifer Marlins (ADH ASS SR, Finance & Administration) and Lim Tsu Teong (ACC MAN, Account Management Staff). The bottom screen is 'Advanced Tasks / Requirements' for the same period, showing tasks like 'CON, Consultation', 'Pre-training brief', and 'Training time' with their respective project and cost center information.

To plan tasks for employees:

1. Go to Projects → Planning → Resource planning. You can also plan from Projects → Planning → Tasks by clicking **New**, and then clicking **Resource planning**.
2. In the **Person: Planning** screen in the **Resource planning** pane, type or select the information to define the criteria for the relevant employee planning.
3. Click **Refresh**. The **Resource planning** pane displays the available capacity per person based on the defined criteria.
4. At the **Tasks / Requirements** pane, type or select the information to define the criteria for displaying the tasks/requirements. Click **Refresh** to display the tasks/requirements based on the defined selection criteria.
5. In both the **Resource planning** and **Tasks / Requirement** panes, click **Advanced** to display the advanced selection options to enable you to define the advanced criteria in displaying the resource planning.
6. Next, do these at the same time:
 - At the **Tasks / Requirements** pane grouped by **Items**, you must expand the corresponding requirement by clicking **+ Expand** and select the expanded cell that specifies the **Not planned** quantity (indicated in red).
 - From the **Resource planning** pane, select the cell that shows the unutilized capacity of the person that you want to plan this task for.

7. Click **Plan** to plan the duration of labor hours of a task/requirement to a person. The **Plan** button is enabled only when you select both the available capacity of an employee and a requirement at the same time. It is possible to plan part of a requirement to employee A and part to employee B. The color indicator will indicate whether a person is fully planned, partially planned, over planned, or not planned for at all.
8. In the **Plan** screen, type or select the start date, time, and number of hours to plan for the resource. The system will automatically fill in **Person** according to the selected person.
9. Click **OK**. If the planned start date is a non-working day in the weekend, for example, Saturday, you will see a message requesting for confirmation on whether you want to plan the task on a non-working day. Click **Yes** to plan the task on that day or **No** to cancel, and you will see another message requesting for confirmation on whether you want to plan the task for the following day which is a Sunday (also a non-working day). Click **Yes** to plan the task on Sunday or **No** to cancel, and the system will automatically plan the task for Monday.
10. If the number of hours you typed exceeds the available capacity of a person, you will see this message, "Overwork?". Click **Yes** to plan the task to the person who will exceed the default work schedule. The system allows overwork for each day up to 12 midnight only. The remaining task will be planned to the following day. Click **No** and the system will plan the task to the person based on the available capacity of a resource on the day, and the remaining required task will be planned to the following day within the default working schedule. You will see the "Overwork?" message in scenarios such as planning 9 hours of a task to a resource with a daily work schedule of 8 hours or planning a 7-hour task to a person who has only 5 incomplete planned hours.
11. Click **Close** to exit.

To re-plan planned tasks to another person or date:

1. Go to Projects → Planning → Resource planning.
2. At the **Resource planning** pane, type or select the criteria of the relevant planning.
3. Click **Refresh** to display the available and planned capacity per person in the **Resource planning** pane.
4. Click **+ Expand** to expand the completely planned (green cell), incompletely planned (yellow cell), or over planned (green cell with red value) capacity, per person. You will then see a list of planned capacity (green cells).
5. To show the details of the time and date planned for the person, point to the cell or see the **Cost center (Activity)** and **Job title (Time)** columns. To display the columns, click **Advanced** and select the **Show: Details** and **Show: Time** check boxes.
6. Select the corresponding planned capacity (green cell) and click **Task**.
7. In the **Planning** screen, you will see the details of the task planned to the corresponding person.
8. To change the date, type or select a different date or range of dates in the **Date** fields.
9. To change the person, type or select a different name in the **Person** field.
10. Click **Save** to save the changes.
11. Click **Refresh** to refresh the **Resource planning** pane with the latest changes. The task is now planned to a different person on a different date.

To create sales orders from resource planning screen:

1. Go to Projects → Planning → Resource planning.
2. At the **Resource planning** pane, type or select the information to define the criteria for the relevant planning.
3. Click **Refresh**. The **Resource planning** pane displays the available capacity per person based on the defined criteria.
4. Select the labor hour capacity, and then click **Order**:
 - If you select the unplanned labor hour capacity (orange cells), which means that no sales order is created yet for the planning, the **Create sales orders** box will be displayed. You need to define the mandatory information, such as the hour item and ordered by debtor hour item and ordered by debtor before the system can generate the sales order. Other information, such as the parent project, warehouse, selection code, and resource are optional. When you click **OK**, the message, "Generated: Sales order 20300054 - Open?" is displayed, whereby 20300054 is the sales order number of the generated sales order. Click **Yes** to view the sales order. You will see that a sales order is created for the defined labor hour item and ordered by debtor, and planned to the selected person whereby you can view and maintain accordingly. A **Fixed** project with a similar sales order number is also created automatically.
 - If you select a planned labor hour capacity, the system will open the corresponding sales order whereby you can view and maintain accordingly.
- Note:** This button is enabled only when you have selected the planned or unplanned capacity of a person.
5. Click **Close** to save the sales order.

2.4 Adding Tasks to Projects

It is possible to add new tasks to a project. This can happen in the following scenarios:

- You have created an order for tasks that have been carried out. If you generate a project directly from the order, you need not redefine the tasks. However, if you directly define a project, you need to define the tasks required for the completion of the project.
- During the course of a **Fixed** type project, you need to plan additional tasks at the initial planning but at the same time you do not want to invoice the customer for the extra tasks.

To add tasks to projects:

1. Go to Projects → Planning → Tasks.
2. Click **New**. You can also add tasks from Projects → Planning → Resource planning by clicking Tasks or Projects → Projects → Maintain projects by going to the Planning tab of a project master card and clicking  **New: Task**.

3. Define the necessary information. It is mandatory to type or select the specific project code for which the task is created as well as the quantity and code of the specific hour item. Type or select other relevant information which includes the start and end date of the task, description, the required quantity of hours for the task, resource ID, and internal request number (check task or task created from Exact Synergy Enterprise). To add more information to the task, type a note in **Note** or click  to attach a document to the task.
4. The system will automatically fill in the **Price, Amount,** and **G/L** based on the quantity of hours and the hour item selected for the task. The price will be based on the highest-priority internal rate defined by you. For more details, see 4.3 *Internal and External Rates*.
5. Click **Save** to save the task.
6. Click **Close** to exit. The task is now added to the project and is directly planned for the specified person. Therefore, the person can directly realize the task. If the specified person has already been fully planned for the day or already scheduled to work before the additional task is planned to him, you will see the message "Overwork?" after you have clicked **Save** in the **Planning** screen. Click **Yes** to confirm overwork to plan the additional task to the extended work hours of the person on the same day. If you do not want the person to overwork, click **No**, and the additional task will be automatically planned for the following work day.

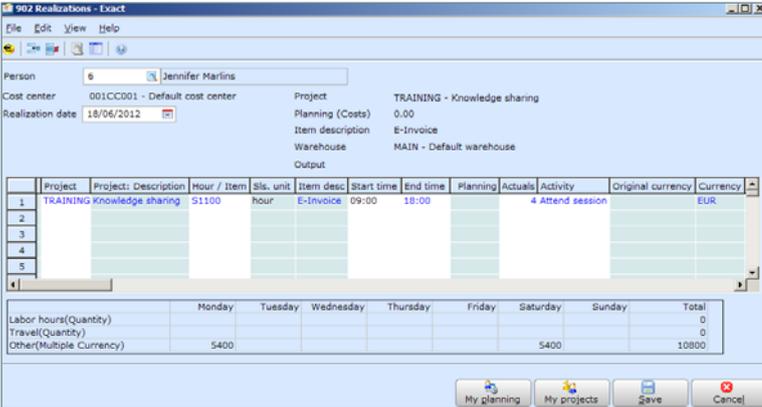
2.5 Realizing Actual Time and Materials

During the course of a project, you need to register the actual time and materials spent on the project. People can define the hours if they are given the realization rights. The project manager and/or the system administrator can also define the hours for them. This function is important because there is a need to account for all the actual costs and be able to compare the budgeted costs with the actual costs. Depending on the project type, realization of time and materials is also important as the realized hours and/or materials will be invoiced to the customer

You can realize the actual time and materials at:

- Projects → Entries → Realizations — To realize hours for a person on a daily basis.
- Projects → Entries → Labor hours — To realize hours for a person on a weekly basis. To realize hours for more than a week, select the **Planning: All** check box.
- Projects → Entries → Hours per cost center — To realize hours for people belonging to a particular cost center on a weekly basis.
- Projects → Entries → Additional costs — To realize hours for additional costs without linking to a specific resource on a weekly basis.

Once realized, the realizations require authorization. In addition, the realizations can also be corrected by the project manager or manager of the employee.



Project	Project: Description	Hour / Item	Slu. unit	Item desc	Start time	End time	Planning	Actuals	Activity	Original currency	Currency
1	TRAINING Knowledge sharing	51100	hour	E-Invoice	09:00	18:00		4	Attend session		EUR
2											
3											
4											
5											

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
Labor hours(Quantity)								0
Travel(Quantity)								0
Other(Multiple Currency)	5400					5400		10800

To realize hour items:

1. Go to Projects → Entries → Realizations, Projects → Entries → Labor hours, or Projects → Entries → Hours per cost center.
2. At **Person**, type or select the person who is linked to the item which is to be realized. By default, the system will fill in the person who starts the application. To edit, type or select another person.
3. Type or select the date or week of the realization at **Realization date** or **Week**.
4. Press the TAB key to display the planning that has been defined for that person.
5. In the **Actuals** column, type the actual quantity of hours to be realized. You can also change the **Start time** and **End time** of the realization. By default, it will show the Start time and End time of the work schedule for the first half and second half of the working day if resource planning has been done. You can also press TAB continuously after you have typed or selected the realization date to automatically define the actual hours to be realized if the hours to be realized are fully planned for the day based on the start time and end time of the default work schedule. You can see the number of hours realized for each day of the week in the table shown below the **Realizations** screen.
6. Click **Save** to save the changes and to process the entry.

Tips: You can realize more or less than the hours planned by typing the actual quantities under the **Actuals** column. After authorizing the realizations which are more than planned, you will see the extra realized hours added in the line section of the sales order. However, this applies only to a **Time & Material** project. In addition, you also can realize unplanned amount (no person is assigned in the sales order line and resource planning is not performed).

At Projects → Entries → Realizations, select the person who is to realize the unplanned amounts at **Person**, and type or select the realization date at **Realization date**. Under the **Project** and **Hour / Item** columns, type the project code or press F2 to select the corresponding project code and the item to be realized. Type the start time under the **Start time** column and the actual quantity of hours to be realized under the **Actuals** column. The **End time** column will be automatically filled in after you have typed the actual hours to be realized and press the TAB key. Finally, click **Save**.

To realize non-hour items:

1. Go to Projects → Entries → Realizations, Projects → Entries → Labor hours, or Projects → Entries → Hours per cost center.
2. At **Person**, type or select the person who is linked to the non-hour item which is to be realized. By default, the system will fill in the person who starts the application. To edit, type or select another person.
3. Type or select the date to be realized at **Realization date**.
4. Under the **Project** and **Hour / Item** columns, type the project code or press F2 to select the corresponding project code and the non-hour item which are to be realized. The **Start time** and **End time** columns will be disabled for non-hour items.
5. Under the **Actuals** column, type the quantity of the non-hour items to be realized. You can see the quantity of non-hour items realized for each day of the week at the table shown below the **Realizations** screen. For the travel non-hour item (for example, the quantity of travel expense claims realized), it will be shown in the **Travel (Quantity)** line while for the other non-hour standard items, the quantity realized is shown in the **Other (Default Currency)** line.

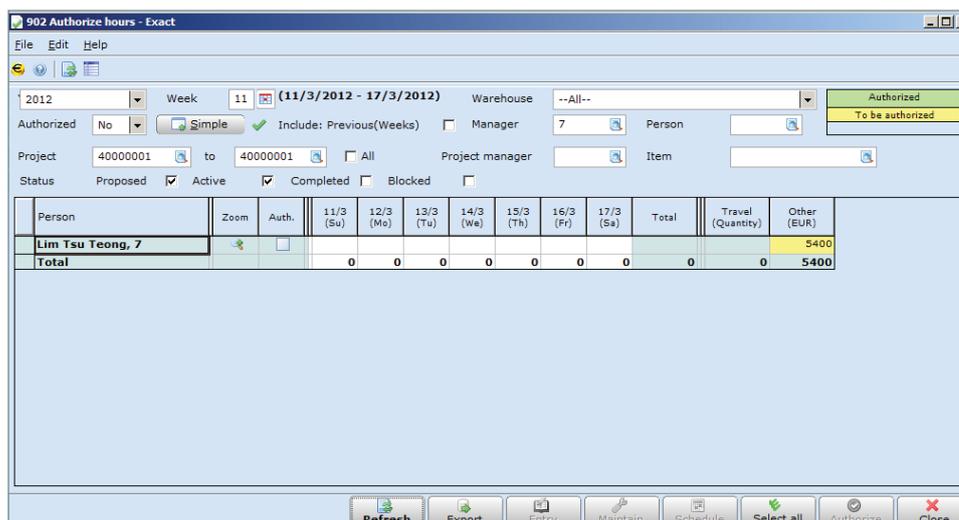
- Click **Save** to save the changes and to process the entry.

Tips:

Click  **Columns** in the toolbar to open the **Format columns** box, and then select the **Show: Standard (Items)** check box to view the non-hour standard items with the "Sales" attribute on the **Realizations** screen. If you do not select the check box, you will not see the realized non-hour standard items with the "Sales" attribute at **Projects → Entries → Realizations**.

2.6 Authorizing and Correcting Realizations

The project or resource manager verifies the realized hours daily or weekly to ensure that the entries are correct. After verification, the realizations must be authorized before they can be invoiced. If authorized realizations are found to be incorrect, the realization entries can be corrected and must be authorized again.



To authorize realizations:

- Go to **Projects → Entries → Authorize**.
- Define the necessary information to filter the realizations that require authorization. Select the appropriate information at **Year**, **Week**, and **Authorized**. At **Authorized**, select **All** to display all the realizations, **Yes** to display only authorized realizations, and **No** to display only realizations which have not been authorized.
- Type or select the **Manager** to display the realizations of project under this manager and **Person** to display the realizations defined for this person.
- Select the **Include: Previous(Weeks)** check box to display the realizations from the previous weeks of the selected year. The **Include: Previous(Weeks)** check box is enabled only when the option at **Authorized** is set to **No**. This function allows you to check for unauthorized realizations in the past or if there are new realizations defined after a previous authorization.
- Click **Advanced** to display the advanced filter options. Type or select the required information at **Project**, **Project Manager**, **Item**, and **Status**.
- Click **Refresh** to display the realizations based on the defined criteria.

7. Click  **Zoom** to zoom in on the details of the realization and click **Back** to return to the complete list.
8. In the **Auth.** column, select the check box of the realization which is to be authorized. To select all the realizations at once, click **Select All**.
9. Click **Authorize** to authorize the selected realizations.
10. Click **Close** to exit.

Project	Hour / Item code	Start time	End time	Planning	Actuals	Activity	Price	Amount	Auth.
20300077	CNSLT	09:00	13:00	4.000	4	Software project I	45.000	180.00	<input checked="" type="checkbox"/>
20300077	CNSLT	13:30	17:30	4.000	4.000	Software project I	45.000	180.00	<input checked="" type="checkbox"/>

Project	Hour / Item code	Start time	End time	Planning	Actuals	Activity	Price	Amount	Auth.
20300077	CNSLT	09:00	13:00	4.000	4.000	Software project I	45.000	180.00	<input checked="" type="checkbox"/>
20300077	CNSLT	13:30	17:30	4.000	4.000	Software project I	45.000	180.00	<input checked="" type="checkbox"/>
20300077	CNSLT	17:30	18:30	0.000	1.000	Correction line: Realization date - 05-01-2005	45.000	45.00	<input type="checkbox"/>

To correct realizations:

In the event you discover an authorized realization which has been defined wrongly, use the following steps to correct the entry.

1. Go to Projects → Entries → Realizations, Projects → Entries → Labor Hours, or Projects → Entries → Hours per cost center.
2. Type or select the person whose realization needs to be corrected at **Person**.
3. At **Realization date**, type or select the realization date which belongs to the realization that needs to be corrected. Then, press the TAB key to display the realization entries.
4. Under the **Actuals** column, type the correct number of hours spent on the job. In this example, type 5.
5. Next, click **Save**.
6. Reopen the realization application at Projects → Entries → Realizations and follow steps 1, 2, and 3. You will see the previous screen. Notice that one new line with 1 hour of Consultancy services has been added as the correction line. This extra line has to be authorized so that it becomes a billable item to the customer. To authorize this extra line of realization, follow the steps *To authorize realizations*.

2.7 Invoicing Realizations

After you have authorized the realized time and materials for your project, you need to create invoices and authorize them. These can be done if you have the **Invoice** module. Invoicing is required for all types of projects except for **Internal** projects.

Invoicing can be done during the course of a project or after the completion of the project. However, only realized hours which have been authorized can be invoiced. Once the invoice is generated and printed, the revenues are recorded in the **Financial** section under the **Basics** tab of the project master card.

	Customer	Project	Invoice method	Planned (€)	Postponed	Realized	Invoiced	No invoice	Proposal	Auth.	Discount
1	1000, Flopshop BV			1,200.00	0.00	1,200.00	1,200.00	0.00	0.00	<input checked="" type="checkbox"/>	0.00
2		23000057, Time & Material		1,200.00	0.00	1,200.00	1,200.00	0.00	0.00	<input checked="" type="checkbox"/>	0.00
3	1200, Ursus Major			150.00	0.00	150.00	150.00	0.00	0.00	<input type="checkbox"/>	0.00
4		23000072, Fixed (SO: Fulfill		150.00	0.00	150.00	150.00	0.00	0.00	<input type="checkbox"/>	0.00
5		40000001, Fixed		0.00	0.00	0.00	0.00	0.00	0.00	<input type="checkbox"/>	0.00
6		40000002, Fixed		0.00	0.00	0.00	0.00	0.00	0.00	<input type="checkbox"/>	0.00
7	Totals			1,350.00		1,350.00	1,350.00				

To invoice realizations:

1. Go to Projects → Entries → Invoice proposal.
2. Define the necessary criteria to filter the realizations that need to be invoiced. Type or select the project code at **Project**, debtor code at **Ordered by** and **Invoice to**, and other necessary data at **Project manager**, **Financial year**, and **Period**. Select the **Include: Related** check box to also invoice realizations that are linked to the related projects (parent and child).
3. Select the **Proposed**, **Active**, **Completed**, and/or **Blocked** check boxes to search for project orders with the corresponding statuses. Select the **To be invoiced: Period** check box to display the realizations which have not been invoiced in the defined period and the subsequent periods.
4. Click **Display** to display the projects based on the defined criteria. Define the necessary criteria to further filter the realizations that need to be invoiced.
5. To invoice a specific project, select the check box under the **Auth.** column and click **Generate**.
6. Type or select an invoice code linked to the project order. The system will automatically fill in the sales representative of the project order that needs to be invoiced at **Person**. This is applicable only if one project is selected. If multiple projects were selected, the field will not be available.
7. Click **OK** to confirm the creation of the invoice for the project order. Once the invoice is created, the corresponding project order will be removed from the list.
8. Click **Close** to exit.

To invoice realizations of expense claims:

You can invoice expense claims with the "Sales" attribute like other normal items. There are two possible scenarios:

- Scenario 1: When a user orders an expense item from a sales order, the invoice amount will be based on the sales price of the item.

- Scenario 2: When a user directly realizes an expense item without ordering from a sales order, the invoice amount will be based on the realization amount.

For both scenarios, create an example of expense item called "Toll". Define the sales price as "EUR 100.00", cost price as "EUR 80.00", the stock account as the "creditor account, and turn the "Sales" attribute on. For more information, see to *1.3 Creating Items*.

Scenario 1: Ordering expense items from a sales order

1. Go to Projects → Projects → Maintain projects.
2. Click **New** to create a **Time & Material** project. For more information, see *1.5 Creating Projects*.
3. Type or select the necessary information in the sales order header. In the sales order line, type or select "Toll" and define the quantity as "1". Notice that the system automatically displays the sales price as EUR 100.00 and the net price is EUR 100.00. Click **Close** to save and close the sales order.
4. Go to Projects → Entries → Realizations to realize the expense item. In the realization line, select the relevant project and item and realize one item at the amount of EUR 50.00. Click **Save** to save the realization. For more information, see *2.5 Realizing Actual Time and Material - To realize non-hour items*.
5. Go to Projects → Entries → Authorize to authorize the realization. For more information, see *2.6 Authorizing and Correcting Realizations - To authorize realizations*.
6. Go to Projects → Entries → Invoice proposal to view the invoice proposal which proposes the amount of EUR 100.00 and invoice accordingly. For more information, see *2.7 Invoicing Realizations - To invoice realizations*.

When you order an expense from a sales order, the invoice amount is suggested based on the sales price, depending on the external rate structure.

Scenario 2: Realizing expense items without ordering from a sales order

1. Go to Projects → Projects → Maintain projects
2. Click **New** to create a **Time & Material** project. For more information, see *1.5 Creating Projects*.
3. Type or select the necessary information in the sales order header. In the sales line, under Item, press TAB to enter a text line. Then, click **OK** in the **Enter text line** screen to save the text line followed by **Close** to save and close the sales order.
4. Go to Projects → Entries → Realizations to realize the expense item. In the realization line, select the relevant project and item and realize one item at the amount of EUR 50.00. Click **Save** to save the realization. For more information, see *2.5 Realizing Actual Time and Materials - To realize non-hour items*.
5. Go to Projects → Entries → Authorize to authorize the realization. For more information, see *2.6 Authorizing and Correcting Realizations - To authorize realizations*.
6. Go to Projects → Projects → Maintain projects.
7. Select the created project and click **Sales order**. Alternatively, you can search the sales order at Order → Entries → Sales orders. In the sales order line, notice that a line for the corresponding item is added whereby the sales price is EUR 50.00 and the net price is EUR 50.00.
8. Go to Projects → Entries → Invoice proposal to view the invoice proposal which proposes the amount of EUR 50.00 and invoice accordingly. For more information, see *2.7 Invoicing Realizations - To invoice realizations*.

If you realize an expense item without ordering from a sales order, the invoice proposal will suggest the invoice amount from the cost price/realization amount. Therefore, this will not follow the external rate structure.

To postpone invoicing of part of realized hours:

For projects that require several stages of tasks to be performed whereby the customer is invoiced after every stage, you can postpone the invoicing of some realized works which were performed by people to other stages of the project. Postponement allows you to invoice the customer at a subsequent date.

1. Go to Projects → Entries → Invoice proposal.
2. Define the necessary criteria to filter the realizations that need to be invoiced. Type or select the project code at **Project**, debtor code at **Ordered by** and **Invoice to**, and other necessary data at **Project manager**, **Financial year**, and **Period**. Select the **Include: Related** check box to also invoice realizations that are linked to the related projects (parent and child).
3. Select the **Proposed**, **Active**, **Completed**, and/or **Blocked** check boxes to search for project orders with the corresponding statuses. Select the **To be invoiced: Period** check box to display the realizations which have not been invoiced in the defined period and the subsequent periods.
4. Click **Display** to display the projects based on the defined criteria. Define the necessary criteria to further filter the realizations that need to be invoiced.
5. In the **To be invoiced** screen, select the corresponding project, and then click **Change**.
6. At the line with the realized hours that you want to postpone, select the check box under the **Select** column, and then click **Postpone**. Under the **Postpone** column, you will see the quantity of realized hours which you want to postpone. The total hours to be invoiced, which are shown under the **Invoice** column, will display the quantity of hours to be invoiced after deducting the quantity of hours to be postponed. Meanwhile, the total amount of invoice will show the amount after deducting the postponed amount.
7. Click **Save**. The line which you have postponed will be removed from the invoice list. To see the postponed amount, click Close to return to the **To be invoiced** screen, and at **Period**, type the following period and click **Refresh**.
8. At **Period**, type the current period and click **Refresh** to generate the invoice for the current period.
9. Select the check box under the **Auth.** column and click **Generate**. This will generate the invoice for all items except for the postponed items.
10. Type or select an invoice code linked to the project order. The system will automatically fill in the **Person** according to the sales representative of the project order that needs to be invoiced. This is applicable only if one project is selected. If multiple projects were selected, the box will not be available.
11. Click **OK** to confirm the creation of the invoice for the project order. Once the invoice is created, the corresponding project order will be removed from the list.
12. Click **Close** to exit.

To invoice extra realizations:

It is possible to invoice the realizations which are more than the budgeted time and materials for a task.

1. Go to Projects → Items → Hours.
2. Click **New** to create an hour item called "Program" with a "Sales" attribute. For more information, see *1.2 Creating Labor Hours*.
3. Go to Projects → Projects → Maintain Projects and click **New** to create a **Time & Material** project. For more information, see *1.5 Creating Projects*.
4. Type or select the necessary information in the sales order header. In the sales order line, type or select 8 hours of "Programming" and plan it to a resource with 8 working hours per day. For more information, see *1.4 Defining Work Schedules and Generating MRS*. Click **Close** on the sales order to save and close the sales order.
5. Go to Projects → Entries → Realizations to realize the hour item. In the realization line, select the relevant project and hour item, and then realize 10 hours instead of the planned 8 hours. Click **Save** to save the realization. For more information, see *2.5 Realizing Actual Time and Materials - To realize non-hour items*.

6. Go to Projects → Entries → Authorize to authorize the realization. For more information, see 2.6 *Authorizing and Correcting Realizations - To authorize realizations.*
7. Go to Projects → Projects → Maintain projects and open the corresponding project and click **Sales order**. In the sales order line, notice that the ordered quantity under the **Ordered** column is now “10” instead of “8”.
8. Go to Projects → Entries → Invoice proposal to view the invoice proposal which proposes the amount for 10 programming hours instead of 8. For more information, see 2.7 *Invoicing Realizations - To invoice realizations.*

To exclude realized items in invoices:

In certain scenarios, you may want to exclude some of the realized items in the invoice. This can happen if you do not want to invoice the hours/items to your customer but these items are required to be realized.

1. Go to Projects → Entries → Invoice proposal.
2. Define the necessary criteria to filter the realizations that need to be invoiced. Type or select the project code at **Project**, debtor code at **Ordered by** and **Invoice to**, and other necessary data at **Project manager**, **Financial year**, and **Period**. Select the **Include: Related** check box to invoice realizations that are linked to the related projects (parent and child).
3. Select the **Proposed**, **Active**, **Completed**, and/or **Blocked** check boxes to search for project orders with the corresponding statuses. Select the **To be invoiced: Period** check box to display the realizations which have not been invoiced in the defined period and the subsequent periods.
4. Click **Display** to display the projects based on the defined criteria. Define the necessary criteria to further filter the realizations that need to be invoiced.
5. In the **To be invoiced** screen, select the corresponding project, and then click **Change**.
6. At the line with the realized item that you want to exclude from the invoice, select the check box under the **Select** column, and then click **No invoice**. You will see the quantity of items to be excluded in the invoice shown under the **No invoice** column and the total amount of invoice will show the amount after deducting the amount of items excluded in the invoice.
7. Click **Save**. The line which shows the no invoice item will be removed from the list. Click **Close** to return to the **To be invoiced** screen. You will see the amount for the no-invoice items displayed under the **No invoice** column.
8. Select the check box under the **Auth.** column and click **Generate** to generate the invoice for other lines of realized items.
9. Type or select an invoice code linked to the project order. The system will automatically fill in the **Person** according to the sales representative of the project order that needs to be invoiced. This is applicable only if one project is selected. If multiple projects were selected, the field will not be available.
10. Click **OK** to confirm the creation of the invoice for the project order. Once the invoice is created, the corresponding project order will be removed from the list.
11. Click **Close** to exit.

Tips: Go to Invoice → Entries → Invoices and click **Open** to view the generated invoice. You will not see the item which you have set to “no-invoice” in the invoice.

To invoice zero amount of realized items:

In certain projects, you may want to offer free items to customers as a marketing strategy. Under such scenario, you can invoice the realized items at the price "0". Hence, the items will be shown in the invoice with the amount "0". This could also happen if an unplanned task is added into the project and you have agreed not to bill the additional task to the customer.

1. Go to Projects → Entries → Invoice proposal.
2. Define the necessary criteria to filter the realizations that need to be invoiced. Type or select the project code at **Project**, debtor code at **Ordered by** and **Invoice to**, and other necessary data at **Project manager**, **Financial year**, and **Period**.
Select the **Include: Related** check box to also invoice realizations that are linked to the related projects (parent and child).
3. Select the **Proposed**, **Active**, **Completed**, and/or **Blocked** check boxes to search for project orders with the corresponding statuses. Select the **To be invoiced: Period** check box to display the realizations which have not been invoiced in the defined period and the subsequent periods.
4. Click **Display** to display the projects based on the defined criteria. Define the necessary criteria to further filter the realizations that need to be invoiced.
5. In the **To be invoiced** screen, select the corresponding project, and then click **Change**.
6. At the line with the realized item you want to offer at the amount "0", select the check box under the **Select** column, and then click **Zero amount**. Under the **Price** and **Amount** columns, "0" is shown. The total amount of invoice will show the amount after deducting the original amount of items which you have set to zero.
7. Click **Save**. The line which you have set to "0" will still be shown in the invoice list.
Click **Close** to return to the **To be invoiced** screen.
8. Select the check box under the **Auth.** column and click **Generate** to generate the invoice.
9. Type or select an invoice code linked to the project order. The system will automatically fill in the **Person** according to the sales representative of the project order that needs to be invoiced. This is applicable only if one project is selected. If multiple projects were selected, the box will not be shown.
10. Click **OK** to confirm the creation of the invoice for the project order. Once the invoice is created, the corresponding project order will be removed from the list.
11. Click **Close** to exit.

Tips: Go to Invoice → Entries → Invoices and click **Open** to view the generated invoice. You will see the item which you have set to the amount "0" in the invoice. Notice that the net price of this item is shown as zero, hence the amount is also zero for this item.

To authorize and print invoices:

1. Go to Invoice → Entries → Authorize to search for the invoice that you have just generated. You can find your invoice here if the invoice requires authorization before it is processed. You can define the settings for invoice authorization at System → General → Settings, under **Invoice settings** by selecting the **Authorize invoices** check box. The invoice is listed at Invoice → Entries → Invoices. If you do not select the check box, the invoice is listed at Invoice → Entries → Invoices and also at Project → Entries → Print invoices.
2. At Invoice → Entries → Authorize, click **Open** to open the invoice, and then click **Authorized** to authorize the invoice. Next, click **Processed** to open the **Print invoices** screen.
3. At **Process**, select **Final** and at **Output**, select **Printer**.

4. Type or select the invoice date at **Invoice date** and the **Reporting date** will be automatically filled with the invoice date. At **Layout**, the invoice layout which you have defined in System → Settings → General, under **Documents settings at Invoice** will be automatically defined in the field.
5. Click **Process** to print the invoice.

Tips: Alternatively, if invoice authorization is not required, you can directly go to Project → Entries → Print invoices and select the invoice to be printed. Click **Print** to open the **Print invoices** screen. Follow steps 3 to 5 to print the invoice.

2.8 Creating internal use requests in Pur./Inventory tab

You can create an internal use request from the **Pur./Inventory** tab of a project card. The **Pur./Inventory** tab provides the functionality for users to create and maintain purchase and inventory information linked to the project.

In order to provide the convenience of creating an internal use request from this tab and updating the project card accordingly, the system will automatically create a purchase order whenever you create and save an internal use request for a standard item. The corresponding information for the item linked to the purchase order will be listed or updated accordingly when you click **Inventory** at **Show** after the internal use request has been fulfilled.

2.9 Completing Projects

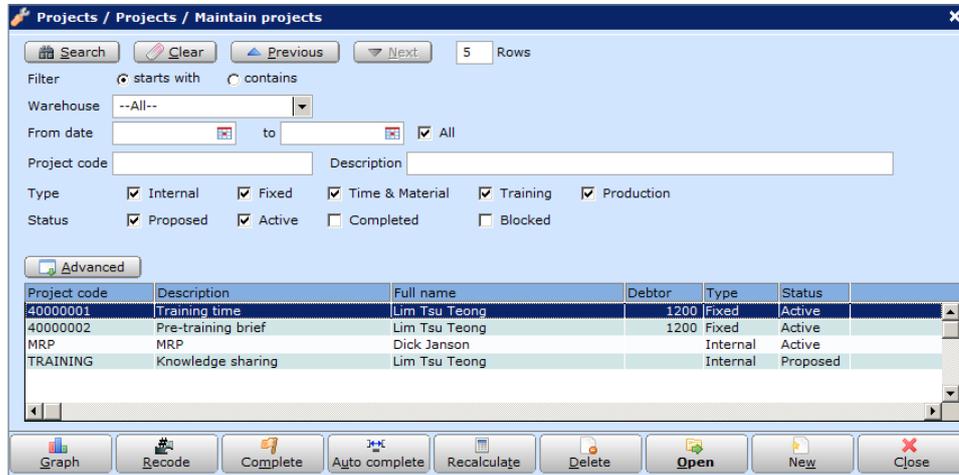
Every project has an end date on which the project is closed. This means that the sales order has been completed and consequently, the customer considers the project completed.

A project can be completed if the following criteria are met:

- The linked sales order is completed.
- Invoice is printed.
- The linked internal use is completed.
- The linked purchase order is completed.
- All child projects are completed.

Once a project is completed, the status of the project is changed to **Completed**. It is not possible to link activities to a completed project, or define any realizations or financial transactions to it.

There are two methods to complete a project - manually and automatically.



To complete projects manually:

1. Go to Projects → Projects → Maintain projects or Projects → Entries → Project orders.
2. Define the necessary criteria to filter the projects to be completed and click **Search**.
3. Select a project to be completed and click **Complete**. The **Complete** screen will be displayed.
4. In the **Complete** screen, type or select the completion date of the project, and then click **OK** to confirm the completion process. A message will inform you that the project is completed.
5. Click **OK**.
6. Click **Close** to exit.

To complete projects automatically:

1. Go to Projects → Projects → Maintain projects.
2. Click **Auto complete**.
3. At the **Complete Projects** screen, all the check boxes under the **Select** column will be selected automatically. Clear the check boxes until only the check boxes for projects you want to set to **Completed** status are selected. Click **Select all** to select all the projects.
4. Click **Complete**.
5. Type or select the completion date of the project(s), and then click **OK** to confirm the completion process. A message will inform you that the project is completed.
6. Click **OK**.
7. Click **Close** to exit.

Tips: For a completed project, you can set the project to incomplete again by going to Projects → Projects → Maintain projects, and clicking **Open** to open the selected completed project. In the **MRP** section at **Status**, change the status from **Completed** to **Active**, and then click **Save**. You may want to do this if the customer requests for new items to be added to the sales order and these items need to be realized in the project.

Chapter 3

Work In Progress



3 Work In Progress

Work In Progress (WIP) is generally defined as the working stock of a project-based organization and it can include:

- Hours
- Hours of third parties (for example, when projects are outsourced)
- Used materials
- Cost of third parties (direct cost)

Due to the diversity of project-based organizations, every organization handles WIP differently. However, the different ways of handling WIP are still based on the international regulations for accounting WIP as stipulated in the International Accounting Standards (IAS) 11 (11.22 and 11.32).

Meanwhile, long term projects can be classified as:

- Projects that are executed by the company's own account, which are also called internal projects.
- Projects that are requested by a third party.

For internal projects, you need to book the profit from the projects in the year which the goods/services resulted from the projects are sold. As for projects executed by order of third parties, there are two methods to determine when to book the profit:

- **Percentage of completion** — Profit is recorded proportionally based on the realization of the project.
- **Completed contract** — Profit is recorded upon the completion of the project.

Besides the two WIP methods mentioned earlier which determine when profit should be recorded (either based on the percentage of completion or upon completion of a project), there are also two other WIP methods you can use. These are the **To be invoiced** and **Cost of sales** methods.

Based on the **To be invoiced** method, the WIP represents the outstanding billable amount to the customer. It provides an overview of the amount that has yet to be invoiced. This method enables booking of WIP whenever there is a change of price. For example, when discounts are offered or a higher price for items in a project is charged. As for the **Cost of sales** method, recognized cost is used in the calculation of WIP. The choice for either one of these methods will depend on the type of projects. For similar type of projects, you need to use the same method for booking the profit.

According to the International Financing and Reporting Standards (IFRS), the use of the percentage of completion method to account for WIP is recommended unless it is impossible to measure the progress of a project. In such case, you can use other WIP methods.

Meanwhile, the valuation of WIP can be based on cost price and revenue.

Finally, there are two possibilities to account for WIP:

1. Directly book all cost and revenue realizations on a profit & loss general ledger account and determine the WIP at a later stage. This is also called the "Result method" which is supported by Exact Globe Next.
2. Directly book realizations on the WIP general ledger account on the balance sheet and release this at a later stage to the profit & loss statement. This is also called the "Work in progress method".

In general, the purpose of WIP is to handle the key accounting issue of allocating revenue and cost to different accounting periods, within which the contract work is performed. You can define the default WIP method to be used in System → General → Settings under **Project settings** at **WIP method**. The default method will be automatically selected in **WIP method** when you create projects in Projects → Projects → Maintain projects, and then click **New**.

In the administrative structure, WIP is based upon the **Realization** and **Prudence** principles of accounting. The **Realization** principle indicates that cost and revenue, which are directly related to each other, should be registered on the profit and loss statement within the same financial reporting period. On the other hand, the **Prudence** principle indicates that we should register the cost, when known or may be suspected, and the revenue, when realized.

This chapter discusses the following types of WIP methods based on a standard sales order:

- Percentage of Completion Cost Recognition (PoCCR)
- Percentage of Completion Cost Recognition (Budget) (PoCCR Budget)
- Percentage of Completion Revenue Recognition (PoCRR)
- Percentage of Completion Revenue Recognition (Budget) (PoCRR Budget)
- Completed Contract Method (CC)
- To be Invoiced (TBI)
- Cost of Sales Method (COS)
- No: WIP
- Case Scenario

3.1 Percentage of Completion Cost Recognition (PoCCR)

If a project is executed by the order of third parties, the profit can be determined by the percentage of completion method, whereby profit is taken proportionally with the realizations of the work/project. In order to account the WIP for several projects in a specific period and determine the change of the WIP, you have to determine the percentage of completion based on the forecast and actual/realized cost. This method is used for projects that are active over many financial report periods. Based on the actual and forecast cost, a percentage of completion is calculated.

Formulas for PoCCR:

Percentage of completion

= Costs (actual) / Costs (forecast) x 100%

WIP (change)

= [Percentage of completion x Revenue (forecast) - Revenue (actual)] - WIP (current)

WIP New

= WIP (current) + WIP (change)

3.2 Percentage of Completion Cost Recognition (Budget) (PoCCR Budget)

Similar to PoCCR, the profit can be determined by the percentage of completion method, whereby profit is taken proportionally with the realizations of the work/project. However, as WIP calculations are based on planning, the user has to adhere strictly to dates. Therefore, you can use PoCCR Budget instead of PoCCR, whereby the calculations are based on total budget versus realization, and the budget does not depend on a date. It is also used for projects that are active over many financial report periods. PoCCR Budget is available only if you have the **SE1050 - E-Budget** in your license.

Formulas for PoCCR Budget:**Percentage of completion**

= Costs (actual) / Costs (budget) x 100%

WIP (Change)

= [Percentage of completion x Revenue (budget) - Revenue (actual)] - WIP (current)

WIP New

= WIP (Current) + WIP (Change)

3.3 Percentage of Completion Revenue Recognition (PoCRR)

This method is similar to PoCCR, but the percentage of completion is based on the forecast and actual/ realized revenue instead of cost.

Formulas for PoCRR:**Percentage of completion**

= Revenue (actual) / Revenue (forecast) x 100%

WIP (change)

= [Percentage of completion x Cost (forecast) - Cost (actual)] - WIP (current)

WIP New

= WIP (current) + WIP (Change)

3.4 Percentage of Completion Revenue Recognition (Budget) (PoCRR budget)

The method is very much similar to PoCCR Budget, but the percentage of completion is based on the forecast and actual/realized revenue instead of cost. This method is available only if you have **SE1050 - E-Budget** in your license.

Formulas for PoCRR Budget:

Percentage of completion

= Revenue (actual) / Revenue (budget) x 100%

WIP (change)

= [Percentage of completion x Cost (budget) - Cost (actual)] - WIP (Current)

WIP New

= WIP (current) + WIP (change)

3.5 Completed Contract Method (CC)

Besides the WIP methods discussed earlier, you can also calculate the WIP using the Completed Contract (CC) method, if a project is executed by the order of third parties. With this method, profit is taken at the completion of the work/project. This method is also known as zero profit method. In order to account the WIP for several of these projects in a specific period, the revenue should be recognized to the extent of recoverable expenses. The outcome of some projects cannot be estimated reliably except for the fact that the overall project is expected to be profitable.

As long as the project is not completed, no profit or loss is taken in the financial result. After generating the WIP, the result for the project on profit and loss statement should be zero. When the project is finished, the WIP or project result is released. Forecast is not used for the WIP calculation. Only the proposed percentage of completion is based on the actual and forecast.

Formulas for CC:

Percentage of completion:

The value must be equal to 0% or 100%

- If Revenue (forecast) > Revenue (actual), then
Percentage of completion = 0%
- If Revenue (forecast) = Revenue (actual), then
Percentage of completion = 100%
- If Revenue (forecast) < Revenue (actual), then
Percentage of completion = 100%

WIP (change):

- If **Percentage of completion = 0%**, then

$$\text{WIP (change)} = [\text{Cost (actual)} - \text{Revenue (actual)}] - \text{WIP (current)}$$
- If **Percentage of completion = 100%**, then

$$\text{WIP (change)} = - \text{WIP (current)}$$

WIP New

= WIP (current) + WIP (change)

3.6 To be Invoiced (TBI)

This method enables booking of WIP whenever there is a change of price. For example, when discounts are offered or a higher price for hour items is charged. The new WIP entry will represent the outstanding billable amount to the customer. It can also provide an overview of the amount that has yet to be invoiced. Calculation is based on realized hours that are authorized but not yet invoiced multiplied by a sales rate. Forecast and percentage of completion is not used in this method. Rates used are based on the project rate structure.

Formulas for TBI:**WIP (change)**

- = Amount to be invoiced - WIP (current)
- = Quantity to be invoiced x Average rate - WIP (current)

WIP (new)

= Quantity to be invoiced x Average rate

3.7 Cost of Sales Method (COS)

When you select to use the Cost of sales method (COS) as the WIP method, Exact Globe Next introduces the recognized cost application. Recognized cost is calculated based on the invoiced quantities multiplied by the average purchase price of the item. Percentage of completion is not applicable for this method. By using this WIP method, a proposal for recognized cost can be generated at Projects → Projects → Work in progress. In general, there are three conditions that need to be met before the recognized cost application can be used and calculated. These conditions are:

- WIP method set to COS method.
- Sales order is fulfilled.
- Sales invoice is processed.

Note: This method is available in the license for all countries except the Netherlands.

Formulas for COS:

WIP (change):

- If **Revenue (actual) = 0**, then
WIP (change) = Cost (actual) - WIP (current)
- If **Revenue (actual) <> 0**, then
WIP (change) = Cost (actual) - [Qty invoiced x Cost (actual) / Qty of item] - WIP (current)
- If **[Cost (actual) / Qty of item] = 0**, then
WIP (change) = Cost (actual) - (Qty invoiced x Cost price) - WIP (Current)

Recognized Cost (change)

= Qty invoiced x [Cost (actual) / Qty of item]

Note: For Recognized Cost (change), if an item has a "Text" attribute with zero standard cost price, the actual cost in the formula will be the cost from invoice.

Note: If **Cost of sales method** is available for selection at **WIP method** in the **Basics** tab of a project maintenance card, you will see the **Suggestion (Recognized costs)** check box at **Proposal** at Projects → Projects → Work in progress. Select this check box to show the suggested recognized cost in the WIP overview. This WIP method is available in the license for all countries except the Netherlands.

To define recognized cost accounts (for WIP entries with item linked):

1. Go to System → Logistics → Item groups.
2. Click **New**.
3. At **Item group**, type a unique number for the new item group.
4. Type a code for the item group at **Code**. This information is mandatory.
5. Type a description of the item group at **Description**. This information is mandatory.
6. Under the **Basics** tab, type or select the revenue account for this item group and the recognized cost account at **Revenue account** and **Cost of goods sold account** respectively.
7. Type or select the stock account for this item group at **Stock account**.
8. Click **Save**.
9. Click **Close** to exit.

Note: When you generate the WIP entry for recognized cost, the recognized cost GL account of the item group, which the item is linked to, will be used. You must link the hour item to the item group to use the recognized cost GL account. To link to the specific item group, go to Projects → Items → Hours, select the hour item, and then click **Open**. Under the **Financials** tab, type or select the item group at **Item group**. The respective accounts of the item group will be automatically filled in at **Revenue**, **Salary payment**, and **Realizations**. Click **Save**, and then **Close**.

To define recognized cost accounts (for WIP entries without item linked):

1. Go to System → General → Settings.
2. In the **Settings** section, click **Project settings**.
3. In the **Entry** section, type or select the general ledger account (Profit & Loss-type) at **Recognized cost**.
4. Click **Save**.
5. Click **Close** to exit.

Note: When you generate the WIP entry for non-item linked transaction, the GL account defined at **Recognized cost** under **Project settings** will be used by default.

3.8 No: WIP

It is also possible not to link the project to any WIP methods. Select **No: WIP** if you do not want to link the project to any WIP methods.

As a result:

- The corresponding project will not be listed when you click  at **Projects** at Projects → Projects → Work in progress.
- The WIP button at the bottom of the corresponding project maintenance card is disabled.

3.9 WIP cost and revenue (CR)

With the WIP cost and revenue method, you can book the WIP revenue and WIP cost to the balance sheet accounts. As the project completes, the WIP revenue and WIP cost can be released as generated WIP revenue and WIP cost to the profit & loss accounts. Besides distinguishing the costs and revenues in separate general ledger accounts, this method will maintain the information of the relevant cost centers and cost units.

Formulas for CR:

Result

= (Actual revenue - WIP revenue) - (Actual costs - WIP costs - WIP others)

Result + WIP

= Actual revenue - Actual cost - WIP production

3.10 Case Scenario

Follow the steps below to create a standard scenario to explain the different WIP methods. For more information on setting up the scenario, see *1 Setting Up* and *2 Project Management*.

To create labor hour items:

1. Go to Projects → Items → Hours.
2. Click **New** to create labor hour items, namely CONS1 (Consultancy 1) and CONS2 (Consultancy 2).
3. Type or select the following information:

CONS1:

- The validity date is from 01/01/2006
- Sales price = EUR 110.00
- Cost price = EUR 40.00
- Tax = 19% excluding
- Select the **Sales: (Can be used in sales transactions)** check box under the **Purchase/ Sales** tab.
- Under the **Financial** tab, type or select this information:
 - **Item group** = Miscellaneous
 - **Revenue** = General ledger account for revenue account
 - **Salary payment** = General ledger account for gross wages, and
 - **Realizations** = General ledger account for realization

CONS2:

- The validity date is from 01/01/2006
 - Sales price = EUR 137.50
 - Cost price = EUR 32.00
 - Select the **Sales: (Can be used in sales transactions)** check box under the **Purchase/ Sales** tab.
 - Under the Financial tab, type or select this information:
 - **Item group** = Miscellaneous
 - **Revenue** = General ledger account for revenue account
 - **Salary payment** = General ledger account for gross wages, and
 - **Realizations** = General ledger account for realization
4. Under the **People** tab of these two new labor hours, assign both the hour items to the same person (Person 1).
 5. Click **Save**.
 6. Click **Close** to exit.

Item	Description	Wrh.	Price list	Ordered	Unit	Fulfillment date	Sales price	Net price	VAT	Amount	Person
1	✓CONS1 Consultancy 1	MAIN	SALESPRICE	8.000	hour	31/01/2006	110.000	110.000	19E	880.00	1
2	✓CONS2 Consultancy 2	MAIN	SALESPRICE	2.000	hour	01/02/2006	137.500	137.500	19E	275.00	1
3											
4											
5											

Quoted | Ordered | Authorize | Confirm | Fulfillment | Shipment | Print | Authorize | Invoice | Payments | Net: 1,155.00 EUR
 Taxes: 219.45 EUR
 Specific: 0.00 EUR
 Total: 1,374.45 EUR

To create sales orders:

1. Go to Order → Entries → Sales orders.
2. Click **New**.
3. In the sales order header, type or select the following information:
 - Type or select a debtor at **Ordered by**.
 - Type or select 27/01/2006 at **Sales order date**.

4. In the order lines, type or select the following information:
 - Type “CONS1” under the **Item** column.
 - Type “8” under the **Ordered** column.
 - Type “31/01/2006” under the **Fulfillment date** column.
 - Type or select the person with ID equals to “1” under the **Person** column to assign the person to perform the job. Press the TAB key across the subsequent columns until the second order line.
 - Type “CONS2” under the **Item** column.
 - Type “2” under the **Ordered** column.
 - Type “01/02/2006” under the **Fulfillment date** column.
 - Type or select “Person 1” under the **Person** column to assign the person to perform the job.
5. In total, the debtor ordered 8 hours of CONS1 and 2 hours of CONS2. The **Sales price** and **VAT** columns will be automatically filled up as you press the TAB key across the columns. The total value of this sale order is EUR 1,374.45, which consists of EUR 1,155.00 revenue and EUR 219.45 taxes (19% excluding).

Calculation:

Net or Revenue (planning)

= Revenue from CONS1 + Revenue from CONS2
 = Number of planned CONS1 x Sales price of CONS1 per hour + Number of planned CONS2 x Sales price of CONS2 per hour
 = 8 hours x EUR 110.00 per hour + 2 hours x EUR 137.50 per hour
 = EUR 880.00 + EUR 275.00
 = EUR 1,155.00

Taxes

= Percentage of tax x Total planned revenue
 = 19% x EUR 1,155.00
 = EUR 219.45

Total

= Net + Taxes
 = EUR 1,155.00 + EUR 219.45
 = EUR 1,375.45

6. Click **Conditions** and define the relevant information:
 - Clear the **Sales order confirmation** check box.
 - Select the **Partial delivery allowed** check box to allow partial delivery for the sales order.

Then, click **Close** to exit.

7. If required, click **Authorize** to authorize the sales order.
8. Click **Close** to close the **Sales orders** screen. A project is automatically generated when an hour item is involved in a sales order.
9. Go to Projects → Projects → Maintain projects, select the corresponding project, and then click **Open** to view the project.
10. At **WIP method**, select **Percentage of completion cost recognition**. By default, the **WIP method** selected at **WIP method** at System → General → Settings → Project settings is pre-selected.
11. Click **Save**.
12. Click **Close** to exit.

To generate the MRS for people:

1. Go to HR → People → Maintain or Payroll → People → Maintain.
2. Select the person assigned to the task, namely “Person 1”.
3. Click **Generate**.
4. Type or select the date range from “27/01/2006” to “01/02/2006” to generate the available capacity for the project.
5. Click **Generate**.
6. Click **Close** to exit.

To plan tasks to people:

1. Go to Projects → Planning → Resource planning.
2. Type or select the date range to view the planning and the required tasks from “27/01/2006” to “01/02/2006” at the **Resource planning** and **Tasks / Requirements** panes. Notice that the 8 hours of CONS1 and 2 hours of CONS2 have been automatically planned to Person 1. This is because the planning is automatically generated when a person is assigned in a sales order.
3. Click **Close** to exit.

To realize the first hours:

1. Go to Projects → Entries → Realizations to realize 8 hours of CONS1 on 31/01/2006.
2. Go to Projects → Entries → Authorize to authorize the realization.
3. Go to Projects → Projects → Maintain projects, and click **Open** to view the project maintenance card.
4. Click **Project card** to view the project transaction card which displays the following results:

G/L Description	Debit EUR	Credit EUR
Coverage		320.00
Realization	320.00	

Calculation:

Costs of realized CONS1

= Number of realized CONS1 x Cost of CONS1
= 8 hours x EUR 40.00 per hour
= EUR 320.00

Costs (actual) = Costs of realized CONS1 = EUR 320.00

5. Click **Close** to close the project transaction card.
6. In the **Financial** section of the **Basics** tab of the project maintenance card, you will see the following financial entries:

G/L Description	Debit EUR	Credit EUR
Revenue	EUR 1,155.00	EUR 0.00
Costs	EUR 384.00	EUR 320.00
WIP		EUR 0.00
Result	EUR 771.00	(- EUR 320.00)
Margin	67%	0%

Calculation:**Revenue (planning)**

= Revenue from CONS1 + Revenue from CONS2
 = Number of planned CONS1 x Sales price of CONS1 per hour + Number of planned CONS2 x Sales price of CONS2 per hour
 = 8 hours x EUR 110.00 per hour + 2 hours x EUR 137.50 per hour
 = EUR 880.00 + EUR 275.00
 = EUR 1,155.00

Costs (planning)

= Cost of CONS1 + Cost of CONS2
 = Number of planned CONS1 x Cost of CONS1 per hour + Number of planned CONS2 x Cost of CONS2 per hour
 = 8 hours x EUR 40.00 per hour + 2 hours x EUR 32.00 per hour
 = EUR 320.00 + EUR 64.00
 = EUR 384.00

WIP (planning) is not applicable as no WIP is generated yet.

Result (planning)

= Revenue (planning) - Cost (planning)
 = EUR 1,155.00 - EUR 384.00
 = EUR 771.00

Margin (planning)

= [Result (planning) / Revenue (planning)] x 100%
 = EUR 771.00 / EUR 1,155.00 x 100%
 = 67%

Revenue (actual) = EUR 0.00

Note: CONS1 and CONS2 are not invoiced yet.

Costs (actual) = EUR 320.00

Note: See the calculation at *Item 2* above.

Result (actual)

= Revenue (actual) - Costs (actual)
 = EUR 0.00 - EUR 320.00
 = (- EUR 320.00)

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%
 = (- EUR 320.00) / EUR 0.00 x 100%
 = 0%

7. Click **Close** to exit.

To invoice the first realization:

Note: For the PoCCR, PoCCR Budget, PoCRR, PoCRR Budget, CC, and COS methods, you generate and process the first invoice before generating the first WIP. For the TBI method, the first invoice will only be generated and processed after generating the first WIP. Therefore, when you generate the first WIP for the TBI method, the Revenue (actual) and Costs (actual) will be EUR 0.00 each while for other methods, they will be EUR 880.00 and EUR 320.00, respectively.

1. Go to Projects → Entries → Invoice proposal.
2. After generating the invoice, click **Close** to exit.
3. Go to Invoice → Entries → Invoices, select the invoice, and then click **Open** to view the invoice.
4. At the sales invoices process flow, click the **Authorized** process step to authorize the invoice.
5. Click the **Processed** process step to print the invoice. The **Print invoices** screen will be displayed.
6. At **Process**, select **Final**.
7. At **Output**, select **Printer**.
8. At **Invoice date**, type or select “31/01/2006” and the **Reporting date** will be automatically filled in with the invoice date.
9. At **Layout**, the invoice layout which you have defined at System → Settings → General, under **Document settings** at **Invoice** will be automatically filled here.
10. Click **Process**.
11. Click **Close** to exit.
12. If the invoice does not require authorization, you can print the invoice at Project → Entries → Print invoices. The invoice will generate the following values:

Net amount

= Number of invoiced CONS1 x Sales price of CONS1
= 8 hours x EUR 110.00 per hour
= EUR 880.00

Taxes

= Percentage of tax x Net amount
= 19% x EUR 880.00
= EUR 167.20

Total

= Net amount + Taxes
= EUR 880.00 + EUR 167.20
= EUR 1,047.20

Note: See the calculation at *Item 7* above.

13. Go to Projects → Projects → Maintain projects.
14. Select the project and click **Open**.
15. Click **Project card**.
16. At **Date**, select the **All** check box.

17. At **Group by**, select **G/L**, and then select the **Unprocessed** check box. You will see the following results:

G/L Description	Debit EUR	Credit EUR
Account Receivables	1,047.20	
VAT to pay account		167.20
Revenue		880.00
Total	1,047.20	1,047.20

Calculation:

Account receivables = **Total** from the second invoice = EUR 1,047.20

VAT to pay account = **Taxes** from the second invoice = EUR 167.20

Revenue = **Net amount** from second invoice = EUR 880.00

Note: See the calculation at *Item 7* above.

18. Click **Close** to return to the **Maintain projects** screen. Under the **Basics** tab in the **Financial** section, you will see the following results:

	Planning	Actual
Revenue	EUR 1,155.00	EUR 880.00
Costs	EUR 384.00	EUR 320.00
WIP		EUR 0.00
Result	EUR 771.00	EUR 560.00
Margin	67%	64%

Calculation:

For the calculation of **Revenue (planning)**, **Costs (planning)**, **WIP (Planning)**, **Result (planning)**, and **Margin (planning)**, see *To realize the first hours*.

Revenue from invoiced CONS1

= Number of invoiced CONS1 x Sales price of CONS1

= 8 hours x EUR 110.00

= EUR 880.00

Revenue (actual) = **Revenue from invoiced CONS1** = EUR 880.00

Costs (actual) = EUR 320.00

Note: See the calculation at *To realize the first hours*.

WIP (actual) = EUR 0.00

Note: No WIP is generated yet.

Result (actual)

= Revenue (actual) - Costs (actual)
= EUR 880.00 - EUR 320.00
= EUR 560.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%
= EUR 560.00 / EUR 880.00 x 100%
= 64%

19. Click **Close** to exit.

Note: After invoicing the first realization for the TBI method, you need to generate the WIP again. For more information, see *To generate WIP for the first realization, after generating the invoice for TBI method*. In order to record the WIP on the balance sheet, you need to transfer a part of the current project result to the balance sheet on the WIP general ledger account. Follow the steps to process the WIP.

The screenshot shows the 'Projects / Projects / Work in progress' configuration window. The 'Warehouse' is set to '--All--'. The 'Project manager' field is empty. The 'Project' and 'End date' fields are empty, with 'to' and 'All' checkboxes. The 'Include: Related' checkbox is unchecked, and 'Include: Zero (Actual)' is checked. Under 'Project type', 'Internal' is unchecked, 'Fixed' and 'Time & Material' are checked, and 'Training' and 'Production' are unchecked. Under 'Project status', 'Proposed' is unchecked, 'Active' is checked, and 'Completed' and 'Blocked' are unchecked. 'Group by' is set to 'Item'. The 'Scenario' and 'Ordered by' fields are empty. The 'Invoice to' field is empty. Under 'WIP method', 'Percentage of completion cost recognition' and 'Percentage of completion revenue recognition' are checked. 'Percentage of completion cost recognition (budget)' and 'Percentage of completion revenue recognition (budget)' are also checked. 'Completed contract method' and 'Cost of sales method' are checked. 'WIP cost and revenue transfer' and 'WIP cost and revenue' are unchecked, and 'Partial release' is unchecked. The 'Transaction date' and 'Reporting date' are both set to '31/06/2006'. The 'Proposal' checkbox is checked, and 'Suggestion (Recognized costs)' is also checked.

To generate WIP for the first realization:

Note: For the PoCCR, PoCCR Budget, PoCRR, PoCRR Budget, CC, and COS methods, this process will generate the WIP for realized CONS1 with processed invoice. However, for the TBI method, this process will generate the WIP for realized CONS1 without the processed invoice.

1. Go to Projects → Projects → Work in progress or click the **Work in progress** button at the bottom of the **Basics** tab of the corresponding project maintenance card.
2. Define the relevant criteria to search for the WIP.

Notes:

- For the COS method, select **Item** at **Group by**. Then, select the **Suggestion (Recognized costs)** check box to show the suggested recognized cost in the overview of WIP.

- For the PoCCR, PoCRR, CC, TBI, and COS methods, type or select the reference date at **to** to display transactions up to the defined reference date. For PoCCR, PoCRR, CC, TBI, and COS, the reference date is important as this function allows the system to display the forecast calculations of revenue and cost up to the date you define. By default, the reference date will be filled with the current date. In this scenario, type “31/01/2006” to display transactions up to the defined reference date. Based on the reference date, the calculation of forecast revenue and forecast cost are based on these formulas:

Revenue (forecast)

= Total actual revenue up to the reference date + Total planned revenue after the reference date
 = Revenue from CONS1 + Revenue from CONS2
 = EUR 880.00 + EUR 275.00
 = EUR 1,155.00

Costs (forecast)

= Total actual costs up to the reference date + Total planned costs after the reference date
 = Costs from CONS1 + Costs from CONS2
 = EUR 320.00 + EUR 64.00
 = EUR 384.00

- For PoCCR Budget and PoCRR Budget, you can define the budget for cost and revenue at System → Finance → Budgets, if any. For this scenario, we will assume that the budget for cost and revenue are as follows:
 - Revenue (budget) = EUR 1,155.00
 - Costs (budget) = EUR 384.00
3. Click **Display** to see the results for the selected WIP method. Click **Change** to change the WIP method to a different method and click **OK**.
Note: For the COS method, select **Item** at **Group by** and the **Suggestion (Recognized costs)** check box to show the suggested recognized cost in the overview of WIP before you click **Display**.

WIP Method	PoCCR	PoCCR Budget	PoCRR	PoCRR Budget	CC	TBI	COS
Costs (budget)		EUR 384.00		EUR 384.00			
Costs (actual)	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00		EUR 320.00
Invoiced						EUR 0.00	
0.00							
WIP (current)	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00
Percentage of completion	83.33%	83.33%	76%	76%	0%	0%	
WIP (change)	EUR 82.50	EUR 82.50	(- EUR 27.43)	(- EUR 27.43)	(- EUR 560.00)	EUR 880.00	
Quantity invoiced							8 hours
Quantity of item							8 hours

4. Click **Info** to see how the **Percentage of completion** and the **WIP (Change)** amounts are calculated based on the WIP method.

Calculation:

For more information about **Revenue (forecast)**, **Revenue (budget)**, **Costs (forecast)**, and **Costs (budget)**, see *Item 2*, above.

Revenue (actual) for PoCCR, PoCRR Budget, PoCRR, PoCRR Budget, CC, and COS method= EUR 880.00

Note: See the calculation at *To invoice the first realization*.

Revenue (actual) for TBI method = EUR 0.00

Note: Nothing is invoiced yet.

Costs (actual) = EUR 320.00

Note: See the calculation at *To realize the first hours*.

WIP (current) = EUR 0.00

Note: No WIP generated yet.

PoCCR:

Percentage of completion

= Costs (actual) / Costs (forecast) x 100%

= EUR 320.00 / EUR 384.00 x 100%

= 83.33%

WIP (change)

= [Percentage of completion x Revenue (forecast) - Revenue (actual)] - WIP (current)

= (83.33% x EUR 1,155.00) - EUR 880.00 - EUR 0.00

= EUR 82.50

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 82.50

= EUR 82.50

PoCCR Budget:

Percentage of completion

= Costs (actual) / Costs (forecast) x 100%

= EUR 320.00 / EUR 384.00 x 100%

= 83.33%

WIP (change)

= [Percentage of completion x Revenue (forecast) - Revenue (actual)] - WIP (current)

= (83.33% x EUR 1,155.00) - EUR 880.00 - EUR 0.00

= EUR 82.50

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 82.50

= EUR 82.50

PoCRR:**Percentage of completion**

= Revenue (actual) / Revenue (forecast) x 100%

= EUR 880.00 / EUR 1,155.00 x 100%

= 76.19 % ~ 76%

WIP (change)

= [Percentage of completion x Costs (forecast) - Costs (actual)] - WIP (current)

= [(76.19% x EUR 384.00) - EUR 320.00] - EUR 0.00

= (- EUR 27.43)

WIP (new)

= WIP (Current) + WIP (change)

= EUR 0.00 + (- EUR 27.43)

= (- EUR 27.43)

PoCRR Budget:**Percentage of completion**

= Revenue (actual) / Revenue (budget) x 100%

= EUR 880.00 / EUR 1,155.00 x 100%

= 76.19 % ~ 76%

WIP (change)

= [Percentage of completion x Costs (budget) - Costs (actual)] - WIP (Current)

= [(76.19 % x EUR 384.00) - EUR 320.00] - EUR 0.00

= (- EUR 27.43)

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + (- EUR 27.43)

= (- EUR 27.43)

CC:

Since Revenue (forecast) > Revenue (actual), then

Percentage of completion = 0.00 %

Since **Percentage of completion** = 0.00 %, then

WIP (change)

= Cost (actual) - Revenue (actual) - WIP (current)

= EUR 320.00 - EUR 880.00 - EUR 0.00

= (- EUR 560.00)

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + (- EUR 560.00)

= (- EUR 560.00)

TBI:

Invoiced = EUR 0.00

Note: Nothing is invoiced yet.

Quantity to be invoiced = 8 hours

Note: Number of realized CONS1.

Average rate (for CONS1) = EUR 110.00

Note: Rate of realized CONS1

WIP (change)

= {Quantity to be invoiced x Average rate} - WIP (current)

= (8 hours x EUR 110.00 per hour) - EUR 0.00

= EUR 880.00

WIP (new)

= Quantity to be invoiced x Average rate

= 8 hours x EUR 110.00 per hour

= EUR 880.00

COS

Quantity invoiced = EUR 0.00

Note: Number of CONS1 invoiced.

Quantity of item = 8 hours

Note: Number of CONS1 realized.

Since **Revenue (actual)** <> 0, then

WIP (change)

= Cost (actual) - [Qty invoiced x Cost (actual) / Qty of item] - WIP (current)

= EUR 320.00 - [(8 hours x EUR 320 / (8 hours))] - EUR 0.00

= EUR 0.00

Recognized Costs (change)

= Qty invoiced x [Cost (actual) / Qty of item]

= 8 hours x [(EUR 320.00 per hour / (8 hours))]

= EUR 320.00 per hour

5. Click **OK** to close the **Info** screen.
6. In the **Work in progress** screen under the **Generate** column, select the **Generate** check box, and then click **Generate**. This will transfer all cost and revenue per original transaction (based on our reference and transaction date) to the applicable WIP general ledger account.
Note: For the COS method, click **Column** to display extra columns in the overview of WIP. Select the **Recognized costs (Current)**, **Recognized costs (Total)**, and **Recognized costs (Change)** check boxes to display these columns. Then, select the **Generate** column for CC022 only.
7. In the **Generate** screen, type or select the journal number and the transaction date to 31/01/2006. Click **OK** to generate the WIP. After generating the WIP, click **Close** at the **Work in progress** screen to return to Projects → Projects → Work in progress.
8. Click **Display**, then **Info** to see the results based on the selected method.

WIP Method	PoCCR	PoCCR Budget	PoCRR	PoCRR Budget	CC	TBI	COS
Revenue (forecast)	EUR 1,155.00		EUR 1,155.00		EUR 1,155.00		
Revenue (budget)		EUR 1,155.00		EUR 1,155.00			
Revenue (actual)	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 0.00	EUR 880.00
Costs (forecast)	EUR 384.00		EUR 384.00				
Costs (budget)		EUR 384.00		EUR 384.00			
Costs (actual)	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00		EUR 320.00
Invoiced						EUR 0.00	
WIP (current)	EUR 82.50	EUR 82.50	(- EUR 27.43)	(- EUR 27.43)	(- EUR 560.00)	EUR 880.00	EUR 320.00
Percentage of completion	83.33%	83.33%	76%	76%	0%		
WIP (change)	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	

WIP Method	PoCCR	PoCCR Budget	PoCRR	PoCRR Budget	CC	TBI	COS
WIP (new)	EUR 82.50	EUR 82.50	(- EUR 27.43)	(- EUR 27.43)	(- EUR 560.00)		
Quantity invoiced							8 hours
Quantity of items							8 hours

Calculation:

PoCCR
<p>WIP (current) = 82.50 Note: See the calculation of WIP (new) at <i>Item 4</i> above</p> <p>Percentage of completion = 83.33 % Note: See the calculation at <i>Item 4</i> above.</p> <p>WIP (change) = [Percentage of completion x Revenue (forecast) - Revenue (actual)] - WIP (current) = (83.33 % x EUR 1,155.00) - EUR 880.00 - EUR 82.50 = EUR 962.50 - EUR 880.00 - EUR 82.50 EUR = EUR 0.00</p> <p>WIP (new) = WIP (current) + WIP (change) = EUR 82.50 + EUR 0.00 = EUR 82.50</p>

PoCCR Budget

WIP (current) = 82.50

Note: See the calculation of WIP (new) at *Item 4* above.

Percentage of completion = 83.33 %

Note: See the calculation at *Item 4* above.

WIP (change)

= [Percentage of completion x Revenue (budget) - Revenue (actual)] - WIP (current)

= (83.33 % x EUR 1,155.00) - EUR 880.00 - EUR 82.50

= EUR 962.50 - EUR 880.00 - EUR 82.50

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 82.50 + EUR 0.00

= EUR 82.50

PoCRR

WIP (current) = (- EUR 27.43)

Note: See the calculation of WIP (new) at *Item 4* above.

Percentage of completion = 76.19 % ~ 76%

Note: See the calculation at *Item 4* above.

WIP (change)

= [Percentage of completion x Costs (forecast)] - Costs (actual) - WIP (current)

= (76.19 % x EUR 384.00) - EUR 320.00 - (- EUR 27.43)

= EUR 292.57 - EUR 320.00 + EUR 27.43

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= (- EUR 27.43) + EUR 0.00

= (- EUR 27.43)

PoCRR Budget

WIP (current) = (- EUR 27.43)

Note: See the calculation of WIP (new) at *Item 4* above.

Percentage of completion = 76.19 % ~ 76%

Note: See the calculation at *Item 4* above.

WIP (change)

= [Percentage of completion x Costs (budget)] - Costs (actual) - WIP (current)

= (76.19 % x EUR 384.00) - EUR 320.00 - (- EUR 27.43)

= EUR 292.57 - EUR 320.00 + EUR 27.43

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= (- EUR 27.43) + EUR 0.00

= (- EUR 27.43)

CC:

WIP (current) = (- EUR 560.00)

Note: See the calculation of **WIP (new)** at *Item 4*, above.

Since **Revenue (forecast) > Revenue (actual)**, then

Percentage of completion = 0.00 %

Since **Percentage of completion** = 0.00%, then

WIP (change)

= Cost (actual) - Revenue (actual) - WIP (current)

= EUR 320.00 - EUR 880.00 - (- EUR 560.00)

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= (- EUR 560.00) + EUR 0.00

= (- EUR 560.00)

TBI:

Invoiced = EUR 0.00

Note: Nothing is invoiced yet.

WIP (current) = EUR 880.00

Note: See the calculation of **WIP (new)** at *Item 4*, above.

Quantity to be invoiced (CONS1) = 8 hours

Note: Number of CONS1 to be invoiced

Average rate (CONS1) = EUR 110.00 per hour

Note: Average rate for CONS1

WIP (change)

= [Quantity to be invoiced x Average rate] - WIP (current)

= (8 hours x EUR 110.00 per hour) - EUR 880.00

= EUR 0.00

WIP (new)

= Quantity to be invoiced x Average rate

= 8 hours x EUR 110.00 per hour

= EUR 880.00

COS
<p>WIP (current) = EUR 320.00 Note: See the calculation of Recognized costs (change) at <i>Item 4</i>, above.</p> <p>Quantity invoiced = 8 hours Note: Number of CONS1 invoiced.</p> <p>Quantity of item = 8 hours Note: Number of CONS1 realized. Since Revenue (actual) < 0, then</p> <p>WIP (change) = Cost (actual) - [Qty invoiced x Cost (actual) / Qty of item] - WIP (current) = EUR 320.00 - [8 x EUR 320.00 / 8] - EUR 320.00 = EUR (-320.00)</p> <p>Recognized costs (change) = Qty invoiced x [Cost (actual) / Qty of item] = 8 x (EUR 320.00 / 8) = EUR 320.00</p>

9. Click **OK** to close the **Info** screen.
10. Click **Close** to exit.

To view financial entry of the first WIP generated:

1. Go to Projects → Projects → Maintain projects.
2. Select the corresponding project and click **Open** to view the project.
3. Click **Project card** to view the financial entry of the generated WIP. Alternatively, you can also view the financial entry of the generated WIP by going to Projects → Projects → Cards, selecting the corresponding project, and then clicking **Card**.

For PoCCR and PoCCR Budget:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)	82.50	
Work in Progress (P&L)		82.50

For PoCRR and PoCRR Budget:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)		27.43
Work in Progress (P&L)	27.43	

For CC:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)		560.00
Work in Progress (P&L)	560.00	

For TBI:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)	880.00	
Work in Progress (P&L)		880.00

For COS:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)	320.00	
Work in Progress (P&L)		320.00

In order to correct the profit and loss statement, the WIP (balance) general ledger account is credited or debited with the corresponding amount against the WIP (change) general ledger account.

- Click **Close** to close the project card and return to the **Maintain projects** screen. Under the **Basics** tab in the **Financial** section, you will see the following results:

	PoCCR	Actual [PoCCR]	Actual [PoCCR Budget]	Actual [PoCRR]	Actual [PoCRR Budget]	CC	TBI
Revenue	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00
Cost	EUR 384.00	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00	EUR 320.00
WIP		EUR 82.50	EUR 82.50	EUR (-27.43)	EUR (-27.43)	EUR (-560.00)	EUR 1,440.00
Result	EUR 771.00	EUR 642.50	EUR 642.50	EUR 532.57	EUR 532.57	EUR 0.00	
Margin	67%	73%	73%	61%	61%	0%	364%

Calculation:

For the calculation of **Revenue (planning)**, **Costs (planning)**, **Result (planning)**, and **Margin (planning)**, see *To realize the first hours*.

Revenue (actual) = EUR 880.00

Note: See the calculation at *To invoice the first realization*.

Costs (actual) = EUR 320.00

Note: See the calculation at *To realize the first hours*.

PoCCR Budget

WIP (actual) = EUR 82.50

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 320.00 - EUR 82.50]

= EUR 642.50

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 477.50 / EUR 880.00 x 100%

= 73%

PoCRR

WIP (actual) = (- EUR 27.43)

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 320.00 - (- EUR 27.43)]

= EUR 532.57

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 532.57 / EUR 880.00 x 100%

= 61%

PoCRR Budget

WIP (actual) = (- EUR 27.43)

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 320.00 - (- EUR 27.43)]

= EUR 532.57

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 532.57 / EUR 880.00 x 100%

= 61%

CC

WIP (actual) = (- EUR 560.00)

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 320.00 - (- EUR 560.00)]

= EUR 0.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 0.00 / EUR 880.00 x 100%

= 0%

TBI
<p>WIP (actual) = EUR 880.00</p> <p>Note: See the calculation for WIP (new) at <i>Item 8 of To generate WIP for the first realization.</i></p> <p>Result (actual)</p> <p>= Revenue (actual) - [Cost (actual) - WIP(actual)]</p> <p>= EUR 880.00 - (EUR 320.00 - EUR 880.00)</p> <p>= EUR 1,440.00</p> <p>Margin (actual)</p> <p>= [Result (actual) / Revenue (actual)] x 100%</p> <p>= EUR 1,440.00 / EUR 880.00 x 100%</p> <p>= 0%</p>

COS
<p>WIP (actual) = EUR 320.00</p> <p>Note: See the calculation for Recognized cost (change) at <i>Item 8 of To generate WIP for the first realization.</i></p> <p>Result (actual)</p> <p>= Revenue (actual) - [Cost (actual) - WIP(actual)]</p> <p>= EUR 880.00 - (EUR 320.00 - EUR 320.00)</p> <p>= EUR 880.00</p> <p>Margin (actual)</p> <p>= [Result (actual) / Revenue (actual)] x 100%</p> <p>= EUR 880.00 / EUR 880.00 x 100%</p> <p>= 100%</p>

5. Click **Close** to exit.

To generate WIP for the first realization, after generating the invoice for TBI method:

Note: This process is after you have invoiced the first realization.

1. For the TBI method, click **Work in progress**. In the **Work in progress** screen, click **Info**. You will see the following:

WIP Method	TBI
Revenue (actual)	EUR 880.00
Invoiced	EUR 880.00
WIP (current)	EUR 880.00
WIP (change)	(- EUR 880.00)
WIP (new)	EUR 0.00

Calculation:

Revenue (actual) = EUR 880.00

Note: For more information, see *To invoice the first realization*.

Invoiced = EUR 880.00

Note: For more information, see *To invoice the first realization*.

WIP (current) = EUR 880.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the first realization*.

Quantity to be invoiced and Average rate are not applicable as nothing is to be invoiced anymore for the realized CONS1.

WIP (change)

= [Quantity to be invoiced x Average rate] - WIP (current)

= EUR 0.00 - EUR 880

= (- EUR 880.00)

WIP (new)

= Quantity to be invoiced x Average rate

= EUR 0.00

2. Click **OK** to close the **Info** screen.
3. In the **Work in progress** screen, select the **Generate** check box under the **Generate** column and click **Generate**. Note that the previous WIP of EUR 880.00 must be balanced off with the WIP (Change) of (-EUR 880.00) as there are no more outstanding hours to be invoiced.
4. Type or select the journal number and the transaction date "31/01/2006".
5. Click **OK**.
6. Click **Close** to exit.

To realize the second hours:

1. Realize the remaining two hours of CONS2 on 01/02/2006 at Projects → Entries → Realizations, and then authorize the realization at Projects → Entries → Authorize.
2. To view the financial entry of the realized cost, go to Projects → Projects → Maintain projects.
3. Click **Open** to view the corresponding project, and then click **Card**. You will see the following results:

G/L Description	Debit EUR	Credit EUR
Coverage		384.00
Realization	384.00	

Calculation:

Costs of realized CONS1 = EUR 320.00

Note: See the calculation at *To realize the first hours*.

Costs of realized CONS2

= Number of realized CONS2 x Cost of CONS2

= 2 hours x EUR 32.00

= EUR 64.00

Costs (actual)

= **Costs of realized CONS1 + Costs of realized CONS2**

= EUR 320.00 + EUR 64.00

= EUR 384.00

4. Click **Close** to close the project card. Under the **Basics** tab in the **Financial** section, you will see the following financial entries:

	Planning	Actual [PoCCR]	Actual [PoCCR Budget]	Actual [PoCRR]	Actual [PoCRR Budget]	CC	TBI
Revenue	EUR 1,155.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00	EUR 880.00
Cost	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00
WIP		EUR 82.50	EUR 82.50	EUR (-27.43)	EUR (-27.43)	EUR (-560.00)	EUR 0.00
Result	EUR 771.00	EUR 578.50	EUR 578.50	EUR 468.57	EUR 468.57	EUR (-64.00)	EUR 496.00
Margin	67%	66%	66%	53%	53%	(-7%)	356%

Calculation:

For the calculation of **Revenue (planning)**, **Costs (planning)**, **WIP (Planning)**, **Result (planning)**, and **Margin (planning)**, see *To realize the first hours*.

Revenue (actual) = EUR 880.00

Note: See *To invoice the first realization*.

Costs (actual) = EUR 384.00

Note: See the calculation at *Item 2* above.

PoCRR
<p>WIP (actual) = EUR 82.50</p> <p>Note: See the calculation of WIP New at <i>Item 8</i> of <i>To generate WIP for the first realization</i>.</p>
<p>Result (actual)</p> <p>= Revenue (actual) - [Costs (actual) - WIP (actual)]</p> <p>= EUR 880.00 - [EUR 384.00 - EUR 82.50]</p> <p>= EUR 578.50</p>
<p>Margin (actual)</p> <p>= [Result (actual) / Revenue (actual)] x 100%</p> <p>= EUR 578.50 / EUR 880.00 x 100%</p> <p>= 66%</p>

PoCCR Budget

WIP (actual) = EUR 82.50

Note: See the calculation of **WIP New** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 384.00 - EUR 82.50]

= EUR 578.50

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 413.50 / EUR 880.00 x 100%

= 66%

PoCRR

WIP (actual) = (- EUR 27.43)

Note: See the calculation of **WIP New** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 384.00 - (- EUR 27.43)]

= EUR 468.57

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 468.57 / EUR 880.00 x 100%

= 53%

PoCCR Budget

WIP (actual) = (- EUR 27.43)

Note: See the calculation of **WIP New** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 384.00 - (- EUR 27.43)]

= EUR 468.57

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 468.57 / EUR 880.00 x 100%

= 53%

CC

WIP (actual) = (- EUR 560.00)

Note: See the calculation of **WIP New** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 880.00 - [EUR 384.00 - (- EUR 560.00)]

= EUR (-64.00)

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= [Result (actual) / Revenue (actual)] x 100%

= (-7)%

TBI

WIP (actual) = EUR 0.00

Note: See the calculation of **WIP New** at *To generate WIP for the first realization, after generating the invoice for TBI method.*

Result (actual)

= Revenue (actual) - [Cost (actual) - WIP (actual)]

= EUR 880.00 - (EUR 384.00 - EUR 0.00)

= EUR 496.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 496.00 / EUR 880.00 x 100%

= 56%

COS

WIP (actual) = EUR 320.00s

Note: See the calculation of **Recognized Cost (change)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue - [Cost (actual) - WIP (actual)]

= EUR 880.00 - (EUR 384.00 - EUR 320.00)

= EUR 816.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 816.00 / EUR 880.00 x 100%

= 93%

To invoice the second realization:

Note: For the PoCCR, PoCCR Budget, PoCRR, PoCRR Budget, CC, and COS methods, you generate the second invoice before generating the second WIP. For the TBI method, the second invoice will only be generated and processed after generating the second WIP. Therefore, when you generate the first WIP for the TBI method, the Revenue (actual) and Costs (actual) will be EUR 880.00 and EUR 320.00 respectively while for other methods, its EUR 1,155.00 and EUR 384.00, respectively.

1. Go to Projects → Entries → Invoice proposal.
2. After generating the invoice, click **Close** to exit.
3. Go to Invoice → Entries → Invoices, select the invoice, and then click **Open** to view the invoice.
4. At the sales invoices process flow, click the **Authorized** process step to authorize the invoice, and then the **Processed** process step to print the invoice. You will see the **Print invoices** screen. At **Process**, select **Final** and at **Output**, select **Printer**.
5. At **Invoice date**, type or select “01/02/2006” and the **Reporting date** will be automatically filled in with the invoice date.
6. At **Layout**, the invoice layout which you have defined in System → Settings → General, under **Documents settings** at **Invoice** will be automatically filled.
7. Click **Process**.
8. Click **Close** to exit.
9. If the invoice does not require authorization, you can print the invoice at Project → Entries → Print invoices. Select the invoice to be printed. Click **Print**. Follow the same settings as described in the steps to print the invoice at Invoice → Entries → Invoices. The invoice will generate the following values:

Net amount

= Number of invoiced CONS2 x Sales price of CONS2
 = 2 hours x EUR 137.50 per hour
 = EUR 275.00

Taxes

= Percentage of tax x Net amount
 = 19% x EUR 275.00
 = EUR 52.25

Total

= Net amount + Taxes
 = EUR 275.00 + EUR 52.25
 = EUR 327.25

10. To view the financial entry of the second invoice, go to Projects → Projects → Maintain projects. Click **Open** to view the corresponding project, and then click **Card**. Type or select the date for “01/11/2005” to view the financial entry for the selected date. You will see the following results:

G/L Description	Debit EUR	Credit EUR
Account Receivables	327.25	
VAT to pay account		52.25.00
Revenue		275.00
Total	327.25	327.25

Calculation:

Account receivables = Total from the second invoice = EUR 327.25

VAT to pay account = Taxes from the second invoice = EUR 52.25

Revenue = Net amount from second invoice = EUR 327.25

Note: See the calculation at *Item 7*, above.

Click **Close** to close the project card.

11. Under the **Basics** tab at the **Financial** section, you will see the following financial entries:

	Planning	Actual (PoCCR)	Actual (PoCCR Budget)	Actual (PoCRR)	Actual (PoCRR Budget)	CC	TBI
Revenue	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00
Cost	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00
WIP		EUR 82.50	EUR 82.50	EUR (-27.43)	EUR (-27.43)	EUR (-560.00)	EUR 275.00
Result	EUR 771.00	EUR 853.50	EUR 853.50	EUR 743.57	EUR 743.57	EUR 211.00	EUR 1,046.00
Margin	67%	74%	74%	64%	64%	18%	91%

Calculation:

For the calculation of **Revenue (planning)**, **Costs (planning)**, **WIP (Planning)**, **Result (planning)**, and **Margin (planning)**, see *To realize the first hours*.

Revenue from invoiced CONS1 = EUR 880.00

Note: See the calculation at *To invoice the first realization*.

Revenue from invoiced CONS2

= Number of invoiced CONS2 x Sales price of CONS2

= 2 hours x EUR 137.50 per hour

= EUR 275.00

Revenue (actual)

= **Revenue from invoiced CONS1** + **Revenue from invoiced CONS2**

= EUR 880.00 + EUR 275.00

= EUR 1,155.00

Costs (actual) = EUR 384.00

Note: See the calculation at *To realize the second hours*.

PoCCR

WIP (actual) = EUR 82.50

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - (EUR 384.00 - EUR 82.50)

= EUR 853.50

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 853.50 / EUR 1,155.00 x 100%

= 74%

PoCCR Budget

WIP (actual) = 82.50 EUR

Note: See the calculation of **WIP New** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - EUR 82.50]

= EUR 853.50

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 688.50 / EUR 1,155 x 100%

= 74%

PoCRR

WIP (actual) = (- EUR 27.43)

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - (- EUR 27.43)]

= EUR 743.57

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 743.57 / EUR 1,155.00 x 100%

= 64%

PoCRR Budget

WIP (actual) = (- EUR 27.43)

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - (- EUR 27.43)]

= EUR 743.57

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 743.57 / EUR 1,155.00 x 100%

= 64%

CC

WIP (actual) = (- EUR 560.00)

Note: See the calculation for **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Result (actual)

= Revenue (actual) - [Cost (actual) - WIP (actual)]
 = EUR 1,155.00 - [EUR 384.00 - (- EUR 560.00)]
 = EUR 211.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%
 = EUR 211.00 / EUR 1,155.00 x 100%
 = 18%

TBI

WIP (actual) = EUR 275.00

Note: See the calculation of **WIP (new)** at *Item 2 of To generate WIP for the second realization.*

Result (actual)

= Revenue (actual) - [Cost (actual) - WIP (actual)]
 = EUR 1,155.00 - (EUR 384.00 - EUR 275.00)
 = EUR 1,046.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%
 = EUR 1,046.00 / EUR 1,155.00 x 100%
 = 91%

COS

WIP (actual) = EUR 320.00

Note: See the calculation for **Recognized costs (change)** at *Item 8 of To generate WIP for the first realization.*

Result Actual

= Revenue (actual) - [Cost (actual) - WIP (actual)]
 = EUR 1,155.00 - (EUR 384.00 - EUR 320.00)
 = EUR 1,091.00

Actual Margin

= [Result (actual) / Revenue (actual)] x 100%
 = EUR 1,091.00 / EUR 1,155.00 x 100%
 = 94%

12. Click **Close** to exit

Note: After invoicing the second realization for TBI method, you need to generate the WIP again. See *To generate WIP for the second realization, after generating the invoice for TBI method.*

To generate WIP for the second realization:

Note: For the PoCCR, PoCCR Budget, PoCRR, PoCRR Budget, CC, and COS methods, this process will generate the WIP for realized CONS2 with processed invoice. However, for the TBI method, this process will generate the WIP for realized CONS2 without processed invoice.

1. Go to Projects → Projects → Work in progress or click the **Work in progress** button at the bottom of the **Basics** tab of the corresponding project maintenance card.
2. Define the relevant criteria to search for the WIP.

Notes:

- For the COS method, select **Item** at **Group by**, then, select the **Suggestion (Recognized costs)** check box to show the suggested recognized cost in the overview of WIP.
 - For the PoCCR, PoCRR, CC, TBI, and COS methods, type or select the reference date at **to** to display transactions up to the defined reference date. For PoCCR, PoCRR, CC, TBI, and COS, the reference date is important as this function allows the system to display the forecast calculations of revenue and cost up to the date you define. By default, the reference date will be filled with the current date. In this scenario, type “01/02/2006” to display transactions up to the defined reference date.
3. Click **Info**. You will see the following results for the corresponding WIP method:
Note: For the COS method, to view the information on individual items, click to select the amount of the column under the **WIP (Change)** column for each item before you click **Info**.

WIP Method	PoCCR	PoCCR Budget	PoCRR	PoCRR Budget	CC	TBI	COS	
							CONS 1	CONS 2
Revenue (forecast)	EUR 1,155.00		EUR 1,155.00		EUR 1,155.00			
Revenue (budget)		EUR 1,155.00		EUR 1,155.00				
Revenue (actual)	EUR 1,155.00		EUR 1,155.00		EUR 1,155.00	EUR 880.00	EUR 880.00	EUR 275.00
Costs (forecast)	EUR 384.00		EUR 384.00					
Cost (budget)		EUR 384.00		EUR 384.00				
Costs (actual)	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00		EUR 320.00	EUR 64.00
Percentage of completion	100%	100%	100%	100%	100%			
Invoiced						EUR 880.00		
WIP (Current)	EUR 82.50	EUR 82.50	(- EUR 27.43)	(- EUR 27.43)	(- EUR 560.00)	EUR 0.00	EUR 320.00	EUR 0.00

WIP Method	PoCCR	PoCCR Budget	PoCRR	PoCRR Budget	CC	TBI	COS	
							CONS 1	CONS 2
WIP (change)						EUR 275.00	(- EUR 320.00)	EUR 0.00
WIP (new)						EUR 275.00		
Recognized costs (change)							(- EUR 320.00)	EUR 64.00

Calculation:

For more information about **Revenue (forecast)**, **Revenue (budget)**, **Costs (forecast)**, and **Costs (budget)**, see *To generate WIP for the first realization*.

Revenue (actual) = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

PoCCR
<p>Costs (actual) = EUR 384.00 Note: See the calculation at <i>To realize the second hours</i>.</p> <p>WIP (Current) = EUR 82.50 Note: See the calculation of WIP (new) at <i>Item 8 of To generate WIP for the first realization</i>.</p> <p>Percentage of completion = Costs (actual) / Costs (forecast) x 100% = EUR 384.00 / EUR 384.00 x 100% = 100%</p> <p>WIP (change) = [Percentage of completion x Revenue (forecast)] - Revenue (actual) - WIP (current) (wc) = (100 % x EUR 1,155.00) - EUR 1,155.00 - EUR 82.50 = (- EUR 82.50)</p> <p>WIP (new) = WIP (current) + WIP (change) = EUR 82.50 + (- EUR 82.50) = EUR 0.00</p>

PoCCR Budget

Costs (actual) = EUR 384.00

Note: See the calculation at *To realize the second hours*.

WIP (Current) = EUR 82.50

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the first realization*.

Percentage of completion

= Costs (actual) / Costs (forecast) x 100%

= EUR 384.00 / EUR 384.00 x 100%

= 100%

WIP (change)

= [Percentage of completion x Revenue (forecast)] - Revenue (actual) - WIP (current) (wc)

= (100 % x EUR 1,155.00) - EUR 1,155.00 - EUR 82.50

= (- EUR 82.50)

WIP (new)

= WIP (current) + WIP (change)

= EUR 82.50 + (- EUR 82.50)

= EUR 0.00

PoCRR

Costs (actual) = EUR 384.00

Note: See the calculation at *To realize the second hours*.

WIP (current) = (- EUR 27.43)

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the first realization*.

Percentage of completion

= Revenue (actual) / Revenue (forecast) x 100%

= EUR 1,155.00 / EUR 1,155.00 x 100%

= 100%

WIP (change)

= [Percentage of completion x Costs (forecast)] - Costs (actual) - WIP (current)

= (100% x EUR 384.00) - EUR 384.00 - (- EUR 27.43)

= EUR 27.43

WIP (new)

= WIP (current) + WIP (change)

= (- EUR 27.43) + EUR 27.43

= EUR 0.00

PoCRR Budget

Costs (actual) = EUR 384.00

Note: See the calculation at *To realize the second hours*.

WIP (current) = (- EUR 27.43)

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the first realization*.

Percentage of completion

= Revenue (actual) / Revenue (forecast) x 100%

= EUR 1,155.00 / EUR 1,155.00 x 100%

= 100%

WIP (change)

= [Percentage of completion x Costs (forecast)] - Costs (actual) - WIP (current)

= (100% x EUR 384.00) - EUR 384.00 - (- EUR 27.43)

= EUR 27.43

WIP (new)

= WIP (current) + WIP (change)

= (- EUR 27.43) + EUR 27.43

= EUR 0.00

CC

Since **Revenue (forecast) = Revenue (actual)**, then

Percentage of completion = 100.00 %

Since **Percentage of completion** = 100 %, then

WIP (current) = (- EUR 560.00)

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the first realization*.

Since **Percentage of completion** = 100%, then

WIP (change)

= - WIP (current)

= - (- EUR 560.00)

= EUR 560.00

Therefore,

WIP (new)

= WIP (current) + WIP (change)

= (- EUR 560.00) + EUR 560.00

= EUR 0.00

TBI

WIP (actual) = EUR 0.00

Note: See the calculation of **WIP New** at *To generate WIP for the first realization, after generating the invoice for TBI method.*

Quantity to be invoiced = 2

Note: Number of realized CONS2 to be invoiced.

Average rate = EUR 137.50

Note: Rate for CONS2

WIP (change)

= [Quantity to be invoiced x Average rate] - WIP (current)

= 2 x EUR 137.50 - EUR 0.00

= EUR 275.00

WIP (new)

= Quantity to be invoiced x Average rate

= 2 x EUR 137.50

= EUR 275.00

COS

For CONS2:

Revenue (actual) = Revenue of invoiced CONS2 = EUR 275.00

Note: See the calculation at *To invoice the second realization.*

Costs (actual) = Costs of realized CONS2 = EUR 64.00

Note: See the calculation at *To realize the second hours.*

Qty invoiced = 2

Note: Number of invoiced CONS2

Qty of item = 2

Note: Number of realized CONS2

WIP (current) = 320.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the first realization.*

Since **Revenue (actual) <> 0**, then

WIP (change)

= Cost (actual) - [Qty invoiced x Cost (actual) / Qty of item] - WIP (current)

= EUR 64.00 - [2 x (EUR 64.00 / 2)] - EUR 0.00

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 0.00

= EUR 0.00

Recognized Costs (change)

= Qty invoiced x [Cost (actual) / Qty of item]

= 2 x (EUR 64.00 / 2)

= EUR 64.00

4. Click **OK** to close the **Info** screen.
5. In the **Work in Progress** screen, select the **Generate** check box under the **Generate** column, and then Generate. This is because the previous WIP must be balanced off with the **WIP (Change)** as there are no more outstanding hours to be invoiced for PoCCR, PoCCR Budget, PoCRR, PoCRR Budget, CC, COS.
Note: For the COS method, select the **Generate** check box under the **Generate** column for each item before clicking **Generate**.
6. Type or select the **Date** as “01/02/2006” and click **OK** to generate the WIP.
7. Click **Close** to return to the Projects → Projects → Work in progress screen.
8. You will see the following results when you click **Info**:

WIP Method	PoCCR	PoCCR Budget	PoCRR	PoCRR Budget	CC	TBI	COS
Revenue (forecast)	EUR 1,155.00		EUR 1,155.00		EUR 1,155.00		
Revenue (budget)		EUR 1,155.00		EUR 1,155.00			
Revenue (actual)	EUR 1,155.00	EUR 880.00	EUR 1,155.00				
Costs (forecast)	EUR 384.00		EUR 384.00				
Cost (budget)		EUR 384.00		EUR 384.00			
Costs (actual)	EUR 384.00		EUR 384.00				
Invoiced						EUR 880.00	
WIP (current)	EUR 0.00	EUR 275.00	EUR 384.00				
Percentage of completion	100%	100%	100%	100%	100%		
WIP (Change)	EUR 0.00	EUR 0.00					
WIP (new)	EUR 0.00	EUR 275.00					
Quantity invoiced							10 hours
Quantity of items							10 hours

Calculation:

For more information about **Revenue (forecast)**, **Revenue (budget)**, **Costs (forecast)**, and **Costs (budget)**, see *To generate WIP for the first realization*.

Revenue (actual) = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

Costs (actual) = EUR 384.00

Note: See the calculation at *To realize the second hours*.

PoCCR

WIP (current) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 3*, above.

Percentage of completion = 100%

Note: See the calculation at *Item 3*, above.

WIP (change)

= [Percentage of completion x Revenue (forecast)] - Revenue (actual) - WIP (current)

= (100 % x EUR 1,155.00) - EUR 1,155.00 - EUR 0.00

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 0.00

= EUR 0.00

PoCCR Budget

WIP (current) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 3*, above.

Percentage of completion = 100%

Note: See the calculation at *Item 3*, above.

WIP (change)

= [Percentage of completion x Revenue (forecast)] - Revenue (actual) - WIP (current)

= (100 % x EUR 1,155.00) - EUR 1,155.00 - EUR 0.00

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 0.00

= EUR 0.00

PoCRR

WIP (current) = EUR 0.00

Note: See the calculation for **WIP (new)** at *Item 3*, above.

Percentage of completion = 100%

Note: See the calculation at *Item 3*, above.

WIP (change)

= [Percentage of completion x Costs (forecast)] - Costs (actual) - WIP (current)

= (100 % x EUR 384.00) - EUR 384.00 - EUR 0.00

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 0.00

= EUR 0.00

PoCRR Budget

WIP (current) = EUR 0.00

Note: See the calculation for **WIP (new)** at *Item 3*, above.

Percentage of completion = 100%

Note: See the calculation at *Item 3*, above.

WIP (change)

= [Percentage of completion x Costs (forecast)] - Costs (actual) - WIP (current)

= (100% x EUR 384.00) - EUR 384.00 - EUR 0.00

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 0.00

= EUR 0.00

CC

WIP (current) = EUR 0.00

Note: See the calculation for **WIP (new)** at *Item 3*, above.

Since **Revenue (forecast)** = **Revenue (actual)**, then

Percentage of completion = 100.00 %

Since **Percentage of completion** = 100 %, then

WIP (change)

= [- WIP (current)]

= EUR 0.00

WIP (new)

= WIP (current) + WIP (change)

= EUR 0.00 + EUR 0.00

= EUR 0.00

TBI

WIP (current) = EUR 275.00

Note: See the calculation for **WIP (new)** at *Item 3*, above.

Quantity to be invoiced = 2

Note: Number of realized CONS2 to be invoiced.

Average rate = EUR 137.50

Note: Rate for CONS2.

WIP Change

= [Quantity to be invoiced x Average rate] - WIP (current)

= 2 x EUR 137.50 - EUR 275.00

= EUR 0.00

WIP (new)

= Quantity to be invoiced x Average rate

= 2 x EUR 137.50

= EUR 275.00

COS

Qty invoiced = 10

Note: Number of realized CONS1 (8 hours) and CONS2 (2 hours) invoiced.

Qty of item = 10

Note: Number of realized CONS1 (8 hours) and CONS2 (2 hours).

WIP (current)

= EUR 320.00 + EUR 64.00 = EUR 384.00

Note: See the calculation for **Recognized cost (change) (CONS1)** and **Recognized cost (change) (CONS2)** at *Item 3*, above.

Since **Revenue (actual)** <> 0, then

WIP (change)

= Cost (actual) - [Qty invoiced x Cost (actual) / Qty of item] - WIP (current)

= EUR 384.00 - (10 x EUR 384.00 / 10) - EUR 384.00

= (- EUR 384.00)

WIP (new)

= WIP (current) + WIP (change)

= EUR 384.00 + (- EUR 384.00)

= 0.00

Recognized Costs (change)

= Qty invoiced x [Cost (actual) / Qty of item]

= 10 x (EUR 384.00 / 10)

= EUR 384.00

9. Click **OK** to close the **Info** screen.

10. Click **Close** to exit the **Work in progress** screen.

Note: For the TBI method, you can invoice the second realization generating the WIP for the second realization.

To view financial entry of the second WIP generated:

1. Go to Projects → Projects → Maintain projects.
2. Select the project and click **Open**.
3. Click **Card**.
4. At **Date** or **Reporting date**, select the **All** check box.
5. At **Group by**, select **G/L**, and then select the **Unprocessed** check box. You will see the following results:

Notice that:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)	0.00	0.00
Work in Progress (P&L)	0.00	0.00

For **COS**:

G/L Description	Debit EUR	Credit EUR
Work in Progress (BS)	384.00	
Work in Progress (P&L)		384.00

6. Click **Close** to close the project card and to go back to the **Maintain projects** screen. Under the **Basics** tab in the **Financial** section, you will see the following results:

	Planning	Actual [PoCCR]	Actual [PoCCR Budget]	Actual [PoCRR]	Actual [PoCRR Budget]	CC	TBI
Revenue	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00	EUR 1,155.00
Cost	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00	EUR 384.00
WIP		EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 0.00	EUR 275.00
Result	EUR 771.00	EUR 771.00	EUR 771.00	EUR 771.00	EUR 771.00	EUR 771.00	EUR 1,046.00
Margin	67%	67%	67%	67%	67%	67%	91%

Calculation:

For the calculation of **Revenue (planning)**, **Costs (planning)**, **WIP (Planning)**, **Result (planning)**, and **Margin (planning)**, see *To realize the first hours*.

Revenue (actual) = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

Costs (actual) = EUR 384.00

Note: See the calculation at *To realize the second hours*.

PoCCR
<p>WIP (actual) = EUR 0.00</p> <p>Note: See the calculation of WIP (new) at <i>Item 8 of To generate WIP for the second realization</i>.</p>
<p>Result (actual)</p> <p>= Revenue (actual) - [Costs (actual) - WIP (actual)]</p> <p>= EUR 1,155.00 - [EUR 384.00 - EUR 0.00]</p> <p>= EUR 771.00</p>
<p>Margin (actual)</p> <p>= [Result (actual) / Revenue (actual)] x 100%</p> <p>= EUR 771.00 / EUR 1,155.00 x 100%</p> <p>= 67%</p>

PoCCR Budget

WIP (actual) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the second realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - EUR 0.00]

= EUR 771.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 771.00 / EUR 1,155.00 x 100%

= 67%

PoCRR

WIP (actual) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the second realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - EUR 0.00]

= EUR 771.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 771.00 / EUR 1,155.00 x 100%

= 67%

PoCRR Budget

WIP (actual) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the second realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - EUR 0.00]

= EUR 771.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 771.00 / EUR 1,155.00 x 100%

= 67%

CC

WIP (actual) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the second realization.*

Result (actual)

= Revenue (actual) - [Costs (actual) - WIP (actual)]

= EUR 1,155.00 - [EUR 384.00 - EUR 0.00]

= EUR 771.00

Margin (actual)

= [Result (actual) / Revenue (actual)] x 100%

= EUR 771.00 / EUR 1,155.00 x 100%

= 67%

TBI
<p>WIP (actual) = EUR 275.00</p> <p>Note: See the calculation of WIP (new) at <i>Item 8 of To generate WIP for the second realization</i>.</p> <p>Result (actual) = Revenue (actual) - [Costs (actual) - WIP (actual)] = EUR 1,155.00 - (EUR 384.00 - EUR 275.00) = EUR 1,046.00</p> <p>Margin (actual) = [Result (actual) / Revenue (actual)] x 100% = EUR 1,046.00 / EUR 1,155.00 x 100% = 91%</p>

COS
<p>WIP (actual) = EUR 384.00</p> <p>Note: See the calculation of Recognized costs (change) at <i>Item 8 of To generate WIP for the second realization</i>.</p> <p>Results (actual) = Revenue (actual) - [Costs (actual) - WIP (actual)] = EUR 1,155.00 - (EUR 384.00 - EUR 384.00) = EUR 1,155.00</p> <p>Margin (actual) = (Results / Revenue) x 100% = EUR 1,155.00 / EUR 1,155.00 x 100% = 100%</p>

To generate WIP for the second realization, after generating the invoice for TBI method:

Note: This process is performed after you have invoiced the second realization.

1. As there are no more outstanding hours to be invoiced, WIP need to be adjusted. Click **Work in progress**.
2. In the **Work in progress** screen, click **Info**. You will see the following:

WIP Method	TBI
Revenue (actual)	EUR 1,155.00
Invoiced	EUR 1,155.00
WIP (current)	EUR 275.00
WIP (change)	(- EUR 275.00)
WIP (new)	EUR 0.00

Calculation:

Revenue (actual) = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

Invoiced = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

WIP (current) = EUR 275.00

Note: See the calculation of **WIP (new)** at *Item 8 of To generate WIP for the second realization*.

Quantity to be invoiced and **Average rate** are not applicable as there is nothing else to be invoiced.

WIP Change

= [Quantity to be invoiced x Average rate] - WIP (current)

= EUR 0.00 - EUR 275.00

= (- EUR 275.00)

WIP New

= Quantity to be invoiced x Average rate

= EUR 0.00

3. Click **OK** to close the **Info** screen.
4. In the **Work in progress** screen, select the **Generate** check box under the **Generate** column, and then click **Generate** (The previous WIP of EUR 275.00 must be balanced off with the **WIP (Change)** of - EUR275.00 as there is no more outstanding hours to be invoiced).
5. Type or select the journal number, and the transaction date as "01/02/2006".
6. Click **OK**.
7. Click **Close** to return to the Projects → Projects → Work in progress screen.
8. Click **Display**. You will see the following results based on the TBI method when you click **Info**:

WIP Method	TBI
Revenue [actual]	EUR 1,155.00
Invoiced	EUR 1,155.00
WIP [current] [wc]	EUR 275.00

Calculation:

Revenue (actual) = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

Invoiced = EUR 1,155.00

Note: See the calculation at *To invoice the second realization*.

WIP (current) = EUR 0.00

Note: See the calculation of **WIP (new)** at *Item 2*, above.

Quantity to be invoiced and **Average rate** are not applicable as there is nothing else to be invoiced.

WIP Change

= [Quantity to be invoiced x Average rate] - WIP (current)

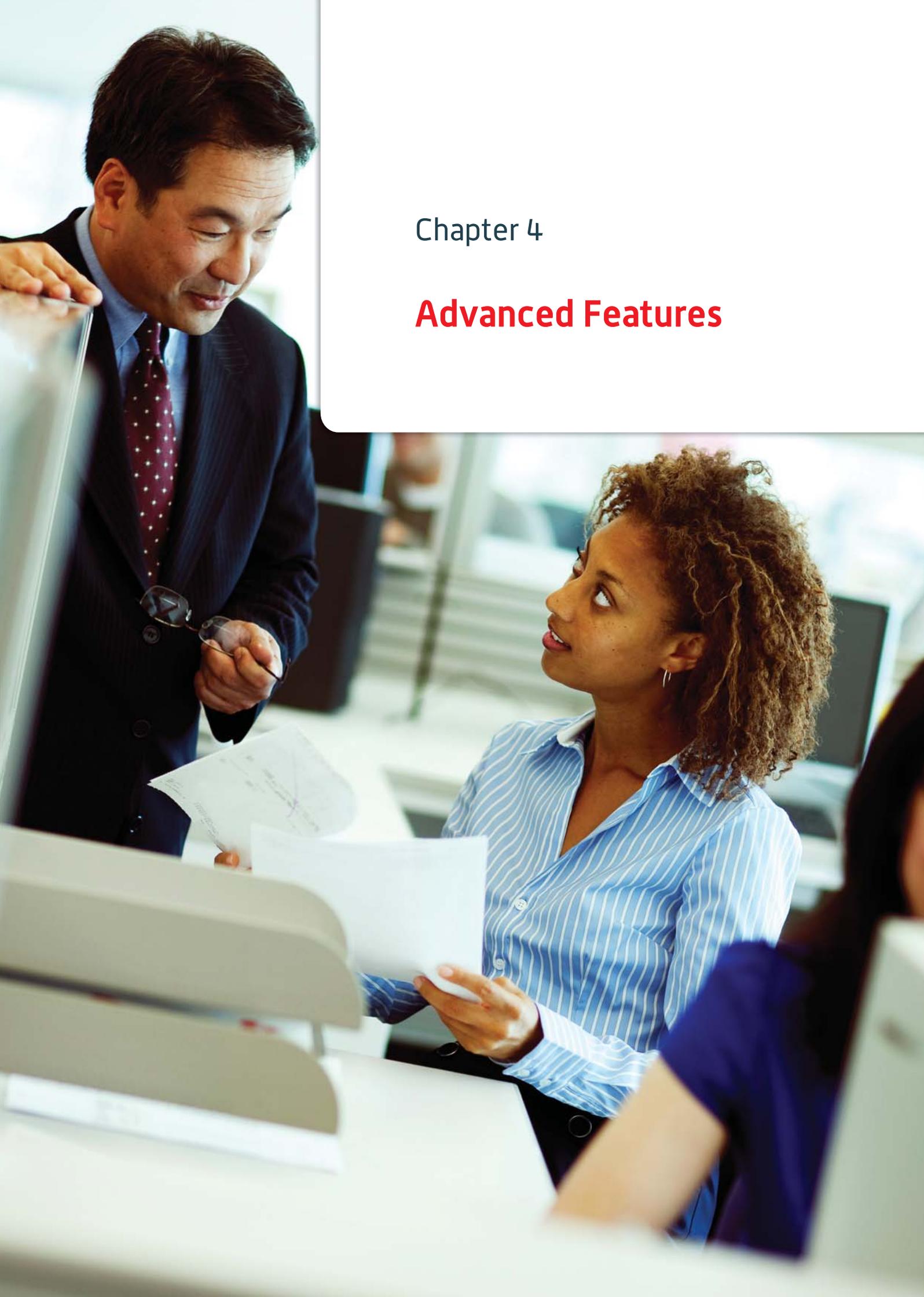
= EUR 0.00 - EUR 0.00

= EUR 0.00

WIP New

= Quantity to be invoiced x Average rate

= EUR 0.00



Chapter 4

Advanced Features

4 Advanced Features

In this chapter, advanced features that you can use in your project management will be explained. Among the features are the functions to generate multiple invoices for a particular order in term invoicing, to link child projects to parent projects, to define the internal and external rates for items in projects as well as security features to enhance the security of your project management. The advanced features covered in this chapter are:

- Term Invoicing
- Parent-child Relations
- Internal and External Rates
- Security: Project Members and Project Items

4.1 Term Invoicing

Term invoicing refers to a scenario where a company creates a sales order with more than one payment period. For example, the sales order could involve several payment installments. In this scenario, more than one invoice would be generated for the customer. Apart from this, term invoicing is also used when the customer and company agreed on the amount that is going to be charged and the customer will only pay for the amount that has been agreed upon.

To create labor hour items:

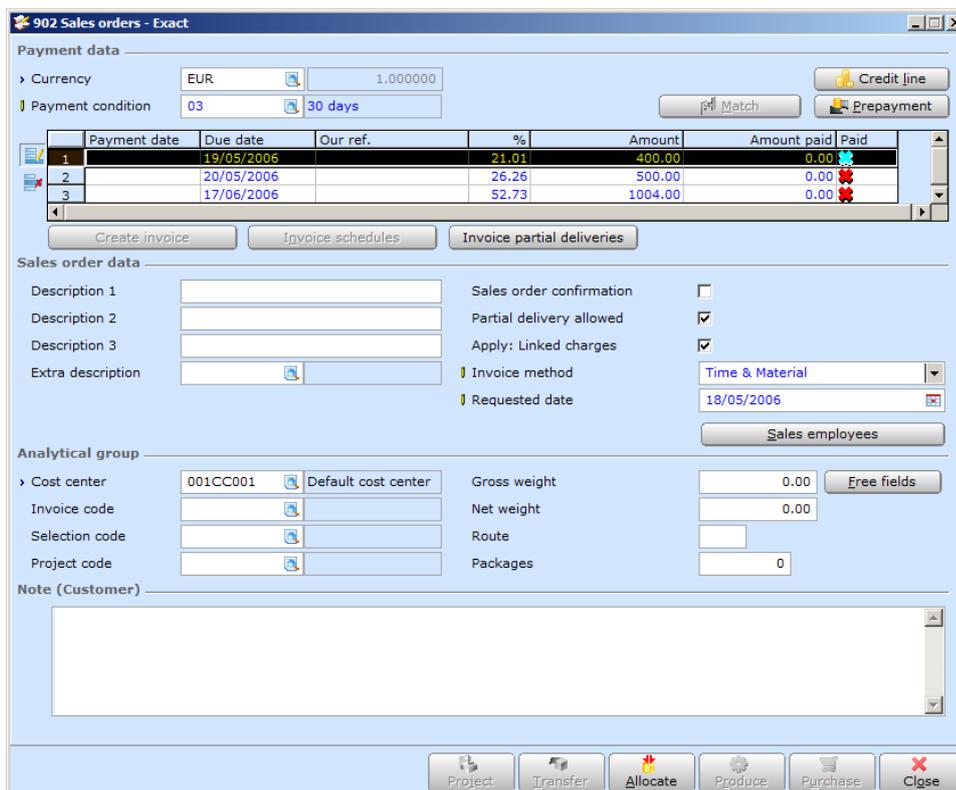
1. Go to Projects → Items → Hours.
2. Click **New**. The **Hours** screen will be displayed.
3. At **Hour code** and **Description**, create an example of an hour item by typing "PROGRAMMING" and "Programming" respectively.
4. Select **Labor hour** at **Type**.
5. Select **Active** at **Status**.
6. Type or select the date "01/01/2006" at **From** to define the validity status of the labor hour item effective from the specified date.
7. At **Taxes**, type or select the VAT code for "19% excluding".
8. Type the cost price of the labor hour item as "EUR 15.00" at **Cost price**.
9. Type or select the sales unit "hour" at **Sales unit**.
10. Click **Save**.
11. Under the **Price** column in the price table in the **Sales** section, type "EUR 50.00". This is the sales price of the labor hour item.
12. Go to the **Purchase/ Sales** tab. Select the **Sales: (Can be used in sales transactions)** check box.
13. Under the **Financial** tab, type or select the item group that the labor hour item belongs to at **Item group**, and the corresponding GL accounts to be used for revenue, salary payment, and realizations linked to this labor hour item at **Revenue**, **Salary payment**, and **Realizations**, respectively.
14. Click **➔ Add: All** under the **People** tab to add all the people to the labor hour item.
15. Click **Save** to save the labor hour item.
16. Click **Close** to exit.

	Item	Description	Wrh.	Ordered	Unit	Fulfillment date	Sales price	Net price	VAT	Amount	Person
1	PROGRAMMING	Programming	MAIN	8	hour	18/05/2006	50.000	50.000	19E	400.00	2
2	PROGRAMMING	Programming	MAIN	8	hour	19/05/2006	50.000	50.000	19E	400.00	2
3	PROGRAMMING	Programming	MAIN	8	hour	22/05/2006	50.000	50.000	19E	400.00	2
4	PROGRAMMING	Programming	MAIN	8	hour	23/05/2006	50.000	50.000	19E	400.00	2

To create sales orders for hour items:

1. Go to Order → Entries → Sales orders.
2. Click **New**. The **Sales orders** screen will be displayed.
3. Define all the necessary details at the sales order header.
4. At **Sales order date**, type or select “18/05/2006”.
5. Type “Term invoice project” at **Description**.
6. In the sales order lines, type or select the **Programming** hour item under the **Item** column.
7. Type “8” under the **Ordered** column to be fulfilled on each 18/05/2006, 19/05/2006, 22/05/2006, and 23/05/2006.
8. Under the **Person** column, type or select “1” to assign the task in the four order lines to Person 1.
The sales order should generate the following values:
Net amount = EUR 1,600.00
Taxes = EUR 304.00
Total = EUR 1,904.00
9. Click **Conditions**. You will see that the payment condition selected at **Payment condition** as 30 days. This is the default payment condition that you can define at System → General → Settings, under **Invoice settings** at **Payment condition** in the **Direct invoice** section. See *1.6 Creating and Maintaining Payment Conditions* in the **Invoice** user manual for more details on how to create payment conditions. Based on the payment condition, notice that in the **Payment data** section, the due date for the payment amount of EUR 1,904.00 is 17/06/2006 (30 days from the sales order date of 18/05/2006. Click **Edit** to edit the payment term in the **Sales invoice** screen. Change the amount from EUR 1,904.00 to EUR 400.00 to allow the first invoice of EUR 400.00 to be generated. Type “19/05/2006” at **Due date** (available in the **Advanced** mode).
10. Click **Save**.
11. Click **Close**.
12. Select the payment term for the amount of EUR 1,504.00 and click **Edit**. Change the amount from “EUR 1,504.00” to “EUR 500.00” to allow the second invoice of EUR 500.00 to be generated. Type “20/05/2006” at **Due date** (available in the **Advanced** mode).

13. Click **Save**.
14. Click **Close**.
15. The system will generate three lines of payment terms: 21.01% for EUR 400.00, 52.73% for EUR 1,004.00, and 26.26% for EUR 500.00. Select the payment term for the amount of EUR 1,004.00 and click  **Edit**. Type “17/6/2006”, which is 30 days from the sales order date at **Due date** (available in the **Advanced** mode).
16. Click **Save**.
17. Click **Close**. You will see the following screen:



The screenshot shows the '902 Sales orders - Exact' window. The 'Payment data' section includes a table with three rows of payment terms. The 'Sales order data' section contains fields for descriptions, invoice method, and requested date. The 'Analytical group' section includes fields for cost center, invoice code, selection code, project code, gross weight, net weight, route, and packages. The 'Note (Customer)' section is empty. At the bottom, there are buttons for 'Project', 'Transfer', 'Allocate', 'Produce', 'Purchase', and 'Close'.

	Payment date	Due date	Our ref.	%	Amount	Amount paid	Paid
1		19/05/2006		21.01	400.00	0.00	
2		20/05/2006		26.26	500.00	0.00	
3		17/06/2006		52.73	1004.00	0.00	

18. Click **Close** to return to the sales order.
19. Click **Authorize** to authorize the sales order if authorization is required for sales orders.
20. Click **Close** to exit.

To generate the first invoice:

1. Go to Projects → Projects → Maintain projects.
2. Select the project and click **Open**.
3. Go to the **Condition** section.
4. Select the term of EUR 400.00, and then click **Generate: Invoice**.
5. Type or select the corresponding **Invoice code** and **Person**. The system will automatically fill in the **Person** according to the sales representative of the linked sales order. The sales representative is the person defined at **Person** in the header section of the sales order.
6. Click **OK** to generate the invoice.
7. Click **Save** to save the changes in the **Maintain projects** screen.
8. Click **Close** to exit.

To authorize and print the first invoice:

1. Go to Invoice → Entries → Invoices to select the invoice you have just generated.
2. Click **Open** to open the selected invoice.
3. Click **Authorized** to authorize the invoice if you require invoices to be authorized in your company. You can define this setting by selecting the **Authorize invoices** check box at System → General → Settings, under **Invoice settings**.
4. Click **Processed** to open the **Print invoices** screen. Select **Final** at **Process** and **Printer** at **Output**. At **Invoice date**, type or select “18/05/2006”. The **Reporting date** will be automatically defined as “18/05/2006”.
5. At **Layout**, the invoice layout you have defined at System → General → Settings, under **Documents settings** at **Invoice** is automatically defined.
6. Click **Process** to print the invoice. The first invoice should generate the following values:

Net amount = EUR 336.13

Taxes = EUR 63.86

Total = EUR 399.99

7. Click **Close** to exit.

Tips: Alternatively, if invoice authorization is not required, you can go directly to Projects → Entries → Print invoices, and select the invoice to be printed. Click **Print** to open the **Print invoices** screen. Follow the print settings in steps 6 and 7 to print the invoice.

To view the updated term invoice and generate the second invoice:

1. Go to Projects → Projects → Maintain projects.
2. Select the project, and then click **Open**.
3. Click **Sales order** to view the sales order of this project. Click **Conditions**. You will see the following three lines of payment terms:
 - 52.73% - EUR 1,004.00
 - 26.26% - EUR 500.00
 - 21.01% - EUR 399.99, with a payment date of 18/05/2006.
4. Click **Close** to return to the **Maintain projects** screen.
5. Go to the **Condition** section, select the term of EUR 500.00, and then click **Generate: Invoice** to generate the second invoice.
6. Type or select the corresponding **Invoice code** and **Person**.
7. Click **OK** to generate the invoice.
8. Click **Save** to save the changes in the **Maintain projects** screen.
9. Click **Close** to exit.

To authorize and print the second invoice:

1. Go to Invoice → Entries → Invoices to select the invoice you have just generated.
2. Click **Open** to open the selected invoice.
3. Click **Authorized** to authorize the invoice if you require invoices to be authorized in your company.
4. Click **Processed**. The **Print invoices** screen will be displayed.
5. Select **Final** at **Process** and **Printer** at **Output**.
6. At **Invoice date**, type or select “19/05/2006”. The **Reporting date** will be automatically defined as “19/05/2006”.
7. At **Layout**, the invoice layout you have defined at System → General → Settings, under **Documents settings** at **Invoice** is automatically defined.
8. Click **Process** to print the invoice. The second invoice should generate the following values:

Net amount = EUR 420.17

Taxes = EUR 79.83

Total = EUR 500.00

9. Click **Close** to exit.

To view the updated term invoice and generate the third invoice:

1. Go to Projects → Projects → Maintain projects.
2. Select the project and click **Open**.
3. Click **Sales order** to view the sales order of this project.
4. Click **Conditions** to see the updated three lines of payment terms.
5. Click **Close** to return to the **Maintain projects** screen.
6. Go to the **Condition** section, select the term of EUR 1,004.00, and then click **Generate: Invoice** to generate the third invoice.
7. Type or select the corresponding **Invoice code** and **Person**.
8. Click **OK** to generate the invoice.
9. Click **Save** to save the changes in the **Maintain projects** screen.
10. Click **Close** to exit.

To authorize and print the third invoice:

1. Go to Invoice → Entries → Invoices to select the invoice you have just generated.
2. Click **Open** to open the selected invoice.
3. Click **Authorized** to authorize the invoice if you require invoices to be authorized in your company.
4. Click **Processed**. The **Print invoices** screen will be displayed.
5. Select **Final** at **Process** and **Printer** at **Output**.
6. At **Invoice date**, type or select “23/05/2006”. The **Reporting date** will be automatically defined as “23/05/2006”.
7. At **Layout**, the invoice layout you have defined at System → General → Settings, under **Documents settings** at **Invoice** is automatically defined.
8. Click **Process** to print the invoice. The third invoice should generate the following values:

Net amount = EUR 843.70

Taxes = EUR 160.30

Total = EUR 1,004.00

9. Click **Close** to exit.

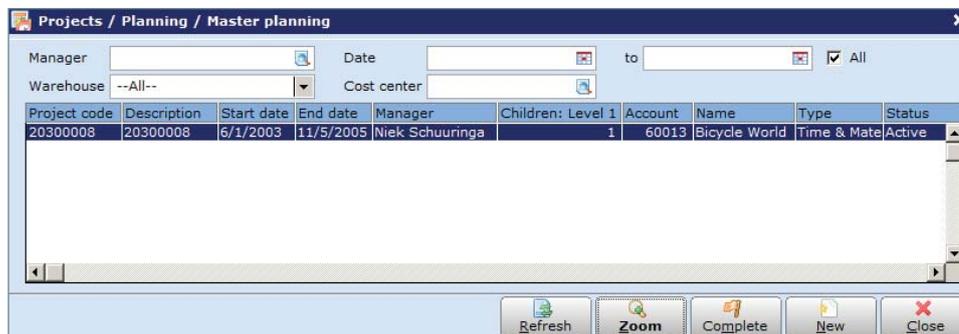
To view the updated term invoice:

1. Go to Projects → Projects → Maintain projects.
2. Select the project and click **Open**.
3. Click **Sales order** to view the sales order of this project.
4. Click **Conditions** to see the updated three lines of payment terms.
5. Click **Close** to return to the **Maintain projects** screen.

Tips: Besides going to Projects → Maintain → Projects and clicking **Open** to open the selected project, and see the updated term invoice by clicking **Sales order** followed by **Conditions**, you can also view the updated term invoice at Order → Entries → Sales orders. Click **Open** to open the selected sales order, and then click **Conditions**. Alternatively, go to Projects → Entries → Invoice proposal, define the criteria to display the corresponding project, and then click **Display**. Click **+** to expand the debtor line and you will see the updated term invoice in the **Terms** line under the **Project** column.

4.2 Parent-Child Relations

A project can become a child project by linking it to another project. By linking the projects, you can gain access to a high-level monitoring that includes all the related projects in a single overview.

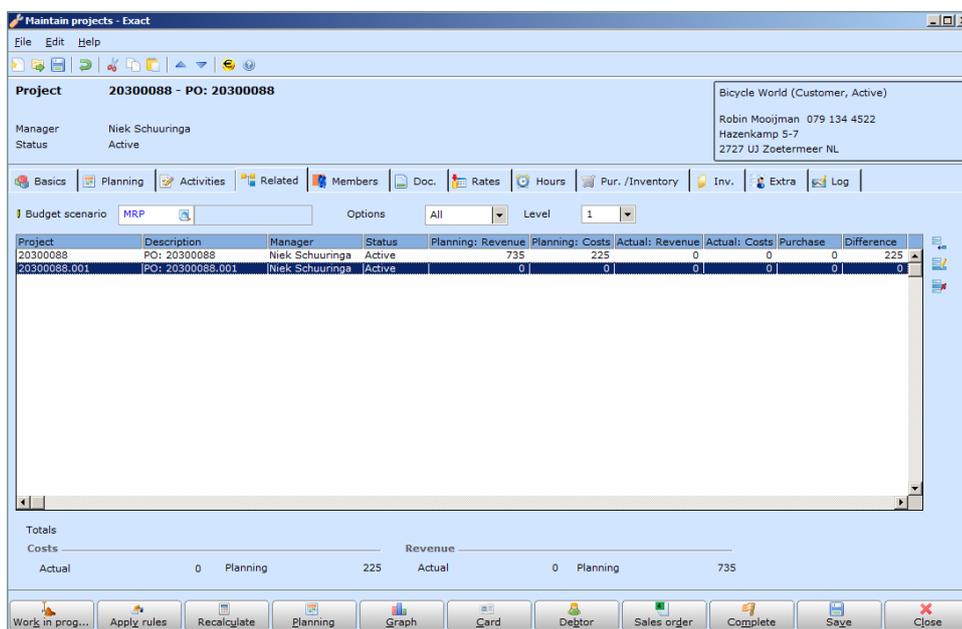


To link projects to existing parent projects:

1. Go to Projects → Planning → Master planning to search for a parent project.
2. At **Manager**, type or select the project manager to display the projects under his charge.
3. Type or select the start and end dates of the project at **Date** to display projects planned within the date range. Select the **All** check box to display projects for all dates.
4. At **Warehouse**, select the warehouse to display the projects linked to the specific warehouse.
5. At **Cost center**, type or select the cost center to display the projects linked to the specific cost center.
6. Click **Refresh** to display the projects based on the defined criteria.
7. Select a project and click **Zoom**. The **Master planning** screen will be displayed.
8. Click **Link** to view a list of other existing projects that could be linked as a child project.
9. Select the necessary criteria to filter the projects to be linked as a child project. At **Warehouse**, select a warehouse to display the projects that are linked to the warehouse.
10. Select the **Parent: Empty** check box to display the projects that are not linked to any parent projects.
11. Click **Refresh** to display the potential child projects.
12. Select a project, and then click **Select**.

13. At the **Link:Project** screen, the system will automatically fill in the parent project at **Parent**. You can link the selected child project to a different parent project by changing the parent project. At **Project**, the selected child project will be automatically displayed. This cannot be edited.
14. Click **Continue** to link the parent and child projects.
15. Click **OK** to confirm the linking process.

Tips: You can also link a new project to an existing project when you create the project at Projects → Projects → Maintain projects. Type or select the parent project that you want to link the new project to at **Parent**. Click **Save**, and then **Close** to exit.



To create/insert child projects to projects:

1. Go to Projects → Projects → Maintain projects.
2. Select a project, and then click **Open**.
3. Under the **Related** tab, click **New** to create a child project for this project. The **Maintain projects** screen will be displayed.
4. At **Type**, notice that if the parent project is of the **Time & Material**, **Fixed**, or **Internal** type, the type of the child project you want to create can be **Internal**, **Time & Material**, or **Fixed**. For a **Training** type parent project, the types of child project allowed are **Internal** or **Training**, while for a **Production** type parent project, only an **Internal** type child project can be created.
5. At **Project**, a new project code will be automatically assigned to the child project. The code reflects the project code of the parent project followed by an extension of a 3-digit code.
6. At **Parent**, the project code of the parent project will be automatically displayed.
7. Type a description for the child project at **Description**.
8. Click **Save**. Notice that the debtor linked to the parent project is automatically linked to the child project.

9. If the child project is of type **Time & Material** or **Fixed**, the **Sales order** button will be available in the **Maintain projects** screen. Click this and you will see that a dummy sales order has been generated for the child project. Click **Close** to close the sales order and return to the Maintain projects screen of the child project.
10. Click **Close** to exit from the **Maintain projects** screen of the child project.
11. Click **Close** to exit from the **Maintain projects** screen of the parent project.

Alternatively, you can also create a child project for an existing parent project at Projects → Planning → Master planning. Follow the steps below to create a child project for a parent project via this menu path:

The screenshot shows the 'Insert: Project' dialog box with the following details:

- Start, End date:** 19/03/2012 to 19/04/2012 (32 Days)
- Product, Location:** (Empty)
- Manager:** (Empty)
- Parent:** 20300088
- Project:** 20300088.002
- Type:** Time & Material
- Account:** 60013
- Description:** Child project for proj PO: 20300088
- Notes:** [mayy22251: Monday, 19 March, 2012, 10:23:52 AM] Child project created for 20300088.
- Costs (Estimate):** 0.00
- Attachment:** (Empty)
- Plan:** (Empty)
- Person:** (Empty)

To create/insert child projects for existing parent projects at Projects → Planning → Master planning:

1. Go to Projects → Planning → Master planning.
2. Define the relevant criteria to display the parent projects, and then click **Refresh**.
3. Select a project and click **Zoom**. The **Master planning** screen will be displayed.
4. Click **New**, and you will see the **Insert: Project** screen.
5. Type the description of the child project at **Description**. This is mandatory. Fill in other relevant information for the child project.
6. Click **Save**.

4.3 Internal and External Rates

Internal rates are the cost price of the items used in a project. In businesses, it is common that a company define several internal rates for the same item to use the different rates if the item is used in different projects and/or realized by different people. Realizations are the registration of the actual time and materials spent on a project by different people. Hence, the internal rate structure is very important in determining the internal rate to be used based on a priority level. This means if several internal rates are created, the system will take the internal rate of the higher priority.

The priorities are based on six types of internal rates:

- Rate per project per item per person
- Rate per project per item
- Rate per project per person
- Rate per item per person
- Default internal rate per person
- Job level rate

The first type has the highest priority that will be used if the criteria are met. If not, the next type will be used and so on. Only project managers or system administrators can define the structure. They can define the cost of each hour item based on different project and/or on different people.

On the other hand, the external rates are the sales price of items billable to your customers. A project manager can view and maintain the rates used for a project at a glance from the project master card. Only project managers or people with price management rights can define the project price list or project external rate structure. Like internal rates, external rates structure is also priority-based. These priorities are structured to:

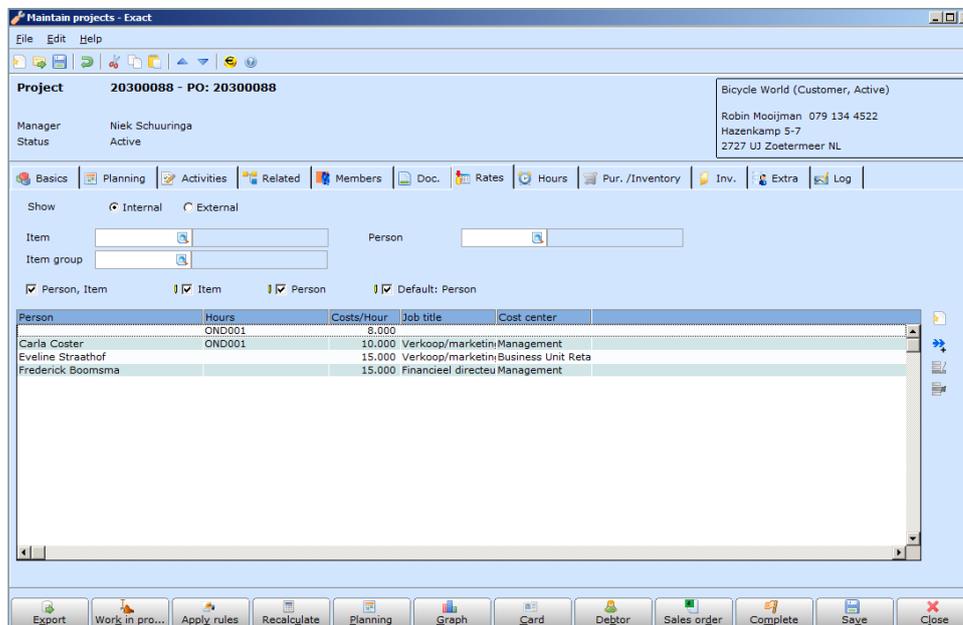
- Net price defined in sales order lines.
- External rate defined in maintain projects.
- External rate defined in template project (parent project).
- Price defined in a price agreement.
- Price defined in a price list.
- Sales price of item.
- External rate linked to people.

With these priorities, several kinds of rates can be defined:

- External rates per project per person per item
- External rate per project per item
- External rate per item per customer
- External rate per item per customer category
- External rate per item, and
- Default external rate per person

The external rate structure is not available for trainings and production projects as these cannot be invoiced.

4.3.1 Internal rates



To create internal rates per project per item per person (priority 1):

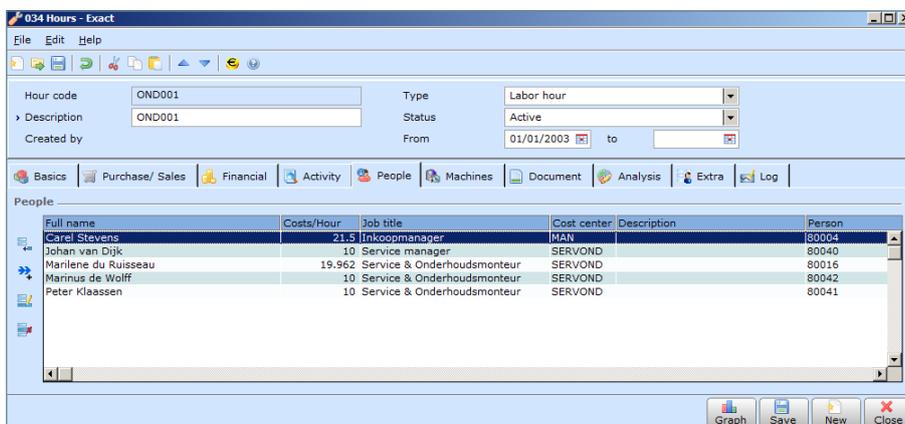
1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Under the **Rates** tab, select **Internal** at **Show**.
4. Click **New**.
5. In the **Internal rate** screen, type or select the hour item code that you want to apply to the internal rate at **Item code**.
6. At **Person**, type or select the person's identification number to define the internal rate for this person.
7. Type the internal rate for the selected hour item for this person in this project at **Purchase price**. The **Unit** will be automatically filled with the sales unit of the selected hour item.
8. Click **Save**.
9. Click **Close** to exit. With this internal rate created, any hour realized for this hour item and person for this project will be based on this internal rate and not the **Purchase price** of this hour item as defined for this person at Projects → Item → Hours under the **People** tab.
10. To edit this internal rate, select the corresponding internal rate and click **Edit**. Type the new internal rate at **Purchase price**, click **Save**, and then click **Close**.
11. To delete the internal rate, select the corresponding internal rate and click **Delete**.

To create internal rates per project per item (priority 2):

1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Under the **Rates** tab, select **Internal** at **Show** and click  **New**.
4. In the **Internal rate** screen, type or select the hour item code that you want to apply the internal rate at **Item code**.
5. Type the internal rate at **Purchase price**. Leave the **Person** field blank.
6. Click **Save**.
7. Click **Close** to exit. With this internal rate created, any person realizing this hour item in this project, except for the person whom you have defined the internal rate of the top priority, will take this internal rate.
8. To edit this internal rate, select the corresponding internal rate and click  **Edit**. Type the new internal rate at **Purchase price**, click **Save**, and then click **Close**.
9. To delete the internal rate, select the corresponding internal rate and click  **Delete**.

To create internal rates per project per person (priority 3):

1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Under the **Rates** tab, select **Internal** at **Show**.
4. Click  **New**.
5. In the **Internal rate** screen at **Person**, type or select the ID to define the internal rate for this person.
6. Type the internal rate for the selected person in this project at **Purchase price**. Leave the **Item code** field blank.
7. Click **Save**.
8. Click **Close** to exit. With this internal rate created, any hour item realized by this person in this project will take this internal rate (except for the hour item that you have defined the internal rate according to priority 2).
9. To edit this internal rate, select the corresponding internal rate and click  **Edit**.
10. Type the new internal rate at **Purchase price**.
11. Click **Save**.
12. Click **Close**.
13. To delete the internal rate, select the corresponding internal rate and click  **Delete**.



Hour code: OND001 Type: Labor hour
 Description: OND001 Status: Active
 Created by: From: 01/01/2003 to

Basics | Purchase/ Sales | Financial | Activity | People | Machines | Document | Analysis | Extra | Log

Full name	Costs/Hour	Job title	Cost center	Description	Person
Carel Stevens	21.15	Inkoopmanager	MAN		80005
Johan van Dijk	10	Service manager	SERVOND		80040
Marilene du Ruisseau	19.962	Service & Onderhoudsmonteur	SERVOND		80016
Marinus de Wolff	10	Service & Onderhoudsmonteur	SERVOND		80042
Peter Klaassen	10	Service & Onderhoudsmonteur	SERVOND		80041

Graph Save New Close

To create internal rates per item per person (priority 4):

1. Go to Projects → Items → Hours.
2. Select an hour item and click **Open**.
3. Under the **People** tab, click **Add** to add a person to the hour item or click **Add : All** to add all your employees to the hour item.
4. Select a person and click **Edit** to edit the internal rate of this person for the hour item that is filled at **Price**. By default, the price will be based on the cost price of this hour item. This information can be modified.
5. Click **Save**.
6. Click **Close** to exit.

Tips: This internal rate is not shown under the **Rates** tab when you click **Open** to view the corresponding project at Projects → Projects → Maintain projects.

034 Maintain: People - Exact

File Edit Actions Help

80003 - Frederick Boomsma Financieel directeur
Employee, 16/12/2001 Active

General Payroll Reference number Family Absence Budgets Vacancies Documents Rights Extra Log

Creditor data

Name: Frederick Boomsma VAT number: []
Payee name: [] Offset account: []
Classification: [] Creditor account: []
Price list / Discount: [] 0.00 Currency: []
Condition: []

Project

Rate: []
Internal rate: 15.000

Extra

Human resources: free field 1	[]	Human resources: free field 11	0.0000
Human resources: free field 2	[]	Human resources: free field 12	0.0000
Human resources: free field 3	[]	Human resources: free field 13	0.0000
Human resources: free field 4	[]	Human resources: free field 14	0.0000
Human resources: free field 5	[]	Human resources: free field 15	0.0000
Human resources: free field 6	[]	Human resources: free field 16	[]
Human resources: free field 7	[]	Human resources: free field 17	[]
Human resources: free field 8	[]	Human resources: free field 18	[]
Human resources: free field 9	[]	Human resources: free field 19	[]
Human resources: free field 10	[]	Human resources: free field 20	[]

Created: 13/3/2005 1:27:32 AM By: [] Modified: 22/10/2003 1:41:25 PM By: Carla Coster

Activity Card Copy Save New Close

To create default internal rates per person (priority 5):

1. Go to HR → People → Maintain.
2. Select a person that you want to create a default internal rate for, and click **Open**.
3. Under the **Extra** tab, type the default internal rate for this person at **Internal rate**.
4. Click **Save**.

Click **Close** to exit. With the default internal rate created for this person, any hour item realized for this person for any project will take this default internal rate. However, the default internal rate for a particular person will only be used during realization of an hour item if the person is not linked to this hour item in Projects → Items → Hours under the **People** tab. When a person is linked to an hour item with a cost price of zero, zero will be used as the internal rate.

5. Go to Projects → Projects → Maintain projects.
6. Select any project, and then click **Open**.
7. Under the **Rates** tab, select **Internal** at **Show** to display internal rates and select the **Default: Person** check box to display the default internal rate per person you have created. Notice that if you select the default internal rate line,  **Edit** will be disabled. Hence, you cannot edit the default internal rate in this screen.

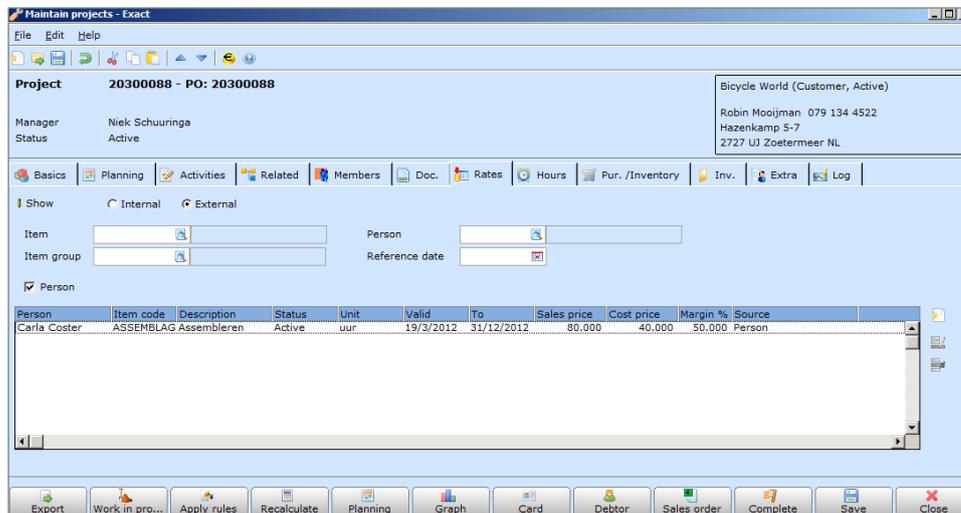
To create internal rates for a range of people with the same job level:

1. Go to Projects → Projects → Maintain projects.
2. Select a project, and then click **Open**.
3. Under the **Rates** tab, select **Internal** at **Show** and click  **New**.
4. Under the **Rates** tab, click  **Add : Job level**.
5. Type the job level at **Job level**, for example “13”. This is the job level that you want to create the internal rate for.
6. At **Price**, type the internal rate.
7. Click **Generate** to generate the internal rate for people with this job level.
8. Go to HR → People → Maintain, select a person with a job level of 13 and click **Open**. Under the **Extra** tab, you will notice that at **Internal rate**, it is filled with the internal rate you have generated at Projects → Projects → Maintain projects under the **Rates** tab.

To display the internal rates of projects:

1. Go to Projects → Projects → Maintain projects.
2. Select a project, and then click **Open**.
3. Click the **Rates** tab. The tab enables the maintenance of internal and external rates that are linked to the current project.
4. At **Show**, select **Internal** to list the internal rates of hour items for the current project.
5. Select the **Person**, **Item** check box to display the internal rates of per project per person per item, the **Item** check box to display the internal rates of per project per item, the **Person** check box to display the internal rates of per project per person, or the **Default: Person** check box to display the default internal rates of a person. You can select more than one.

4.3.2 External rates



To create external rates per project per item per person:

1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Under the **Rates** tab, select **External** at **Show**.
4. Click **New**.
5. In the **External rate** screen, type or select the item code that you want to apply the external rate at **Item code**.
6. At **Person**, type or select the ID of a person to define the external rate for this person.
7. Click **Continue**.
8. In the **Price agreement** screen, type the external rate at **Sales price**. By default, **Sales price** shows the sales price of the selected item.
9. Type or select the date range at **Valid** to define the validity period of the sales price.
10. Click **Save**. You will see this message “Changing this sales price will change the sales price of this item in the entire price list. Continue?”. Click **Yes** to change the sales price of the item in the entire price list or **No** if you do not want to do that.
11. Click **Save**.
12. Click **Close** to close the **Price agreement** screen.
13. To edit this external rate, select the corresponding external rate and click **Edit**. Type the new sales price and/or validity period, and then click **Save**, followed by **Close**.
14. Select the corresponding external rate and click **Delete** to delete the external rate.

To create external rates per project per item:

1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Under the **Rates** tab, select **External** at **Show**.
4. Click  **New**.
5. In the **External** rate screen, type or select the item code that you want to apply the external rate at **Item code**. Do not select anyone at **Person**.
6. Click **Continue**.
7. In the **Price lists** screen, type the external rate for this item at **Sales price**.
8. Type or select the date range at **Valid** to define the validity period of the sales price.
9. Click **Save**. You will see this message “Changing this sales price will change the sales price of this item in the entire price list. Continue?”. Click **Yes** to change the sales price of the item in the entire price list, or **No** if you do not want to do that.
10. Next, click **Save** to save the new price.
11. Click **Close** to exit from the **Price lists** screen.
12. To edit this external rate, select the corresponding external rate and click  **Edit**. Type the new sales price and/or validity period. Click **Save**, and then click **Close**.
13. Select the corresponding external rate and click  **Delete** to delete the external rate.

To create external rates from parent projects (one level up only):

This part will be explained based on the following scenario:

To create internal projects:

1. Go to Projects → Projects → Maintain projects to create an internal project.
2. At **Project**, type “PROJ 1”, for example.
3. Under the **Rates** tab, click  **New** to create an external rate for an item for a specific person.
4. Type the external rate at **Sales price**.
5. Click **Save**.
6. Click **Close** to exit.

To create Time & Material projects:

1. Go to Projects → Projects → Maintain projects.
2. Click **New** to create a **Time & Material** project.
3. Create a sales order, assign the order to the person whom you have created the external rate for PROJ 1
4. Authorize and close the sales order.
5. In the **Maintain projects** screen, select **PROJ 1** at **Parent**. This will make the internal project the parent project of the **Time & Material** project.
6. Click **Save** and you will see the message “Copy: Parent - Attributes?” Click **Yes**.
7. Click **Close** to exit.

To realize and authorize hour entries for projects:

1. Go to Projects → Entries → Realizations to realize the hour entries for the new project. For more information, see *2.5 Realizing Actual Time and Materials*.
2. To authorize the realized hour entries, go to Projects → Entries → Authorize. For more information, see *2.6 Authorizing or Correcting Realizations*.

To generate invoices for sales orders:

1. Go to Projects → Entries → Invoice proposal to view the invoice proposal for the sales order. For more information, see *2.7 Invoicing Realizations*.
2. Select the line for the corresponding project and click **Change**. You will notice that the net price (sales price) of the hour items realized for the person will follow the external rates defined for the parent project. Click **Close**.
3. Select the check box under the **Auth.** column and click **Generate**.
4. Type or select an invoice code linked to the project order. The system will automatically fill in the resource according to the sales representative of the project order that needs to be invoiced. This is applicable only if one project is selected. If multiple projects were selected, the box will not be available.
5. Click **OK** to confirm the creation of the invoice for the project order. Once the invoice is created, the corresponding project order will be removed from the list.
6. Click **Close** to exit.

034 Maintain sales price lists - Exact

Price list: MIDYR12 Country: []

Description: Mid year 2012 Currency: EUR

Classification: []

Status: Active

Type: Customer

Filter: [] Previous Next 10 Rows

Price list	Item	Description	Status	Unit	Valid	To	Sales price	Cost price	Discount type	Quantity (1)	Discount (1)	Ne
	AB1120		Active	stuks	1/12/2002		22.500	14.000				
	AB1130		Active	stuks	1/12/2002		129.000	89.000				
	AB1140		Active	stuks	1/12/2002		95.000	0.000				
	ADFSAS	adfsdf	Active	dag	22/3/2005		87,476,000	72,000,000				
<input checked="" type="checkbox"/>	ASSEMBLAGE	adfsdf	Active	dag	22/3/2005	31/12/2012	100,000	40,000	New price	2,000	5,00	
	BROCHURE	brochure	Active	stuks	1/12/2002		0.000	1.500				
	CNT001DB1100		Active	uur	1/1/2003		150.000	0.000				
	CNT001DB4000	ateatwea	Active	Stuks	1/1/2003		150.000	0.000				
	CNT002DB1100		Active	stuks	1/1/2003		0.000	0.000				
	CNT002DB4000		Active	stuks	1/1/2003		0.000	0.000				

Status: [] Type: []

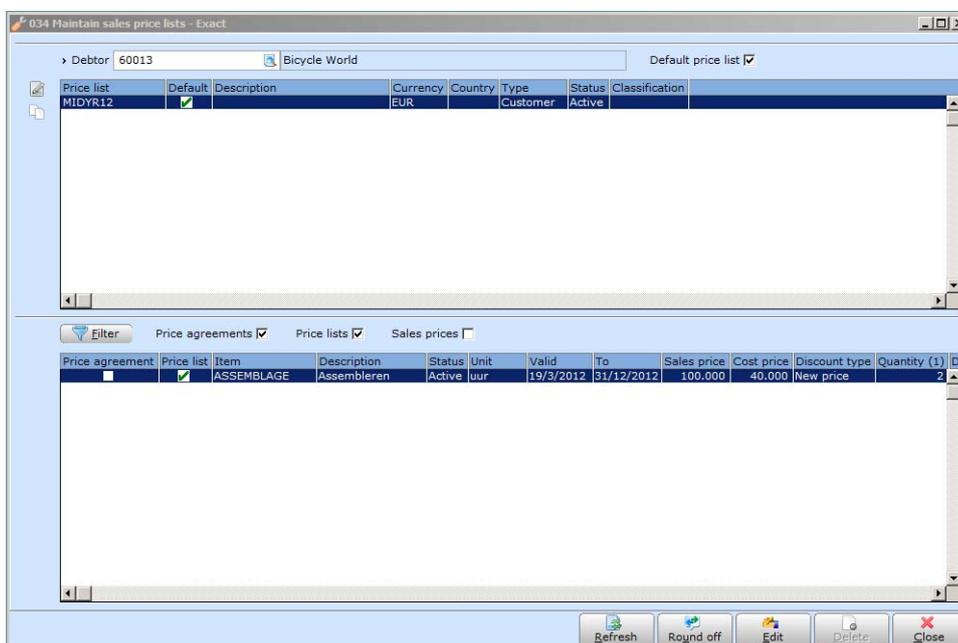
Item group: [] Stock item: []

Round off Price agreements Item Delete Add Edit Save Close

To create external rates per item per customer

1. Go to Order → Price management → Price lists.
2. Click **New**. The **Maintain sales price lists** screen will be displayed.
3. At **Pricelist**, type a unique code for the price list. This information is mandatory.
4. Type a description of the price list at **Description**. This information is mandatory.
5. Type or select the currency of the price list at **Currency**. This information is mandatory.
6. Select **Active** at **Status** and **Customer** at **Type** to use this price list for active customers.
7. Select the **Sales prices** check box to display the list of items and their sales prices.

8. Select the item that you want to create a price list for and click **Add**. The **Price lists** screen will be displayed.
9. At **Discount type**, select **New price**. Type the new price at **Sales price**. The price will be automatically updated at the **New price** column.
10. Click **Save** and you will see the message “Changing this sales price will change the sales price of this item in the entire price list. Continue?”. Click **Yes**, and then **Close** to exit the **Price lists** screen.
11. In the **Maintain sales price lists** screen, select only the **Price lists** check box.
12. Select the item line that you have created the price list, and then click **Price agreements**.
13. Click  to add a debtor to the price list.
14. At **Debtor**, type or select the debtor you want to add, and then click **OK**.
15. Click **Close** to exit.



To change sales prices in price agreements:

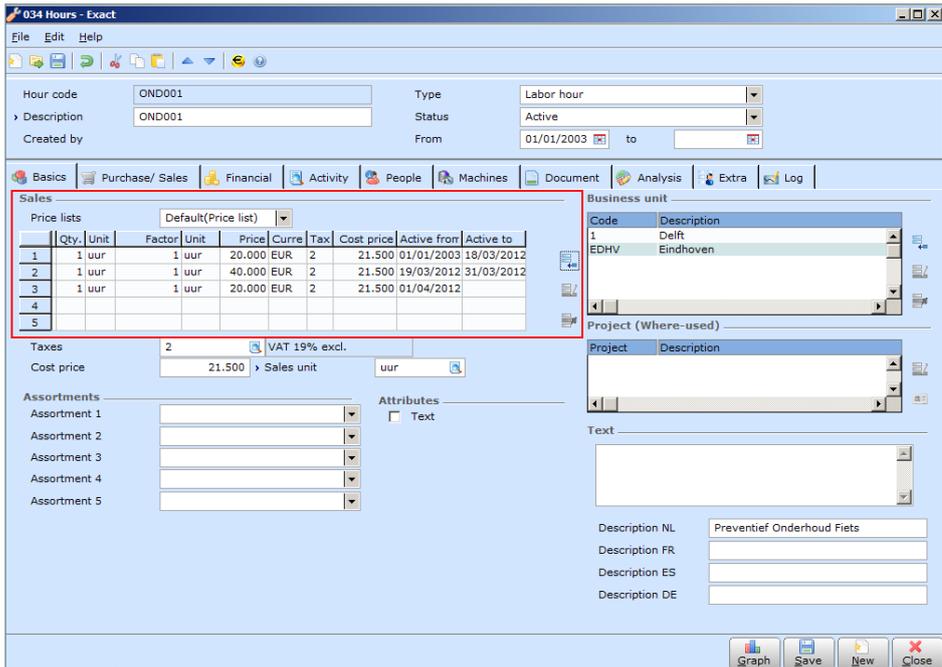
1. Go to Order → Price management →  Price agreements.
2. Clear the **Price agreements** check box and click **Search**.
3. Select the debtor that you have added in the price list at Order → Price management →  Price lists, and then click **Open**.
4. Select the correct price list line at the top section and select the correct item line at the bottom section, and then click **Edit**.
5. At **Discount type**, select **New price**. Type the new price at **Sales price** and the price will be automatically updated under the **New price** column.
6. Click **Save** and you will see the message “Changing this sales price will change the sales price of this item in the entire price list. Continue?”. Click **Yes**, and then **Close** to exit the **Price lists** screen.
7. Click all the **Close** buttons to exit.

Tips: With this external rate per item per customer created, the sales price of the item concerned in the invoice generated for this customer will be based on the sales price in the price agreement with the related customer.

To create external rates per item per customer category:

1. Go to Order → Price management →  Price lists.
2. Click **New**.
3. At **Pricelist**, type a unique code for the price list. This information is mandatory.
4. Type a description of the price list at **Description**. This information is mandatory.
5. Type or select the currency of the price list at **Currency**. This information is mandatory.
6. Select **Active** at **Status** and **Customer** at **Type** to use this price list for active customers.
7. Select the **Sales prices** check box to display the list of items and their sales prices. Select the item that you want to create a price list for and click **Add**. You will see the **Price lists** screen.
8. At **Discount type**, select **New price**. Type the new price at **Sales price**. The price will be automatically updated under the **New price** column.
9. Click **Save** and you will see the message “Changing this sales price will change the sales price of this item in the entire price list. Continue?”. Click **Yes**, and then **Close** to exit the **Price lists** screen.

Tips: The sales price of the item that has been defined in the price list will be used in the sales orders for any customer except for the customer in the price agreement.



034 Hours - Exact

File Edit Help

Hour code: OND001 Type: Labor hour

Description: OND001 Status: Active

Created by: From: 01/01/2003 to:

Basics Purchase/ Sales Financial Activity People Machines Document Analysis Extra Log

Sales

Price lists: Default (Price list)

Qty.	Unit	Factor	Unit	Price	Curre	Tax	Cost price	Active from	Active to
1	1 uur	1 uur		20.000	EUR	2	21.500	01/01/2003	18/03/2012
2	1 uur	1 uur		40.000	EUR	2	21.500	19/03/2012	31/03/2012
3	1 uur	1 uur		20.000	EUR		21.500	01/04/2012	
4									
5									

Taxes: 2 VAT 19% excl.

Cost price: 21.500 Sales unit: uur

Assortments: Assortment 1, Assortment 2, Assortment 3, Assortment 4, Assortment 5

Attributes: Text

Business unit:

Code	Description
1	Delft
EDHV	Eindhoven

Project (Where-used):

Project	Description
---------	-------------

Text:

Description NL: Preventief Onderhoud Fiets

Description FR:

Description ES:

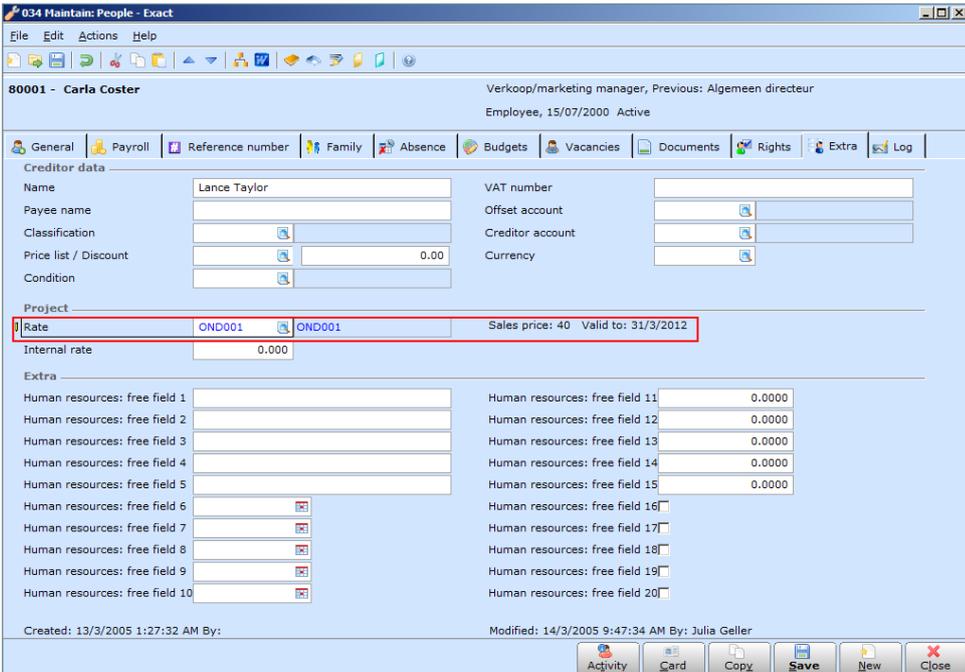
Description DE:

Graph Save New Close

To create external rates per item:

1. Go to Projects → Items → Hours.
2. Select an hour item and click **Open**.
3. Under the **Basics** tab, type the sales price of the hour item under the **Price** column. You can also create the future prices of an hour item by clicking  **New**. In the Sales prices screen, type the future sales price at **Sales price**.
4. Type or select the date range to apply the new sales price at **Valid**.
5. Click **Save**.
6. Click **Close** to exit.

Tips: In addition, you can also create the future prices for any hour and standard item at Invoice → Price management → Sales prices. For more information, see 4.2 *Maintaining Standard Sales Prices* in the **Invoice** user manual.



The screenshot shows the '034 Maintain: People - Exact' window for employee '80001 - Carla Coster'. The 'Project' section is visible, with the 'Rate' field highlighted in red. The 'Rate' field contains 'OND001' and is linked to another 'OND001' field. To the right of the 'Rate' field, the text 'Sales price: 40 Valid to: 31/3/2012' is displayed. Below the 'Rate' field, the 'Internal rate' is set to '0.000'. The 'Extra' section contains 20 free fields for human resources, with values ranging from 0.0000 to 0.0000. The bottom of the window shows the 'Created' and 'Modified' dates and times, along with the user 'Julia Geller'.

To create default external rates per person:

1. Go to HR → People → Maintain.
2. Select a person and click **Open**.
3. Under the **Extra** tab in the **Project** section at **Rate**, type or select the hour item to use the sales price of this hour item as the default external rate of this person. Once an hour item is selected, you will see the sales price and its validity period displayed next to it.

4. Click **Save**.
5. Click **Close** to exit.

Tips: This default external rate will be used when no other higher priority rates are defined. For example, if a sales order is for an hour item defined at **Rate** and realized by this person, the sales price in the invoice will take the sales price of OND001 if there is no other higher priority sales price defined.

To display the external rates of projects:

1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Click the **Rates** tab. The tab enables the maintenance of internal and external rates that are linked to the current project.
4. At **Show**, select **External** to list the external rates of hour items for the current project.
5. Type or select the necessary criteria to display the external rates. At **Item**, **Item group**, **Person**, and/or **Reference date**, type or select the item, item group, person and/or the reference date associated with the external rates you want to view.
6. Select the **Person** check box to view the external rates per project per item per person.

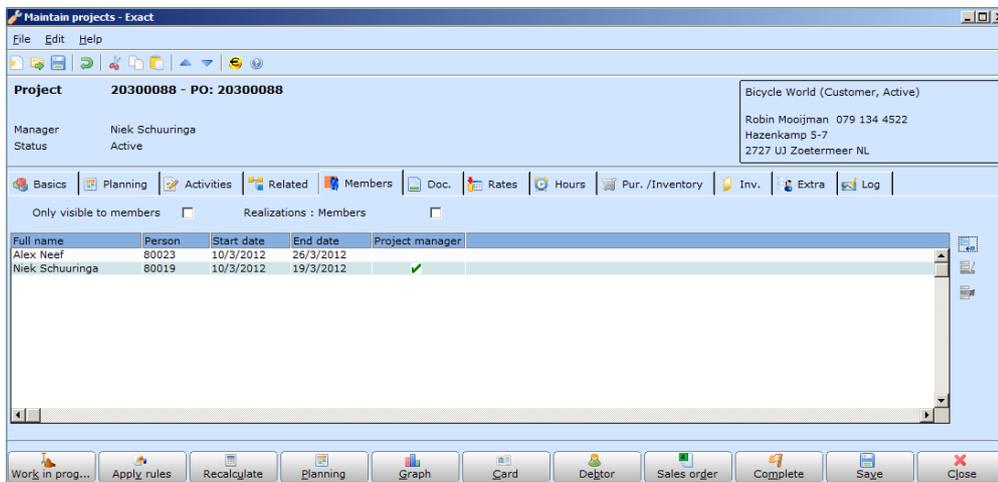
4.4 Security: Project Members and Project Items

As security enhancement features, you can assign specific resources as the members of a project and restrict the realization access to the project members only. In addition, you also may want to allow only certain hour items to be realized in a project. These can prevent resources from selecting and realizing the inappropriate labor hour items and non-project members to realize the hour items.

These security features can be found under the **Members** and **Hours** tabs when you open an existing project at Projects → Projects → Maintain projects.

Members tab

Under the **Members** tab, you can add new members to a project. By default, the system allows only the project manager and/or the system administrator to add new members to a project, delete project members from a project, and change the start and end date for resources are members of the project. Under this tab, you can also enhance the security in project management by restricting the realization function only to project members.



To assign project members to projects:

1. Click  **New** to add a new member to the project.
2. Type or select the person who will be added as a new member to the project at **Person**.
3. At **Start date** and **End date**, type or select the start and end dates to specify the duration of this person as a project member. By default, the start and end date of a member will be based on the start and end dates of the project.
4. Click **OK**.

To edit the start and end dates for project members:

1. Select a project member.
2. Click  **Edit**.
3. Make the necessary changes, and then click **OK**.
4. Click **Save**.
5. Click **Close** to exit.

To delete members from projects:

1. Select a project member.
2. Click  **Delete** to remove the project member from the project.
3. Click **Save**.
4. Click **Close** to exit.

Tips: You cannot delete a project member who is also the Project Manager.

To allow only project members to define hour realizations for the project:

1. Select the **Realizations: Members** check box. If you do not select this check box, anyone can define hour realizations for the project.
2. Click **Save**.
3. Click **Close** to exit.

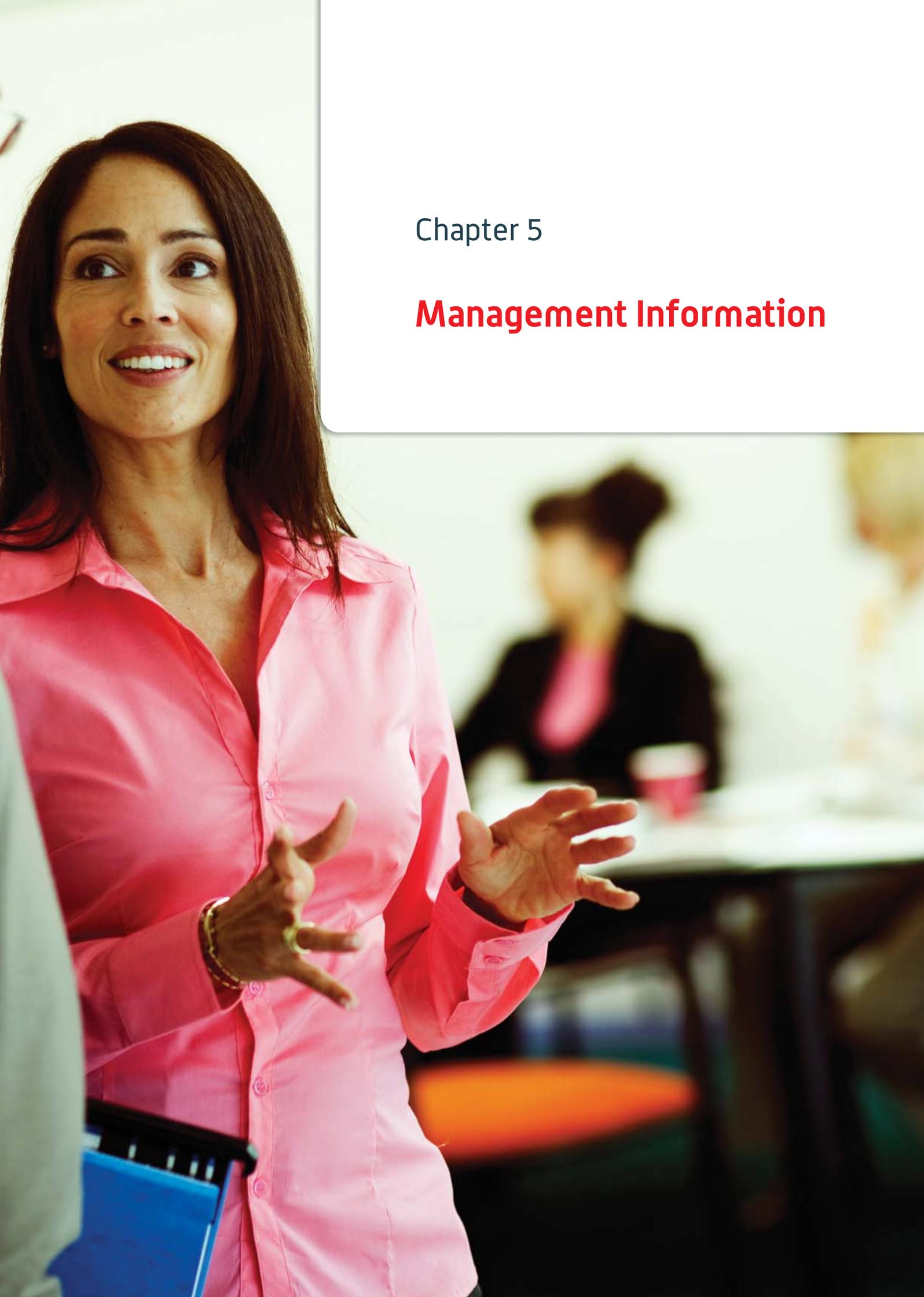
Tips: If you have added new project members and selected the **Realizations: Members** check box, you cannot delete a project member whose hour realization has been defined. If you attempt to delete this project member, you will see this error message “Not allowed - Linked realizations”. Meanwhile, you can always realize the hour entries for phantom person who has an identification code of -3, without adding the person as a project member.

Hours tab

The **Hours** tab enables the maintenance of hour items linked to the current project. However, it only allows the project manager and the system administrator to link the required labor hour items to the projects. Only the linked labor hour items are available for realization at hour realization application. Consequently, users can efficiently select the correct labor hour item.

To maintain hour items linked to existing projects:

1. Go to Projects → Projects → Maintain projects.
2. Select a project and click **Open**.
3. Click the **Hours** tab.
4. To display the hour items of the project based on your preferred grouping order, select **None**, **Item**, or **Person** at **Group by**. Based on the previous screen under the **Type** column, **MRP** is the **Master Resource Planning** type of budget that is derived from the sales order linked to the project, **Planning** is the resource planning performed in the project, while **Financial** is the financial budget created for the project.
5. At **Budget scenario**, type or select a budget scenario to display the hour items that are related to the budget scenario.
6. Select the **Realization: Linked activities only** check box to allow only activities or hour items that are related to the project to be realized for the project. Clear the check box to realize any hour items for the project. This is only applicable for hour items.
7. Click  **New: Task** to create a task for the project,  **New: Budget** to create a budget for the project,  **Edit** to edit the sales order of the project, or  **Delete** to delete the selected planned task and/or budget line.
8. Click **Save** to save the changes.
9. Click **Close** to exit.

A woman with long dark hair, wearing a bright pink button-down shirt, is smiling and gesturing with her hands as if speaking in a meeting. She is holding a blue folder. In the background, another person is seated at a table, blurred.

Chapter 5

Management Information

5 Management Information

Reports and statistics are important management information as they can provide a summary of information, which is customizable according to the needs of your company. With the **Projects** module, it is possible to generate various overviews and reports to facilitate and improve project management. These overviews and reports are useful as you can monitor every area of your projects for a better decision-making process.

This chapter consists of four sections which include:

- Labor Hours Reports
- Project Reports
- Performance Monitoring Reports
- Pivot Analysis Productivity Reports

5.1 Labor Hours Reports

The **Projects** module allows you to generate a report on labor hour statistics. Labor hours are items which represent tasks that are required to be performed in the projects. They are planned and allocated to specific people and/or to the phantom person over a period of time within which a project is carried out. Nevertheless, at times, labor hours may not be planned. As your company carries out various projects, there could be a need where you have to generate reports on the labor hours in order to make important business decisions. Thus, Exact Globe Next provides an efficient tool for you to generate these reports displaying the required labor hour statistics. Such reports can be generated for a specific project, period, or for specific people. Apart from these flexibilities, you can also define the layout of your reports; whether you want to view the unplanned labor hours, planned ones, or only those which were realized. With these criteria defined, you can customize your report to include only information that you want to obtain. The result will be a compact and relevant labor hours report.

The screenshot shows the configuration interface for the 'Projects / Statistics / Labor hours' report. It is organized into several sections:

- Date:** Selection options for 'Year, Weeks' and 'Date' (selected). Date range: 15/06/2012 to 18/06/2012.
- Person:** Fields for 'Cost center', 'Manager', and 'Person'. Checkboxes for 'All', 'Active', and 'Inactive'.
- Project:** Fields for 'Account', 'Project', and 'Project manager'. Checkboxes for 'All'.
- Activity:** Fields for 'Activity', 'Assortment 1', 'Assortment 2', and 'Assortment 3'. Checkboxes for 'All'.
- Layout:** Radio buttons for 'Column' (Day, Week, Month) and 'Group by' (Date, Person, Cost center, Project, Activity). 'Day' and 'Person' are selected. Additional options include 'Group by 2' (Date, Person, Cost center, Project, Activity, None) and 'Show' (Not planned, Planned, Show only: Actual).

Buttons for 'Start' and 'Close' are located at the bottom right of the window.

To generate reports on labor hour statistics in Microsoft Excel format:

1. Go to Projects → Statistics → Labor hours.
2. In the **Date** section, select **Year, Weeks** and then type or select the year and the range of weeks to generate the labor report within this period. Alternatively, select **Date** and then type or select the range of date to generate the report within the defined period.
3. In the **Person** section at **Cost center**, type or select the cost center or range of cost centers to view the statistics of labor hours related to the specified cost center(s). Select the **All** check box to view the labor hour statistics for all cost centers.
4. At **Manager**, type or select the ID of the manager to view the labor hour statistics of the subordinates of this manager. After you have selected a manager, **Level** will be enabled. Select **1: Direct, 2, 3, or 4** to define the number of levels of subordinates you want to view the labor hour statistics. Select the **All** check box to view the labor hour statistics of all the managers' subordinates.
5. Type or select the ID at **Person** to view the labor hour statistics performed by this person. Alternatively, select the **All** check box to view the labor hours performed by everyone, the **Active** check box to view the labor hours performed by people with the **Active** status, and/or the **Inactive** check box to view the labor hours performed by people with the Inactive status.
6. In the **Project** section at **Account**, type or select the debtor to view the labor hour statistics related to the debtor.
7. At **Project**, type or select the project which you want to view the statistics or select the **All** check box to view the labor hour statistics for all projects.
8. You can also view the labor hour statistics related to a specific project manager by typing or selecting the ID of the project manager at **Project manager**. Alternatively, select the **All** check box to view the labor hour statistics related to all the project managers.
9. In the **Activity** section, type or select a valid item code or range of valid item codes at **Activity** to view the labor hour statistics related to the item(s).
10. At **Assortment 1-5**, select the assortments of items to view the statistics related to these assortments.
11. Define the layout of your labor hours report in the **Layout** section. At **Column**, select **Day, Week, or Month** to display the columns of realized labor hours based on day, week, or month.
12. You can define the grouping orders of the statistics at **Group by** and **Group by 2**. The latter is the second grouping order option.
13. At **Show**, select **Not planned** to view the unplanned labor hours and realized labor hours, or **Planned** to view the planned and realized labor hours. Alternatively, select the **Show only: Actual** check box to view only the actual hours including the planned and unplanned ones.
14. Click **Start** to generate the report in Microsoft Excel. You will see the following report:

Company 902 Compshop											
Project : Hour Entry											
Selection criteria :											
Cost center	All	Date	15/6/2012 - 18/6/2012								
Manager	All	Project	All								
Level	All	Project manager	All								
Person	All	Group by	Person / Activity								
				15/6/2012		16/6/2012		17/6/2012		18/6/2012	
Person	Activity	Job title	Description	Date	Not planned	Actual	Not planned	Actual	Not planned	Actual	
Jennifer Marlins , 6	WPH	Finance & Administration Staff			Subtotal	8.0				8.0	
Lim Tsu Teong , 7	WPH	Account Management Staff			Subtotal	8.0				8.0	
					Grand total	16.0				8.0	

The example of the labor hours report shown is grouped by people with its columns divided on a weekly basis within the specified date range from 15/06/2012 to 18/06/2012. Planned and realized labor hours for every person are displayed under the **Planned** and **Actual** columns respectively for each week. Meanwhile, the criteria you have defined to generate the report is shown at the top section of the report.

5.2 Project Reports

Various types of reports displaying the statistics that indicate the progress of projects through different stages of the projects can be generated via the **Projects** module. The following sections describe the steps to generate the audit trail, balance list, and work in progress (WIP) reports.

5.2.1 Audit trail reports

An audit trail report provides information from all stages of a project. It displays all the realized tasks, billable works as well as sales invoices in an overview so that you are able to focus on the crucial points of a project and analyze different situations quickly.

With the function to generate an audit trail report, you can manage your projects efficiently by looking at the balance in every stage, group the data in the report in a more meaningful way through the criteria, and analyze the information in every column. Information from this report shows pending situations, such as realized work pending for authorization, authorized realizations pending for invoice generation, or open invoice pending processing.

Project	Item	Realized Qty. - Not authorized	Realized Qty. - Authorized	Proposal Qty.	Proposal	Invoiced Qty.	Invoiced EUR	Difference Qty.
40000001, Training time								
	S1100, E-Invoice	0.00	4.00	0.00	0.00	0.00	0.00	4.00
Total		0.00	4.00	0.00	0.00	0.00	0.00	4.00

To generate audit trail reports:

1. Go to Projects → Reports → Audit trail.
2. At **Date**, type or select the date or date range to generate the report within the defined period.
3. Select the grouping order at **Group by** to group the data in your report.
4. At **Status**, select the relevant check boxes to display the audit trail report for projects with the corresponding status.
5. Type or select a project or range of projects at **Project** to generate the audit trail report for the defined project(s). To generate the audit trail report for all your projects, select the **All** check box.
6. At **Ordered by**, type or select the debtor number to filter your report based on the debtor who is linked to the projects. In addition, you can type or select a debtor number at **Invoice to** to generate an audit trail report for projects that are invoiced to this specific debtor.
7. Click **Refresh** to generate a report based on the defined criteria. You can display this report in Microsoft Excel format by clicking **Export**.

The **Project** column displays the project codes and description of the projects while the **Item** column displays the description of the labor hour items involved in the projects. The other columns display the statistics of quantity and value of hour items in different stages of a project. For instance, the **Realized Qty. - Not authorized column** displays the quantity of hour items that have been realized but yet to be authorized, while the **Realized Qty. – Authorized** column displays the quantity of hour items that have been realized and authorized.

The values under the **Proposal Qty.** column represent the proposed number of hour items to be invoiced. The value of the proposed hour items to be invoiced is displayed under the **Proposal** column. Under the **Invoiced Qty. column**, you will see the quantity of hours items already invoiced for the projects with their values shown under the **Invoiced (Default currency)** column. The **Difference Qty.** column displays the difference between the quantity of hour items under the **Proposal Qty.** column and the **Invoiced Qty.** column.

5.2.2 Balance list reports

A balance list report shows the financial statistics of projects. You will be able to view the costs, revenue, margin, and the tax amount incurred in your projects. With this report, you can gauge the financial performance of every project.

The screenshot shows a software window titled "Projects / Reports / Balance list". It contains several sections for filtering data:

- General:** Warehouse (dropdown: --All--), Transaction date (01/01/2006 to 31/12/2006), Sales order, Ordered by, Delivery to, Cost centers (to), Person (Active, Inactive), Project (to).
- Project:** Project type (Time & Material, Internal, Fixed, Production, Training), Project status (Active, Proposed, Completed, Blocked), Exclude: Automatically generated projects (checked).
- Show:** Include: Related (checkbox).
- Item:** Item group (to), Item (to), Item status (Active, Blocked, Discontinued, Inactive, Future), Item type (Standard, Labor hour, Machine hour).

At the bottom right, there are three buttons: "Display", "Simple", and "Close".

To generate balance list reports:

1. Go to Projects → Reports → Balance list.
2. Click **Advanced** to view the advanced criteria options.
3. In the **General** section at **Transaction date**, type or select the date range to display the balance list report within the defined period. To display the balance list of all dates, select the **All** check box.
4. Type or select the sales order number at **Sales order** to display the balance list of the project generated from the sales order.
5. Type or select the person with hours planned or realized for the projects to display the balance list of projects linked to the selected person at **Person**.
6. Select the **Active** and/or **Inactive** check boxes to filter the balance list by the corresponding status of the person.
7. At **Project**, type or select a specific project or range of projects to display the balance list report of the defined project(s). Select the **All** check box to generate the balance list report for all the projects.
8. In the **Project** section, select the type(s) of projects at **Project type** to display the balance list report for projects of the corresponding type(s).
9. You can generate the balance list report based on the project status by selecting the project statuses at **Project status**.
10. To view only the balance list report for projects that are manually created, select the **Exclude: Automatically generated projects** check box.
11. When you have selected a specific project at **Project**, the **Include: Related** check box in the **Show** section will be enabled. Select this check box to include the child projects of the selected project in the balance list report.
12. In the **Item** section, type or select a valid item group at **Item group** to display the balance list of projects linked to items which belong to that specific item group or item group range. Select the **All** check box to generate the balance list of projects linked to items which belong to any item group.
13. At **Item**, type or select a valid item code to display the balance list of projects linked to that specific item or item range. Select the **All** check box to display the balance list of projects linked to any item.
14. At **Item status** and **Item type**, select the item statuses and/or type(s) to generate the balance list report for the projects linked to the corresponding item statuses and/or types.
15. Click **Display** to view the report based on the defined criteria. You can also display the report in Microsoft Excel format by clicking **Export**. The following screen is an example of a balance list report:

Project	Description	Sales order	Debtor	Name	Receivables	Cash	Revenue	Tax	Costs	Result	Margin % - Costs	Margin % - Revenue	Re
20300040	20300040	20300040	60013	Bicycle World	696.15	0.00	585.00	111.15	0.00	585.00	0.00	100.00	
20300079	Gel saddle	20300079	60013	Bicycle World	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PR040005871	Production PR04000				0.00	0.00	0.00	0.00	130.00	-130.00	-100.00	0.00	

Based on the example of the balance list report, the **Receivables** column displays the value of receivables from a project, the **Cash** column displays the actual cash inflow or outflow to and from a project, the **Revenue** column displays the amount of actual revenue from each project, the **Costs** column displays the amount of actual costs for each project, and the **Result** column displays the actual profit or loss of each project.

Meanwhile, the **Revenue (Planning)** column displays the planned revenue for each project, the **Cash (Planning)** column displays the planned cash inflow or outflow to and from a project, the **Costs (Planning)** column displays the amount of planned costs for each project and the **Result (Planning)** column displays the amount of planned profit or loss of each project. Other columns include **Debtor**, **Tax**, **Margin % - Costs**, **Margin % - Revenue**, **Tax (Planning)**, **Margin (Planning) % - Costs** and **Margin (Planning) % - Revenue**. These columns display the debtor code related to each project, the actual tax amount, the percentage of actual margin based on costs, the percentage of actual margin based on revenue, the planned tax amount, the percentage of planned margin based on costs, and the percentage of planned margin based on revenue for each project respectively.

The following are the calculation formulas for the columns in the balance list report:

Result = Revenue – Costs

Result (Planning) = Revenue (Planning) – Costs (Planning)

Margin % - Costs = Result/Costs x 100%

Margin % - Revenue = Result/Revenue x 100%

Margin (Planning) % – Costs = Result (Planning)/Costs (Planning) x 100%

Margin (Planning) % - Revenue = Result (Planning)/Revenue (Planning) x 100%

5.3 WIP report

A WIP report provides information on all the statistics concerning the WIP of your projects. These statistics include the WIP amount that has been generated, WIP opening balance, WIP per period, and WIP closing balance. You can present the report based on the required criteria and the grouping order of the data.

The screenshot shows a software window titled "Projects / Reports / Work in progress". It contains a "Filter" section with the following fields and options:

- Date:** Two text input fields with a calendar icon, separated by "to". A checkbox labeled "All" is checked.
- Project:** A text input field with a search icon, followed by "to" and another text input field with a search icon. A checkbox labeled "All" is checked.
- Cost center:** A text input field with a search icon, followed by "to" and another text input field with a search icon. A checkbox labeled "All" is checked.
- Project manager:** A text input field with a search icon.
- Ordered by:** A text input field with a search icon.
- Invoice to:** A text input field with a search icon.
- Status:** A dropdown menu currently showing "All".

At the bottom right of the window, there are two buttons: "Start" and "Close".

To generate WIP reports:

1. Go to Projects → Reports → Work in progress.
2. At **Date**, type or select the date or date range to display the WIP report within the defined period. Select the **All** check box to display the report for all the dates.
3. Type or select the project code or range of project codes at **Project** to display the WIP report for the defined project(s). Alternatively, select the **All** check box to include all the projects in the WIP report.
4. At **Ordered by** and **Invoice to**, type or select the debtor that is linked to the projects reported in the WIP overview. Next, select the status of the projects at **Status** to display the WIP report for projects of the corresponding status.
5. Click **Start** to generate the report based on the defined criteria. In the **Work in progress** screen, you can select **Parent**, **Projects**, or **Debtors** at **Group by** to group the data by the parent projects, projects, or debtors respectively. The following screen is an example of a WIP report:

	Project	Status	WIP method	Opening balance		Period		Closing balance	
				Debit	Credit	Debit	Credit	Debit	Credit
1	PROD00010000	Completed	Production			270.46	270.46	0.00	
2	PROD00010001	Completed	Production			270.46	270.46	0.00	
3	PROD00010002	Completed	Production			270.46	270.46	0.00	
4	PROD00010003	Completed	Production			270.46	270.46	0.00	
5	PROD00010006	Completed	Production			324.54	324.54		0.00
6	PROD00010006	Completed	Production			324.54	324.54		0.00
7	PROD00010006	Completed	Production			324.54	324.54		0.00
8	PROD00010006	Completed	Production			324.54	324.54		0.00
9	PROD00010007	Completed	Production			65.05	65.05		
10	PROD00010007	Completed	Production			10.83	10.83	0.00	
11	PROD00010008	Completed	Production			564.75	564.75	0.00	
12	PROD00010009	Completed	Production			108.18	108.18	0.00	
13	PROD00010010	Active	Production			34.11		34.11	
14	PROD00010011	Completed	Production			237.99	237.99	0.00	
15	PROD00010012	Active	Production			108.16	108.20		0.04
16	Grand total					3,509.07	3,475.00	34.07	

The **Opening balance** column displays the WIP debit or credit opening balance of a project, the **Period** column displays the WIP debit or credit balance recorded for a project in the defined period, and the **Closing balance** column displays the WIP debit or credit closing balance of a project.

5.4 Performance Monitoring Reports

It is advantageous for a company to be able to gauge the performance of its projects from different aspects such as the productivity of its employees and the overall financial results of its projects. With the **Projects** module, you can generate various performance-gauging reports for your projects and use the statistics to implement changes, fine-tuning, or other necessary steps to improve the performance of future projects. The following sections explain the steps to generate the productivity and results reports.

5.4.1 Productivity reports

For project-based companies, a productivity report which displays the statistics of employees' productivity is important as the productivity overview will be used as a report card when it comes to rewarding the employees. As such, Exact Globe Next offers a feature to generate the productivity report that will present the statistics of scheduled tasks for employees as compared to the actual work done by the employees in the given tasks. You can also manipulate the data once the report is exported into Microsoft Excel for further analysis and reporting.

The screenshot shows a software window titled "Projects / Reports / Productivity". It contains several input fields and checkboxes for configuring a report. The "Date" section has a "Year" dropdown set to "2005", and "Week" and "Date" fields, each followed by a "to" field and an "All" checkbox. The "Person" section has "Cost center", "Manager", and "Person" fields, each with a search icon and an "All" checkbox. The "Layout" section has a "Group by" dropdown set to "Person" and a "Layout" dropdown set to "Quarter". At the bottom, there are radio buttons for "Realizations" (selected) and "Planning". "Start" and "Close" buttons are at the bottom right.

To generate productivity reports:

1. Go to Projects → Reports → Productivity.
2. In the **Date** section, select the year at **Year** to display the productivity report for the year.
3. At **Week**, type the week or range of weeks to display the report within the defined period. Select the **All** check box to include all the weeks in your report.
4. You can also generate the report for a date or range of dates by typing the date(s) at **Date**. To present the report for all the dates, select the **All** check box.
5. In the **Person** section at **Manager**, type or select the manager's ID to display the productivity report for all the subordinates of this manager. Select the **All** check box to display the report for the subordinates of all the managers in your company. To generate a productivity report for a specific person, type or select the ID at **Person**. Otherwise, select the **All** check box to generate the report of everyone.
6. Select the required option at **Group by** to group the data in the productivity report by people, manager, or cost center respectively. Select the layout to define how you want to view your report. You can select **Week, Month, Quarter, or Year**.
7. Select **Realizations** or **Planning** to display the actual work performed by the people or the scheduled tasks assigned to them.

8. Click **Start** to generate the report based on the defined criteria. From the report, you can click **Zoom** to zoom in on the details that make up each percentage, or click **Export** to display the report in Microsoft Excel format. See the following screen for an example of a productivity report:

	Person	Job title	Quarter:1	Quarter:2	Quarter:3	Quarter:4	Average
1	Alex Neef, 80023	Support medewerker	1%				1%
2	Talzan Kibaliel, 80038	Marketing medewerker	1%				1%
3	Quarterly Average		1%				1%

Based on the report, the top section shows the criteria you have defined. The productivity of each person is shown in terms of percentage. The weekly productivity percentage is calculated by the number of hours realized by or planned to a resource in the week divided by the total number of working hours per week (as defined in the default work schedule), and then multiplied by 100%.

The overall weekly productivity average is calculated by adding the average productivity percentage of every person, and then divided by the number of people who contributed to the productivity within the week. Meanwhile, the average productivity rate of each person is calculated by adding the productivity rate of every week, and then divided by the number of weeks which the person has realized its work through the defined period.

5.4.2 Results reports

A results report provides information on up-to-date results for the financial status of projects in a single overview. Additionally, the report also provides the forecast financial status of projects according to the defined reference date. This information is important as it helps to ensure that a project does not exceed the budget, the planning is efficient, and the actual results match the planned results. With this report, you can immediately trace any project that does not contribute to the financial health of your company.

To generate results reports:

1. Go to Projects → Reports → Results.
2. At **Group by**, select the required option to group the data in the report by manager, customer, or the item linked to projects. Type or select a manager's ID at **Manager** to generate the results report for projects linked to this manager.

- Type or select a specific project or range of projects to generate the results report for the defined project(s) at **Project**. Select the **All** check box if you want the results report to display the statistics for all the projects. At **to**, type or select the reference date to set the calculation of forecast revenue and costs based on the reference date. The calculation of forecast revenue and costs based on the reference date are as follows:

Forecast revenue = Total of actual revenue up to the reference date + revenue planning after the reference date

Forecast costs = Total of actual costs up to the reference date + costs planning after the reference date

- At **Project type**, select the type of projects you want to view in the results report. You can select more than one project type.
- To exclude automatically generated projects in the results report, select the **Exclude: Automatically generated projects** check box.
- At **Ordered by** and **Invoiced to**, type or select a debtor to generate a results report for projects ordered by and/or invoiced to the selected debtor.
- Click **Refresh** to generate the report based on the defined criteria. You can also click **Export** to display the results report in Microsoft Excel format. See the following screen for an example of a results report:

Project manager	Project	Description	Budget Revenue	Budget Costs	Budget Result	WIP (other)	Actual Revenue	Actual Costs	Actual Result	Actual Result + WIP
Carla Coster, 80001	20300001_2004	Introductie Deltabike 2004 lijn					240.00	-240.00		-240.00
	20300037	fixed 60019					50.00	-50.00		-50.00
Julia Geller, 1	PR0400058717	Production PR0400058717					130.00	-130.00		-130.00
	PR0400059131	Production PR0400059131					288.00	-288.00		-288.00
	PR0400059150	Production PR0400059150					516.00	-516.00		-516.00
Niek Schuurings, 80019	20300008	20300008					313.50	234.50	79.00	79.00
	20300038	20300038					40.00	-40.00		-40.00
	20300040	20300040					585.00	600.00	-15.00	-15.00
	20300048	20300048					1,500.00	99.80	1,400.20	1,400.20
	PR0300043326	Production PR0300043326						-1,572.07	1,572.07	1,572.07
Olaf Smulders, 80021	PR0300043644	Production PR0300043644						-2,096.10	2,096.10	2,096.10
	20300002	Service: 1					199.92	-199.92		-199.92
Olav de Zwaan, 80017	20300010	Service: 4					120.00	-120.00		-120.00
	PR0300043664	Production PR0300043664					-47,430.00	47,430.00		47,430.00

The top section of the results report shows the criteria that you can use to customize the report. The **Budget Revenue**, **Budget Costs**, and **Budget Result** columns display the amount of budgeted revenue, costs, and result of each project. Meanwhile, the **Forecast Revenue**, **Forecast Costs**, and **Forecast Result** columns display the amount of forecast revenue, costs, and result up to the reference date. The amount of work in progress recorded for a project is indicated under the **WIP production** and **WIP (other)** columns. Amount of actual revenue, costs, and result are shown under the **Actual Revenue**, **Actual Costs**, and **Actual Result** columns.

Calculation formulas:

Budget Result = Budget Revenue – Budget Costs

Forecast Result = Forecast Revenue – Forecast Costs

Actual Result = Actual Revenue – (Actual Costs – WIP)

5.5 Pivot Analysis Productivity Reports

The pivot analysis report is a dynamic report that enables you to view the data summarized according to fields from different categories for analytical purposes. With the **Projects** module, the pivot analysis report provides the summary of the projects productivity report.

In general, this advanced data analysis tool allows you to build specific reports whereby you can present a project productivity report in the way that you want by defining the required fields in the X- and Y-axis. For example, you can extract real-time information that enables you to determine which item contributes the highest to productivity over a specific period, the period of a year that recorded the highest productivity, the person who realized the most number of hours within a specific period, and others.

In short, pivot analysis productivity reports are useful for data analysis as these reports allow you to identify trends and filter huge amount of data so that fast business decisions can be made.

From the report, you can export the pivot analysis report to Microsoft Excel by clicking **Export**. You can also save the report template(s) of your choice for future reference by clicking **File** on the menu bar, and then clicking **Save as**.

005 Pivot analysis - Invoice - Exact

Filter

Year: 2005 to 2005 Deb. City: [] Month: []

Axis Y: Month

Axis X: Deb. City

GL account	Month	Actual	Perc. Y	Perc. X	Actual	Perc. Y	Perc. X	Actual	Perc. Y	Perc. X	Total: Actual
Deb. City		Kuala Lumpur			Penang			Petaling Jaya			
25 Revenue of Miscellaneo	9	-38,175.00	35.26	94.78	-2,101.50	4.30	5.22	-11,600.00	94.73	100.00	-40,276.50
26 Revenue of Processors	4										-11,600.00
27 Revenue of Processors	5	-2,445.00	2.26	71.43							-3,423.00
28 Revenue of Processors	6	-1,467.00	1.36	100.00							-1,467.00
29 Revenue of Processors	9	-488.00	0.45	100.00							-488.00
30 Revenue of Subwoofers	1				-2,460.50	5.04	58.82				-4,182.85
31 Revenue of Subwoofers	3				-5,180.00	10.61	100.00				-5,180.00
32 Revenue of Subwoofers	5	-1,495.00	1.38	49.82							-3,001.00
33 Revenue of Subwoofers	6										-289.00
34 Revenue of Subwoofers	8				-2,916.00	5.97	100.00				-2,916.00
35 Revenue of Visual Moni	1	-6,150.00	5.68	100.00							-6,150.00
36 Revenue of Visual Moni	3				-6,897.00	14.13	100.00				-6,897.00
37 Revenue of Visual Moni	5	-12,594.00	11.63	85.71							-14,693.00
38 Revenue of Visual Moni	7	-26,990.00	24.93	100.00							-26,990.00
39 Revenue of Visual Moni	8				-4,198.00	8.60	100.00				-4,198.00
40 Revenue of Visual Moni	9				-2,299.00	4.71	100.00				-2,299.00
41		-108,258.30			-48,821.00			-12,245.00			-198,232.85

Total revenue gained per city

Buttons: Refresh, Export, Details, Close

To generate pivot analysis productivity reports:

1. Go to Projects → Statistics → Pivot analysis productivity.
2. Click  **Display: Fields** to select the required field(s) to be added to Axis X, Axis Y, and/or the **Filter** section. Select a field and click **To: X** (to move the field to Axis X), **To: Y** (to move the field to Axis Y), or **To: Filter** (to move the field to the Filter section). You can add as many fields as necessary. Whichever field that you add to Axis X or Axis Y will be automatically added in the Filter section. However, you can remove any field in the Filter section by clicking  **Remove**.
3. Click  **Columns** to display the **Format columns** box. Select the check boxes to define the columns that you want to view in the pivot analysis report. There are four available options: **Capacity**, **Productive**, **Productivity %**, and **Actuals**. You can select more than one check box. Then, click **Close** to return to the pivot analysis report.
4. In the **Filter** section at **Year**, type the year or range of years of the pivot analysis report that you want to view.
5. Define other relevant criteria you want to include in the pivot analysis report, and then click **Refresh**. Data that match the defined search criteria will be displayed in the report.
6. Click **Close** to exit.

The example of a pivot analysis report as shown in the previous screen displays the total revenue per revenue account by city for each month. To retrieve the information displayed, click  **Display: Fields** to display the **Fields** screen. In the **Categories** field, select **Debtors**. Click **Deb. City** and click **To: X**. Then, drag the **Month** column to Axis Y. Alternatively, right-click **Month** and select **Remove**. Then, click  **Display: Fields**. In the **Categories** field, select **Date**. Click **Month** and click **To: Y**.

Click  **Columns** to select the columns that you want to view in the pivot analysis report. Based on the example, select only the **Actual**, **Percentage X**, and **Percentage Y** check boxes. Click **Close** to close the **Format columns** screen. In the **Filter** section, type the year or the year range that you want the report to be based on. Click **Refresh** to generate the report based on the defined criteria.

From the example, the revenues gained for the cities "Kuala Lumpur", "Penang", and "Petaling Jaya" are displayed. The total revenue gained per city can be viewed at the bottom of the report, while the total revenue gained per revenue account per month is displayed under the **Total: Actual** column.

The percentage for revenue (under the **Perc. X** column) is calculated based on the actual value divided by the sum values of the same row multiplied by 100. For example, the percentage "49.82" displayed at Revenue of Subwoofers in month 5 for Kuala Lumpur is obtained by dividing "1,495.00" with "3,001.00" multiplied by 100.

The amount "-1,495.00" displayed under the Actual column at **Revenue of Subwoofers** in month 5 is the total revenue gained from customers in Kuala Lumpur for the subwoofer items in the month of May. You can also view the details of the selected amount by clicking Details. The following screen will be displayed:

The screenshot shows a window titled "005 Pivot analysis - Details - Exact". It contains a filter section and a data table.

Filter:

Year	2005	to	2005	Deb. City	Kuala Lumpur
GL account	Revenue of Subwoofers			Month	5

Data Table:

Description	ID	GL account	GL description	Month	Deb. City	Date	Debit
Order from Absolute	27652	8030	Revenue of Subwoofers	5	Kuala Lumpur	26/5/2005	
Rows: 1				Total	0.00		1,495.00
				Balance			-1,495.00

Buttons: Refresh, Export, Our ref., Your ref., Close

To view the financial transaction details, select the line and click **Our ref.** You can also display the selected data in Microsoft Excel by clicking **Export**. Click **Close** to return to the report.

Chapter 6

Appendix



Appendix

Product Update	Chapter
404	All Chapters

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