MS Project 2013 Summary

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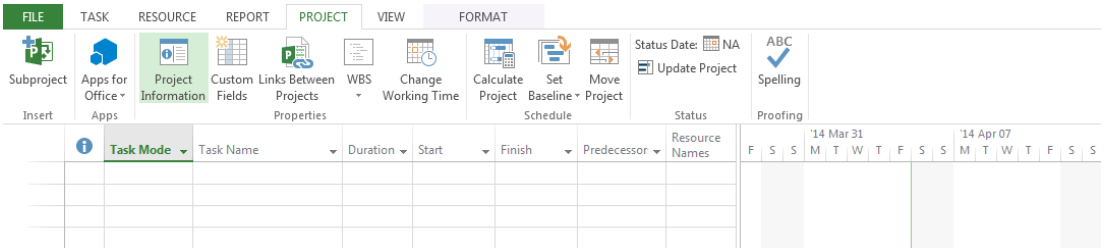
Create a new project

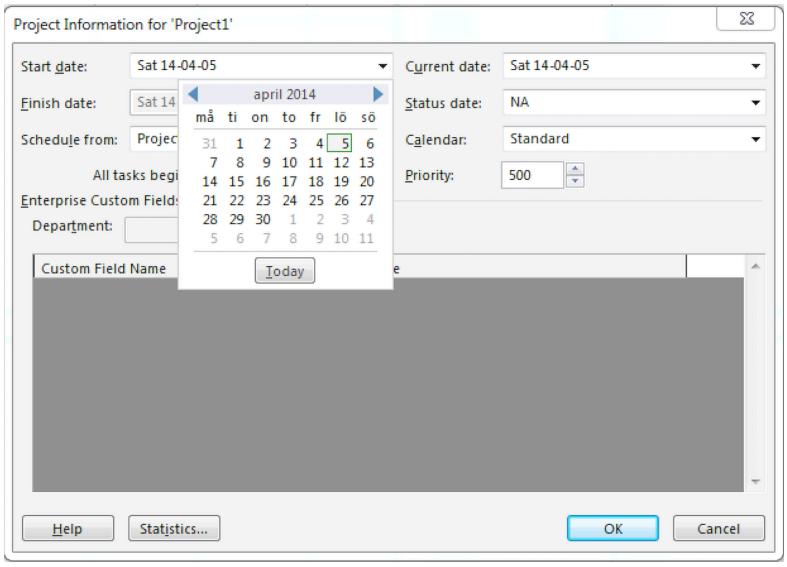
You create a new project by:

1. Go to the File Tab.
2. Click [New].



The first thing you should do is to set the project start date.

1. Go to the Project Tab.
2. Click [Project Information].



3. Select a start date from the calendar.
4. Click [OK].

Task Constraints

Using constraints to plan your project is a powerful, but sometimes tricky, way to decide when tasks should start and end. The default constraint is **As soon as possible** when you plan from a start date, and **As late as possible** when you plan from a finish date. Project has eight different kinds of constraints:

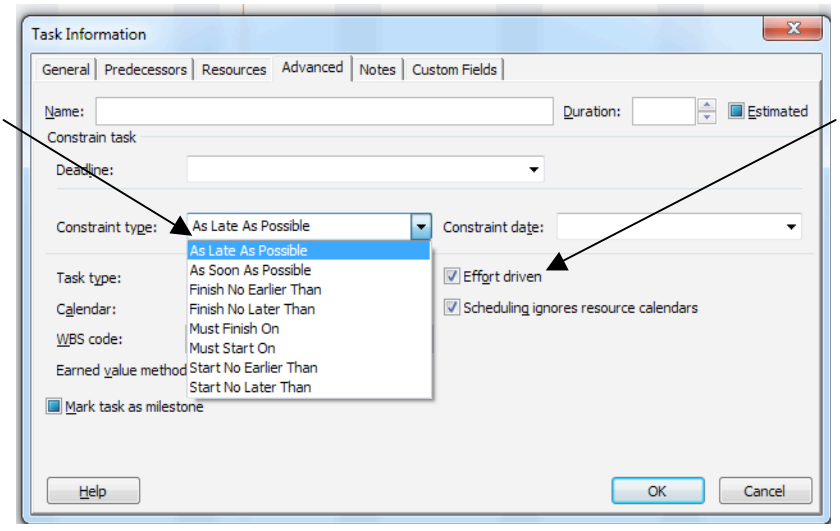
1. **As Soon As Possible**. The task will start as soon as all conditions are fulfilled. No date applicable.
2. **As Late As Possible**. The task starts as close to the projects finish date as possible. No date applicable
3. **Finish No Earlier Than**. A date is set before which the task is not allowed to finish.
4. **Start No Earlier Than**. A date is set before which the task is not allowed to start.
5. **Finish No Later Than**. The task must be finished before a given date.
6. **Start No Later Than**. The task must start before a given date.
7. **Must Finish On**. The task must finish on a given date.
8. **Must Start On**. The task must start on a given date.

Constraints can be flexible or static, depending on the circumstances. A flexible constraint allows Project to calculate a tasks start or finish date, depending on its relation to other tasks in the project. A static constraint does not allow this.

It is therefore important to use the constraints with some care when planning your project. Using unnecessary constraints will make your planning less flexible. The task constraints are changed by:

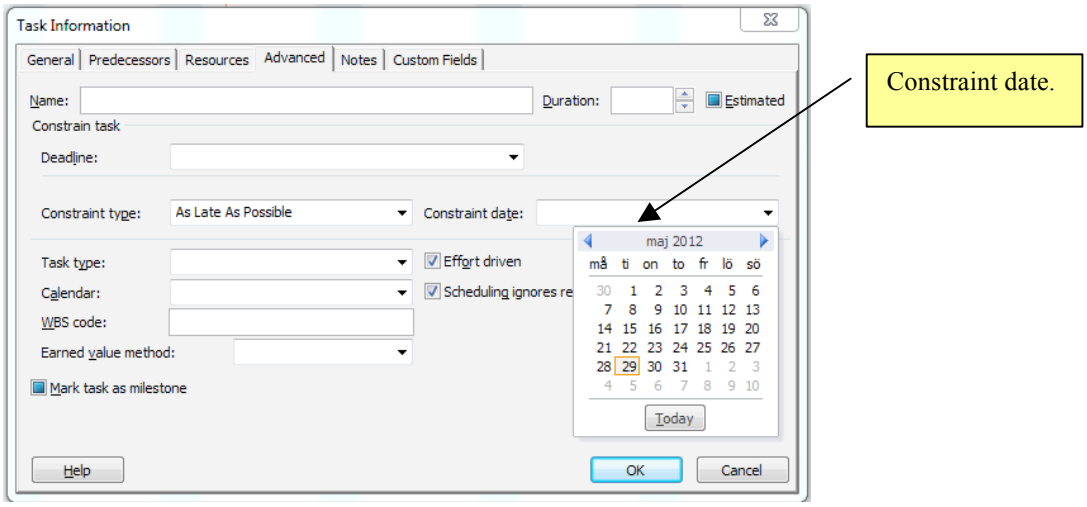
1. Double-clicking the task, or right-clicking it in the task list and selecting <Task Information>.
2. Select the Advanced tab.
3. Open the Type list box.

Constraint type.



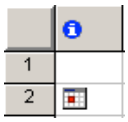
Effort driven determines how Project calculates when the assignments change. Read more about this in the section **Resources**.

4. To select a date, open the **Date** list box.



5. Click [OK].

The constraint is indicated in the task list with a calendar symbol. It can be red (indicating a static constraint), or blue (indicating a flexible constraint).



Link tasks

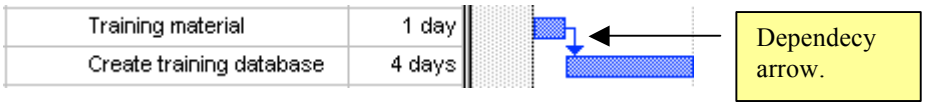
To link a task is to give it a place in the chain of events. It also means that you create a dependency to the other tasks in the project. Linking the tasks is an important step towards the calculation of the project finish date. There are four types of links in Project:

1. **Finish-to-Start (FS)**. A task must finish before the next can start. This type is default when you plan the project from a start date.
2. **Start-to-Start (SS)**. This link defines that when one task starts, the depending task also starts.
3. **Finish-to-Finish (FF)**. Defines that when one task ends, the depending task should be finished as well.
4. **Start-to-Finish**. Used to define that a task can finish only after that the predecessor has started.

You create a link between two tasks by:

1. Selecting one task (the predecessor) in the task list.
2. Press [Ctrl] and select the successor.
3. Use the toolbar button Link tasks. 

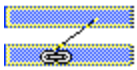
The two tasks are now linked, and displayed in the Gantt chart with a dependency arrow.



Note that the linking is done in the same order that the tasks are selected in the task list. You may also link more than two tasks at the same time, by selecting them while the [Ctrl] button is pressed.

You can also link directly in the Gantt chart. You do it by placing the mouse cursor on the first you want to link from. The cursor symbol changes to a four-pointed arrow.

Press the left mouse button, and drag and drop on the depending task.

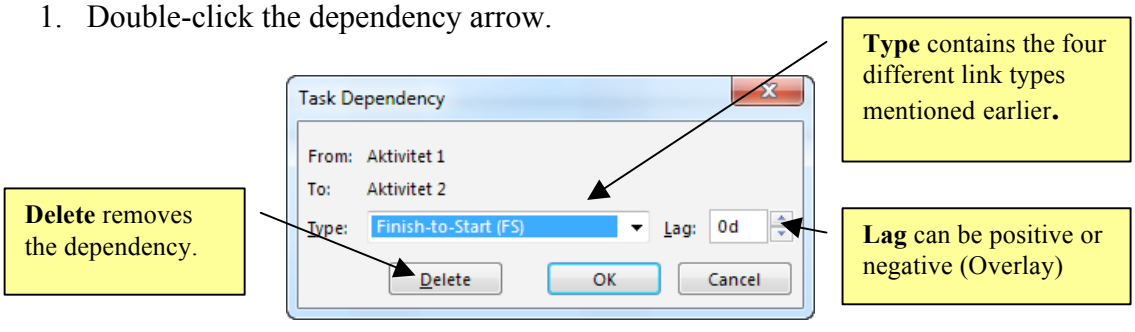


When you release the mouse button, the tasks will link together.

Change dependencies (links)

By default, the link that is created by Project is of type Finish-to-Start. During your planning you will have to change this to suit your purposes. There are two quick ways to change the dependency between tasks.

1. Double-click the dependency arrow.



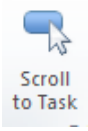
2. By selecting a different option in the Type list box, you change the dependency between the tasks.
3. Clicking [OK] executes the change.

When you are creating dependencies between tasks, it is important to think through what you want to achieve. It is always helpful to think in terms of dependencies rather that just links.

There are several ways to enter lead-time in the task dependencies. The quickest way is from the Task Dependencies dialog box between the two tasks. Inserting a lag means that, in addition to the conditions set by the link itself, a delay will occur. An Overlap is the opposite, which means that the depending task will start earlier than what would be the case if it were only a link.

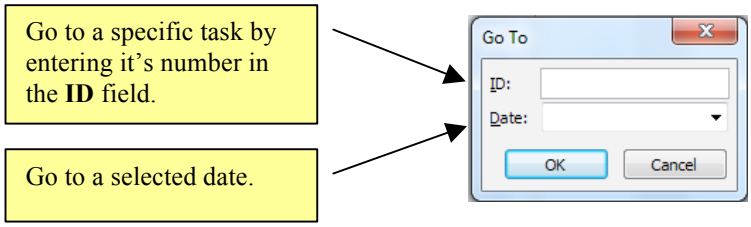
Scroll to a specific task

Your task list is always present to the left of your screen, and a helpful feature is the Scroll To Task function. It quickly brings you to any task in your project. Select the task in the task list and press the toolbar button.



You can also use the Go To function to move around in you Gantt chart.

Press [CTRL] [G].



Resources

What is a resource?

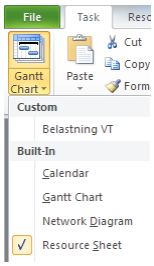
Depending on the size and character of the project you are working with, you might want to enter resources in the planning. All resources are entered in the Resource Sheet. The resources are all available labor (people and machines) that is used in the project to complete the tasks. Adding resources means adding complexity to the planning, since you are adding a new variable. Before we get started with the resources, let's have a look at some keywords:

- **Work** is defined as the number of hours that resource spends on a task. If a carpenter works full time for one day (100 %), the work is 8 hours. If he works half time (50 %), the work is 4 hours.
- **Duration** is the length of a task, or the number of hours/days/weeks from start to finish.
- **Units** define the resource availability. If a resource is available full time (8 hours/day) it means that he/she is available 100%.

There is no automatic connection between the duration of a task and the number of hours it takes to complete.

Resource Sheet

The Resource Sheet is different from the Gantt Chart in the way that it consists only of a table. You access all the views from the Task Tab.



Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/Use	Accrue At	Base Calendar	Code

You enter a new resource by:

1. Click on the first row in the cell Resource.
2. Enter the name of the first project member.
3. Press [Enter].
4. Continue with the rest of the involved resources.

Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/Use	Accrue At	Base Calendar	Code
Keyser Söze	Work		K		100%	0,00 kr/hr	0,00 kr/hr	0,00 kr	Prorated	Standard	
Harry Callahan	Work		H		100%	0,00 kr/hr	0,00 kr/hr	0,00 kr	Prorated	Standard	
John McLain	Work		J		100%	0,00 kr/hr	0,00 kr/hr	0,00 kr	Prorated	Standard	
Percy Nilegård	Work		P		100%	0,00 kr/hr	0,00 kr/hr	0,00 kr	Prorated	Standard	
Glenn Killing	Work		G		100%	0,00 kr/hr	0,00 kr/hr	0,00 kr	Prorated	Standard	

As you can see each resource gets an ID number, just as the tasks in the task list. The rest of the columns are filled in with default numbers, or left empty. Each resource can then be given it's own unique qualities. Before we continue we need an explanation of the columns.

Resource: The resource's name. Can also be used to name groups of resources, like Trainers or Technicians.

Type: Work, Material or Cost. Work are all resources that are charged by a time unit (hour, day a.s.o.).

Material: If the resource type is material, this field is used as a label.

Initials: A text field were each resource could be given their own initials. Useful for graphical presentations.

Group: Used to split the resources into groups for later follow-up. Not to be confused with the term Resource Group, used later in this material.

Max units: Used to define how much of the resources time is available for assignment. Default value is 100%, or 8 hours per day.

Std. Rate: Resource cost during regular working hours.

Ovt. Rate: The cost when using the resource for overtime work. If a resource doesn't have a specific overtime rate, enter the same cost as in the Std. Rate column. Otherwise you might get invalid numbers in your budget.

Cost/Use: Used if the resource has a one-time cost attached, that is activated for every task assignment.

Accurate At: Defines how the cost is added to the project budget.

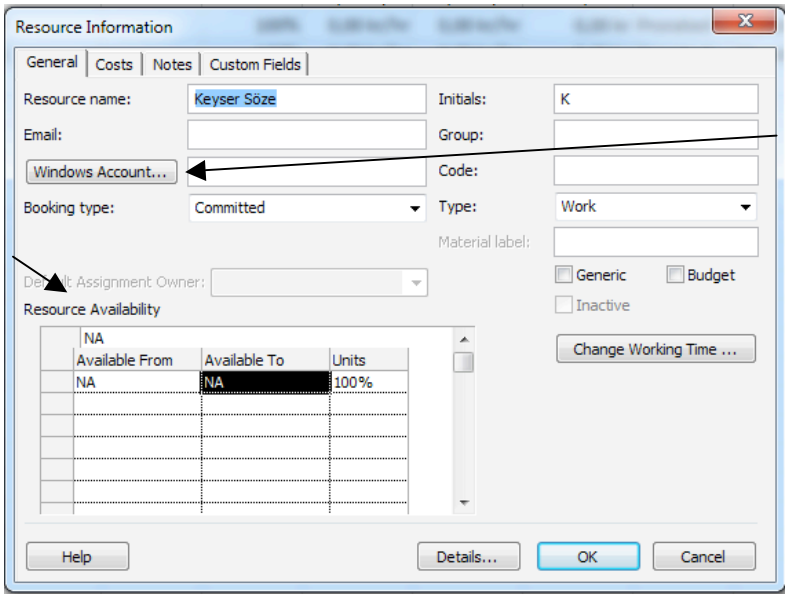
Base Calendar: Defines which calendar the resource follows.

Code: Text field, can be used as it suits best.

Resource Information

Similar to the tasks, each resource has more information connected to it than what shows in the table. And just as in the task list, the quickest way to reach this information is to double-click the resource name.

Availability is used to define if the resource is available during a certain period of time, or during the whole project.



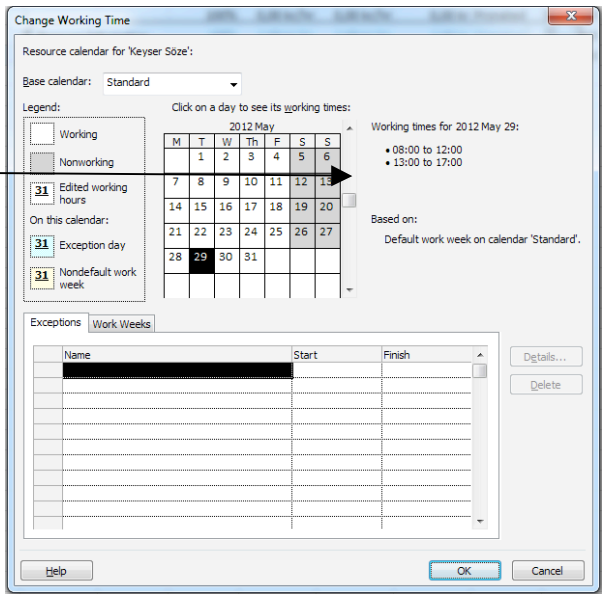
Windows Account is used to communicate within the project, and requires an Exchange (or equivalent) server.

Every resource can be given his/her own work calendar. A work calendar has the same look and functionality as the project calendar. The difference is that the work calendar is personal

for each resource, and may differ from the project working time. It is important to remember that if no changes are made to the resources personal calendars, they will by default be using the project calendar.

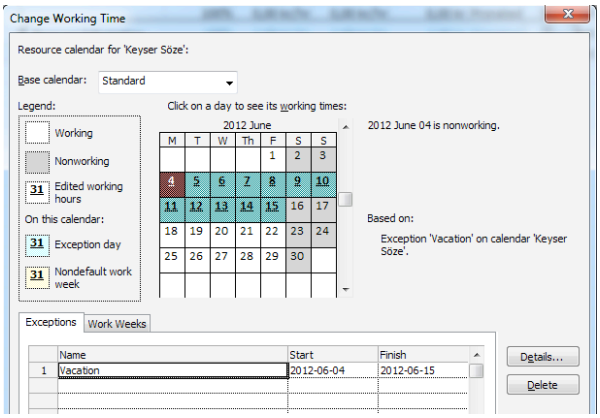
You create a work calendar by pressing [Change Working Time].

You scroll between the months using the vertical scrollbar.



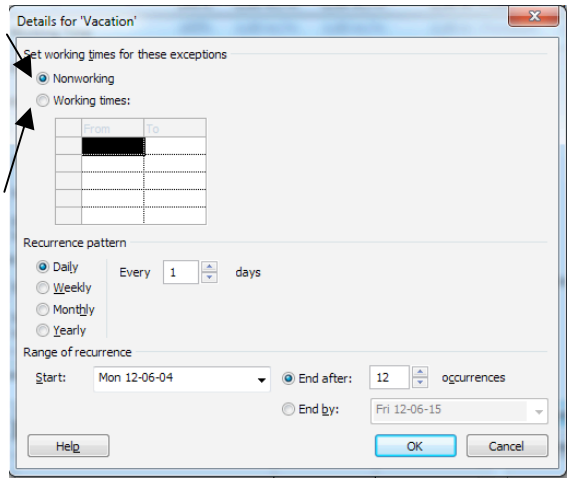
You create changes to the calendar by making a new entry in the **Name** column, and selecting start and finish dates. Example:

To view more detailed information, press [Details].



Nonworking means that no work will be allocated to that period.

Working times is selected to set working time outside the default values.



When a resource has been given a work calendar that deviates from the project calendar, the resource calendar takes precedence.

The Work formula

When the tasks are created and the resources entered, it is time to start assigning the work. There are several different ways to assign resources to tasks, and the final result is of course the same. But depending on how you go through with the work, it is necessary to be familiar with Projects method of calculating the work. So before we move on it is time for some theory.

The key to understand how Project works is understanding the work formula. The formula ties the fields Work, Units and Duration together. The formula to calculate the work hours for a task is:

Work = Units x Duration (W = U x D)

You get the number of work hours if you multiply a tasks duration with the number of assigned resources. This gives that:

Duration = Work/Units (D = W/U)

If you increase the number of units to the task and leave the work unchanged, the duration is decreased.

Units = Work/Duration (U = W/D)

From the last formula follows that, if you increase the duration of a task and leave the work unchanged, the number of resources will decrease.

This formula is important to keep in the back of your head when you start assigning resources. This because the assignments, in combination with the task type, will affect how Project calculates the duration and workload.

How Project prioritizes

Duration is always calculated in hours by Project, even if you enter it in days or weeks. If a task has the duration of 1 week and is assigned to 2 people full time, the work is calculated in the following way:

U x D = W
200% (16 hrs/day) x 5 days = 80 hours

When one of the three variables is changed, one of the two remaining variables must change as well to keep the equation true. But which one will Project change? In the first versions of Project the application was designed to calculate the work on basis of the duration and the number of resources (both estimated by the user, yourself). It was assumed that the user would want to elaborate with the number of units to change duration, without affecting the work.

This still affects the way Project works. One might say it is in the applications gene pool. When Project is re-calculating a value as a consequence of a change made by the user, it tends to change the duration. Furthermore, Project is programmed to keep the number of units intact as far as possible. When Project “chooses” which of the variables Duration, Work and Units to change, it does it in the following order:

- Duration is changed before Work.
- Work is changed before Units.
- Units are changed only when Duration and Work are unable to change.

Task Types

To gain more control over the project you might want to change the task types. (You do it in the Task Information window, under the Advanced tab.) This means that you can define which of the three variables should be left intact when a change is made in the assignments.

Fixed Work

The work hours is not changed when an assignment is changed. Project will re-calculate Duration or Units.

Fixed Units (default)

The assigned units will remain unchanged when the assignment is changed. Project will change Duration or Work.

Fixed Duration

Project keeps the duration unchanged, and re-calculate Work or Units.

Effort driven

There is one more parameter to consider, and that is the attribute Effort driven. Effort driven has no impact on the calculation of work, duration or units when the first assignment is made. But when an assignment is changed, it plays an important role in the outcome. One way of explaining the difference is that the task type defines **what** is to be re-calculated, and the effort driven variable defines **how** it should be done.

If you after the first assignment on an effort driven task assign more resources, Project will look at that attribute. The task will either get a shorter duration (more resources completes the work faster) or the workload on each resource will decrease (more resources complete the work on scheduled time). The total amount of work stays the same if more resources are assigned.

If a task is not effort driven, the amount of work will change when the number of assigned resources change. If a resource is added Project will leave the duration unchanged, as well as the number of work hours assigned to the previous resources. The work of the new resources will be added to the existing ones.

The Task Type and Effort driven attributes has no impact on how Project does the calculation when the initial assignment is made. The selected attributes define how Project calculates when an assignment is changed.

Example 1, effort driven task

Resource	Units	Work	Tot Units
Monica	50 %	20 hrs.	33 %
Rachel	100 %	40 hrs.	67 %
Total	150 %	60 hrs.	100 %

In this example Monica is assigned with 50% and Rachel with 100%. The work is divided according to this. When a new resource is added, the calculation gives:

Resource	Units	Work	Tot Units
Monica	50 %	15 hrs.	25 %
Rachel	100 %	30 hrs.	50 %
Phoebe	50 %	15 hrs.	25 %
Total	200 %	60 hrs.	100 %

Since the task is effort driven Project will assume that the total amount of work is to be left unchanged. The work will be distributed on basis of the resources availability.

Example 2, not effort driven task

Resource	Units	Work	Tot Units
Monica	50 %	20 hrs.	33 %
Rachel	100 %	40 hrs.	67 %
Total	150 %	60 hrs.	100 %

The same example as before and as you see it initially gives the same result. But when a new resource is added, this example gives:

Resource	Units	Work	Tot Units
Monica	50 %	20 hrs.	50 %
Rachel	100 %	40 hrs.	100 %
Phoebe	50 %	20 hrs.	50 %
Total	200 %	80 hrs.	200 %

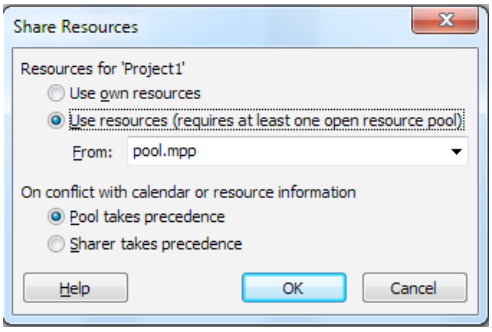
Since the task isn't effort driven Project will add the new resource work to the existing. The work will be distributed on basis of the resources availability.

Remember: Project does exactly what you tell it to do. That is why it is important to know what you are doing!

Resource pool

When working with multiple project files it can be convenient to keep all resources in a separate file, a resource pool. This allows easier tracking of assignments, and allows you to keep one version of all resource calendars. To create a resource pool you do the following:

1. Open an empty MS Project file.
2. Go to the Resource sheet and enter all resources.
3. Save the file.
4. Open the Project file containing the tasks.
5. Select the Gantt view and the Resource Tab.
6. Click on [Resource Pool].
7. Select <Share Resources>.
8. In the **From** list box, select the file containing the resources.
9. Click [OK].

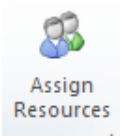


Note that both the resource pool and the file with the tasks must be open in order to share the resources.

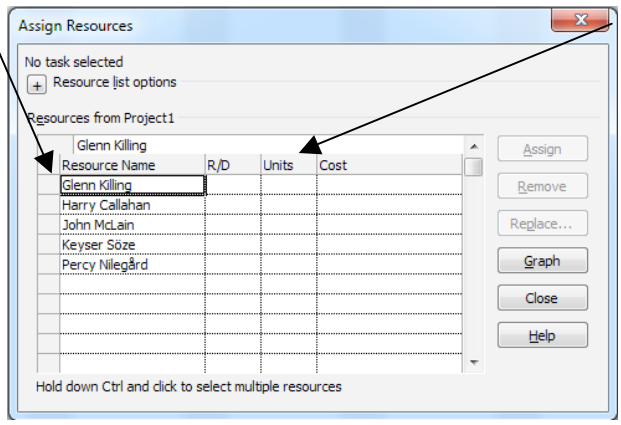
The Assign Resources window

There are two ways to assign resources to a task. You can use either the Assign Resources window or the Resources tab in the Task Information window. The two methods are slightly different, so we will look at both.

1. Activate the Gantt Chart view.
2. Select a task.
3. Click on [Assign Resources].

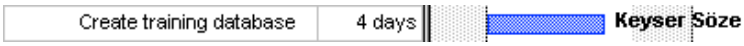


Name contains the resources that have been entered into the Resource Sheet.



The **Units** column shows a number that corresponds to the value set in the Resource Sheet. If a resource is set to 100% Project will automatically set the assignment to that. If you want to use a different figure you type it directly into the cell.

4. Select the resource in the list.
5. Click [Assign].



The resource is now assigned, and according to the work formula he will work 8 hrs. per day in 4 days, which gives 32 hours of work.

Note that the resource name is displayed to the right of the task bar. We are now going to assign a second resource to the same task.

Select a second resource and click [Assign].

Both resources are now assigned to the task with an equal amount of units. They have been assigned with the same amount of work because they have the same availability, 100%. Since the task is effort driven the duration is shortened to 2 days.

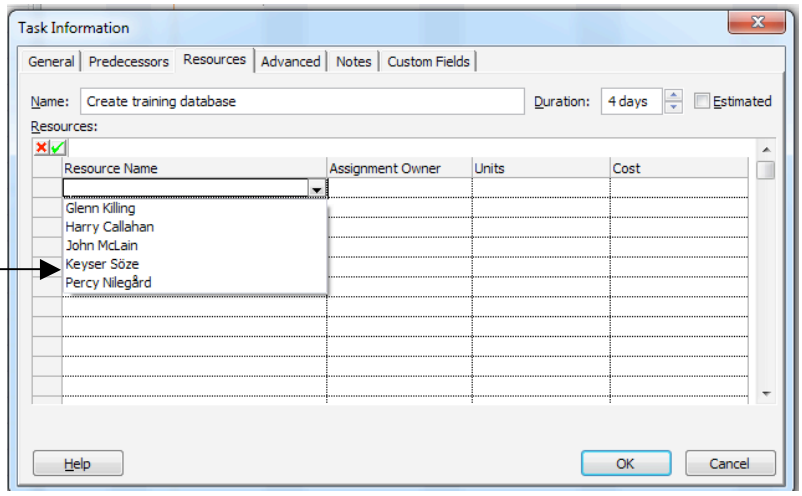
By clicking [Assign] we confirmed each assignment separately. By assigning the second resource we created a change in the assignment, and Project reacted on it. It re-calculated the duration of the task, but left the work unchanged.

The Resources tab

The other way of assigning a resource is via the Task Information window, and the Resources tab. We will look at the same example to show the differences in these those methods.

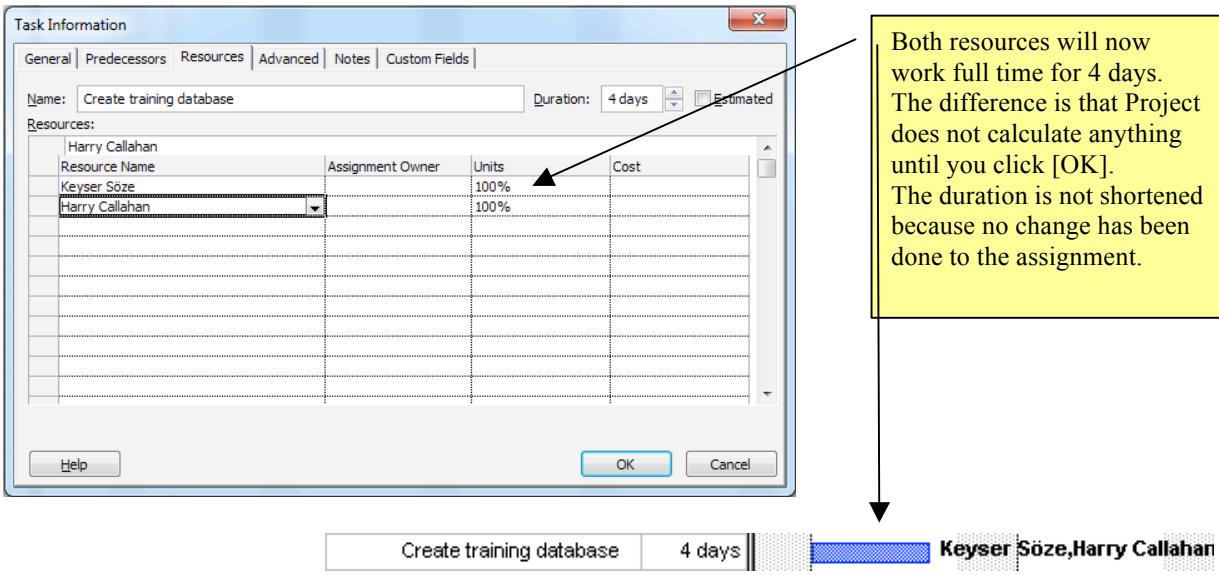
1. Double-click on the task.
2. Open the **Resources** tab.
3. Click on the fist empty row and open the list box.
4. Select the same resource as before.

The list contains the same resources as before.



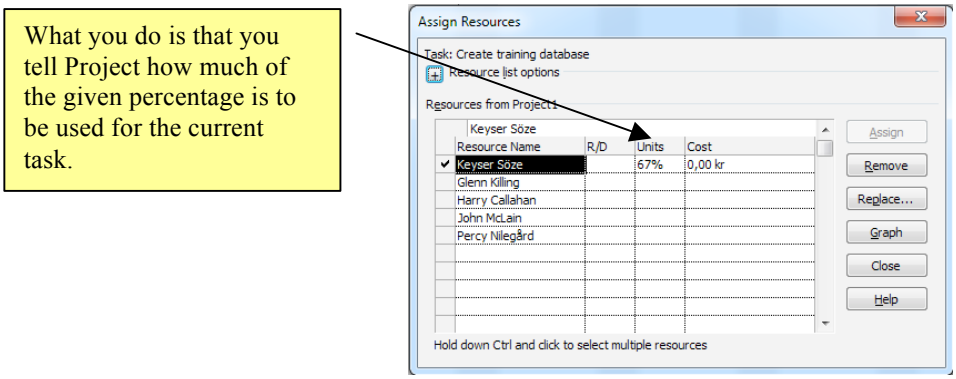
Now we come to the important difference between the two methods. If you now click [OK] you will achieve the same thing as when you clicked [Assign] in the previous example, which is confirming the assignment. If you then open up the Task information window and assign the second resource, you will have the exact same result: a shortened duration. But if you want to create an assignment were both resources work an equal amount of hours without changing the duration you do the following:

1. Select the next empty row and open the list box.
2. Select another resource.



Resource Units

The possibility to work with resource units makes it possible to specify exactly how much a resource should be assigned to a task. As you have seen Project assumes that the assignment should be the same as the availability set in the Resource Sheet. If you want to change this you do it when you create the assignment by editing in the Units table.



In the Resource Sheet you enter the availability for the entire project. For example, if a resource is available on half time (4 hours per day), you set the value in the Max. Units column to 50%. In the Units column in the Assign Resources window you set how many units are to be assigned to a task. If a half time resource is to spend 20 hours per week, the unit's percentage should be 50%. If he/she only works 10 hours per week, you set the assigned units to 25%

It is the same percentage we are talking about in both cases. A common misunderstanding is that the Units column in the Assign Resources window should contain "percent of percent" (percent of what is in the Resource Sheet).

Replace resources

Sometime during your project planning or realization you will have to replace or remove a resource.

1. Select the task.
2. Open the Task Information window and activate the Resources tab.
3. Select a new resource from the list.
4. Click [OK].

The task is now carried out by the new resource without any changes in work or duration, on the condition that the new resource has the same availability.

Before you remove a resource from the Resource Sheet you should remove him/her from all assignments. Otherwise you will loose track of planned work.

Conflicts

Scheduling conflicts

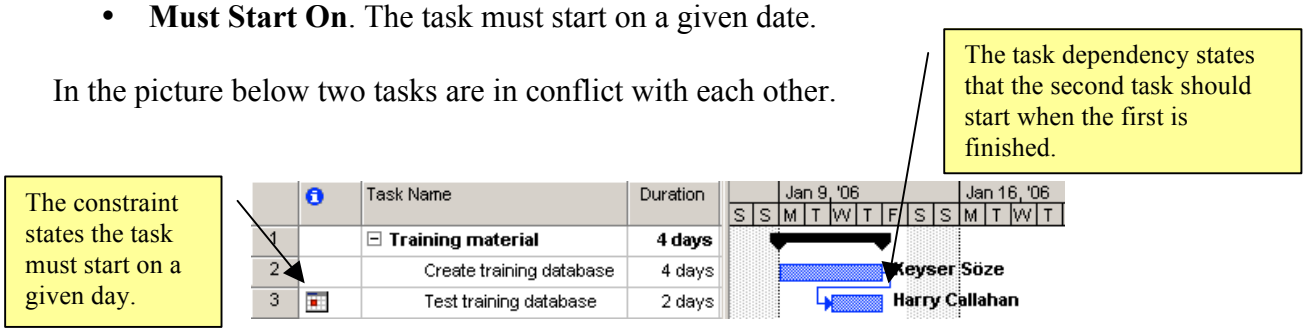
We have now reached the point in the planning where the tasks have been created and the resources assigned. At this stage we can be sure to have some sort of conflict in the plan. Conflicts normally occur for two reasons:

1. One or more of the tasks have been given constrain dates that don't fit the rest of the plan.
2. One or more of the resources that we use has been assigned to too much work.

These conflicts must be solved before we go ahead with the project. Moving the task or changing the constraint solves conflicts created by constraints. The constraint types are:

- **As Soon As Possible**. The task will start as soon as all conditions are fulfilled. No date applicable.
- **As Late As Possible**. The task starts as close to the projects finish date as possible. No date applicable
- **Finish No Earlier Than**. A date is set before which the task is not allowed to finish.
- **Start No Earlier Than**. A date is set before which the task is not allowed to start.
- **Finish No Later Than**. The task must be finished before a given date.
- **Start No Later Than**. The task must start before a given date.
- **Must Finish On**. The task must finish on a given date.
- **Must Start On**. The task must start on a given date.

In the picture below two tasks are in conflict with each other.



One of the tasks will have to be moved in time or be given a new constraint. You solve the conflict by:

- Change the start date for the first task, so it finishes earlier.
- Change the constraint for the second task.

Depending on the rest of the project, the easiest thing is to change the project start date, to allow more time between tasks. If this is not possible, moving the second task forward is probably the best option. Another way is to evaluate if the constraint is necessary. Changing from Must Start On to Start No Earlier Than might be enough.

Resource conflicts

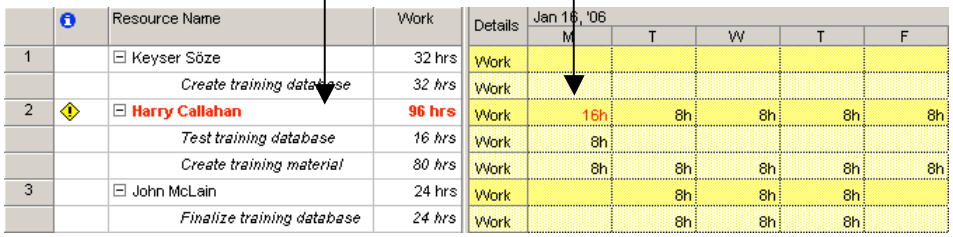
The second type of conflict is the one between resources, and it is probably the most common type. This for the simple reason that in real life, as opposed to the planner's ambitions, resources are limited. There are two ways to solve problems originated from over-allocated resources:

- Get more resources.
- Re-distribute the work between the available resources.

The first option, to get more resources, means that a task can be completed in a shorter time. But first we have to identify were the over allocation is, and the fastest way is to change to the Resource Usage view.

Resource Usage shows all resources and their assignments in a table, displaying work hours. If resource is over allocated it is displayed in red.

The view pane shows the hors assigned to each task in a view with a timescale. From this view you can see which days the conflict occurs.



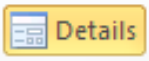
		Resource Name	Work	Details	Jan 16, '06 M	T	W	T	F
1		Keyser Söze	32 hrs	Work					
		Create training database	*32 hrs*	Work					
2	⚠	**Harry Callahan**	**96 hrs**	Work	16h	8h	8h	8h	8h
		Test training database	*16 hrs*	Work	8h				
		Create training material	*80 hrs*	Work	8h	8h	8h	8h	8h
3		John McLain	24 hrs	Work		8h	8h	8h	
		Finalize training database	*24 hrs*	Work		8h	8h	8h	

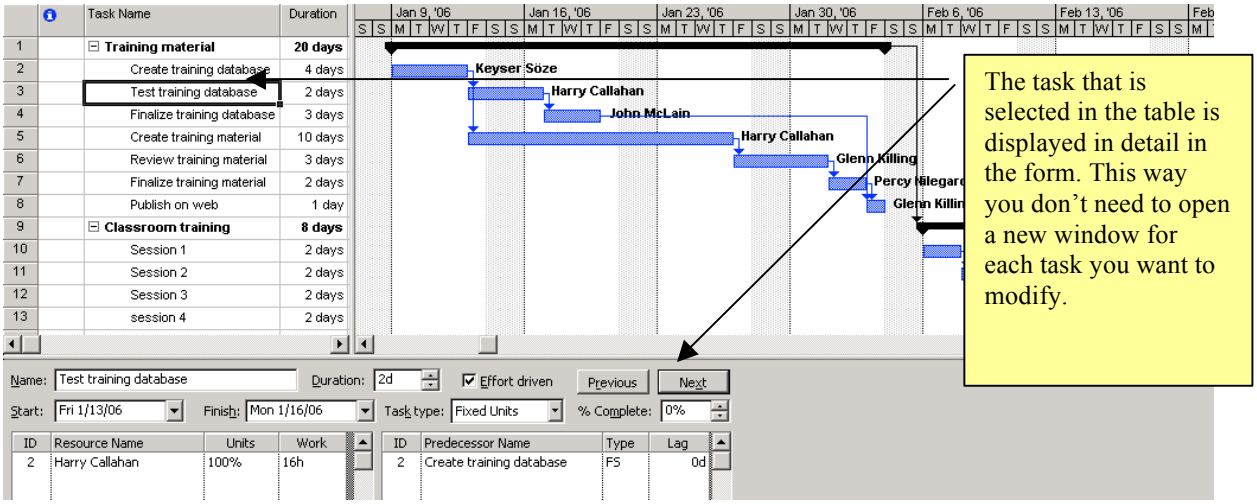
By scrolling in this view you can find all over allocations. It is also possible to edit in the cells to adjust the hours. This way we can keep the assignment by decreasing the work during the current period.

Note that working this way decreases the total work hours for the tasks in question.

Using forms to resolve conflicts

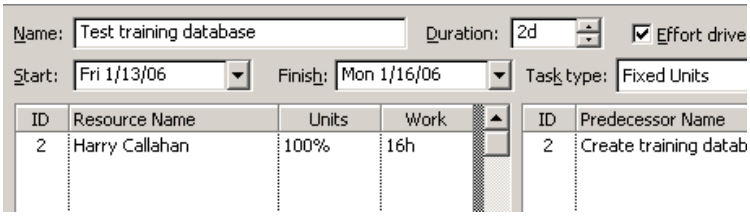
Another solution is to re-assign the work on one of the tasks to another resource. There is of course different ways to do this. One way we have not used yet is to split the window and work with the **Forms**.

Select [Details] from the Task Tab. 

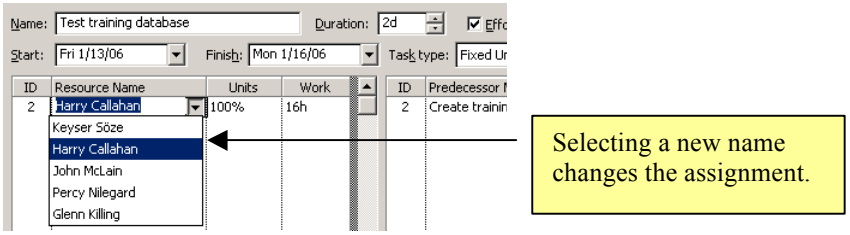


The forms are divided into two categories, task forms and resource forms. When you are working in a task view like the Gantt Chart you have access to the Resource forms.

You switch between the forms by right clicking in the lower half of the window and selecting a form from the menu. In the picture below we have switched to the form **Resource Work**.



Changing the assignment is done by opening the list box in the Resource Name column and selecting another name.



In the same way, when you are working in a resource view, i.e. Resource Usage, you can work with the Task forms.

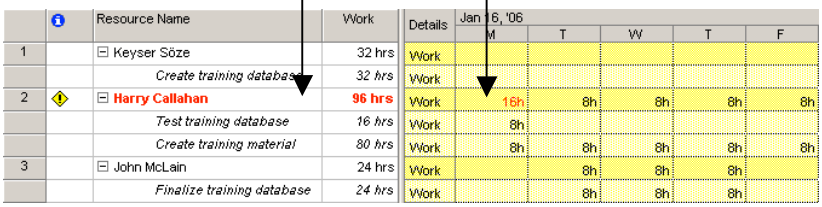
Resource Usage

The Resource Usage view is the mirror of Task Usage, and focuses on the resources. The assigned tasks are displayed on a lower level of disposition. The figures are of course the same, but it is a faster way to find the single resources. It is also a useful view to use when you are looking for over allocations.

The first option, to get more resources, means that a task can be completed in a shorter time. But first we have to identify were the over allocation is, and the fastest way is to change to the Resource Usage view.

Resource Usage shows all resources and their assignments. If resource is over allocated it is displayed in red.

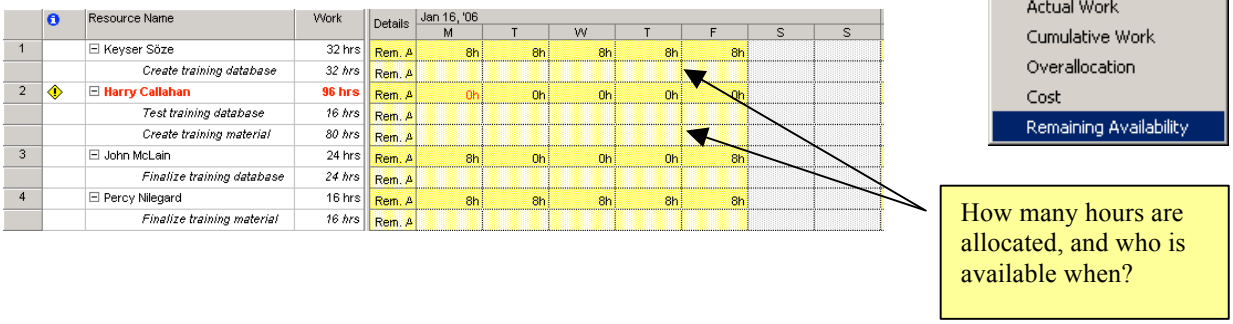
The view pane is similar to the Task Usage.



		Resource Name	Work	Details	Jan 16, '06 M	T	W	T	F
1		Keyser Söze	32 hrs	Work					
		Create training database	*32 hrs*	Work					
2	⚠	**Harry Callahan**	**96 hrs**	Work	16h	8h	8h	8h	8h
		Test training database	*16 hrs*	Work	8h				
		Create training material	*80 hrs*	Work	8h	8h	8h	8h	8h
3		John McLain	24 hrs	Work		8h	8h	8h	
		Finalize training database	*24 hrs*	Work		8h	8h	8h	

By scrolling in this view you can find all over allocations. It is also possible to edit in the cells to adjust the hours. This way we can keep the assignment by decreasing the work during the current period. This view work the same way as the Task Usage view, and it is possible to select the information in the view pane.

Right click in the view pane and select <Remaining Availability>.

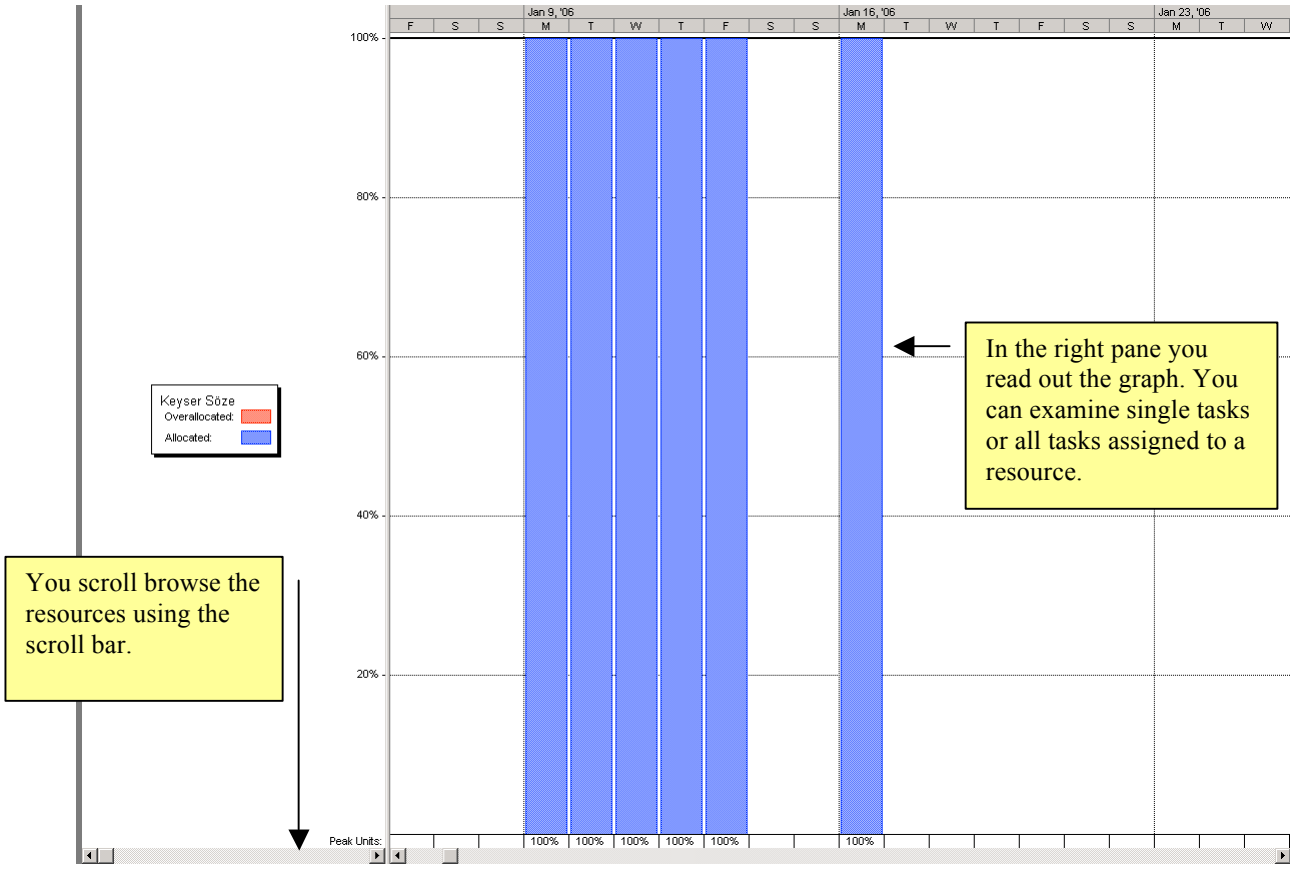


		Resource Name	Work	Details	Jan 16, '06 M	T	W	T	F	S	S
1		Keyser Söze	32 hrs	Rem. A	8h	8h	8h	8h	8h		
		Create training database	*32 hrs*	Rem. A							
2	⚠	**Harry Callahan**	**96 hrs**	Rem. A	0h	0h	0h	0h	0h		
		Test training database	*16 hrs*	Rem. A							
		Create training material	*80 hrs*	Rem. A							
3		John McLain	24 hrs	Rem. A	8h	0h	0h	0h	8h		
		Finalize training database	*24 hrs*	Rem. A							
4		Percy Nilegard	16 hrs	Rem. A	8h	8h	8h	8h	8h		
		Finalize training material	*16 hrs*	Rem. A							

How many hours are allocated, and who is available when?

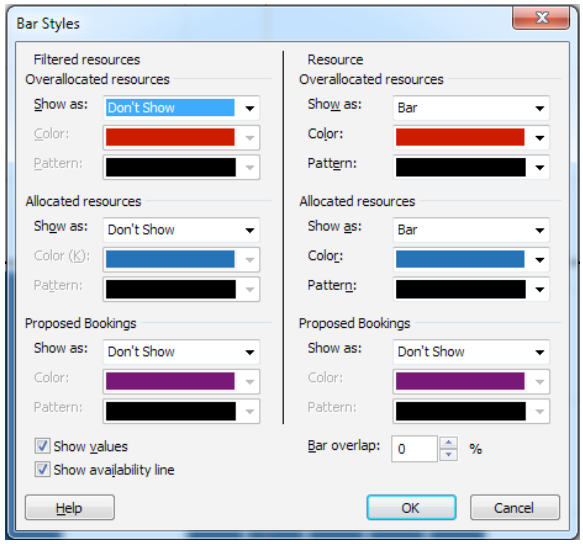
Resource Graph

The Resource Graph view shows the project data, from one or more assignments, as a graph. The view is split in two panes, were the left one scrolls the resources one at the time.

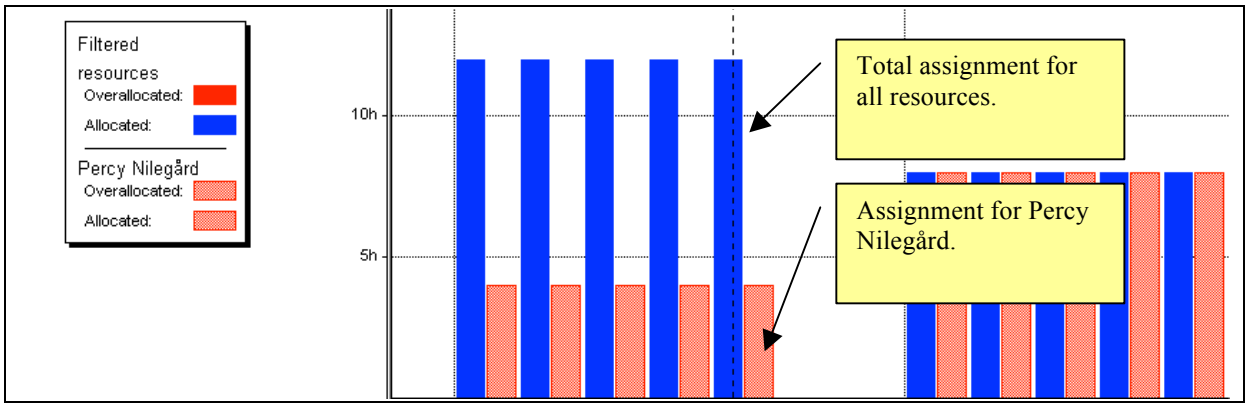


You select type of graph and appearance by right clicking in the right pane. One example:

1. Right click and select <Bar Styles> from the quick menu.
2. Select Bar in all four Show as list boxes.
3. Select different colours.
4. Tick the Show values option.
5. Deselect Show availability line.
6. Click [OK].



Your graph might look something like this.



Update the plan

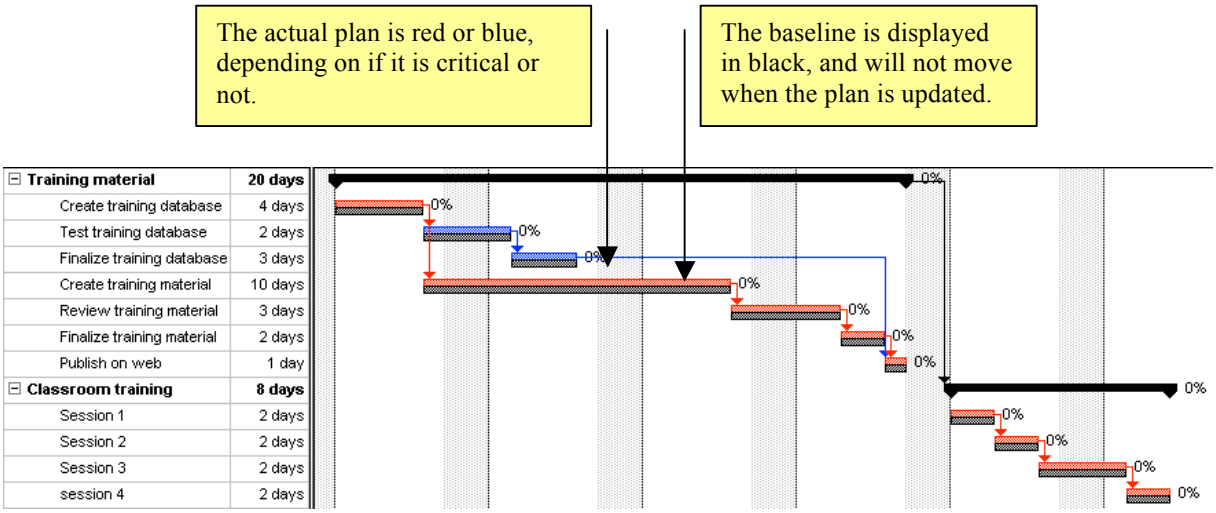
Saving the baseline

No matter how well you plan your project, it is the implementation that is the challenge. Resources will suddenly be unavailable, deliveries will fail and tasks will be delayed. To quote Dwight Eisenhower: “A plan is nothing, planning is everything”. It is time to get to work.

When you start the implementation of your project, you begin with saving the Baseline. The baseline has two important functions. It makes out the planned budget that will be used as a comparison to the actual costs during the entire project, and it is used to compare original and actual planning of the tasks.

You set your projects baseline from the Project Tab and [Set Baseline]. This option can also be used to save a new baseline, if this proves to be necessary.

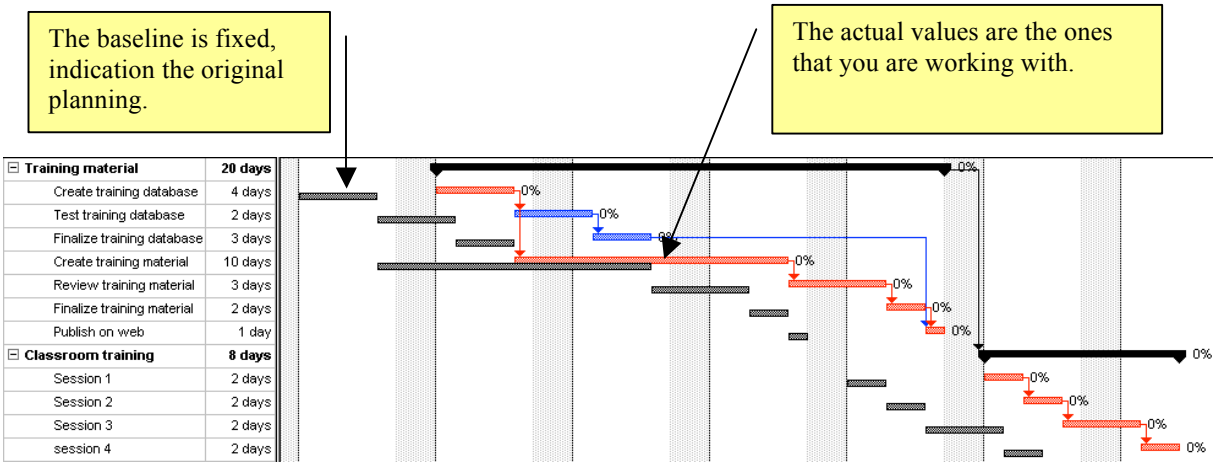
When the baseline is saved and you start working on the project there is a specific view to use, the Tracking Gantt.



You update the Start date if the project start is delayed, or starts earlier than planned. You do it from the Project Information dialog box.

1. Open the Project Tab and select [Project Information].
2. Enter the new start date.
3. Click [OK].

The change is shown immediately in the Tracking Gantt view



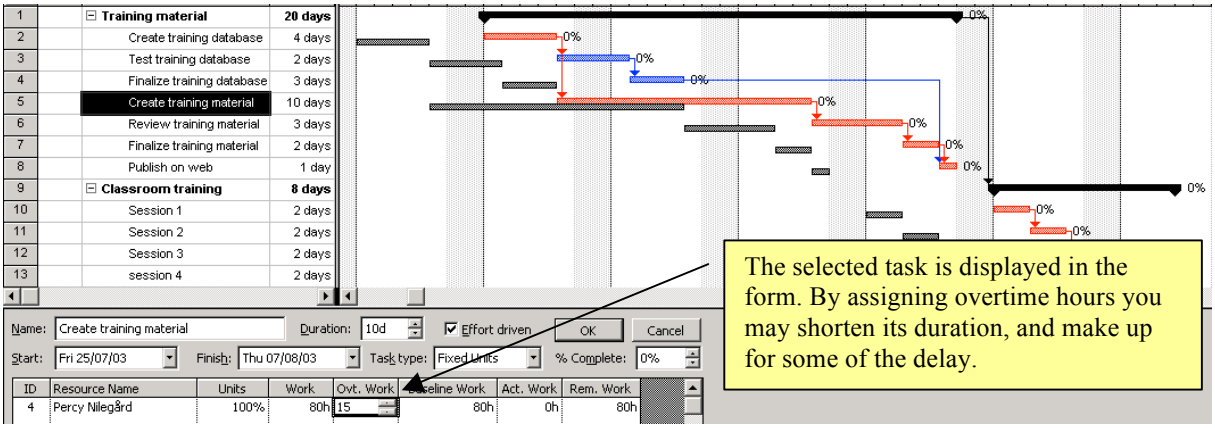
Note: When you are working with multiple projects consolidated into a master project file, the baseline must be saved individually for each inserted project.

Overtime

The work overtime has a slightly different meaning in project compared to what many are used to. It does not mean to add work to a planned number of hours, but that the planned hours will be done in a shorter period of time. This means that instead of doing 40 hours in one week, the same 40 hours might be done in 4 days, which means that some of the work is preformed outside the default working time.

The fastest way to assign overtime work to a resource is by using the Resource Work form from the Gantt Chart or Tracking Gantt view.

1. Open the View Tab and press [Details].
2. Right click and select <Resource Work>.

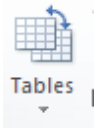


3. You confirm the overtime assignment by pressing [OK].

Update Work

One very important part of the project update is to track the work hours that the resources put into it. This can be done by changing the table in the Task Usage view.

1. Change to the Task Usage View.
2. Open the View Tab and press [Tables].
3. Select the Work table.



Work shows the current prognosis at the end of the project. New figures will change this figure.

Baseline always shows the original plan.

Actual means completed work so far.

	Task Name	Work	Baseline	Variance	Actual	Remaining	% W. Comp.
1	**Training material**	**200 hrs**	**200 hrs**	**0 hrs**	**46 hrs**	**154 hrs**	**23%**
2	Create training database	32 hrs	32 hrs	0 hrs	32 hrs	0 hrs	100%
	Keyser Söze	*32 hrs*	*32 hrs*	*0 hrs*	*32 hrs*	*0 hrs*	*100%*
3	Test training database	16 hrs	16 hrs	0 hrs	8 hrs	8 hrs	50%
	Harry Callahan	*16 hrs*	*16 hrs*	*0 hrs*	*8 hrs*	*8 hrs*	*50%*
4	Finalize training database	24 hrs	24 hrs	0 hrs	6 hrs	18 hrs	25%
	John McLain	*24 hrs*	*24 hrs*	*0 hrs*	*6 hrs*	*18 hrs*	*25%*
5	Create training material	80 hrs	80 hrs	0 hrs	0 hrs	80 hrs	0%
	Percy Nilegård	*80 hrs*	*80 hrs*	*0 hrs*	*0 hrs*	*80 hrs*	*0%*
6	Review training material	24 hrs	24 hrs	0 hrs	0 hrs	24 hrs	0%
	Glenn Killing	*24 hrs*	*24 hrs*	*0 hrs*	*0 hrs*	*24 hrs*	*0%*

The update is made in two steps. First you tell Project how much work has been put into the project so far by entering the figures in the Actual column. If you judge that the planned hours need to be updated, you enter the new estimate in the Remaining column. The difference between the actual and baseline work appears in the Variance column.

Note: A positive number in the Variance column indicates that the baseline has been exceeded.

Remaining availability

In the Resource Usage view it is possible to select the information in the view pane.

1. Right click in the view pane and select <Remaining Availability>.

Resource Name	Work	Details	'03 Jul 07 M	T	W	T	F
Keyser Söze	32 hrs	Rem.	8h	8h	8h	8h	8h
Create training database	*32 hrs*	Rem.					
Harry Callahan	16 hrs	Rem.	0h	0h	8h	8h	8h
Test training database	*16 hrs*	Rem.					
John McLain	24 hrs	Rem.	8h	8h	0h	0h	0h
Finalize training database	*24 hrs*	Rem.					
Percy Nilegård	96 hrs	Rem.	0h	0h	0h	0h	0h
Create training material	*80 hrs*	Rem.					
Finalize training material	*16 hrs*	Rem.					
Glenn Killing	96 hrs	Rem.	8h	8h	8h	8h	8h

How many hours are allocated, and who is available when?