Project 2010 Introduction: Part II

Task entry and reports

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Project 2010 Introduction

Part II

Project 2010 Introduction: Part II

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Project 2010 Introduction: Part I

4 Task entry and linking

After completing this section you will be able to:

- Understand the various methods of Task Entry.
- Enter Tasks.
- Link Tasks.
- Create Summary Tasks.
- Use the AutoCorrect feature.

2010 new feature option

Define Automatic Or Manual Scheduling

In 2010 there is a marked change in the way that Project calculates the tasks there is now an option that decides whether you may (By default) have automatic or manual scheduling for your tass the full meaning will become clear later but to briefly explain. In earlier versions scheduling was automatic by default which meant that if you changed the assigned resources for a given task then the task duration would change if the effort of the resource was reduced then the duration would automatically lengthen. As you will see later there options will appear for each task to be set to manual or automatic scheduling as you enter the tasks. But we will look now at the default setting in case you wish to change it now for the future tasks. By default it is set to manual

- ➢ To Change The Default Scheduling Setting

mouse

i. Go to the file tab and click options In the options window on the left go to schedule option
ii. About half way down is the option for how you wish tasks to be scheduled it says new tasks created.(figure 3-18)
iii. If you desire the default to be changed to automatic scheduling then click the drop down arrow and select the option from the list. Click ok to save and apply the setting.

- Remember every task as it is created will have the option to change back to manual or vice versa this is merely the default.

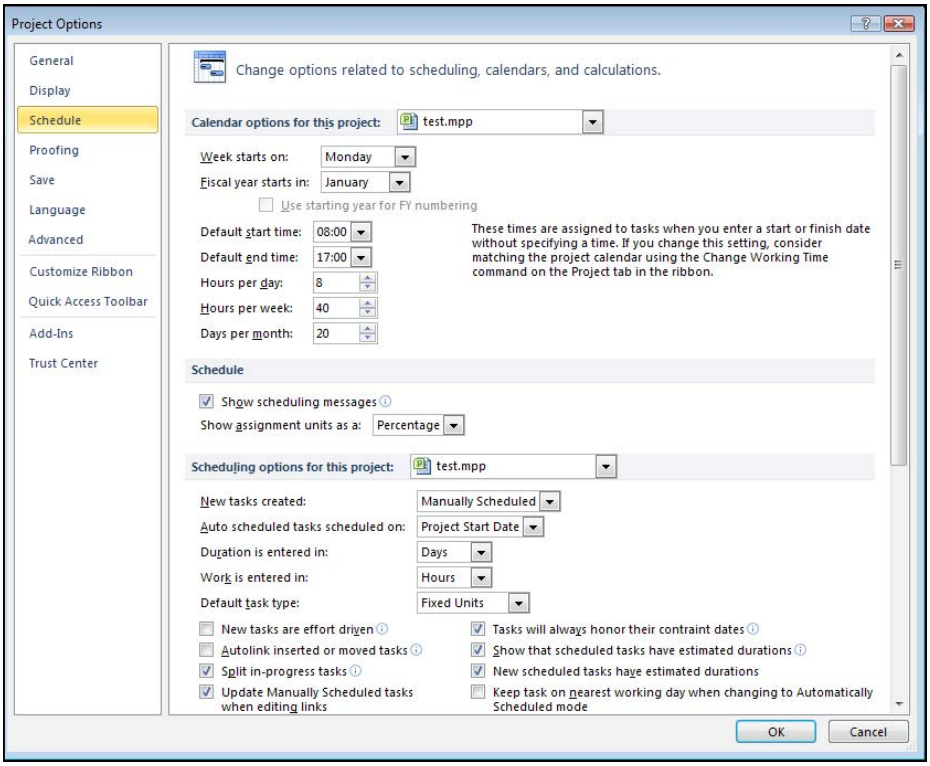


Figure 4-1: Changing To Automatic Schedule

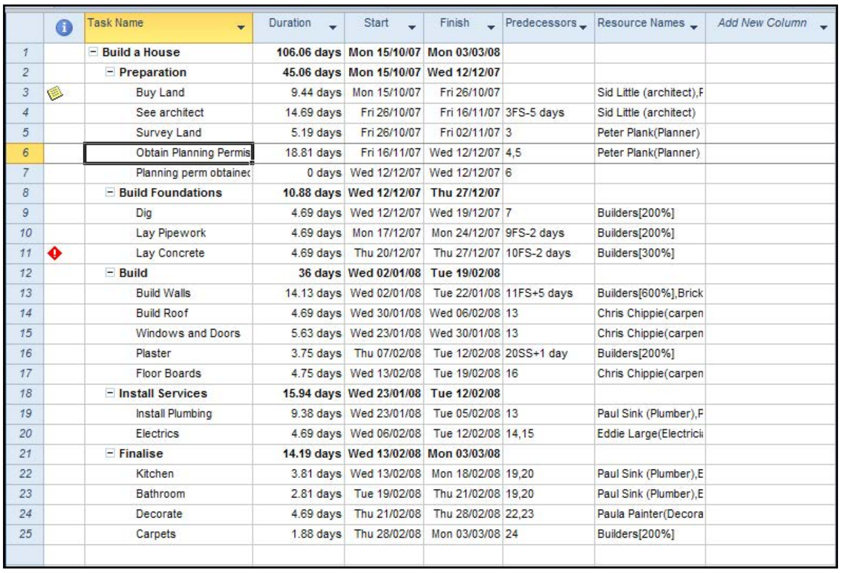
Entering tasks

This is the main activity in setting up a new project. The tasks which have been identified at the Design Stage must be entered. The system will hold task information in a task Project file, which we cannot access directly but is used by the system whenever we view task data. This is one of two Project files the system uses the other being the resource Project file.

It is important to understand that the system checks the data that it holds and where the data does not cross check then the system will generally update the Project file to make it right. It is important to keep an eye on this process; this will be discussed in a later section. As each entry is made the system will update the appropriate data and views to reflect the entries. The order of entry should be in the logical progression but this is not essential as it can be changed.

Normal Task entry will be by using the standard Task Sheet. The Gantt View shows the Gantt Chart in the right part of the window with the Task Sheet in the left part.

The Task Entry Sheet



		Task Name	Duration	Start	Finish	Predecessors	Resource Names	Add New Column
1		Build a House	106.06 days	Mon 15/10/07	Mon 03/03/08			
2		Preparation	45.06 days	Mon 15/10/07	Wed 12/12/07			
3		Buy Land	9.44 days	Mon 15/10/07	Fri 26/10/07		Sid Little (architect),F	
4		See architect	14.69 days	Fri 26/10/07	Fri 16/11/07	3FS-5 days	Sid Little (architect)	
5		Survey Land	5.19 days	Fri 26/10/07	Fri 02/11/07	3	Peter Plank(Planner)	
6		Obtain Planning Permis	18.81 days	Fri 16/11/07	Wed 12/12/07	4,5	Peter Plank(Planner)	
7		Planning perm obtainec	0 days	Wed 12/12/07	Wed 12/12/07	6		
8		Build Foundations	10.88 days	Wed 12/12/07	Thu 27/12/07			
9		Dig	4.69 days	Wed 12/12/07	Wed 19/12/07	7	Builders[200%]	
10		Lay Pipework	4.69 days	Mon 17/12/07	Mon 24/12/07	9FS-2 days	Builders[200%]	
11		Lay Concrete	4.69 days	Thu 20/12/07	Thu 27/12/07	10FS-2 days	Builders[300%]	
12		Build	36 days	Wed 02/01/08	Tue 19/02/08			
13		Build Walls	14.13 days	Wed 02/01/08	Tue 22/01/08	11FS+5 days	Builders[600%],Brick	
14		Build Roof	4.69 days	Wed 30/01/08	Wed 06/02/08	13	Chris Chippie(carpen	
15		Windows and Doors	5.63 days	Wed 23/01/08	Wed 30/01/08	13	Chris Chippie(carpen	
16		Plaster	3.75 days	Thu 07/02/08	Tue 12/02/08	20SS+1 day	Builders[200%]	
17		Floor Boards	4.75 days	Wed 13/02/08	Tue 19/02/08	16	Chris Chippie(carpen	
18		Install Services	15.94 days	Wed 23/01/08	Tue 12/02/08			
19		Install Plumbing	9.38 days	Wed 23/01/08	Tue 05/02/08	13	Paul Sink (Plumber),F	
20		Electrics	4.69 days	Wed 06/02/08	Tue 12/02/08	14,15	Eddie Large(Electrici	
21		Finalise	14.19 days	Wed 13/02/08	Mon 03/03/08			
22		Kitchen	3.81 days	Wed 13/02/08	Mon 18/02/08	19,20	Paul Sink (Plumber),E	
23		Bathroom	2.81 days	Tue 19/02/08	Thu 21/02/08	19,20	Paul Sink (Plumber),E	
24		Decorate	4.69 days	Thu 21/02/08	Thu 28/02/08	22,23	Paula Painter(Decora	
25		Carpets	1.88 days	Thu 28/02/08	Mon 03/03/08	24	Builders[200%]	

Figure 4-2: the Task Entry Sheet

The Task entry sheet is a view of the tasks with information shown in the columns as follows: -

ID:	The Task Identification number.
Information	This shows useful information icons
Task Name:	The Name of the Task.
Duration:	The time the Task will take including the time units.
Start:	This is the current Scheduled Start date for the Task. Not the Planned or Actual Start.
Finish:	The Scheduled Finish date.
Predecessors:	The ID numbers for the preceding Tasks that are linked to this Task.
Resources:	The names of the resources performing or used in the Task.
Add New Column	New to 2010 a quick way to add new columns to your task entry sheet this column will appear on any table that you show

Basic sheet usage

Navigate

Navigating the sheet is much the same as working in a excel spreadsheet enter your information within a cell and use the arrow keys to move left or right.

Select

Select columns or rows by clicking on the column or row label enabling you to format delete or drag to another location.

Enter some information in the following fields to Start building your project.

Important: Do not enter any dates at this time

Task Name:	The Name of the Task.
Duration:	The time the Task will take including the time units.

As the entries are made, the Gantt Chart will automatically be updated to display the tasks. All tasks initially will run from the project start date, this is expected and no problem.

- To Enter Task Descriptions And Durations One Cell At A Time:

i. In the Task Name column, select the first available cell and type the name of the task.
ii. Press Tab
iii. In the Duration column, type the value of the duration. If the duration is anything other than days, type m for minutes, h for hours, or w for weeks.
iv. Press Enter
v. Press Left Arrow to return to the Task Name column and repeat steps 1 through 4 as required.

- To Enter Task Descriptions And Durations By Selecting A Range:

i. Select the first cell (the numbered cell) of the desired range.
ii. Drag the mouse through the range of cells you want to include.
iii. In the first cell, type the desired information.
iv. Press Tab
v. In the Duration column, type the appropriate information.
vi. Repeat steps 4 and 5 as required.

Note: Pressing Shift+Tab moves to the previous cell without deselecting the range. Clicking your mouse inside or outside the range will deselect the range.

The Task Information Form

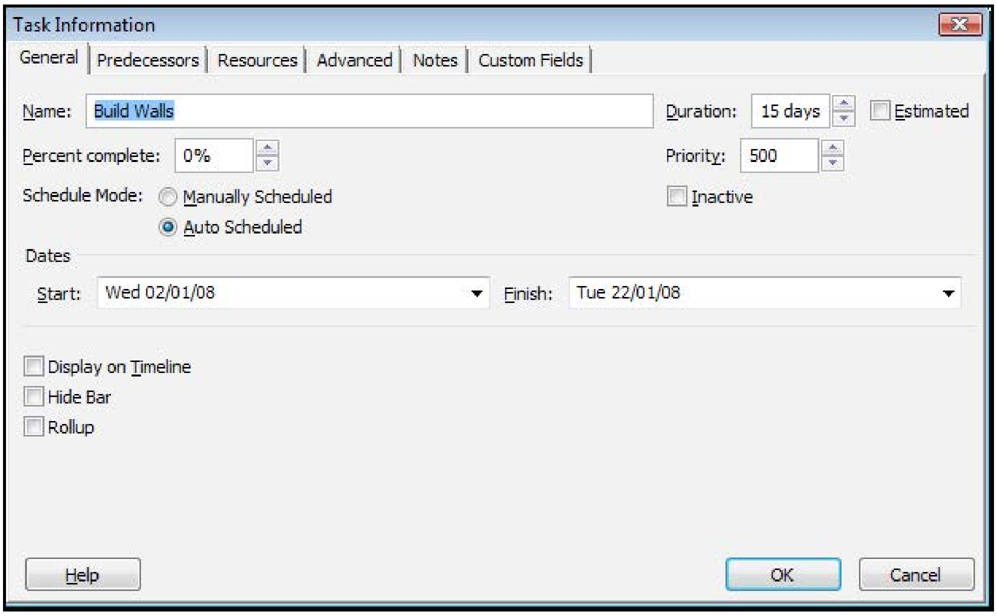


Figure 4-3: The Task Information Form

If using the Task Information Form it will be possible to enter and/or view many other pieces of information that is not normally shown in the task entry table think of the information as hidden columns within the task entry sheet.

➢ To Open The Task Entry Form To View Existing Task

mouse

i. Select a task in the task entry sheet. (click On Row label)
ii. Double click on the desired task to open the task information form for that task.

OR

iii. On the task tab in the properties group select the information button the dialog will open

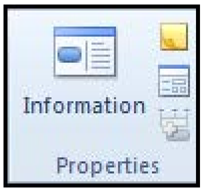


Figure 4-4: Task Information Button

➢ To Create Tasks Using The Task Information Form

mouse

i. Move to an empty row where you wish the task to appear in your task list.
ii. Click on the Information button in the properties section of the task ribbon. The dialog will appear.
iii. Enter the desired information.
iv. Click OK to create the task.

Create New Tasks

Creating new tasks in an existing project means inserting new rows within your project. It is better to enter all tasks you can think of in the most logical order before linking but is not essential it just ensures easier reading of your project.

14		Build Roof	4.94 days	Wed 30/01/08	Wed 06/02/08	13	Chris Chippie(carpen
15		Windows and Doors	6 days	Wed 23/01/08	Wed 30/01/08	13	Chris Chippie(carpen
16		Plaster	4 days	Thu 07/02/08	Tue 12/02/08	20SS+1 day	Builders[200%]
17		Floor Boards	5.06 days	Wed 13/02/08	Tue 19/02/08	16	Chris Chippie(carpen
18		**Install Services**	**15.94 days**	**Wed 23/01/08**	**Tue 12/02/08**		
19		Install Plumbing	9.94 days	Wed 23/01/08	Tue 05/02/08	13	Paul Sink (Plumber),F
20		Electrics	5 days	Wed 06/02/08	Tue 12/02/08	14,15	Eddie Large(Electrici

14		Build Roof	4.94 days	Wed 30/01/08	Wed 06/02/08	13	Chris Chippie(carpen
15		Windows and Doors	6 days	Wed 23/01/08	Wed 30/01/08	13	Chris Chippie(carpen
16		Plaster	4 days	Thu 07/02/08	Tue 12/02/08	21SS+1 day	Builders[200%]
17		<New Task>	1 day?	Wed 13/02/08	Wed 13/02/08	16	
18		Floor Boards	5.06 days	Wed 13/02/08	Wed 20/02/08	17	Chris Chippie(carpen
19		**Install Services**	**15.94 days**	**Wed 23/01/08**	**Tue 12/02/08**		
20		Install Plumbing	9.94 days	Wed 23/01/08	Tue 05/02/08	13	Paul Sink (Plumber),F

Figure 4-5: New Task

➢ To Create A New Task
mouse

i. Select the task Below where you wish your new task to be created for instance if you want a task after Plaster in the above diagram and before floorboards select floorboards. As the task will be pushed down when a new task is created.

ii. Click on the task button in the insert group to create a new task.

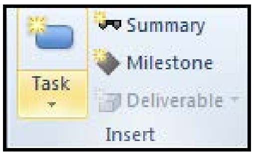


Figure 4-6: New Task Button

iii. Enter the task name to create the Task It is not necessary to complete all the fields at entry time, as more information is added so the system will update the boxes. It is only necessary to enter the data that has been determined in the design stage.

Task Mode

The task mode is a new 2010 feature it allows us to specify whether we want Project to automatically calculate start and end date changes to our tasks as we adjust aspects of the project or whether we Manually schedule our task changes ourselves. From experience although some tasks should have fixed dates (specific meetings and such) many of the tasks should be left to automatic scheduling

	i	Task Mode	Task Name	Duration	Start
1			Create Project	1 day?	Tue 1
2			enter tasks	1 day?	Tue 1
3			enter durations	1 day?	Tue 1
4			Link Tasks		

Figure 4-7: Task Mode

➢ To Define Schedule Type

mouse

i. Entering our tasks a new column should appear before the task name with a pushpin and a question mark called Task Mode.
ii. All tasks are created undefined at first and may not appear in the Gantt chart
iii. Click in the cell in the task mode column for a created task a drop down arrow will appear
iv. From the drop down options select manually scheduled or auto scheduled.
v. The task has been set and should now appear on the Gantt chart. It can be changed at any time by changing the option.

In the following picture task 1 and 2 are auto scheduled and task 3 and 4 are manually scheduled notice hw they appear in the task mode column and on the Gantt Chart.

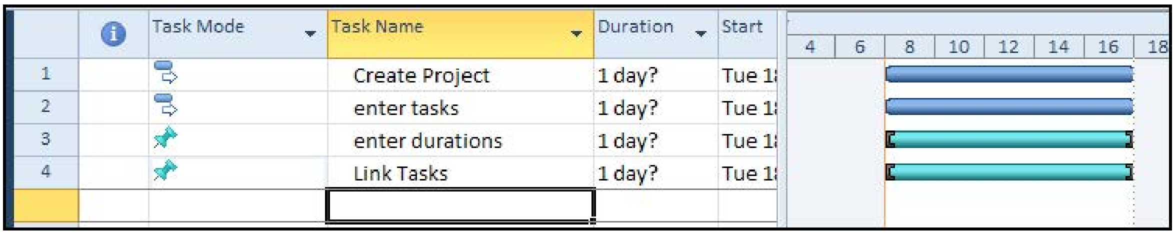


Figure 4-8: Defined Task Mode Examples

Or

Instead of using the task mode column you may use the ribbon

mouse

i. Select a task
ii. on the task ribbon in the tasks group choose a button to manually schedule or automatically schedule your task.

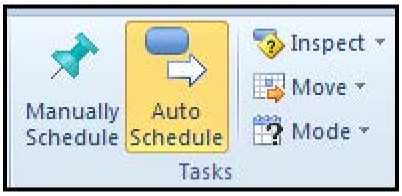


Figure 4-9: Schedule Buttons

Other Methods Of Adding Tasks

As a general rule Tasks can be added in any view where the tasks are displayed. The most obvious methods in addition to using the normal Task Entry view are as follows: -

In The Gantt Chart Or The Task Sheet

An additional task can be added at the end of the list using the Insert, New Task command.

Where additional information is required to be entered then this can be done by using the Task Information form which is opened by simply double-clicking a task in the task list.

Using The Task Information Form

It is possible to enter additional tasks using this form but it does not have all the possible entry points. The details of this form are included in the description of the Task Entry View above.

Using The Network Diagram Chart

Additional tasks can be placed within the chart by drawing a box and then entering the information within the fields. The relationship can be also be entered graphically by pointing to the Predecessor and dragging a line to the Successor.

Where a relationship needs to be removed, a double click on it will display a box which has a delete button in it.

Further time will be spent on this view later.

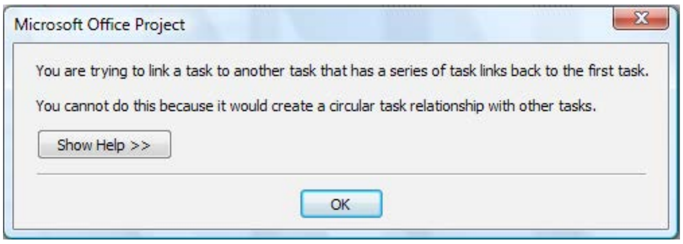


Figure 4-10: Link Task Warning

- Note: When you try to make a link that is not logical or possible, Project will warn you about this (see illustration below).

Setting Durations

If you are using Project 2010 and entering a manually scheduled task, you can enter a valid duration value, such as 1d or 2w, or you can enter text such as TBD or unknown. A manually scheduled task is considered a placeholder task until two of the three scheduling factors—start date, finish date, and duration—contain valid schedule information.

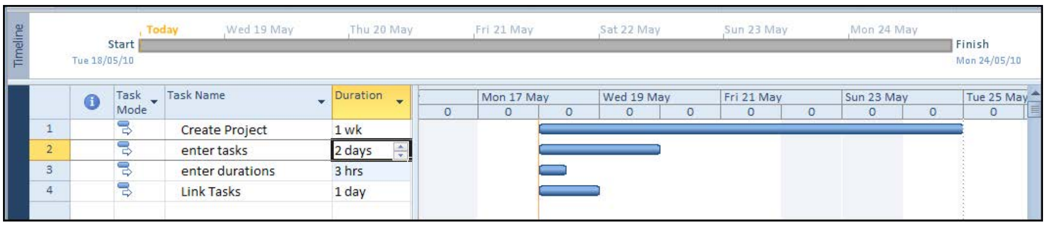


Figure 4-11: Enter Durations

As you enter durations bars will appear on your Gantt chart showing the duration in a graphical format.

- manually scheduled task: This type of task can be placed anywhere in the schedule without Project rescheduling it; it does not move as related information about the task changes.

➢ To Enter Durations

keyboard

i. Navigate to the duration column
ii. Enter a value and the suffix hrs, wks, d, mths, mins to define the duration type.
iii. The task duration will be reflected in the Gantt Chart. Zoom in or out to better see the durations in relationship to one another.

Milestones

A Milestone reference point marking a major event in a project and used to monitor the project's progress. Any task with zero duration is automatically displayed as a milestone; you can also mark any other task of any duration as a milestone.

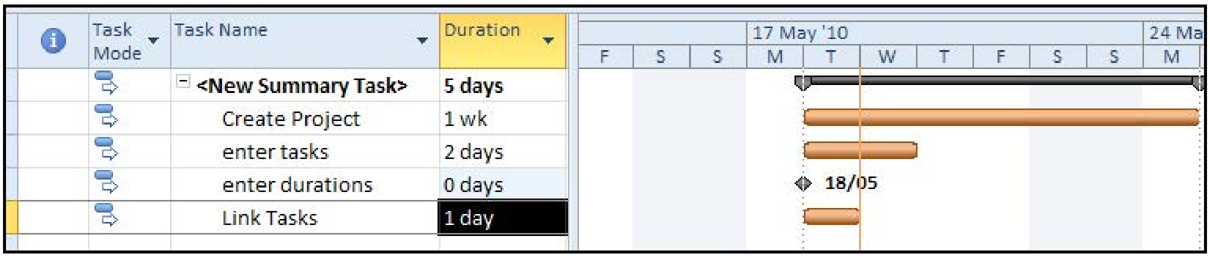


Figure 4-12: A Milestone

➢ To Create A Milestone

mouse

i. Enter a task name for an important marking point in your project (such as signing a contract, Handover of keys etc)
ii. If a task has a duration of zero, it is identified as a milestone so enter the duration as zero. This will be reflected in the Gantt chart

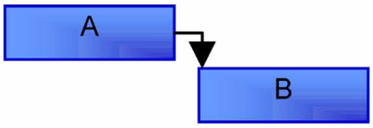
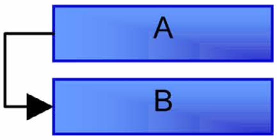
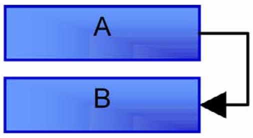
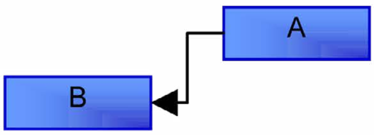
or

i. Select the task,
ii. Open the Task Information dialog
iii. Click the Advanced tab, and then select the Mark task as milestone check box.
iv. If you don't want the task to appear as a milestone, even if its duration is zero, clear the Mark task as milestone check box.

- Milestones can, and should be linked as any other task a milestone is an important point that would stop the whole project if it could not happen so they are key tasks for the project and always critical.

Linking tasks

In order that the system is able to display the overall time aspects of the project, each Task must be defined in terms of the Tasks on which it is dependent and in turn those Tasks that are dependent on it. It is also possible to define in what way these dependencies exist.

Link type	Example	Description
Finish-to-start (FS)		The dependent task (B) cannot begin until the task that it depends (A) on is complete. For example, if you have two tasks, "Dig foundation" and "Pour concrete," the "Pour concrete" task cannot begin until the "Dig foundation" task is complete.
Start-to-start (SS)		The dependent task (B) cannot begin until the task that it depends (A) on begins. The dependent task can begin anytime after the task that it depends on begins. The SS link type does not require that both tasks begin simultaneously. For example, if you have two tasks, "Pour concrete" and "Level concrete," the "Level concrete" task cannot begin until the "Pour concrete" task begins.
Finish-to-finish (FF)		The dependent task (B) cannot be completed until the task that it depends on (A) is completed. The dependent task can be completed anytime after the task that it depends on is completed. The FF link type does not require that both tasks be completed simultaneously. For example, if you have two tasks, "Add wiring" and "Inspect electrical," the "Inspect electrical" task cannot be completed until the "Add wiring" task is completed.
Start-to-finish (SF)		The dependent task (B) cannot be completed until the task that it depends on (A) begins. The dependent task can be completed anytime after the task that it depends on begins. The SF link type does not require that the dependent task be completed concurrent with the beginning of the task on which it depends. For example, the roof trusses for your construction project are built offsite. Two of the tasks in your project are "Truss delivery" and "Assemble roof." The "Assemble roof" task cannot be completed until the "Truss delivery" task begins.

Methods Of Linking

There are two main methods for Linking tasks, using the buttons on the task ribbon and using the predecessors column on the task entry sheet. We will look at both.

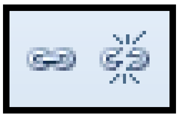


Figure 4-13: Link And Break Link Buttons

- To Link Using Ribbon

mouse

i. Select two or more tasks as described earlier
ii. Click on the link button in the schedule section of the task ribbon.
iii. The tasks will become linked as described in the previous table using the default finish to start link This can be edited as you will see in later sections.
iv. The tasks should appear on the Gantt chart linked

➢ To Link Using Predecessors

keyboard

i. Navigate to the predecessors column for a successor task
ii. Enter the task number of the preceding task

- Enter fs, ss, ff sf following the task number as necessary because by default all tasks will have a fs type link (even though the FS does not show in the predecessors column.)

iii. If the task you are on depends on more than one task completing enter the task numbers separated by a comma
iv. The tasks should appear on the Gantt chart linked

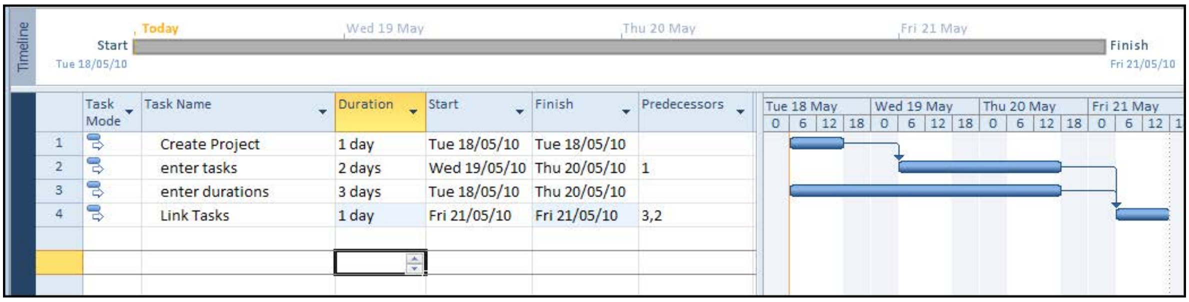


Figure 4-14: Linking Using Predecessors

➢ To Break Links

mouse & Keyboard

i. Select the task you wish to break the link for and click the break link button in the schedule group of the task ribbon (figure 4-9)

or

i. Delete the predecessors from the predecessors column
ii. The links will be broken

Defining the summary tasks

Microsoft Project provides the ability to structure the tasks by setting different levels of tasks and grouping tasks under a summary task. This can be useful where the project has a considerable number of tasks; management can be made easier by only viewing and reporting on the summary tasks.

	Indent the selection to the next lower level (Demote)
	Outdent the selection to the next higher level (Promote)

Create Summary Tasks

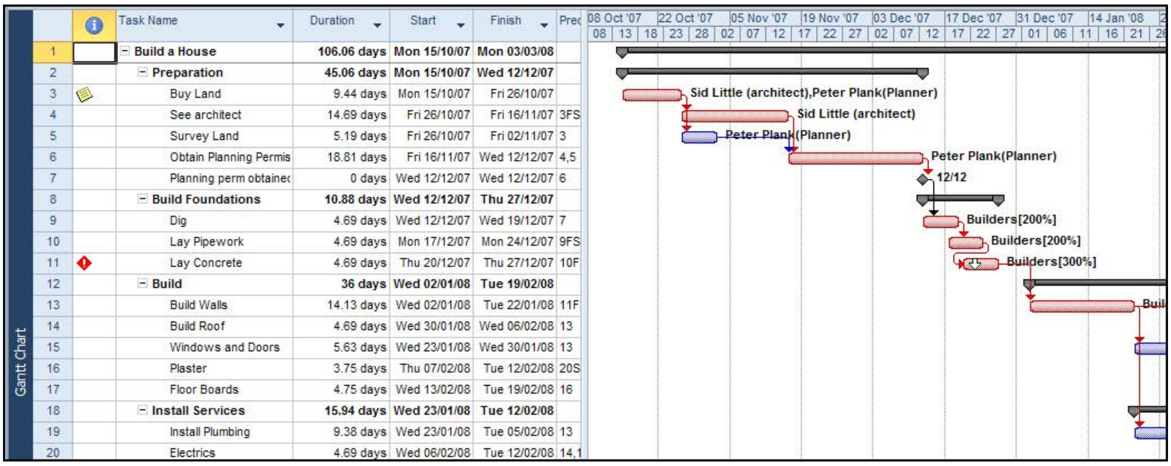


Figure 4-15: Project With Summary Tasks

➢ To Create Summary Tasks

mouse

i. Select all Subtasks below the build house task and indent them using the indent button in the schedule group
ii. They all become subtasks of build house.
iii. Select all tasks between preparation and build foundations (not including)and using the indent button indent them further. Preparation and build foundations become summary tasks as well
iv. Create further summary tasks as in the diagram.
v. This is a good manner in which to lay out your project using the + and – buttons next to a summary task you may collapse or expand that group of tasks see picture below.

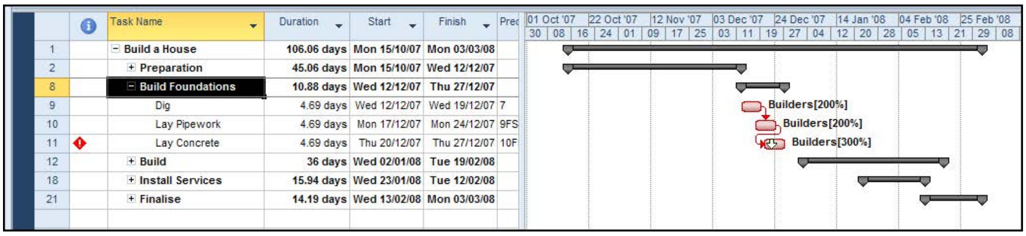


Figure 4-16: Collapsing Summary Tasks

The Planning Wizard

As a help tool the planning wizard will appear as needed to prompt you with things that may help you with your project it may be problems with links, removing or adding tasks, changing durations. The dialog below is here as an help information tool letting you know that there are easier ways to enter the same information for several tasks.

Figure 4-17: The Planning Wizard Dialog

➢ To Use The Wizard

mouse

i. When the Wizard appears READ THE INFORMATION then decide whether you wish to continue receiving this message in the future by ticking the box(or not) click on the OK button.
ii. Select all the tasks you wish to enter the same information for.
iii. Open the Task information box from the properties group
iv. Set the values that you wish to apply to the selected tasks and click Ok

2010 Method For Summary Task Entry

In 2010 a new tool has been added to enable the creation of summary tasks to be easier this creates a summary task wherever you wish it to appear.

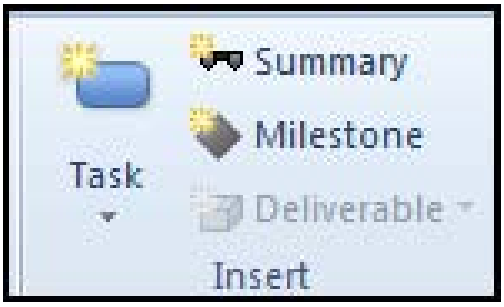


Figure 4-18: Summary Button On Task Ribbon

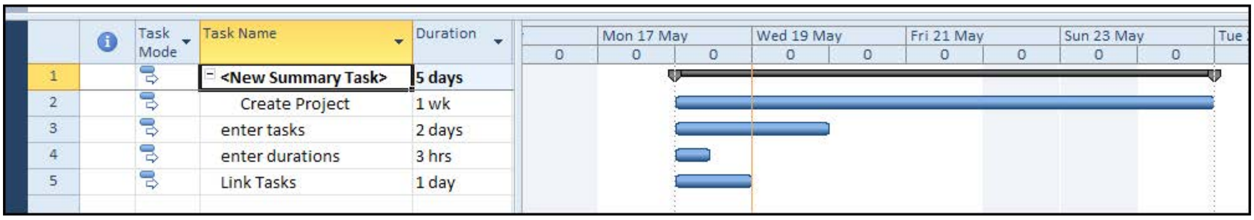


Figure 4-19: Summary Task Creation (One Subtask)

➢ To Create A Summary Task 2010 Style

mouse

i. Place your mouse cursor in the task sheet above where you wish the summary task to appear.
ii. On the task ribbon in the insert group click the summary button a summary task will appear the next task down will be indented all other tasks will remain at the same level.
iii. Enter the summary task name
iv. Indent any other tasks necessary below the new summary task.

or

i. Before clicking the summary button select all tasks you wish to be subtasks of the new summary task.
ii. When the summary button is clicked all selected tasks are now indented and have become subtasks of the new summary task.

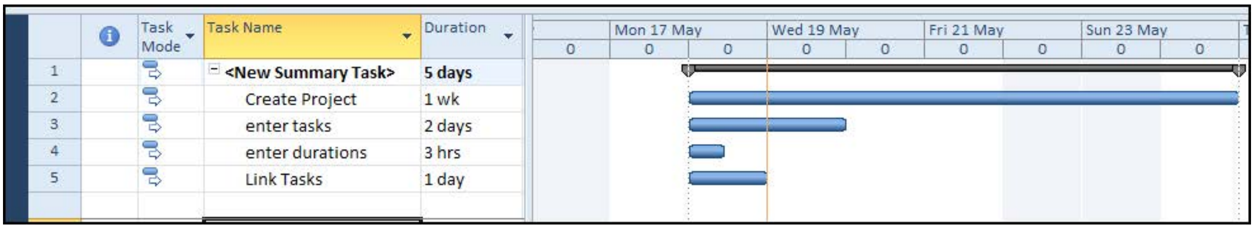


Figure 4-20: Multiple Subtasks At One Click

5 Resource management

At the end of this section you will have:

- An understanding of the various elements of entering and managing resources.
- Entered resources.
- Assigned resources to the tasks.
- Completed the end of the design and planning stage.
- Used the Outlining view

Resources

The management of resources is a major feature of Microsoft Project. It is possible to see how each one is being used and determine the times when they are under or over utilised. The system can adjust the project to eliminate over allocation of a resource. We can think of resource data being stored in a Project file, which is the partner to the task Project file. The Microsoft Project system merges the data in the two Project files to provide the facilities that are available.

There are a number of ways we can view the resources, as the following topics will show.

Define The Resources

When you build a large pool of resources—for example, 200 employees—the best place to enter this information is in the Resource Sheet. If there are only a few resources working on the project, however, you might enter them "on the fly" using the Resource Assignment dialog box.

Resource types

There are only 2 types of resources -material- and –work-.

Material

These are physical resources that you need to complete your project such as tables chairs, bricks and Mortar once they are bought they are used in the project there is no further cost accruing to them (unless they need maintenance which would be a separate resource)

Work

However, if the tables and chairs are rented they may become a work resource because they need regular payments on a hourly, daily, weekly basis as you pay for staff. All items or people you pay for on a regular basis would really be entered as wor to enable the proper costing's to be carried out

Reviewing And Navigating The Resource Sheet

The Resource Sheet contains an array of required fields for entering resources. A Resource Sheet is illustrated below:

		Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/Use	Accrue	Base
1		Sid Little (architect)	Work		SL	Professiona	100%	£50.00/hr	£75.00/hr	£0.00	Prorated	Standard
2		Peter Plank(Planner)	Work		PP	Professiona	100%	£28.00/hr	£40.00/hr	£0.00	Prorated	Standard
3		Eddie Large(Electrician)	Work		EL	Trade	100%	£45.00/hr	£60.00/hr	£0.00	Prorated	Standard
4		Paul Sink (Plumber)	Work		PS	Trade	100%	£50.00/hr	£90.00/hr	£70.00	Prorated	Standard
5		Builders	Work		B	Trade	600%	£25.00/hr	£35.00/hr	£0.00	Prorated	Standard
6		Paula Painter(Decorator)	Work		PP	Trade	100%	£30.00/hr	£45.00/hr	£0.00	Prorated	Standard
7		Chris Chippie(carpenter)	Work		cc	trade	100%	£40.00/hr	£60.00/hr	£0.00	Prorated	Standard
8		Bricks	Material	Pallet (S)	B			£80.00		£0.00	Prorated	
9		Timber	Material	3m length (S)	T			£5.00		£0.00	Prorated	
10		Pipes	Material	3m length (S)	P			£6.00		£0.00	Prorated	
11		Paint	Material	5 lt tin (S)	P			£10.00		£0.00	Prorated	

Figure 5-1:The Resource Sheet

There are two separate stages in adding Resources to be managed by the system. They first must be entered in the Resource Sheet to identify them as being available. Secondly the available resources are associated with the respective tasks.

Adding Resources To The Resource Sheet

You add resources to the Resource Sheet in rows. The columns identify the fields. The table below summarizes the information that you can store in the Resource Sheet.

Field	Description
Resource Name	The name given to a resource. It can be the name of an individual or a type of group.
Type	Whether material or work as previously described.
Material	If defined as a material enter a label here to describe the quantity type purchased E.G. whith brics you may buy them by the pallet not singly.
Initials	The abbreviated name for the resource if a work resource
Group	A resource can be placed in a group, which can be used by a filter to show only group members, it is also possible to use the group name to view all members of the group together.
Max. Units	The percentage (number) of resource units available. This is applicable only if using a type of resource. For example, you might have three technicians (300%), but you can have only one Emma Cheesman (100%)and if Emma is only able to devote half her work week to the project then she would become 50%
Std. Rate	The standard cost of the resource per hour, week, or month.
Ovt. Cost	The overtime cost of the resource per hour, week, or month.
Cost/Use	A special cost of the resource every time it is used like a call out charge.
Accrue At	This field identifies when the cost of the resource is added to the running total of the project. The options are at the "Start", at the "End" or "Prorated" which means updated at the end of each time unit as the resource is used.
Base Calendar	The base calendar to which you assign the resource.
Code	You can assign an alphanumeric code to each resource. The Code field can be used to associate an accounting code for use of the resource. This is an additional method of allocating the costs of the project as required. and use it for sorting, filtering, and reporting.

➢ To Add Resources To The Resource Sheet:

mouse

i. From the View button on the task ribbon, choose Resource Sheet.
ii. In the Resource Name cell, type the Resource Name.
iii. Press Tab
iv. Enter the type and Press Tab
v. Enter the label in the material column if it is a material resource and continue across the row until you have entered all the information needed for the resource as described previously.
vi. Press Enter this brings you to a new row
vii. Press Home this brings you to the beginning of that row to start again for a new resource.
viii. Repeat steps 2 through 7 for each resource.

The Resource Information Dialog

Just like a task there are many fields hidden on the resource sheet and the opportunity for adding much more information for a resource using the resource information dialog.

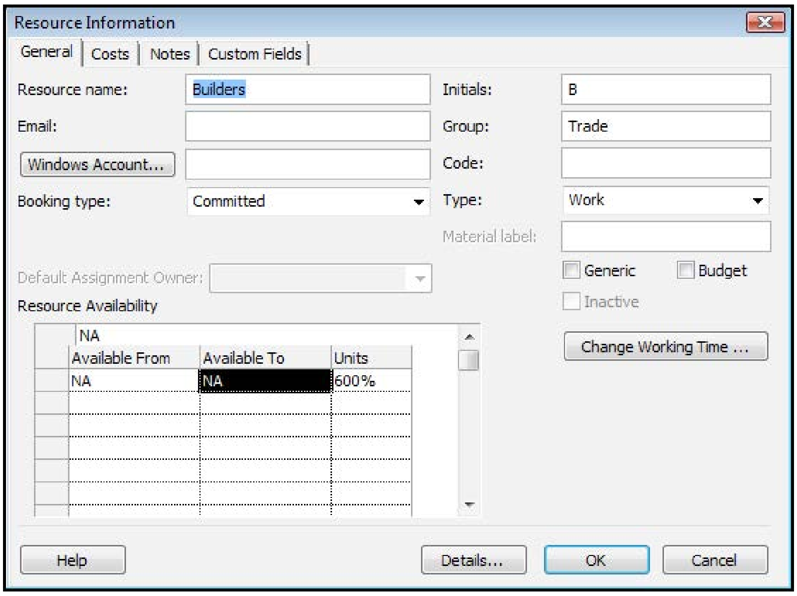


Figure 5-2:The Resource Information Dialog

➢ To Access The Resource Information Dialog

mouse

i. Double click on a desired resource the dialog will open for that resource.

or

i. Select the resource you wish to open the dialog for
ii. Click on the information button in the properties group on the resource tab the dialog will open.

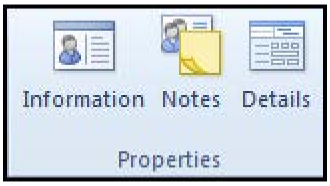


Figure 5-3: The Properties Group For Resources

There are four tabs in the resource information dialog the notes button in the properties group will open the same dialog but at the tab for notes the details button we will loo at in a later section.

A resource is defined under the following headings:-

- ID:
- Name:
- Initials:
- Group:
- Max Units:

The next items relate to calculating the cost of the resource. They can be defined by setting a cost level for a specific period or a cost for each time the resource is used.

- Std. Rate:
- Ovt. Rate:
- Cost/Use:
- Accrue At:
- Code:

Practice Adding Resources

Resource Name	Type	Material Label	Initials	Group	Max. Units	Std. Rate	Ovt. Rate	Cost /Use
Sid Little (architect)	Work		SL	Professional	100%	£50.00/hr	£75.00/hr	£0.00
Peter Plank (Planner)	Work		PP	Professional	100%	£28.00/hr	£40.00/hr	£0.00
Eddie Large (Electrician)	Work		EL	Trade	100%	£45.00/hr	£60.00/hr	£0.00
Paul Sink (Plumber)	Work		PS	Trade	100%	£50.00/hr	£90.00/hr	£70.00
Builders	Work		B	Trade	600%	£25.00/hr	£35.00/hr	£0.00

Paula Painter (Decorator)	Work		PP	Trade	100%	£30.00/hr	£45.00/hr	£0.00
Chris Chippie (carpenter)	Work		cc	Trade	100%	£40.00/hr	£60.00/hr	£0.00
Bricks	Material	Pallet(S)	B			£80.00		£0.00
Timber	Material	3m length(S)	T			£5.00		£0.00
Pipes	Material	3m length(S)	P			£6.00		£0.00
Paint	Material	5 lt tin(S)	P			£10.00		£0.00

i. Select the Resource Sheet from the View button and Enter the resources from the above table. All work resources are pro-rated and use the standard base calendar

- The Max units default value of 100% is very important equate this as if they have a 40 hr work week for example then they are devoting 100% of that time to this project.

- Entering the group of builders as 600% means that you have the availability of 6 builders use multiples of 100% to specify how many individuals you have it will help with costing and allocations.
- If someone can only apply half their time to the project then enter them at only 50% (meaning 20hrs) enter the percentage dependent on the amount of time they can devote to the project.

View resources

As with Tasks there are a number of ways that the Resources can be seen in addition to viewing the Resource Sheet.

The Resource Sheet

Where it is necessary to view all the resources, this is best done in the top part of the screen or a single pane view. Selecting Resource Sheet from the View pull down menu will show a complete list of the resources required by the tasks.

A valuable feature in this view is that those resources that have been over allocated will be shown in a different colour so attention is drawn to the areas that need to be changed. (Figure 5-2)

One great value of this view is that it shows you when a resource is over-allocated. See below, where Chris is over-resourced.

		Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/Use	Accrue	Base
1		Sid Little (architect)	Work		SL	Professiona	100%	£50.00/hr	£75.00/hr	£0.00	Prorated	Standard
2		Peter Plank(Planner)	Work		PP	Professiona	100%	£28.00/hr	£40.00/hr	£0.00	Prorated	Standard
3		Eddie Large(Electrician)	Work		EL	Trade	100%	£45.00/hr	£60.00/hr	£0.00	Prorated	Standard
4		Paul Sink (Plumber)	Work		PS	Trade	100%	£50.00/hr	£90.00/hr	£70.00	Prorated	Standard
5		Builders	Work		B	Trade	600%	£25.00/hr	£35.00/hr	£0.00	Prorated	Standard
6		Paula Painter(Decorator)	Work		PP	Trade	100%	£30.00/hr	£45.00/hr	£0.00	Prorated	Standard
7	◆	Chris Chippie(carpenter)	Work		cc	trade	100%	£40.00/hr	£60.00/hr	£0.00	Prorated	Standard
8		Bricks	Material	Pallet (S)	B			£80.00		£0.00	Prorated	
9		Timber	Material	3m length (S)	T			£5.00		£0.00	Prorated	
10		Pipes	Material	3m length (S)	P			£6.00		£0.00	Prorated	
11		Paint	Material	5 lt tin (S)	P			£10.00		£0.00	Prorated	

Figure 5-4: Overallocation On Resource Sheet

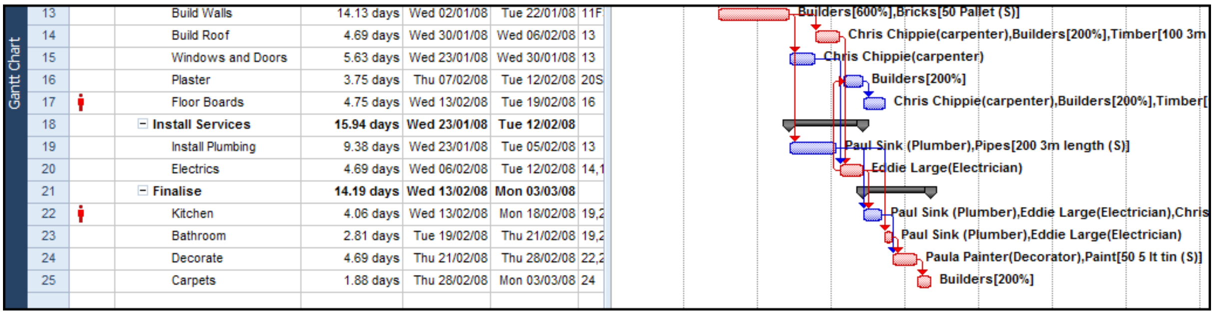


Figure 5-5: Overallocation On Task Sheet

Viewing Overallocations

If a work resource has a 8 hour work day and you assign them 2 different tasks on the same day each 8 hours long then it is obvious this person has twice the work than they can handle. It is not so obvious if they have several tasks each adding up to more than 8 hours but in both cases they are overallocated and those overallocations need to be addressed in both pictures above we can see how overallocations are indicated

In 5-2 we see that Chris is overallocated and in 5-3 we see the tasks that he is overallocated for this is ok for a single resource but if there were several resources then we would not know who was overallocated to what

The Resource Graph

The best use of this view is in the lower pane with the resource sheet or the Gantt chart at the top although it can be seen separately.

If the resource sheet is at the top then it will show only the resource selected. if the Gantt is at the top then it will relate to whatever single resource was selected in the resource sheet but as you click on the tasks he is assigned to it will move to the selected task showing the time allocations. If shown alone then it will show for the last selected resource.

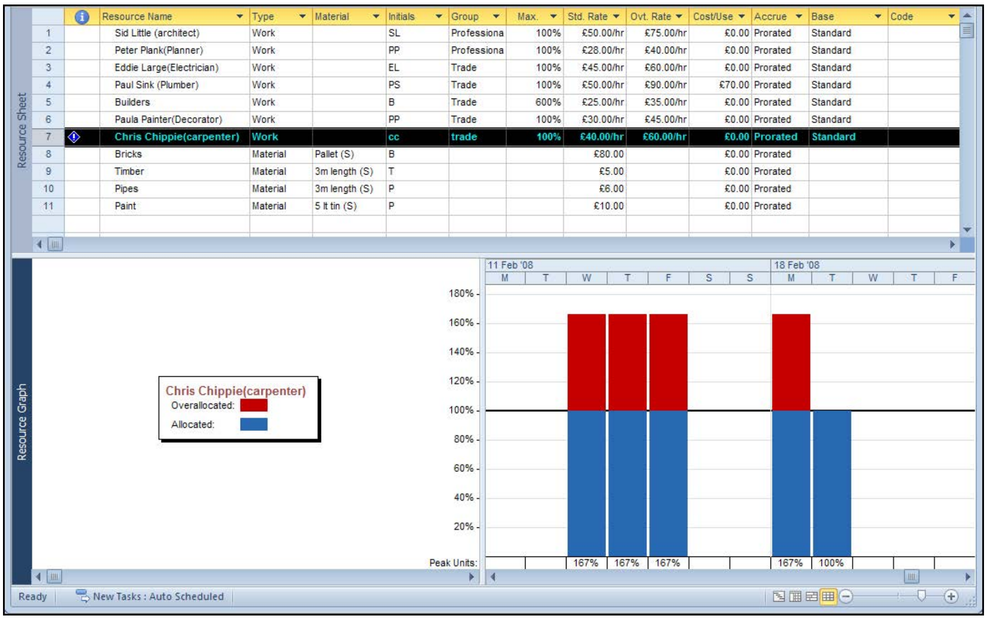


Figure 5-6: Overallocations In Resource Graph/Resource Sheet

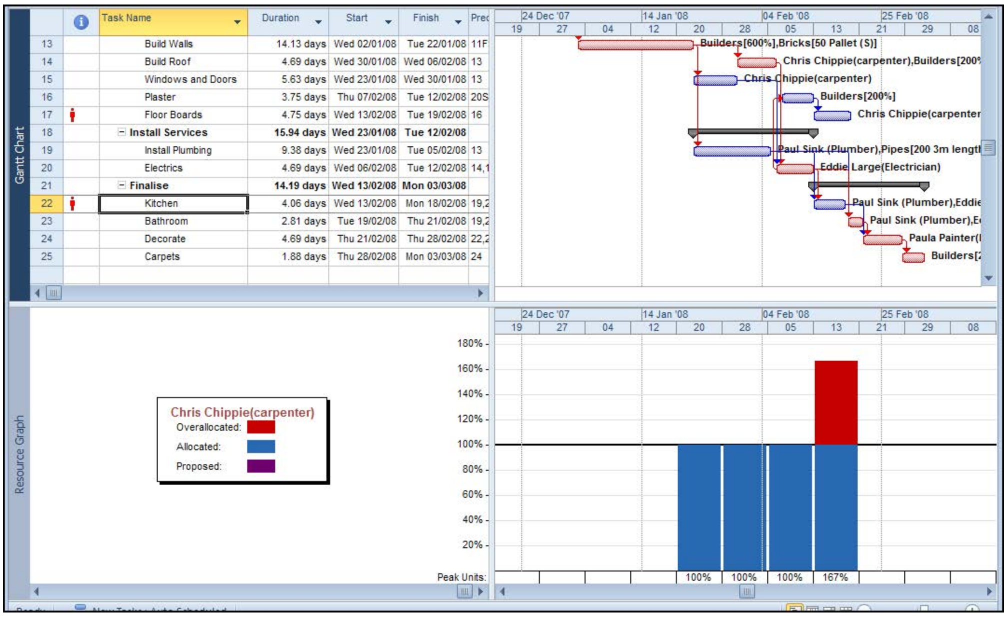


Figure 5-7: Overallocations In Resource Graph/Task Sheet

Allocate/Assign Resources

There are a number of methods of allocating a resource to a task. The most direct method is to select a view in which a task can be selected and then call up the Assign Resources box using the Assign Resources button in the assignments group on the Resource tab.

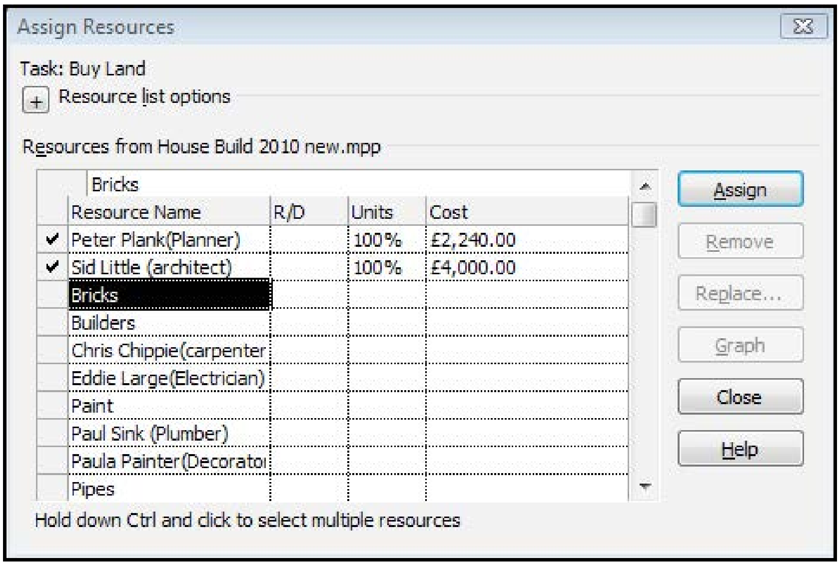


Figure 5-8: Assign Resources Dialog

In the Assign Resources box a list of the resources can be viewed and the required selection made. There are other views in which a resource can be allocated to a task and it does not matter which is used, the preference is up to of the user.

- To Assign Resources

mouse

i. Select the Gantt Chart view from the View button.
ii. Select the first task.
iii. Call up the Assign Resources box using the Assign Resources button in the assignments group on the Resource tab
iv. Select a resource you wish to assign and click the assign button.
v. The resource is assigned
vi. Select another task and repeat to assign resources to different tasks
vii. For each task that needs resources allocated place the pointer on the task scroll down the list of resources and select as appropriate.
viii. If you wish to assign multiple resources to a task select them in the dialog using the ctrl key before clicking the assign button.

- By default a resource is assigned at 100% which means that he will use all his available time on this task. If he has say two tasks running concurrently you may wish to assign him at 50% for each task.
- If you have a group of people say builders then you may want to use more than one of them on a job if they have been entered in the resource sheet at say 600% (meaning 6 builders) assign as many as you wish as multiples of 100%

- To Assign By Percentage

mouse

i. Select the Gantt Chart view from the View button.
ii. Call up the Assign Resources box using the Assign Resources button in the assignments group on the Resource tab
iii. Select a task in your project that needs say two or more builders for example.
iv. Select the builders resource in the assign resources box.
v. In the units box for that resource enter the number of individuals as multiples of 100% (6 builders = 600%)

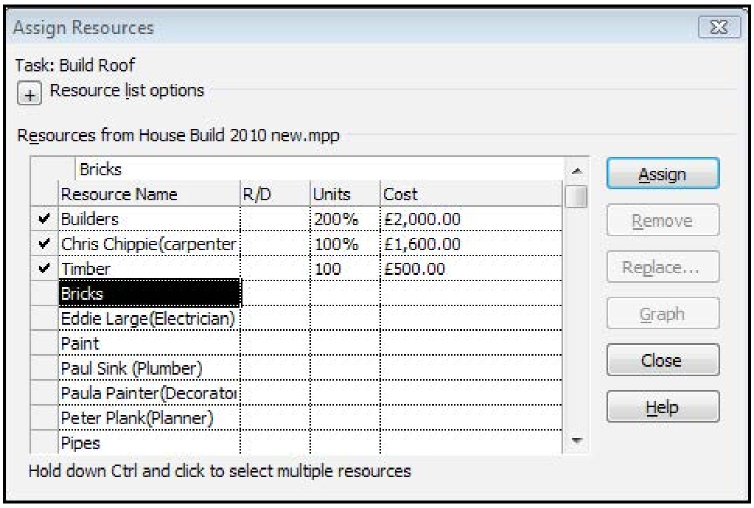


Figure 5-9: Assigning Multiple Individuals And Materials

If you assign an individual to a task and then assign another individual to the same task the second operation seems like an edition to the project, and assigning another individual to the same task can cause the calculation machine in Project to do some strange things.

Think of the old adage about: "if it takes 1 man 2 days to dig a hole how many days would it take two men." Project calculates in this manner. So assigning a second individual two a task can cause one of two things to happen.

- The task could halve in duration
- The individuals could have their units set to 50%

So the best thing to do to avoid this problem is to assign these indivduals at the same time.

➢ To Assign Multiple Resources At The Same Time

mouse

i. Call up the Assign Resources box using the Assign Resources button in the assignments group on the Resource tab
ii. Select a task in your project that needs say two or more individual resources.
iii. Select the first resource in the assign resources box use the ctrl key then select all the resources necessary while you hold the key down.
iv. cxxiii. Click the assign button to assign them en masse.

Editing resource information

Once you enter resource information, you may need to modify it. In the real world, employees come and go, and as a result, project managers need to add and delete resources.

Editing Data Entered By The User

You edit resources in the entry box just as you edit fields in the Gantt Chart and the Network Diagram Chart. After you make your changes, click the Enter button to accept changes, or click the Cancel button to retain the original entry.

- To Edit Data Entered By The User:

i. On the Resource Sheet, select the cell to edit.
ii. Press F2 to activate the cell.
iii. Edit the information in the cell and press return to enter it.

OR

i. Double click the resource to open the resource information dialog
ii. In the dialog edit what information Is necessary.
iii. Click ok to enter the information and close the dialog

Inserting And Deleting Resources

You can add resources either at the end of the Resource Sheet or between existing resources. You can also delete unwanted resources from the Resource Sheet.

- To Insert A Resource

i. Switch to the Resource Sheet.
ii. Select a cell in the row above the one where you want to add a resource.
iii. Press the [Insert] key on your keyboard.
iv. The resource will appear in your list enter the relevant information.

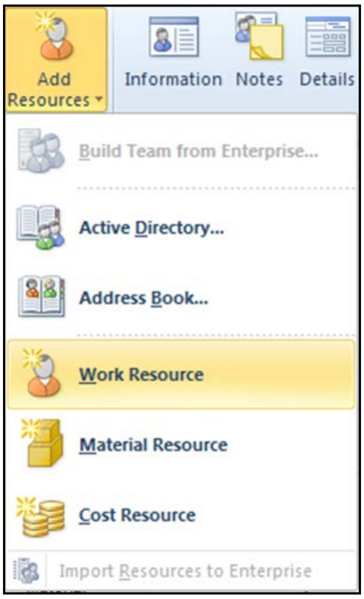


Figure 5-10: Add Resource Menu

OR

i. From the Insert group, on the resource tab click add Resources a menu will appear.(figure 5-8)
ii. From the choices make a selection of either work, material or cost resource.
iii. The resource will appear in your list enter the relevant information.

- To Delete Resources

i. Select a cell in the row of each resource you want to delete.
ii. Press [Delete]

Working With Resources On The Fly

If the resource you want to add is not part of the resource pool, you can add that resource in the Resource Assignment dialog box. At the same time, you can assign the resource to tasks. You can add information about the resource later by using the Resource Sheet or the Resource Information dialog box.

You can easily add resources while you are in the middle of assigning resources by using the Resource Assignment dialog box, and then continue to assign resources. If you realize that a resource is missing, you can simply add it at any time.

➢ To Add Resources On The Fly:

mouse

i. Call up the Assign Resources box using the Assign Resources button in the assignments group on the Resource tab
ii. In the Assign Resources dialog box, select a blank Name cell at the end of the resource list.
iii. Type the name of the resource.
iv. Press Enter

Updating Resource Information On The Fly

Adding resources on the fly does not automatically allow you to update information about the resource. You either have to switch to the Resource Sheet to add or update information, or you have to open the Resource Information dialog box, as illustrated below. All the fields that are available on the Resource Sheet are also available in the Resource Information dialog box.

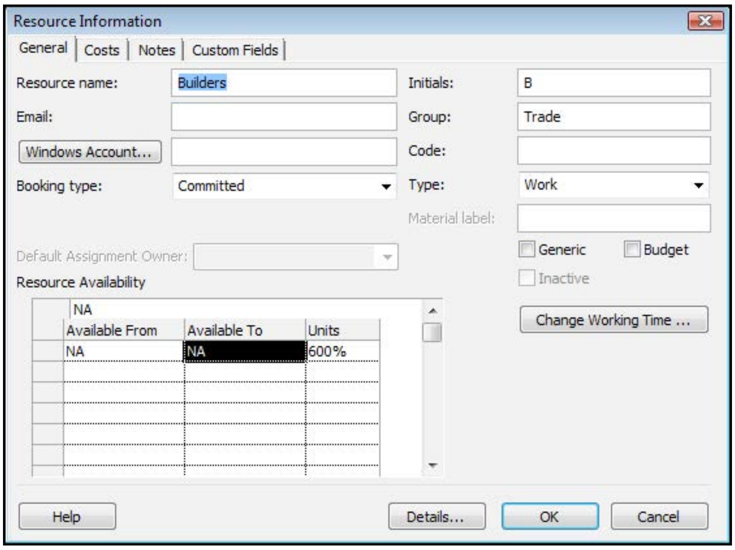


Figure 5-11: Update Resource Info

➢ To Update Resource Information On The Fly

v. Call up the Assign Resources box using the Assign Resources button in the assignments group on the Resource tab
vi. In the Assign Resources dialog box, double-click the resource for which you want to add or update information the resource Information Dialog will open
vii. In the Resource Information dialog box, make the necessary changes and click OK to save the changes.

Overallocations

As mentioned before resources that are have been assigned to many tasks to complete within their work week are classed as overallocated. And these overallocations have to be dealt with we will look at a couple of simple methods of dealing with overallocations at a later stage in the advanced manual we will look at more precise ways of dealing with them and assigning overtime.

View the Resource Graph and where there is an over allocation, consider these methods of correcting them.

Resource Levelling

Levelling is the process of moving tasks in the time scale to redistribute the use of resources where they are over allocated.

- This may rearrange your tasks and lengthen the duration of your project.
- This process can be set to automatic whenever there is a resource over allocation or manually levelling options button in the level group on the resource tab.

➢ To Level One Resource Overallocated
mouse

i. Go to the resource sheet to display your overallocations
ii. Click the level resource button in the level group on the resource tab.

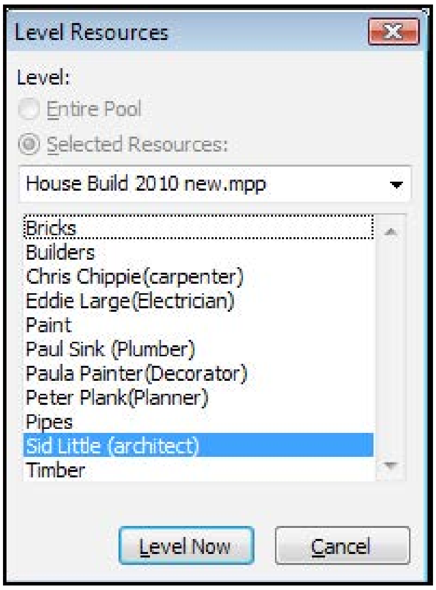


Figure 5-12: Level Resource Dialog (Single Resource)

iii. The level resource dialog box will open
iv. Select a resource that is overallocated.
v. Click the level now button the dialog will close and the resource will be levelled.
vi. Tasks will have rearranged so the resource is no longer overallocated.

➢ To Level All Overallocated Resources

mouse

i. Go to the resource sheet to display your overallocations
ii. Click the level resource button in the level group on the resource tab.

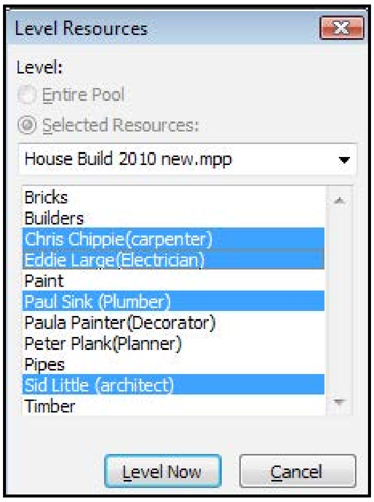


Figure 5-13: Level Resource Dialog(Multiple Resources)

iii. The level resource dialog box will open
iv. Select all resources that are overallocated use your ctrl key to select other resources.
v. Click the level now button the dialog will close and all the resources will be levelled.
vi. Tasks will have rearranged so the resources are no longer overallocated.

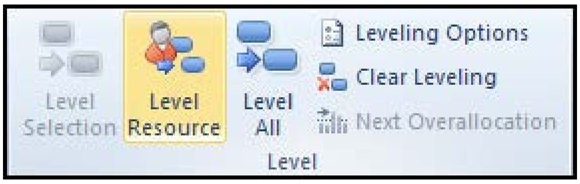


Figure 5-14: Level Group On Resource Tab

or

vii. Simply click on the level all button from the level group and all resources will be levelled.

- When a project involves levelling after a while certain things may change staff coming and going new resources assigned etc you may even have decided to use other methods to deal with your overallocations so uou may need to clear your levelling and deal with the overallocations differently some may even no longer apply.

➢ To Clear Levelling

Mouse

i. Simply click on the Clear levelling button from the level group and all levelled tasks will returned to their former state if resource changes have taken place some resources may no longer be overallocated those that are you may deal with.

- All conflicts must be cleared before moving to the next step

Planned time scale (baselines)

When all the tasks and resources have been added and any resource problems cleared and provided the scheduled dates are acceptable, this marks the completion of the design and planning stage.

- All of the data entered into the project at this time can be considered as the base line for the project to be managed from and measured to. Microsoft Project will hold this data by using the Tracking, Save Baseline command from the Tools menu.

From this point, as the tasks are completed and the data updated it will be possible to make comparisons with the plan and determine how late (or early!!!) the completion date will be and where the problems are occurring.

- This can be seen using the View, More views, Tracking Gantt. The Plan appears as grey bars under the Gantt bars.

Baseline

A baseline is a very useful tool when working with your Project it uses hidden columns to store information about the costs, and dates as your project stands at the moment for example you have a start date and end date as soon as the baseline is saved you will find that you will have a baseline start date and a baseline end date as well. The information is transposed from the original columns to the baseline columns as you save the baseline.

As your project is implemented and inevitable changes and refinements take place you may use the tracking Gantt to compare the current state of play against the baseline (original values) this will show you which tasks are ahead of schedule and those that are behind schedule (slipping tasks) this enables you the opportunity to act on those tasks that may delay your project or/and raise costs.

Set And Clear A Baseline

You may save multiple baselines dependent on the length of your project a short project hardly needs more than one whereas a project spanning years may need reassessing every six months to a year. Some projects are unending and a regular baseline may need to be taken.

- To Save A Baseline

mouse

i. Open your project
ii. Ensure all tasks have been entered, all durations and links set.

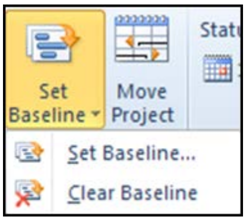


Figure 5-15: Set Baseline Command

i. Select the set baseline button from the schedule group on the project ribbon
ii. Choose set Baseline from the options given a dialog will open.

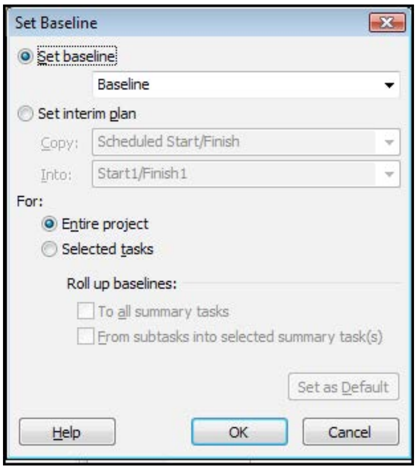


Figure 5-16: Set Baseline Dialog

iii. Click on the set baseline radio button.
iv. Ensure the entire project radio button is selected.
v. Click on the OK button The baseline is now set and as changes are made you will be able to monitor them using the tracking Gantt.

➢ To Clear A Baseline
mouse

i. Open your project
ii. Ensure all tasks have been entered, all durations and links set.
iii. Select the set baseline button from the schedule group on the project ribbon. (Figure 4-16)
iv. From the options displayed choose clear baseline the Clear baseline dialog will open.

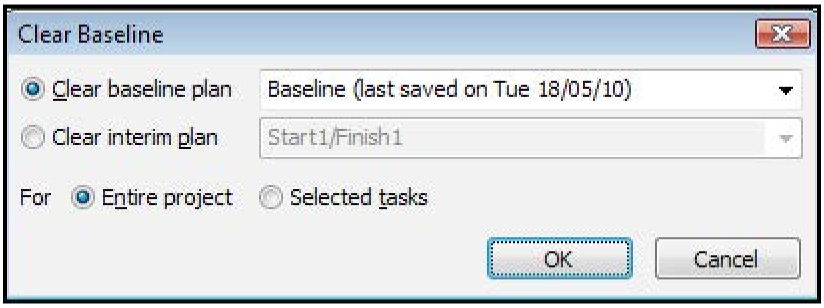


Figure 5-17: Clear Baseline Dialog

v. Ensure the correct baseline is selected and click o the baseline will be cleared.

When further adjustments are made you may save the baseline again. Remember the baseline is meant to be the final version of the plan before implementation to allow you to monitor and effectively deal with the ensuing risks that may be realised in the implementation of the plan.

It is also useful during the evaluation phase of the project to enable a better plan to be formulated for the next project

6 Implementation and tracking

At the end of this section you will

- have an understanding of the capabilities of Microsoft Project to display project data.
- filter the project for specific information.
- be able to examine the cost factors for the project.

Using Gantt Charts

Gantt Chart Principals

The Gantt Chart is a horizontal bar chart that represents each task in the time scale of the project. Each task entered in the project will be shown.

The Gantt Chart can be used to visually keep track of the tasks and also can be used to identify important points about each task. For example those tasks that together control the completion date are known as the critical Path and are shown differently to highlight that fact.

Gantt Charts can be printed and therefore form the significant part of a regular report which shows the current progress, comparison with the original plan, and the new projected completion data. Some of these may well have been covered in earlier sections.

Changing The Split Between Chart And Table

When the Gantt Chart view or the Task Entry view is selected, the Gantt Chart area has part of a table on the left and the bars on the right.

It is possible to move the dividing line between these two areas with the mouse pointer. When the pointer is on the dividing line it changes to two vertical lines with left and right arrows. If the left button is held down then the dividing line can be moved to the left or right as required.

Time Scale

The time scale on the chart can be change to many different settings based on the length of your project and which part of the project you wish to display on the screen.

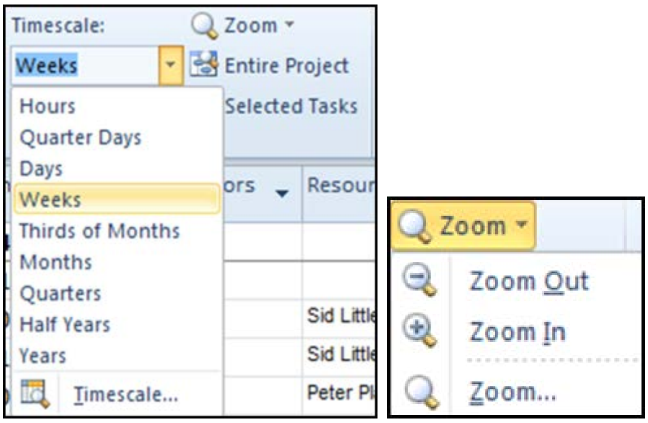


Figure 6-1: Timescale And Zoom Menus From The Zoom Group

➢ To Change Timescale For The Gantt

mouse

i. Ensure you are in Gantt view
ii. Go to the View ribbon, zoom group, Zoom command.
iii. From the menu make a selection of zooming in or out

or

i. Use the zoom slider on the bottom right of the status bar as previously discussed.

or

i. Go to the View ribbon, Timescale drop down box and select a timescale.
ii. Your timescale will adjust to the selection timescale
iii. Go to the View ribbon, Timescale drop down box and select the Timescale command a dialog will open.
iv. From the size box choose a percentage to zoom into and click ok
v. Change the timescale from the drop down box to an appropriate measuring system again if necessary.

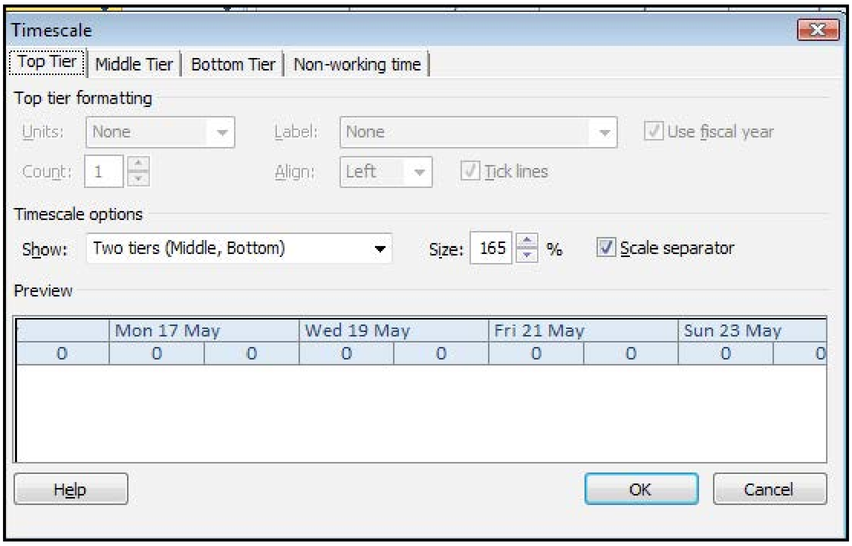


Figure 6-2: The Timescale Dialog

Where the timescale dialog is chosen, the dialog box will provide the ability to change both the major and minor time scales and within each of these it will be possible to alter the units, the label, the alignment, and the count of the interval between the unit labels.

The Timeline new feature

Viewing The Timeline

The Timeline is a new feature in Project 2010 it enables you to see at a glance where you currently are with your project with many options to view your tasks as part of the timeline itself. It shows the whole project and where you are at the moment as you complete tasks it will show the amount of the project completed.

➢ To View The Timeline

mouse

i. To view the timeline go to the view ribbon, split view group and tick the timeline check box. (unticking this will hide the timeline)

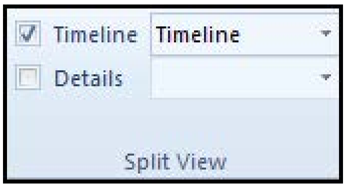


Figure 6-3: Timeline Checkbox

ii. The timeline will appear beneath the ribbon and a new contextual ribbon will appear called Format in the timeline tools. The timeline will contain a scroll bar beneath it to scroll left or right when zoomed in on any aspect of it.

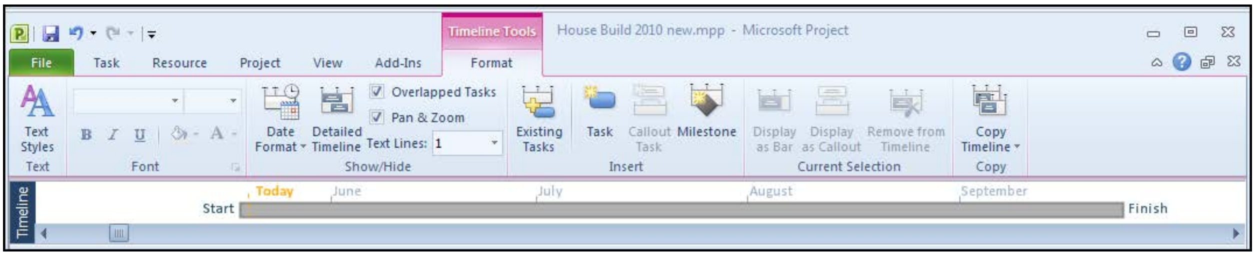


Figure 6-4: The Timeline And Contextual Ribbon

iii. Resize the timeline area by moving your mouse to just below the scroll bar a double arrow will appear click and drag up or down to change the Timeline size.

Zooming

Zooming in and out on any part of the timeline is a useful thing to know when you have added tasks.

➢ To Zoom The Timeline

mouse

i. Select the timeline by clicking on the timeline label to the far left of the timeline this changes the focus from any view you have displayed beneath it to the timeline.

You can either

ii. Use the zoom slider on the bottom right of the status bar to zoom in or out of the timeline.

or

iii. Use the Zoom control in the zoom group on the view tab

Showing Task Details On The Timeline

The timeline can be used as another method of viewing tasks within your project to keep you up to date with what is happening with your project. We need to add them to the timeline but they can be removed just as easily.

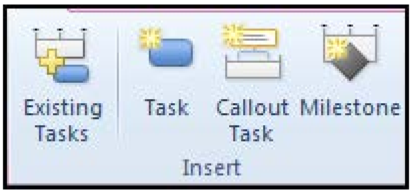


Figure 6-5: Insert Group, Timeline Tools

➢ To Show/Hide Tasks On The Timeline

mouse

i. Go the timeline tools, format tab, Insert group and click on the existing tasks button a dialog will open.

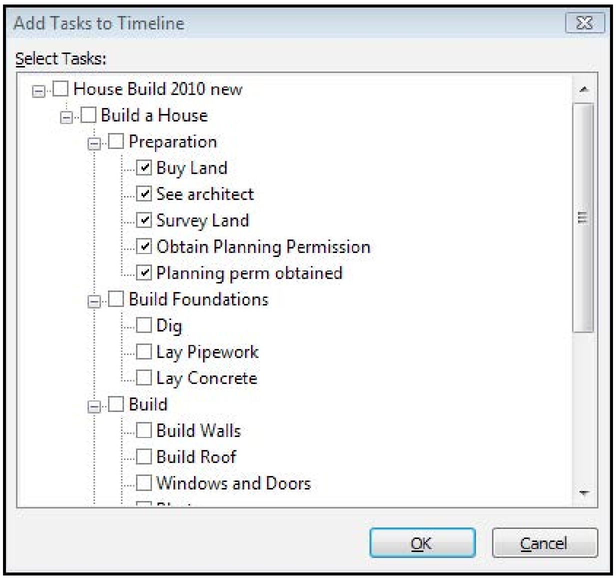


Figure 6-6: Add Existing Tasks Dialog

ii. From the dialog tick any tasks you wish to add to the timeline and untick those you do not wish to see.

iii. Click ok to apply the changes.

iv. Zoom and scroll to view the tasks in the timeline. (notice the milestone)

Figure 6-7: Tasks In Timeline

v. Click on the detailed Timeline button in the show/hide group to add or remove the details from the timeline and just show the tasks.

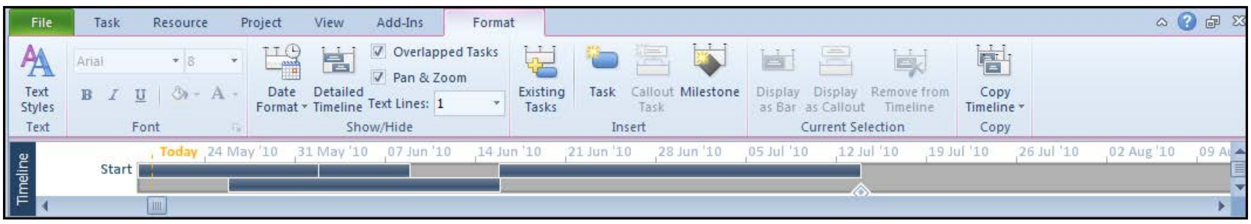


Figure 6-8: Details Hidden

Copy Timeline

Since the timeline could be useful for explanation or presentation purposes there is a facility to copy it and print or present it.

- To Copy Timeline

mouse

i. Click on the copy timeline button on the far right of the format tab a menu will appear.

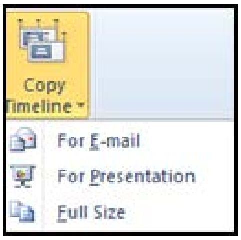


Figure 6-9: Copy Timeline Options

ii. The options in the menu allow for the quality of copy for when you paste it in whatever document type you will use.

- Choosing full size and pasting it into word will allow the object to be pasted as a series of grouped drawing shapes and text boxes to allow further formatting before printing.

Format The Timeline

There are various formatting options on the ribbon to change the appearance:

Text styles

This opens the font format dialog for in depth text formatting

Font group

This allows quick access to text formatting actions

Show/Group

Change the appearance of the date and show or hide various aspects of the timeline

Changing The Gantt Style (Quickstyle Gallery)

The QuickStyle Gallery is new to 2010 and is a quick way of selecting bar colour styles not only for the Gantt but for the critical Path in the Gantt. It is very easy to use.

Figure 6-10: Gantt Quickstyle Selections

➢ To Use The Quickstyle Gallery

mouse

i. Open your project to Gantt view
ii. Go to the contextual format ribbon in the Gantt chart tools.
iii. In the Gantt chart style group use the drop down arrow to the bottom right of the style box a selection of styles appear.
iv. Make a selection to apply it to your Gantt chart
v. You may use this as often as you wish.

➢ To Further Format A Specific Bar

mouse

i. Select a task in the Gantt chart view either on the chart itself or on the task entry sheet.
ii. Go to the contextual format ribbon in the Gantt chart tools.

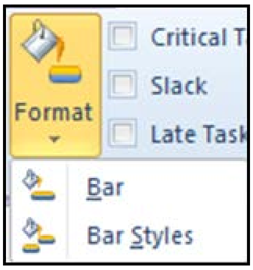


Figure 6-11: Format Bar Or Bar Styles

iii. Click on the format button and select the bar command a dialog will open.

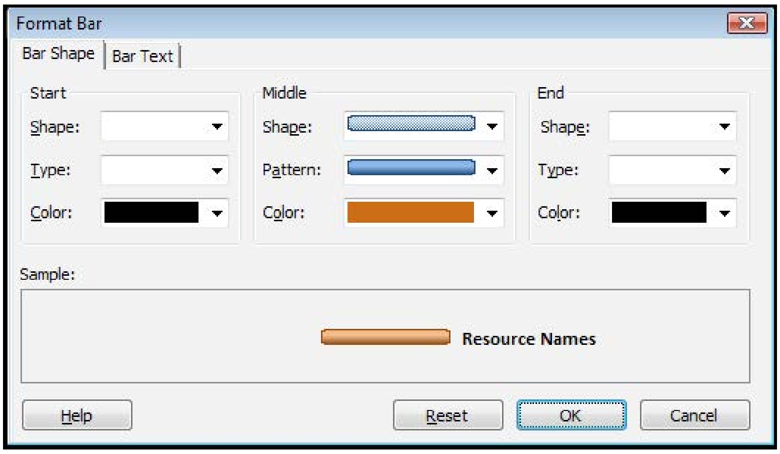


Figure 6-12: Format Gantt Bar Dialog

iv. From this dialog the bar can be further formatted, including its shape pattern and colour.
v. Text may also be added we will see this in the next section.

➢ To Further Format All Aspects Of All The Bars In The Gantt

mouse

i. Select the Gantt chart view.
ii. Go to the contextual format ribbon in the Gantt chart tools.
iii. Click on the format button and select the bar styles command a dialog will open.
iv. This dialog is used to maximise the information provided by the format of the bar on the Gantt Chart. The appearance of the existing bars can be changed and additional bars can be used. The full use of colour, shape and bar ending is also possible.

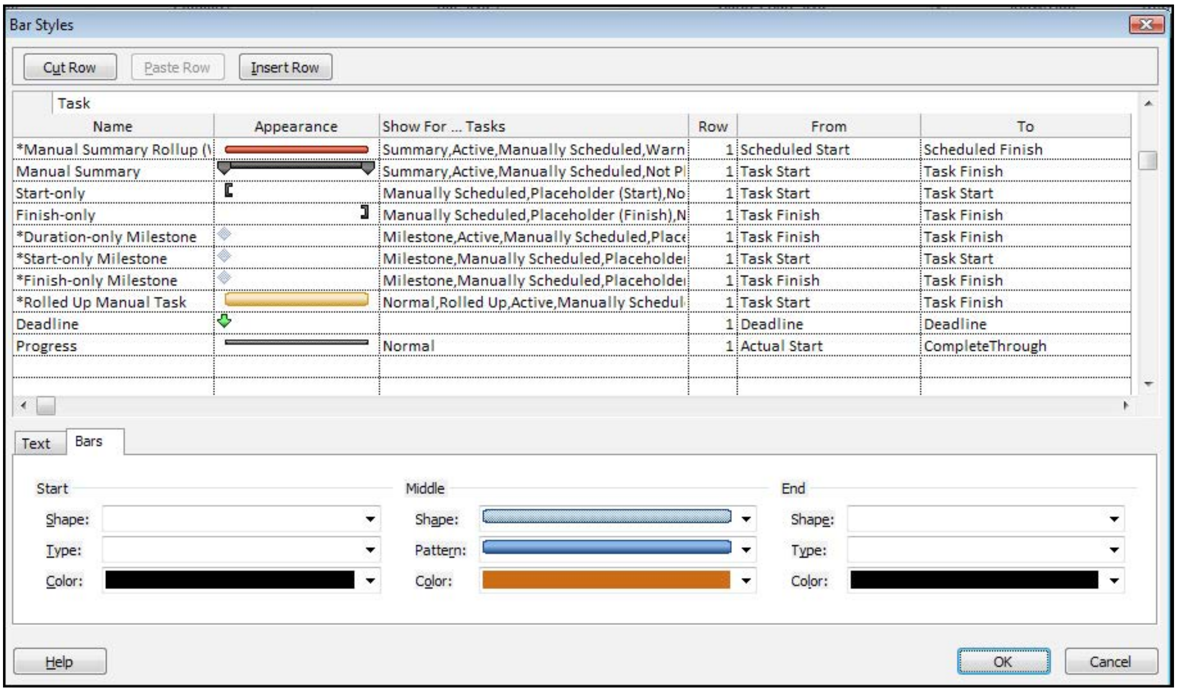


Figure 6-13: Bar Styles Dialog

v. Select a style in the top part of the box and in the bottom select the style you want for that kind of task. Set a start, middle and end style.

vi. Repeat or other bar types in the top most Box.

Adding Labels To Your Gantt

It is also possible to add text labels to your Gantt based on information in your project such as start dates, resource labels % complete etc.

➢ To Add Labels To Your Gantt

mouse

i. Select the Gantt chart view.

ii. Go to the contextual format ribbon in the Gantt chart tools.

iii. Click on the format button and select the bar styles command a dialog will open.

iv. Ensure you have the correct bar type selected in the top part of the dialog such as task.

v. In the bottom section of the dialog click on the text tab

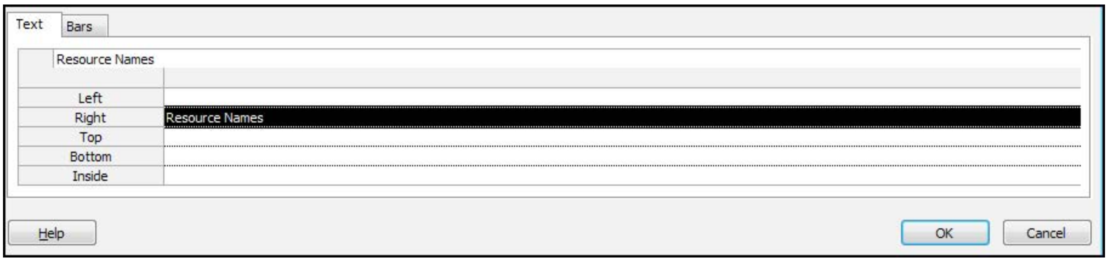


Figure 6-14: Labels To Bars

vi. Choose where you would like your labels to appear and click in the box use the drop down arrow on the right to select from all the fields in the project what information you would like to appear.
vii. Click ok to apply the selection and close the dialog

- Try not to have too many labels on the Gantt as it can look untidy, use the format, bar command to add labels to just one specific bar

Editing Tasks With The Gantt

One method of editing tasks is to change them on the Gantt Chart using the mouse and dragging the changes into place.

➢ To Mark %Complete Tasks With The Gantt
Mouse

i. Positioning the pointer at the beginning of a bar will change the pointer to an arrow and % sign
ii. The left mouse button is pressed and the symbol dragged to the right a box will appear showing the amount of "percentage complete" that has been added. This information will then be updated throughout the system.

➢ To Move A Task On The Gantt
mouse

i. Place the pointer in the centre of the bar it will change to a four-way arrow pointer.
ii. The left button is held down it drag the bar to the left or right in time,
iii. When the mouse is released the changing dates options will be shown in a dialog box

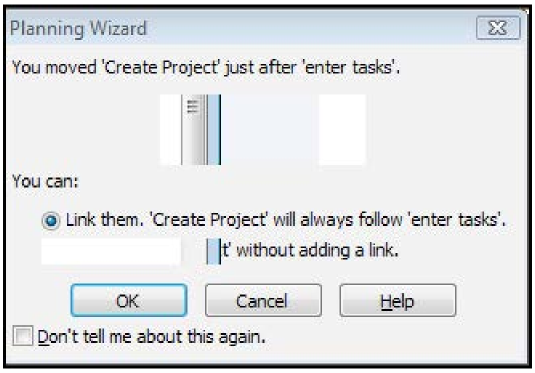


Figure 6-15: Planning Wizard Dialog 2

iv. Click OK, the files will be updated with the new information.

➢ To Change Duration On The Gantt

The third possibility is that the duration of the task can be changed by changing the length of the bar.

mouse

i. The pointer is positioned at the right end of the bar it will change into a right pointing arrow.

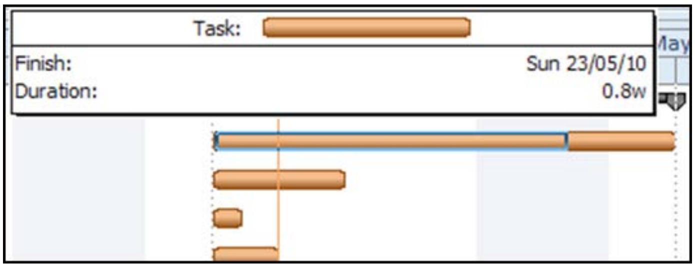


Figure 6-16: Adjusting Duration

ii. The left button is held down it is then possible to change the length of the bar and the respective change in duration is shown in a box.
iii. Release the mouse and the duration will be changed.

Showing The Critical Path

The critical path is a very important path it shows all the critical tasks (those that impact the end date of the project if they slip or are brought forward) It can be very useful to see it visually on the Gantt chart and to see which non-critical tasks are in your project.

Remember a non-critical task may become critical if it slips enough to affect other critical tasks. (compare the Gantts in the next pictures one showing the critical path the other not, displaying how useful this feature is.)

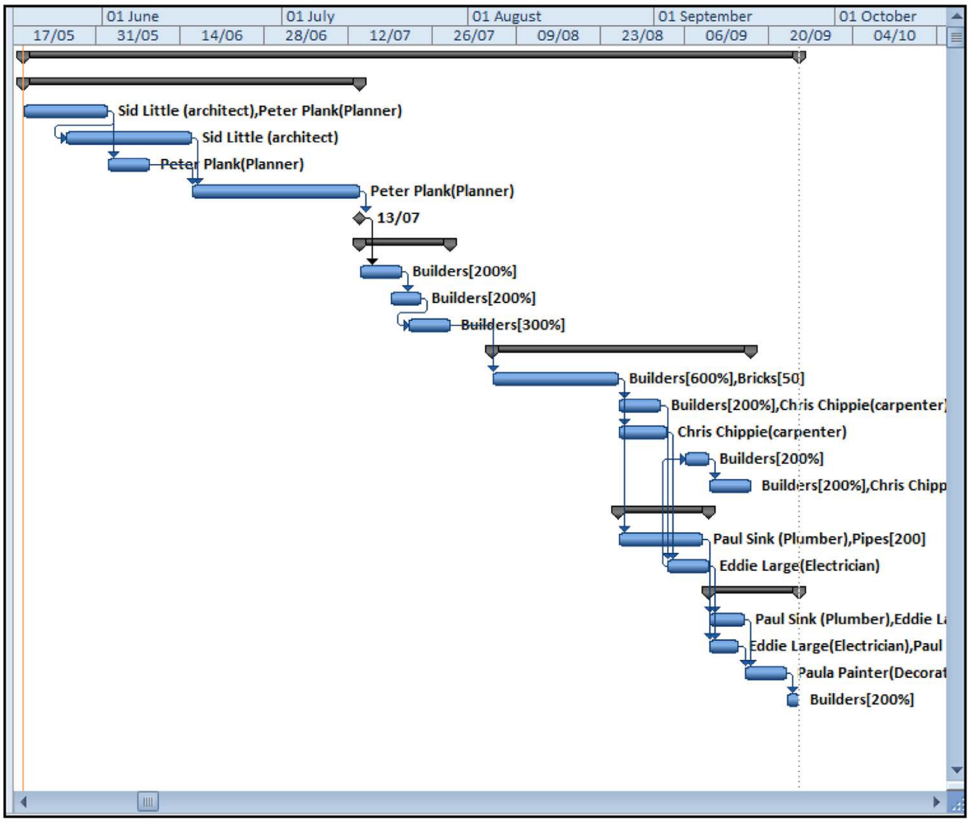


Figure 6-17: Non Critical Tasks

➢ To Show The Critical Path

mouse

i. Go to the contextual format ribbon in the Gantt chart tools.
ii. In the Gantt chart style group tick the box to allow critical tasks to be shown.
iii. Change the style of the critical tasks as described in the previous lesson if you wish.
iv. The Gantt should like the following picture.

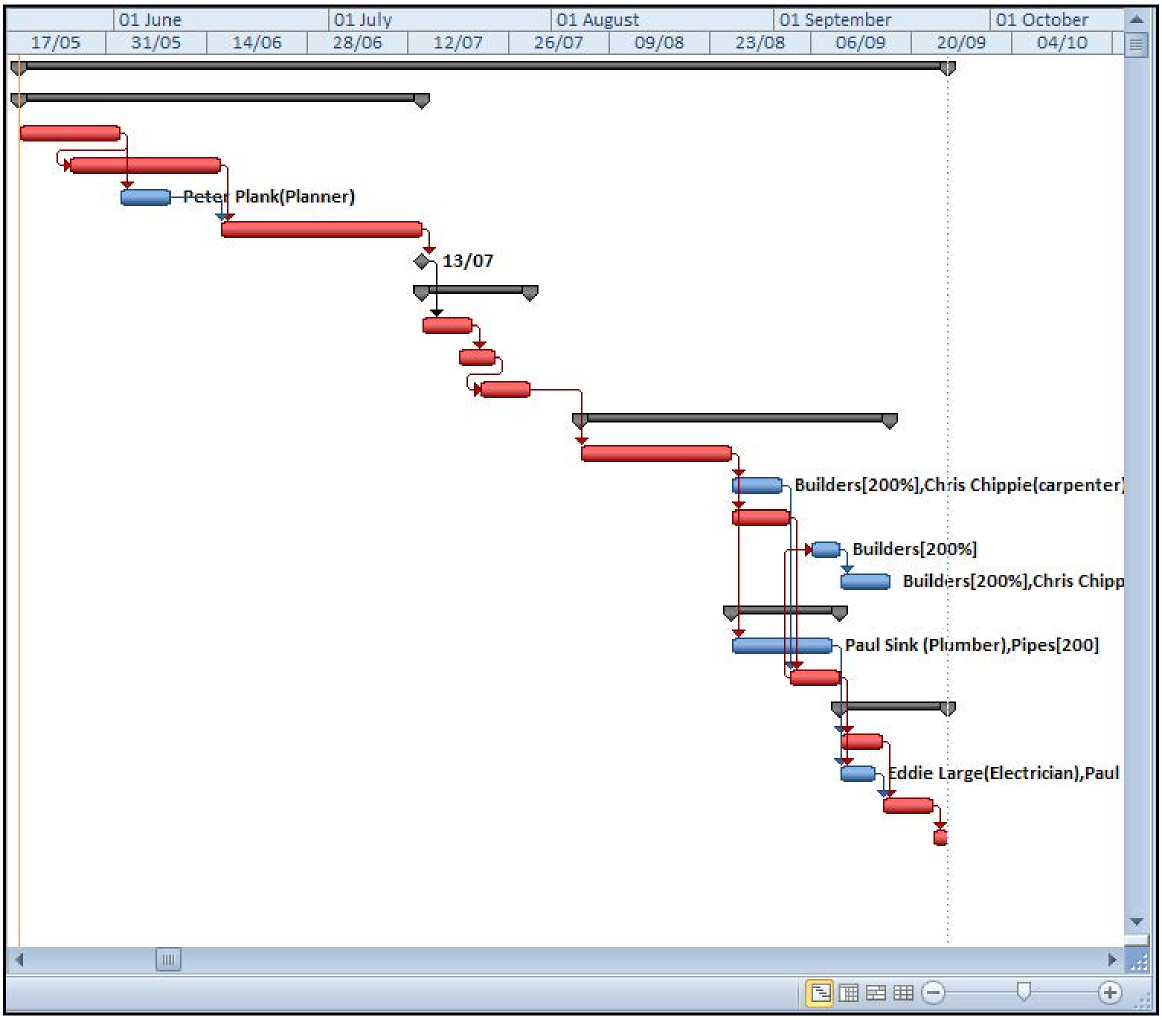


Figure 6-18: Gantt Showing Critical Tasks

v. As you can see the red tasks display the critical path and the blue non-critical tasks have room to slide a little before impacting upon a critical task.

Basic sorting, filtering and grouping

Quick Filters (Autofilters)

A filter is used to screen out unwanted tasks for a particular view to identify a particular aspect of the current state of the project, for example the filter can be set to show the tasks that make up the Critical Pathm and hide the non-critical ones.

There are several ways of creating and using filters we will use the most simple ones here. the more adventurous ones will be in the advanced manual.

As with tables there are different filters for tasks and resources and depending on the current view the appropriate list of filters will be shown for the selection.

- To Apply Autofilters

mouse

i. In the task entry sheet move your mouse to the column label you wish to filter and click on the drop down arrow to the right of the column label a menu will appear.
ii. As you move your mouse down the menu commands other options may appear in a further menu (see picture)

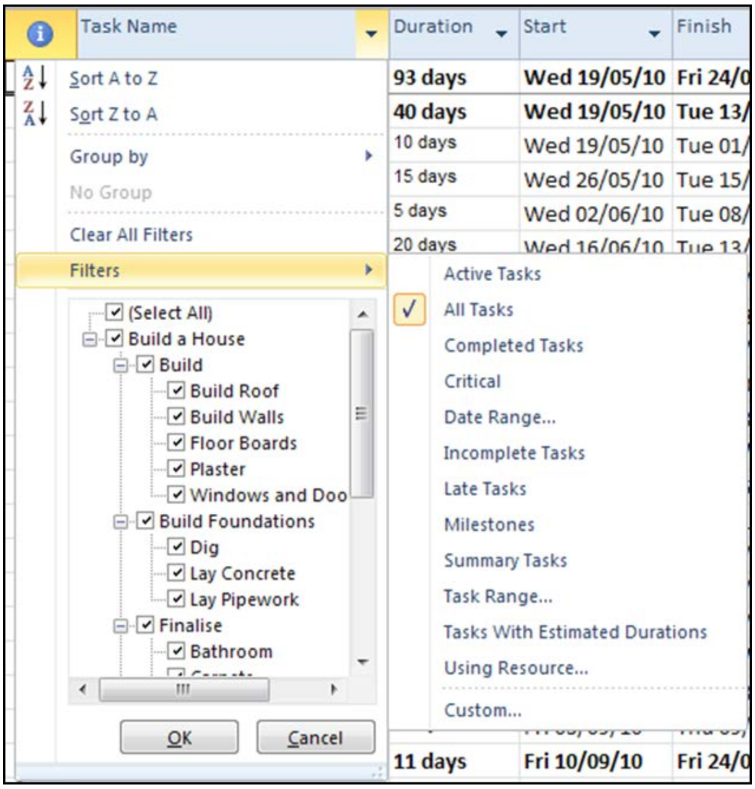


Figure 6-19: Filter Options

- Dependant on the column and the type of information the options will vary from column to column

iii. Make a selection from the displayed menu (disregard the lower part of the menu involving the fields and check boxes for now)
iv. The list will be filtered.

or

v. When you have opened the menu move down to the checkboxes and only select the tasks you wish to see in the task list.

➢ To Clear Filters
i. In the task entry sheet move your mouse to the column label and click on the drop down arrow to make the menu appear.
ii. Move down the menu and click the clear all filters option to remove all applied filters to your data.

Using The Ribbon Filter Commands

There is another option for filtering on the view tab

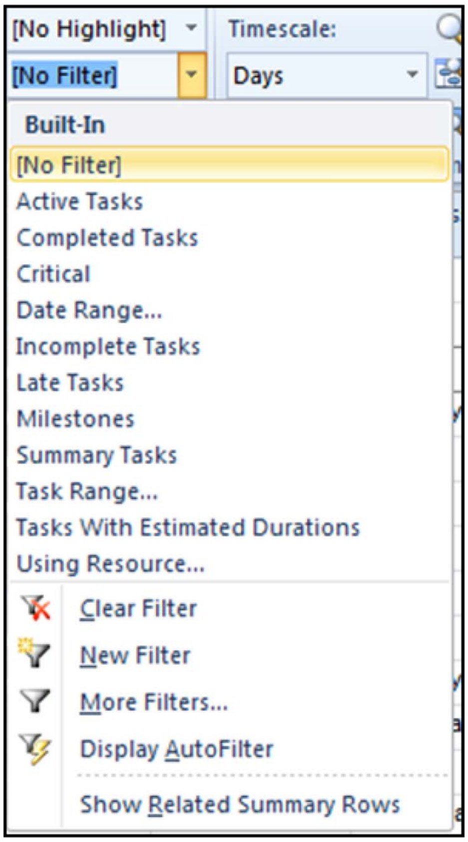


Figure 6-20: Filters In The Ribbon

➢ To Filter From The Ribbon

mouse

i. Click on the view ribbon
ii. In the data group click on the drop down box on the middle right containing the text "no filter" a menu will appear
iii. Make a selection to filter your data.
iv. Repeat and select "no Filter" to remove the applied filter.

Sorting Your Tasks

No less important is sorting your tasks by default they are sorted by their id number but you may wish them sorted by their start date.

- To Sort From The Autofilter Menu

i. In the task entry sheet move your mouse to the column label you wish to sort by (E.G. start date) and click on the drop down arrow to make the menu appear.

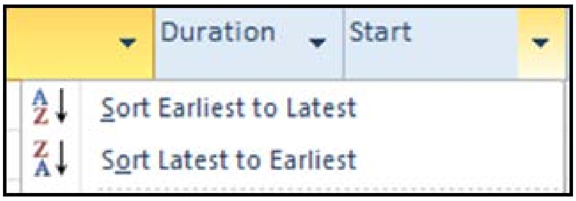


Figure 6-21: Sort Options

ii. choose the sort option you prefer.

- To Sort From The Ribbon

i. Click on the view ribbon
ii. In the data group click on the drop down box on the top left containing the text sort a menu will appear
iii. Make a selection to sort your data.
iv. Repeat and select sort by… to open the sort dialog.

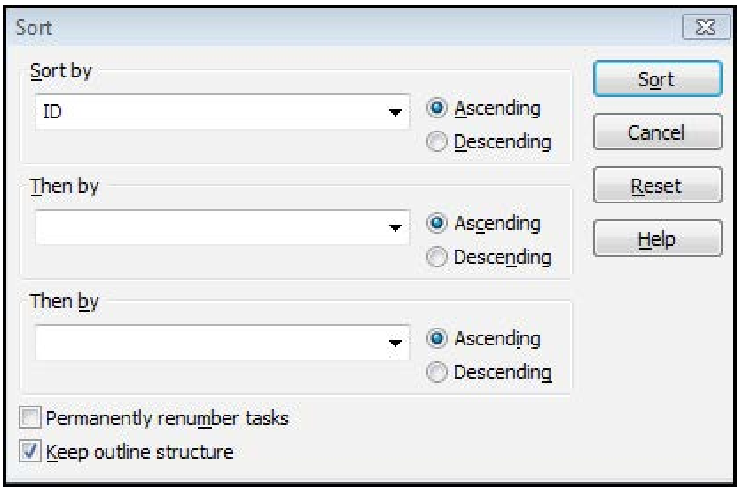


Figure 6-22: The Sort Dialog

v. By default you can see that sorting is by id select from the drop down box another field (column) to sort by you may sort by upto three levels as you can in excel,

- Do NOT tick the permanently renumber tasks unless you are still in the planning and intial stages of setting up your project as all tasks will then have a different ID and if the project is underway it will be very confusing when referring to ID numbers which task is which.

vi. Choose whether to sort ascending or descending
vii. When you have finished your options click ok to apply your sort

➢ To Set To Default Sort

mouse

i. Open the sort dialog from the data group
ii. Click the reset button (This will clear all sorts and the primary sort will revert to ID)
iii. Click ok to apply the default sort order.

Grouping

Grouping is a useful way of organising your data prior to printing. It is also useful to see your project in a different light. For instance you could group by the stages of completion so it is easier to see at a glance which tasks are in what stage of progress, or you may wish to see the critical and non-critical tasks grouped or grouped by resource usage. We will look at only the basic grouping options here and cover them in more depth in the advanced manual.

➢ To Group Your Project Tasks

mouse

i. In the data group on the format ribbon of the Gantt chart tools click on the drop down box on the bottom right containing the text "no group" a menu will appear

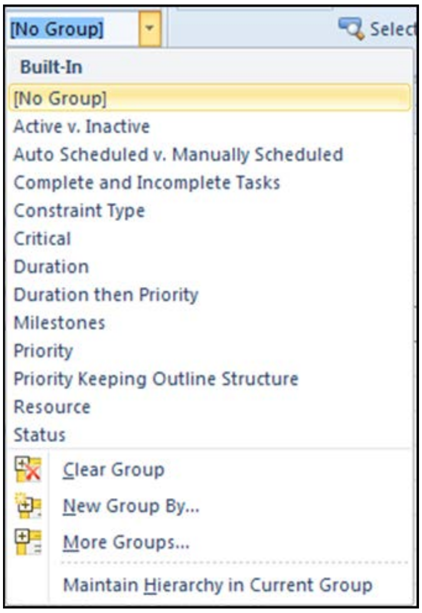


Figure 6-23: Basic Group Options

i. Choose an option you wish to group by.
ii. The grouping will be applied.

➢ To Remove Grouping

mouse

i. In the data group on the format ribbon of the Gantt chart tools click on the drop down box on the bottom right containing the text of the group type that has been applied to access the menu
ii. From the menu choose either no group or clear group.
iii. The tasks will return to their original state.

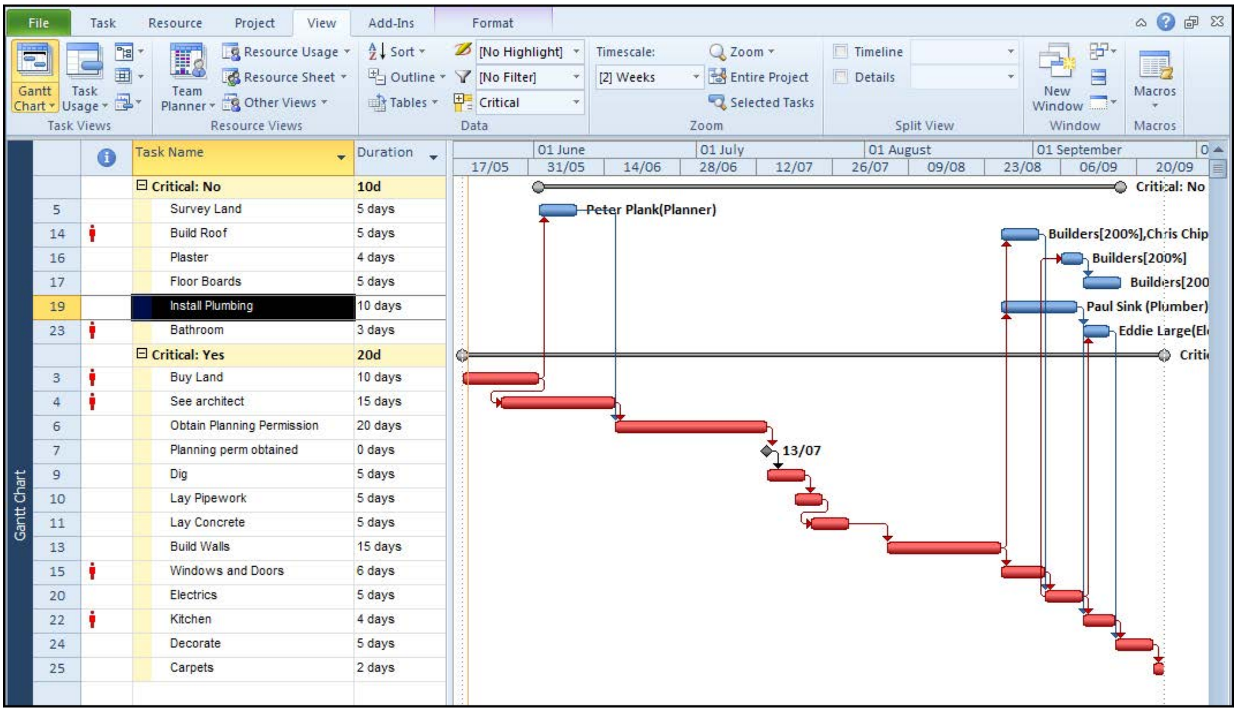


Figure 6-24: Grouped By Critical And Non-Critical Tasks

Grouping, sorting and filtering are useful tools to apply prior to printing your data. There are many more options that will be covered in the advanced manual.

Working With Tables And Filters

i. From the View menu, select More Views, Task Sheet.

Figure 6-25: Task List In Table

ii. From the View, Table menu select and view the different tables
iii. From the View, Table, More Tables menu select Define Tables and press the Edit button. Try to make some changes to the table and then view the result.
iv. From the Tools, Filtered for menu select different filters and see how it changes the Table.
v. Examine the Critical filter and try the Edit button to view how the filters are set up. Try making changes to the filter.

Tracking

An important part of implementing your project is marking when tasks are in progress or complete this is an important part of monitoring your project because if a task has not started yet it should not have incurred any material or work costs. And project uses this to calculate the actual costs to your project and measures the progress of the work against your baseline that you saved earlier.

Definitions

slippage:

The amount of time that a task has been delayed from its original baseline plan. The slippage is the difference between the scheduled start or finish date for a task and the baseline start or finish date.

start date:

The date when a task is scheduled to begin. This date is based on the duration, calendars, and constraints of predecessor and successor tasks. A task's start date is also based on its own calendars and constraints.

finish date:

The date that a task is scheduled to be completed. This date is based on the task's start date, duration, calendars, predecessor dates, task dependencies, and constraints.

slack:

The amount of time that a task can slip before it affects another task or the project's finish date. Free slack is how much a task can slip before it delays another task. Total slack is how much a task can slip before it delays the project.

- If you know where slack exists in your schedule, you can move tasks when certain phases of the schedule have no slack and other phases have too much.
- Slack values may also indicate a schedule inconsistency. For example, a negative slack value occurs when one task has a fiish-to-start dependency with a successor task, but the successor task has a Must Start On constraint that is earlier than the end of the first task. Negative slack can also occur when a task is scheduled to finish after its deadline date.

Marking Progress On Tasks

The first thing we need to do when tracking our project is to mark how much progress has been made on the tasks.

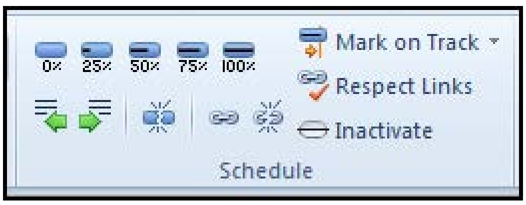


Figure 6-26: The Schedule Group

➢ To Mark Progress On A Task

mouse

i. Select a task in your task list (not a summary task)
ii. In the **SCHEDULE** group of the **TASK** ribbon select a percentage complete button to mark the task as that much complete.
iii. This should show on the Gantt chart.

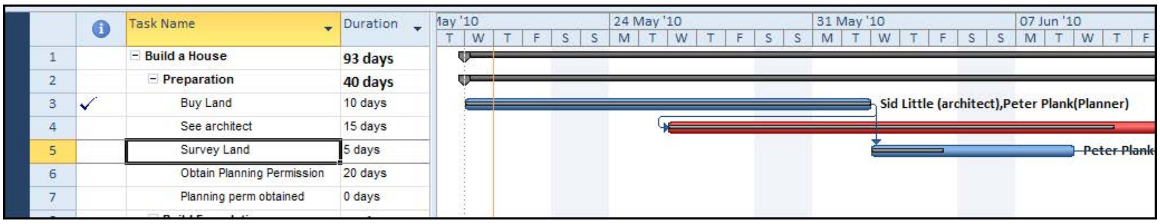


Figure 6-27: Completion Bar In Gantt

iv. If a task is marked as 100% then the task is marked as complete and a tick appears in the information column of the task entry sheet.

➢ To Use The Task Information Dialog

mouse

i. Another method of marking progress is to call up the task information dialog from the properties group of the task ribbon.

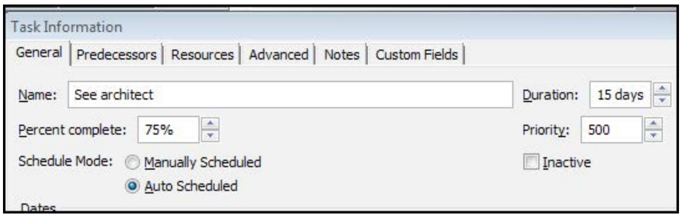


Figure 6-28: Percentage Complete In Task Information Dialog

ii. Type a percentage complete in the Percent complete box and click ok to apply.

- Use this method if the percentage is not a standard figure on the ribbon

Updating Task and Project Data

As the project progresses it will be necessary to enter updated information to indicate the beginning and ending of tasks. There could also be many reasons why some elements of any task may change and to be an effective project management tool the system must be updated with these alterations.

Microsoft Project has a number of different ways to change data and the following explain the various methods.

- The system is dynamic in the sense that if a single element of a task is altered that has a bearing on other elements, the changes will be calculated and the other elements automatically updated.

➢ To Update tasks

i. Select the Task Sheet from the View button on the task tab.

ii. Update individual tasks by selecting the tasks and clicking on the drop down arrow next to the mark on track button in the schedule group on the task ribbon

iii. From the menu shown select update tasks. A dialog will appear

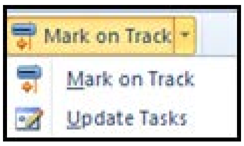


Figure 6-29: Update tasks Button

iv. From the dialog make the choices of how you want the task updated you may change dates, percentage complete, the name, duration etc

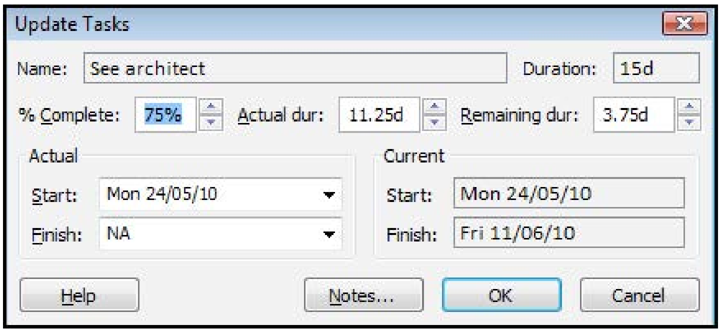


Figure 6-30: Update task options

v. Click ok to apply the update to the task.

➢ To Update the project.

mouse

i. Go to the project tab, status group and click on the update project button a dialog will open.

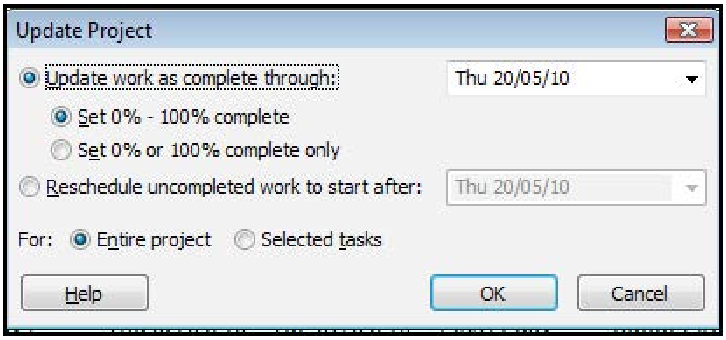


Figure 6-31: Update project options

ii. Either use the dialog to update complete work through a series of dates or if work has not been done reschedule uncompleted work to start after a specific date.

iii. Click ok to apply the update

- As you may have noticed this will work on specific selected tasks as well as the whole project

Use The Tracking Gantt

If you have set a baseline for your project, you can see how tasks progress over time and see whether their start and finish dates are slipping. You can track progress by comparing baseline and scheduled or actual start and finish dates

The Tracking Gantt view displays two task bars, one on top of the other, for each task. The lower bar shows baseline start and finish dates, and the upper bar shows scheduled start and finish dates so that you can see the difference between your plan and the current schedule. In addition, on the Gantt Chart Tools Format tab you can click Baseline to display the chart baselines.

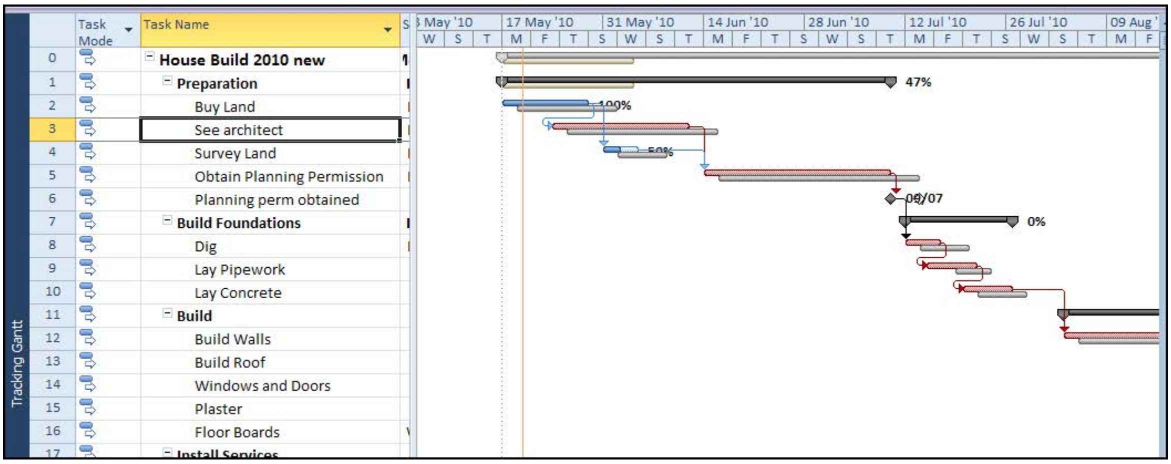


Figure 6-32: The Tracking Gantt

➢ To Use The Tracking Gantt

mouse

i. On the task tab, click the arrow on Gantt Chart, then select Tracking Gantt.

ii. In the Data group on the view tab, click the arrow on Tables, and then select Variance.

	Task Mode	Task Name	Start	Finish	Baseline Start	Baseline Finish	Start Var.
0		House Build 2010 new	1on 17/05/10	Ved 22/09/10	Wed 19/05/10	Fri 24/09/10	-2 days
1		Preparation	Mon 17/05/10	Fri 09/07/10	Wed 19/05/10	Tue 13/07/10	-2 days
2		Buy Land	Mon 17/05/10	Fri 28/05/10	Wed 19/05/10	Tue 01/06/10	-2 days
3		See architect	Mon 24/05/10	Fri 11/06/10	Wed 26/05/10	Tue 15/06/10	-2 days
4		Survey Land	Mon 31/05/10	Fri 04/06/10	Wed 02/06/10	Tue 08/06/10	-2 days
5		Obtain Planning Permission	Mon 14/06/10	Fri 09/07/10	Wed 16/06/10	Tue 13/07/10	-2 days
6		Planning perm obtained	Fri 09/07/10	Fri 09/07/10	Tue 13/07/10	Tue 13/07/10	-2 days
7		Build Foundations	Mon 12/07/10	Mon 26/07/10	Wed 14/07/10	Wed 28/07/10	-2 days
8		Dig	Mon 12/07/10	Fri 16/07/10	Wed 14/07/10	Tue 20/07/10	-2 days
9		Lay Pipework	Thu 15/07/10	Wed 21/07/10	Mon 19/07/10	Fri 23/07/10	-2 days
10		Lay Concrete	Tue 20/07/10	Mon 26/07/10	Thu 22/07/10	Wed 28/07/10	-2 days
11		Build	Tue 03/08/10	Tue 14/09/10	Thu 05/08/10	Thu 16/09/10	-2 days
12		Build Walls	Tue 03/08/10	Mon 23/08/10	Thu 05/08/10	Wed 25/08/10	-2 days
13		Build Roof	Tue 24/08/10	Mon 30/08/10	Thu 26/08/10	Wed 01/09/10	-2 days
14		Windows and Doors	Tue 24/08/10	Tue 31/08/10	Thu 26/08/10	Thu 02/09/10	-2 days
15		Plaster	Thu 02/09/10	Tue 07/09/10	Mon 06/09/10	Thu 09/09/10	-2 days
16		Floor Boards	Wed 08/09/10	Tue 14/09/10	Fri 10/09/10	Thu 16/09/10	-2 days
17		Install Services	Tue 24/08/10	Tue 07/09/10	Thu 26/08/10	Thu 09/09/10	-2 days
18		Install Plumbing	Tue 24/08/10	Mon 06/09/10	Thu 26/08/10	Wed 08/09/10	-2 days
19		Electrics	Wed 01/09/10	Tue 07/09/10	Fri 03/09/10	Thu 09/09/10	-2 days
20		Finalise	Wed 08/09/10	Wed 22/09/10	Fri 10/09/10	Fri 24/09/10	-2 days
21		Kitchen	Wed 08/09/10	Mon 13/09/10	Fri 10/09/10	Wed 15/09/10	-2 days
22		Bathroom	Wed 08/09/10	Fri 10/09/10	Fri 10/09/10	Tue 14/09/10	-2 days
23		Decorate	Tue 14/09/10	Mon 20/09/10	Thu 16/09/10	Wed 22/09/10	-2 days
24		Carpets	Tue 21/09/10	Wed 22/09/10	Thu 23/09/10	Fri 24/09/10	-2 days

Figure 6-33: The Variance Table

- If the variance fields are not visible, adjust the view splitter for the Table/Gantt or press TAB to move through the fields to display them.

Slippage

You can also see whether the start and finish dates for task assignments are slipping, using the Slipping Assignments filter. This filter shows resources that are assigned to tasks that are not yet complete and that have been delayed from the finish date of the baseline. To use this filter, you must have saved a baseline plan.

➢ To Show Slippage

mouse

i. On the View tab, click Resource Usage.
ii. In the Data group, in the Filter list, select More Filters.
iii. In the More Filters list, next to Filters, select Resources.
iv. In the list click Slipping Assignments.

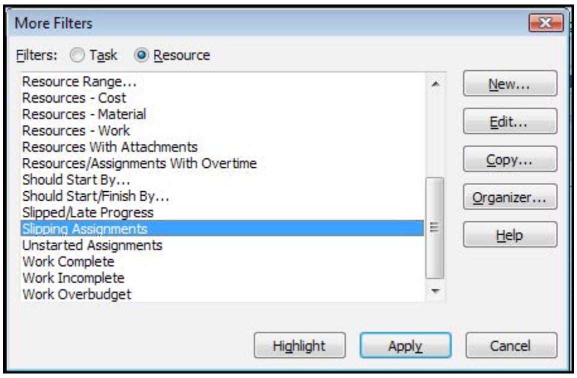


Figure 6-34: Slipping Assignments Filter

v. If you want to show only those assignments that are slipping, click Apply.

or

i. If you want to show all assignments with a coloured highlight on the slipping assignments, click Highlight.

Finding Slack

The amount of slack in your schedule tells you how much you can delay tasks before other tasks or the project end date is affected.

- To Find Slack

mouse

i. On the View tab, in the Task Views group, click the arrow on Gantt Chart, select More Views.
ii. The More Views dialog appears. In the Views list, click Detail Gantt, and then click Apply.
iii. In the chart portion of the view, slack appears as thin bars to the right of tasks, with slack values adjoining the regular Gantt bars.
iv. On the View tab, in the Data group, click the arrow on Tables, and then click Schedule.
v. Press TAB to move to the Free Slack and Total Slack fields if they are not visible or resize the Gantt/ sheet to show more of the sheet in the sheet portion of the view.

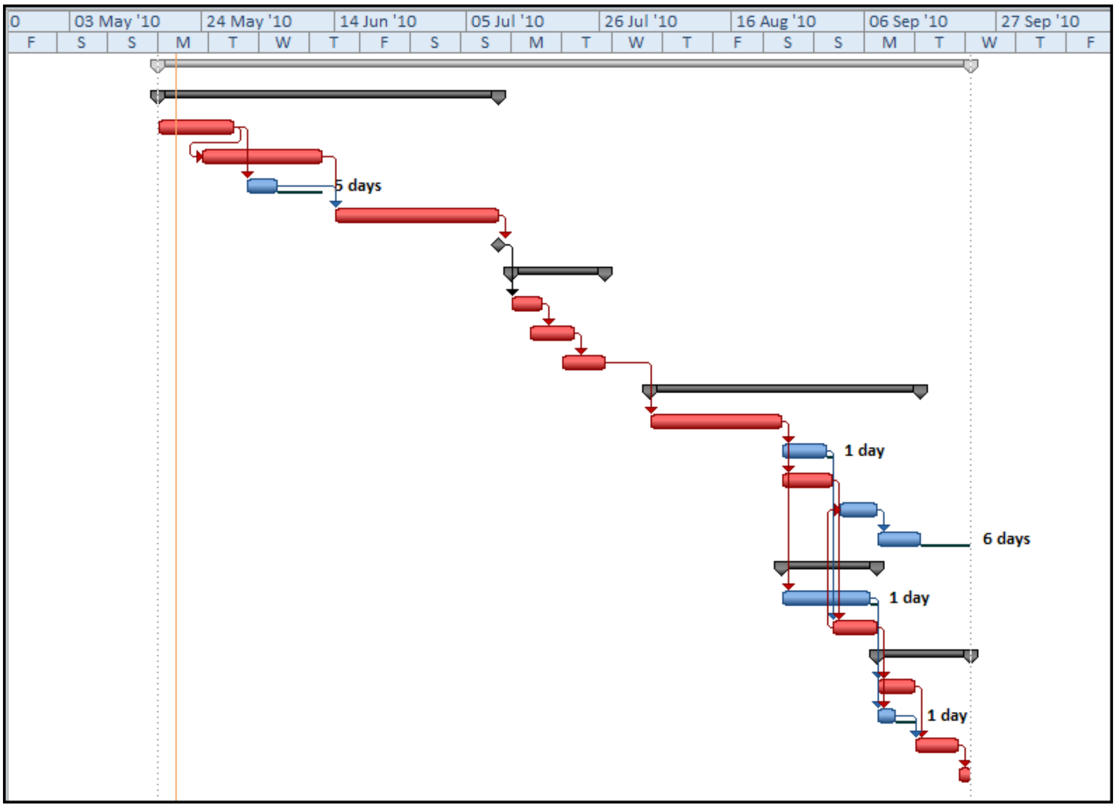


Figure 6-35: Detail Gantt Showing Slack

	Task Mode	Task Name	Start	Finish	Late Start	Late Finish	Free Slack	Tota
0		**House Build 2010 ı**	**lon 17/05/10**	**Ved 22/09/10**	**on 17/05/10**	**ed 22/09/10**	**0 days**	
1		**Preparation**	**Mon 17/05/10**	**Fri 09/07/10**	**Mon 17/05/10**	**Mon 12/07/10**	**0 days**	
2		Buy Land	Mon 17/05/10	Fri 28/05/10	Mon 17/05/10	Fri 28/05/10	0 days	
3		See architect	Mon 24/05/10	Fri 11/06/10	Mon 24/05/10	Fri 11/06/10	0 days	
4		Survey Land	Mon 31/05/10	Fri 04/06/10	Mon 07/06/10	Fri 11/06/10	5 days	
5		Obtain Plannin	Mon 14/06/10	Fri 09/07/10	Mon 14/06/10	Fri 09/07/10	0 days	
6		Planning perm	Fri 09/07/10	Fri 09/07/10	Mon 12/07/10	Mon 12/07/10	0 days	
7		**Build Foundation:**	**Mon 12/07/10**	**Mon 26/07/10**	**Mon 12/07/10**	**Mon 26/07/10**	**0 days**	
8		Dig	Mon 12/07/10	Fri 16/07/10	Mon 12/07/10	Fri 16/07/10	0 days	
9		Lay Pipework	Thu 15/07/10	Wed 21/07/10	Thu 15/07/10	Wed 21/07/10	0 days	
10		Lay Concrete	Tue 20/07/10	Mon 26/07/10	Tue 20/07/10	Mon 26/07/10	0 days	
11		**Build**	**Tue 03/08/10**	**Tue 14/09/10**	**Tue 03/08/10**	**Wed 22/09/10**	**0 days**	
12		Build Walls	Tue 03/08/10	Mon 23/08/10	Tue 03/08/10	Mon 23/08/10	0 days	
13		Build Roof	Tue 24/08/10	Mon 30/08/10	Wed 25/08/10	Tue 31/08/10	1 day	
14		Windows and [	Tue 24/08/10	Tue 31/08/10	Tue 24/08/10	Tue 31/08/10	0 days	
15		Plaster	Thu 02/09/10	Tue 07/09/10	Fri 10/09/10	Wed 15/09/10	0 days	
16		Floor Boards	Wed 08/09/10	Tue 14/09/10	Thu 16/09/10	Wed 22/09/10	6 days	
17		**Install Services**	**Tue 24/08/10**	**Tue 07/09/10**	**Wed 25/08/10**	**Tue 07/09/10**	**0 days**	
18		Install Plumbin	Tue 24/08/10	Mon 06/09/10	Wed 25/08/10	Tue 07/09/10	1 day	
19		Electrics	Wed 01/09/10	Tue 07/09/10	Wed 01/09/10	Tue 07/09/10	0 days	
20		**Finalise**	**Wed 08/09/10**	**Wed 22/09/10**	**Wed 08/09/10**	**Wed 22/09/10**	**0 days**	
21		Kitchen	Wed 08/09/10	Mon 13/09/10	Wed 08/09/10	Mon 13/09/10	0 days	
22		Bathroom	Wed 08/09/10	Fri 10/09/10	Thu 09/09/10	Mon 13/09/10	1 day	
23		Decorate	Tue 14/09/10	Mon 20/09/10	Tue 14/09/10	Mon 20/09/10	0 days	
24		Carpets	Tue 21/09/10	Wed 22/09/10	Tue 21/09/10	Wed 22/09/10	0 days	

Figure 6-36: Schedule Table Showing Free Slack

Examining the Cost Factor

When all the tasks and their associated resources have been entered, it is possible to view the calculated costs of the project and there are several views that can be used.

The first view is the Task Sheet together with the Cost Table (View, Table, Cost).

	Task Name	Fixed Cost	Fixed Cost Accrual	Total Cost	Baseline	Variance	Actual	Remaining
0	**House Build 2010 new**	**£0.00**	**Prorated**	**£73,590.00**	**£73,590.00**	**£0.00**	**£11,300.00**	**£62,290.00**
1	**Preparation**	**£0.00**	**Prorated**	**£17,840.00**	**£17,840.00**	**£0.00**	**£11,300.00**	**£6,540.00**
2	Buy Land	£0.00	Prorated	£6,240.00	£6,240.00	£0.00	£6,240.00	£0.00
3	See architect	£0.00	Prorated	£6,000.00	£6,000.00	£0.00	£4,500.00	£1,500.00
4	Survey Land	£0.00	Prorated	£1,120.00	£1,120.00	£0.00	£560.00	£560.00
5	Obtain Planning Permissic	£0.00	Prorated	£4,480.00	£4,480.00	£0.00	£0.00	£4,480.00
6	Planning perm obtained	£0.00	Prorated	£0.00	£0.00	£0.00	£0.00	£0.00
7	**Build Foundations**	**£0.00**	**Prorated**	**£7,000.00**	**£7,000.00**	**£0.00**	**£0.00**	**£7,000.00**
8	Dig	£0.00	Prorated	£2,000.00	£2,000.00	£0.00	£0.00	£2,000.00
9	Lay Pipework	£0.00	Prorated	£2,000.00	£2,000.00	£0.00	£0.00	£2,000.00
10	Lay Concrete	£0.00	Prorated	£3,000.00	£3,000.00	£0.00	£0.00	£3,000.00
11	**Build**	**£0.00**	**Prorated**	**£33,720.00**	**£33,720.00**	**£0.00**	**£0.00**	**£33,720.00**
12	Build Walls	£0.00	Prorated	£22,000.00	£22,000.00	£0.00	£0.00	£22,000.00
13	Build Roof	£0.00	Prorated	£4,100.00	£4,100.00	£0.00	£0.00	£4,100.00
14	Windows and Doors	£0.00	Prorated	£1,920.00	£1,920.00	£0.00	£0.00	£1,920.00
15	Plaster	£0.00	Prorated	£1,600.00	£1,600.00	£0.00	£0.00	£1,600.00
16	Floor Boards	£0.00	Prorated	£4,100.00	£4,100.00	£0.00	£0.00	£4,100.00
17	**Install Services**	**£0.00**	**Prorated**	**£7,070.00**	**£7,070.00**	**£0.00**	**£0.00**	**£7,070.00**
18	Install Plumbing	£0.00	Prorated	£5,270.00	£5,270.00	£0.00	£0.00	£5,270.00
19	Electrics	£0.00	Prorated	£1,800.00	£1,800.00	£0.00	£0.00	£1,800.00
20	**Finalise**	**£0.00**	**Prorated**	**£7,960.00**	**£7,960.00**	**£0.00**	**£0.00**	**£7,960.00**
21	Kitchen	£0.00	Prorated	£3,110.00	£3,110.00	£0.00	£0.00	£3,110.00
22	Bathroom	£0.00	Prorated	£2,350.00	£2,350.00	£0.00	£0.00	£2,350.00
23	Decorate	£0.00	Prorated	£1,700.00	£1,700.00	£0.00	£0.00	£1,700.00
24	Carpets	£0.00	Prorated	£800.00	£800.00	£0.00	£0.00	£800.00

Figure 6-37: Cost Table

This view will list all the tasks as originally entered and the associated columns will contain the cost data in terms of the Planned(baseline) cost, the Actual cost and how much has been used so far.

This table is very useful in identifying those tasks that are causing the greatest pressure on the total cost of the project.

7 Printing and reporting

At the end of this section you will be able to

- Print your project file.
- Create reports from your project.

Print (backstage)

All print options have now been put in one location to make it easier to handle printing within Project 2010. To access all of the tools visit the file tab (backstage view) print option.

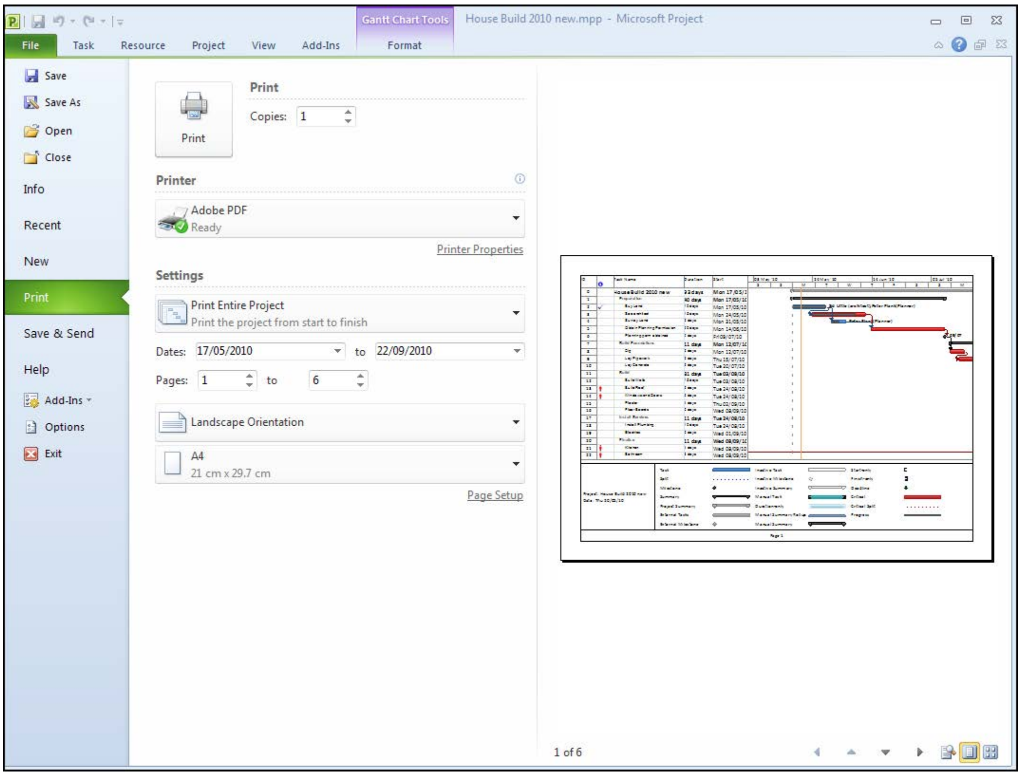


Figure 7-1: Print options (backstage)

Page Setup

Before printing it is advisable to check the Page Setup which is in the middle of the screen of the print options as a link.

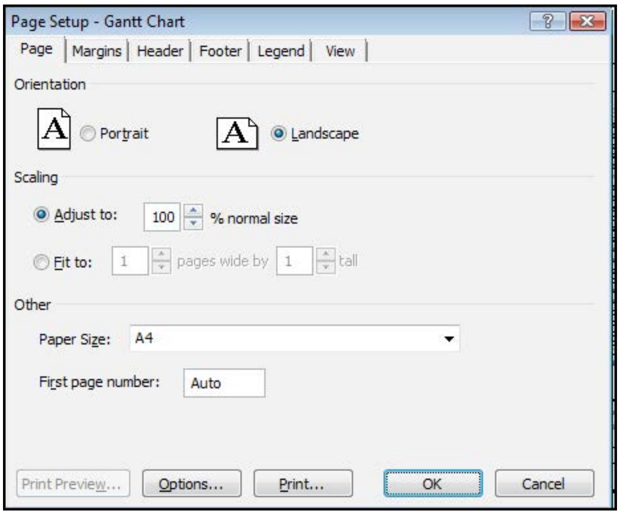


Figure 7-2: Page Setup Dialog

In the dialog box the following tabs can be selected: -

Page:	Choose orientation and scaling.
Margins:	Set the margins and borders.
Header:	This box can hold a Header that will be printed on every page.
Footer	This box can hold the footer for every page.
Legend:	This is for printing Gantt and Network Diagram views only
View:	Choose number of columns of task form etc. if appropriate.

In the Header, Footer, and Legend, buttons are available to enter specific information. For example the following are available:

These include date, time, page number and number of pages.

The Page size is available under the Printer, Setup option.

- To Check The Settings For The Gantt Chart

mouse

i. Ensure you are viewing the Gantt Chart.
ii. Pull down the File Tab (Backstage).
iii. Go to print
iv. Select Page Setup.
v. Select Landscape in the Page box.
vi. Check the other settings and change any that are not correct.
vii. Click ok to close the dialog the Print Preview shows to the right of the backstage window.

Using the preview window

Use this to check the document will print correctly,

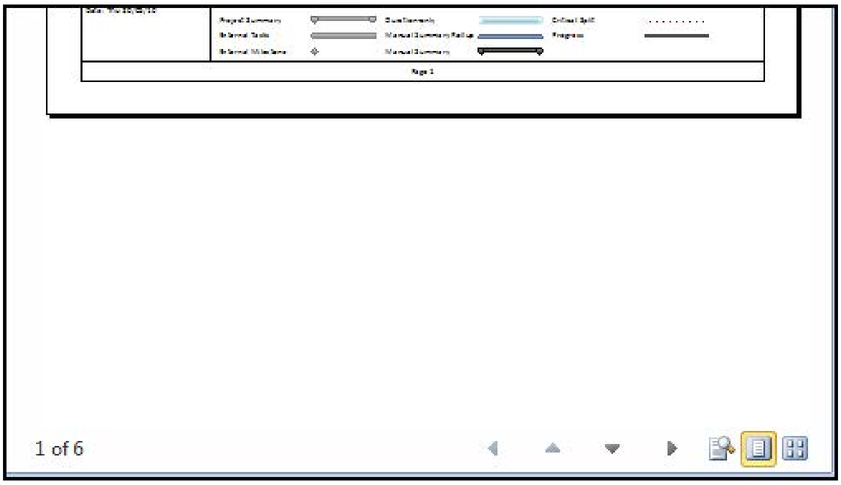


Figure 7-3: preview tool buttons

➢ To use the preview
mouse

i. Click on the image to zoom closer to a desired part of the document click again to Zoom out
ii. In the bottom right corner beneath the preview are buttons for manipulating the preview.
iii. The last three buttons are for viewing the preview as actual size, default preview size (whole page) or multiple pages.
iv. The other four arrow buttons are to enable you to scroll around the zoomed screen.

Other Print options

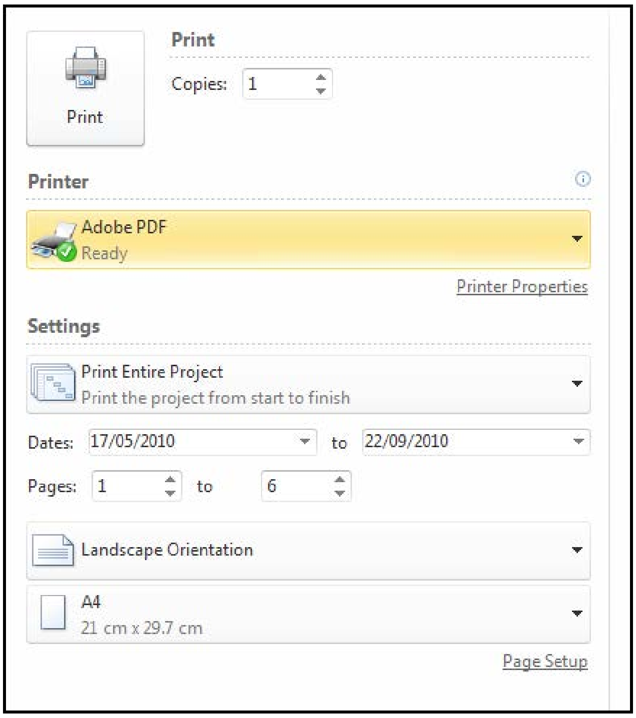


Figure 7-4: The Print options

Before printing you may wish to set some other options available

➢ To change settings

mouse

i. In the print section choose the number of copies you wish to print
ii. In the printer section choose the printer you wish to print to.

- The printer properties link opens the dialog to the printer to allow specific printer settings to be adjusted not discussed here

iii. In the settings section choose a date range that you may wish to print

or

iv. In the settings section choose a page range you would like to print
v. When clicking the button that says print entire Project a menu appears offering even more print range options.

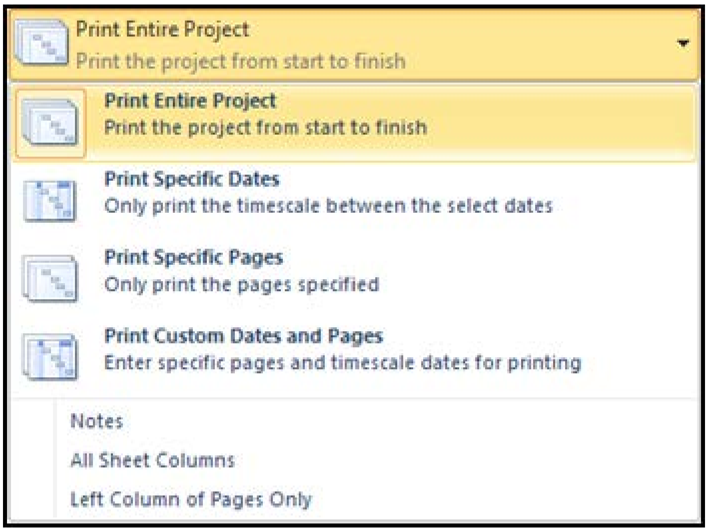


Figure 7-5: Print range options

vi. After making a selection here ensure the page or date range has been set.
vii. The bottom three options are check boxes and allows the printing (or non-printing) of aspects of your project.
viii. When all options have been set and the preview looks as you wish it to click the Print button to send your project to the printer.

If the Page Setup has been completed for the views that are to be printed then it is only necessary to bring the required view on to the screen and select the print command. The settings in Page Setup will align all the necessary settings for the printer and then print the view in as many pages as it takes.

Reports

Reports Setup

Microsoft Project has a number of pre-defined reports based on six principal types which can be used directly, changed as required. Alternatively, completely new reports can be created. The system is picture driven and simple to use.

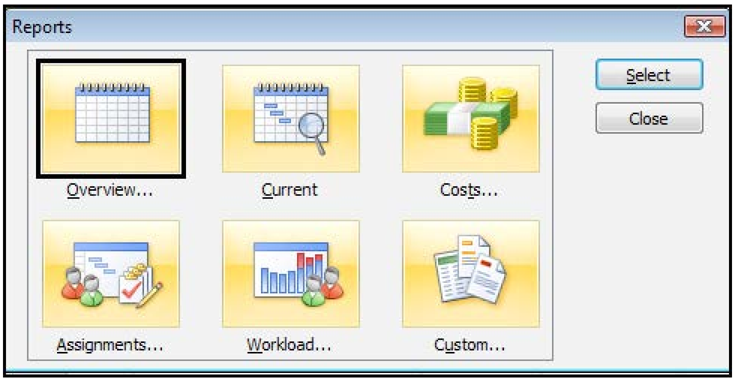


Figure 7-6: Reports Dialog

➢ To access reports

mouse

i. Project reports are accessed from the Project tab, Reports command.
ii. A dialog box appears in which the following type of report can be chosen:

Overview:	Summarizes the most significant project information, including numbers of tasks and resources, task and schedule status, costs, start and finish dates, and so on.
Current Activities:	Displays information about top-level tasks for the entire project. Includes summary tasks and task notes.
Costs:	Shows critical tasks for the entire project. Includes summary and successor tasks and task notes.
Assignments:	Shows project milestones. Includes summary tasks and task notes.
Workload:	Shows working and nonworking times for resources for the entire project duration.
Custom:	Use an existing report to create a new one.

iii. After selecting one of the above you then choose Select and a second box will appear that will have a number of pre-defined options depending on the base of the report.

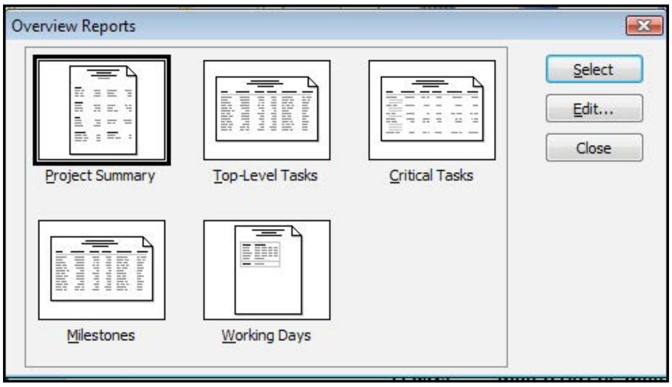


Figure 7-7: The overview selection

iv. Select a subtype from the offered reports and click the select button the report will open in preview in backstage view to make further printing options.

v. Once the options have been set click print to print your report.

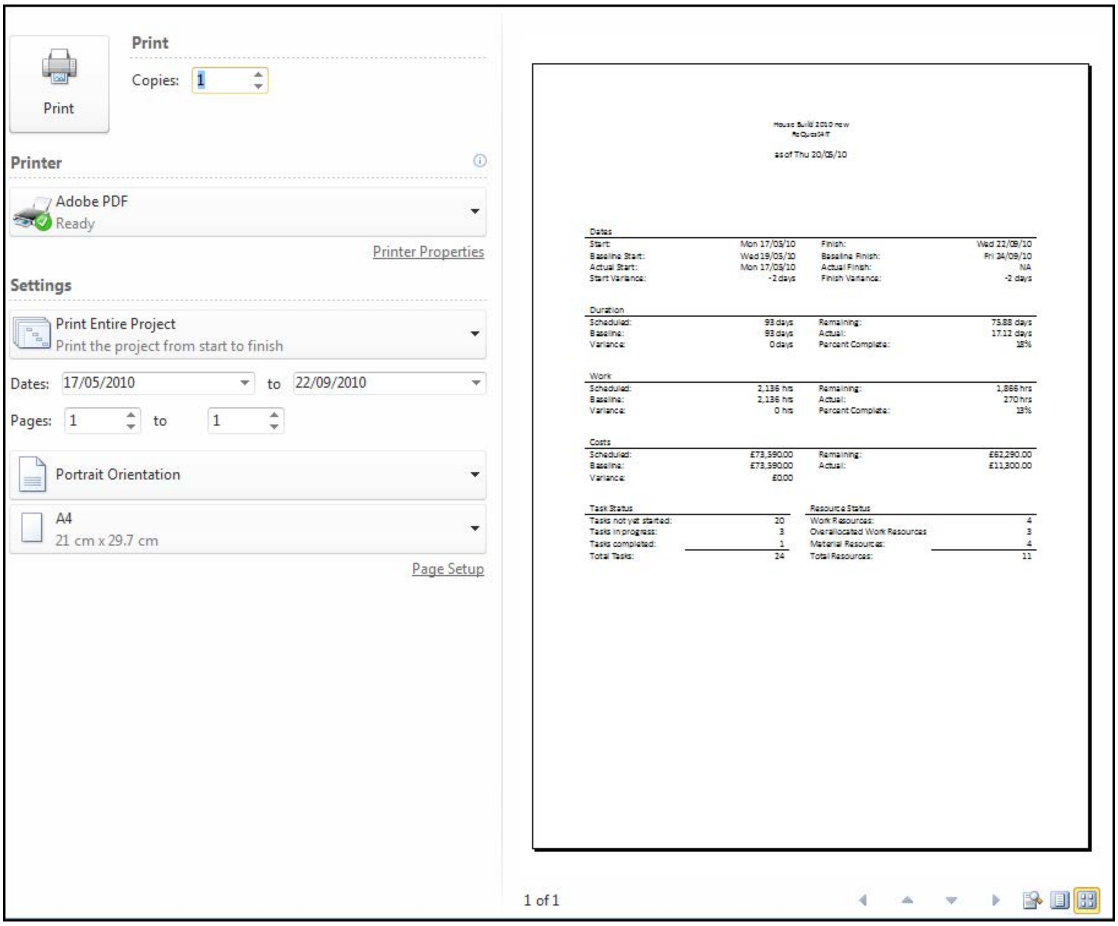


Figure 7-8: report preview

- ➢ To Check The Reports Available

mouse

i. Select project tab, Reports from the ribbon.

ii. Select one of the reports group types and press the Select button.

iii. Check one of the default reports subtypes and press the Select button. A preview is shown.

Reports By Report Type

To Print	Use
The number of tasks and resources, the project cost, the total amount of work, and the project start and finish dates.	Project Summary report (Overview reports)
A list of the highest-level summary tasks showing the scheduled start and finish dates, the percentage completed the cost, and the work.	Top-Level Tasks report (Overview reports)
A list of milestone tasks sorted by start date.	Milestones report (Overview reports)

Working and non-working time in your schedule.	Working Days report (Overview reports)
A list of critical tasks showing the scheduled start and finish dates and the predecessors and successors of each task.	Critical Tasks report (Overview reports).

Costing

The cost of each task per week, along with the total cost of all tasks per week and the total cost of each task.	Weekly Cash Flow report (Cost reports).
A list of resources whose costs are going to exceed the baseline cost.	Overbudget Resources report (Cost reports).
A list of tasks showing whether you are ahead of or behind schedule as compared with the actual costs incurred.	Earned Value report (Cost reports).
A list of tasks showing the budgeted cost of each task and the variance between budgeted costs and current costs.	Budget report (Cost reports).
A list of tasks whose costs are going to exceed the baseline cost.	Overbudget Tasks report (Cost reports).

Gantt

A list of project phases (summary tasks) and durations and a Gantt bar chart showing summary tasks.	Gantt Chart view, Entry table, and Summary tasks filter
A list of tasks and durations and a Gantt bar chart showing tasks, durations, task relationships, and assigned resources.	Gantt Chart view, Entry table, and All Tasks filter.
A list of tasks showing the actual start and finish dates, the percentage of each task completed, and the actual and remaining task durations.	Gantt Chart view, Tracking table, and All Tasks filter.

Calendar

To Print	Use
Scheduled tasks in a calendar format.	Calendar view and All Tasks filter.

Tasks

A list of tasks showing start and finish dates and assigned resources.	Task Sheet view, Entry table, and All Tasks filter.
A flow chart, or network diagram, showing all tasks and task relationships.	Network Diagram Chart view.

Resource Graph

A graph showing cumulative cost per resource over the life of the project.	Resource Graph view with Cumulative Cost chosen from Details submenu on Format menu.

Resource/Task

A list of resources showing the tasks to which each resource is assigned and the amount of work assigned to each resource per week.	Resource report (Assignment reports).
A list of resources showing their assigned tasks, the work scheduled for each task, the start and finish dates, and additional resource information.	Who Does What report (Assignment reports).
A list of resources showing their assigned tasks and the daily work scheduled for each task.	Who Does What report (Assignment reports).
A resource's tasks, broken down by week.	Weekly To-Do List report (Assignment reports).
A list of overallocated resources and the tasks to which they are assigned.	Overallocated Resources report (Assignment reports).

Work

A list showing detailed work information for each resource.	Resource Sheet view, Work Table, and All Resources filter.

Resource Usage

A list showing resource use over time, along with the cost, the work, and the pay rate of each resource.	Resource Usage view, Summary table, and All Resources filter.
A graph showing the amount of work assigned to each resource over time.	Resource Graph view and All Resources filter.

Resource Costs

To Print	Use
A summary of resource costs.	Resource Sheet view, Cost table and All Resources filter.

Task Usage

A list of tasks showing assigned resources and the amount of work assigned to each resource per week.	Task Usage report (Workload reports).
Cost information broken down by task and resource over time.	Crosstab report with tasks selected under Row, Cost selected under Column, and With Resource Assignments selected in Crosstab Report dialog box.
A list of planned and actual resource costs.	Resource sheet view and Cost table.

Tasks

A list of tasks that are currently in progress showing the months in which each task occurs.	Tasks In Progress report (Current Activity reports).
A list of tasks starting within a time period that you specify.	Tasks Starting Soon report (Current Activity reports).
A list of tasks that haven't started.	Unstarted Tasks report (Current Activity reports).
A list of tasks that should have started by the date you specify.	Should Have Started Tasks report (Current Activity reports).
A list of the tasks that have been rescheduled to occur after their baseline start dates.	Slipping Tasks report (Current Activity reports).

A list of completed tasks showing the months in which each task occurred	Completed Tasks report (Current Activity reports).
A list of tasks showing the scheduled start and finish dates, the baseline start and finish dates, and the difference between scheduled and baseline dates.	Task Sheet view, Variance table, and All Tasks filter.
A list of completed tasks.	Task Sheet view, Entry table, and Completed Tasks filter.