

CHAPTER 1

InFocus

WPL_J400

MICROSOFT PROJECT BASICS

Project management software is arguably one of the most difficult to learn, not only because you need to study how to use the software, but because you also need to know a little about project management theory.

Nevertheless, you need to start somewhere. This is a roll up your sleeves session where you will be introduced to the basic operating philosophy of Microsoft Project.

In this session you will:

- ✓ gain an understanding of **Microsoft Project's** operating philosophy
- ✓ learn how to start **Microsoft Project**
- ✓ gain an understanding of the main **Microsoft Project** screen elements
- ✓ gain an understanding of how **Microsoft Project** works
- ✓ learn how to use the **Ribbon**
- ✓ gain an understanding of **Backstage View** in **Microsoft Project**
- ✓ gain an understanding of the work area and project views
- ✓ learn how to change the view of your project
- ✓ learn how to split the project work area horizontally
- ✓ gain an understanding of tables in **Microsoft Project**
- ✓ learn how to change the **Table View**
- ✓ gain an understanding of the special **Gantt Chart** view
- ✓ learn how to work with the **Gantt Chart** view
- ✓ learn how to add a command to the **Quick Access Toolbar**
- ✓ learn how to work with existing **Microsoft Project** files
- ✓ learn how to exit from **Microsoft Project**.

HOW MICROSOFT PROJECT WORKS

Microsoft Project is really a computer database that uses two main **tables** of data to keep track of your project. **Project** uses one table to store information about the **tasks** of your project and

the other for **resource** information. By using the many **views** available in **Project**, you can display your project data from these tables in many different ways.

Tasks

This table is comprised of over 240 columns (or fields) which contain all sorts of information about the tasks such as scheduled start, scheduled finish, name, duration, cost, and the like. Some of these fields require you to enter data, while others are calculated and filled by Microsoft Project for you.

ID	Name	Duration	Start	Finish	Fixed	Cost	etc...
8	Erect fencing	2 days	1/2/2013	3/2/2013	No	\$500	

Resources

This table contains over 200 fields (or columns).

ID	Name	Initials	Group	Max Units	Standard Rate	Overtime Rate	etc...
3	Builder	FG	Contractor	4	\$55.00/h	\$75.00/h	

The two tables are joined together by assigning **resources** to **tasks**.

Views

To help you see, or **view**, your data, **Microsoft Project** adopts techniques used in spreadsheets, databases, and graphics packages.

For example you can see your task or resource table in **sheets** on the screen. Sheets are similar to spreadsheet programs where data is presented in rows and columns. In fact, many of the operations used in spreadsheets, such as widening columns, deleting data, selecting cells, and the like, are also found in **Microsoft Project**.

	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1	Planning	43 days	Mon 6/05/13	Wed 3/07/13		
2	Create architectural plans	3 wks	Mon 6/05/13	Fri 24/05/13		Architect,Draftsperson[200%],Building Clerk[25%]
3	Submit plans for approval	1 mon	Mon 27/05/13	Fri 21/06/13	2	Architect[67%]
4	Order materials	8 days	Mon 24/06/13	Wed 3/07/13	3	Draftsperson,Building Clerk
5	Planning Completed	0 days	Wed 3/07/13	Wed 3/07/13	2,3,4	
6	Site Works	28 days	Thu 4/07/13	Mon 12/08/13		
7	Erect fencing	3 days	Thu 4/07/13	Tue 9/07/13	5	No Barrier Fencing
8	Erect site buildings	4 days	Wed 10/07/13	Mon 15/07/13	7	Supervisor,Carpenter[400%],Labourer[800%]
9	Clear and level site	3 wks	Tue 16/07/13	Mon 5/08/13	8	Supervisor,Driver[200%],Grader[200%]

You can also see, or view, your data in **forms**. These forms are similar to a form view that you receive for data entry screens in database programs. Forms allow you to add or edit data and you can usually cycle through the cards as you would in a normal database.

Name:	Erect steelwork	Duration:	3 mons	<input checked="" type="checkbox"/> Effort driven	<input type="checkbox"/> Manually Scheduled	Previous	Next
Start:	Wed 21/08/13	Finish:	Tue 12/11/13	Task type:	Fixed Units	% Complete:	0%
ID	Resource Name	Work	R/D	Leveling Delay	Delay	Scheduled Start	Scheduled Finish
4	Supervisor	225h		0d	0d	Wed 21/08/13	Tue 12/11/13
5	Rigger	2,700h		0d	0d	Wed 21/08/13	Tue 12/11/13
6	Boilermaker	2,700h		0d	0d	Wed 21/08/13	Tue 12/11/13
7	Welder	2,250h		0d	0d	Wed 21/08/13	Tue 12/11/13
10	Labourer	2,700h		0d	0d	Wed 21/08/13	Tue 12/11/13
11	Driver	900h		0d	0d	Wed 21/08/13	Tue 12/11/13
18	High Jib Crane	450h		0d	0d	Wed 21/08/13	Tue 12/11/13
21	Utility	450h		0d	0d	Wed 21/08/13	Tue 12/11/13

If you wish to see your data graphically you can view it as a **Gantt Chart** or **Network Diagram**. In addition you have a variety of other graphs for displaying resources.

STARTING MICROSOFT PROJECT

To create a new project, or edit an existing one, the first thing that you need to do is to start **Microsoft Project**. As a standard software application, how **Microsoft Project** is started is

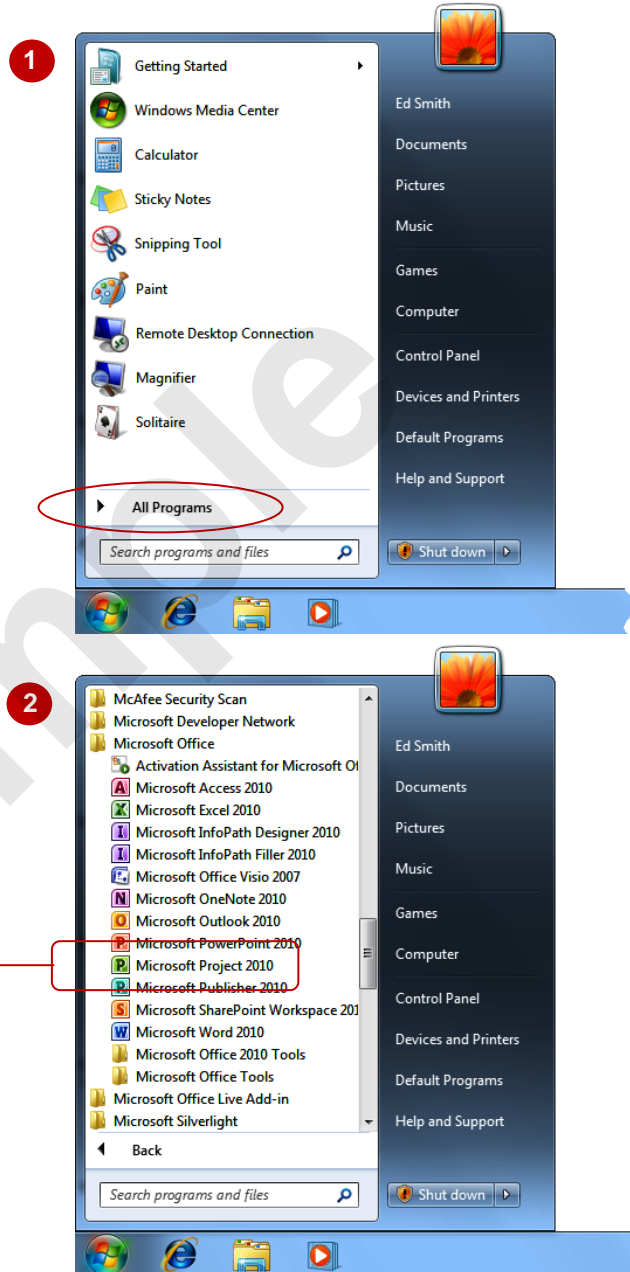
largely determined by Windows. For example, it can be started from the Windows **Start menu**, from a **shortcut**, or from **Windows Explorer** by accessing a file that was created in **Project**.

Try This Yourself:

Before you begin, ensure that your computer is switched on and that the Windows desktop is displayed on your screen...

- 1 Click on the Windows **Start** button (it's a round button with a **Windows** logo on it) at the bottom left-hand corner of the screen to display the menu
- 2 Click on **All Programs**
- 3 Click on **Microsoft Office** to expand the menu and see all of the **Microsoft Office** applications installed on your computer
- 4 Click on **Microsoft Project 2010**

After a few moments of huffing and puffing Project will start with a blank "project" on the screen



For Your Reference...

To **start Microsoft Project**:

1. Click on the Windows **Start** button
2. Click on **All Programs**
3. Click on **Microsoft Office**
4. Click on **Microsoft Project 2010**

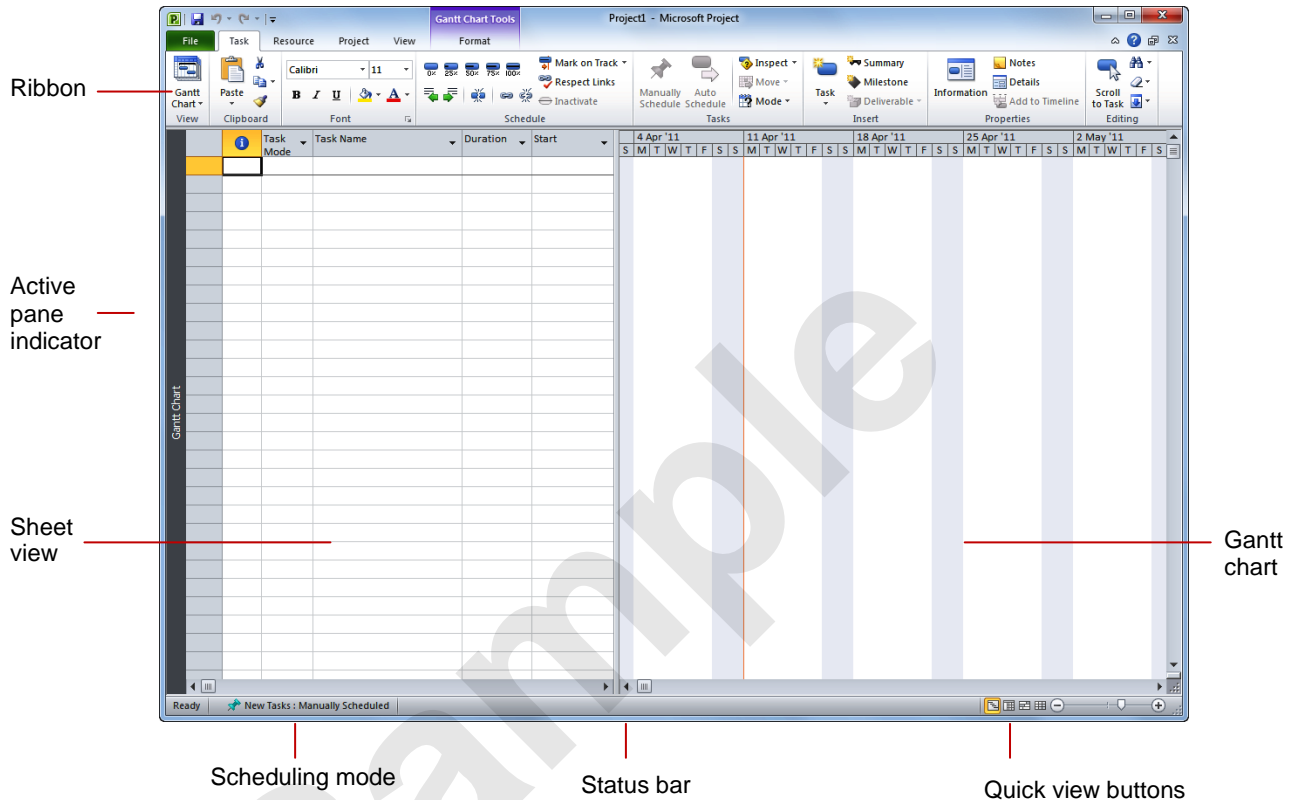
Handy to Know...

- After you have accessed **Microsoft Project** several times it should appear in the first part of the **Start** menu – this means you won't need to continue to the **All Programs** menu.

THE MICROSOFT PROJECT SCREEN

The Microsoft Project screen will vary depending upon the **view**, **table**, and **filter** that is currently active. However, you will need to become familiar with the basic components of the screen as

shown below. Understanding the layout of the screen, and its components and terminology will help you in using Microsoft Project.



Ribbon

The **Ribbon** displays the commands required to use Microsoft Project. It is made up of tabs (*File*, *Task*, *Resource*, etc) which each contain *groups* of commands organised into logical order.

Active pane indicator

The **active pane indicator** is a vertical bar with a dark colouring that runs down the left side of a screen (or a **view**). The one above contains the words **Gantt Chart** so that you know you have a **Gantt Chart** as the **active** view. You can actually have two different views open by *splitting* the screen – only one view, however, can be active because things like the commands on the **Ribbon** are controlled by what you are viewing. The indicator shows which view is currently **active**.

Sheet view

Your project's tasks and resources can be seen as a **table**, much like a spreadsheet. In Microsoft Project this is referred to as a **sheet view**.

Scheduling mode

Your project can be scheduled manually (the default) or automatically. This (very important) indicator tells you which mode is currently applicable.

Status bar

Watch this space – it tells you what Microsoft Project is currently up to.

Quick view buttons

There are many ways to change the view of the screen. These four buttons provide quick access to the four most common views saving you the hassle of locating the commands to do this on the **Ribbon**.

Gantt chart

The **Gantt Chart** is the world's most favourite view of a project. It shows your project's tasks as a series of timelines. It is the default view of Microsoft Project when it is first started and, in reality, will most likely be the one you use most.

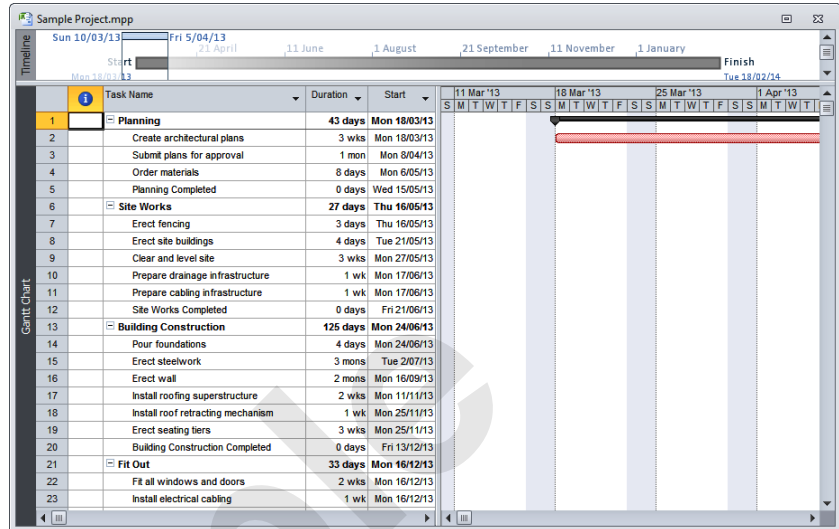
HOW MICROSOFT PROJECT 2010 WORKS

For a novice user the **Microsoft Project 2010** screen can seem intimidating. However, you'll soon see that it is made up of only three key areas. The data you type is placed in the **work**

area. The data here can be manipulated and changed using commands on the **Ribbon**. The data is saved in a project file which is controlled through commands on the **Backstage**.

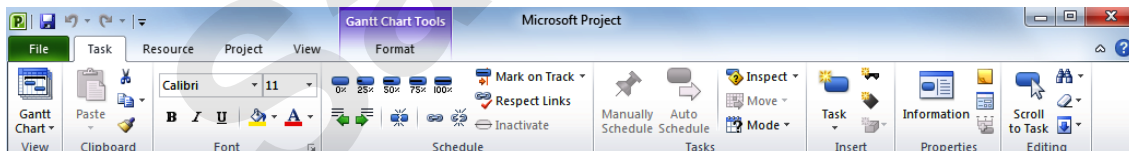
The Work Area

The **work area** occupies the largest part of the screen and contains the data associated with your project. The key point to remember is that a project is made up of **tasks** and **resources** and the work area allows you to view your task and resource data in a number of different ways. The work area may show your data in a **sheet** view, or maybe a **chart** view like a Gantt chart or maybe even both!



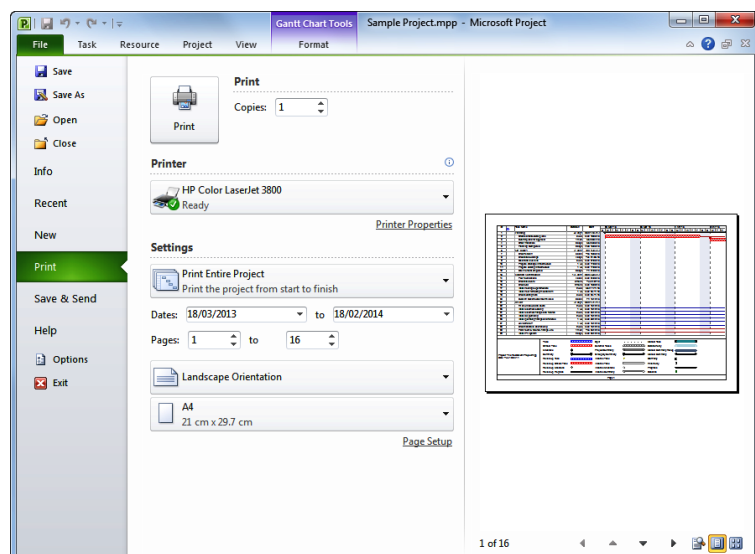
The Ribbon

When you need to do something with the data in the work area, such as format it, colour it, analyse it, move it, copy it, change the view of it and much more, you'll find all of the relevant commands on the **Ribbon**. The **Ribbon** has commands organised thematically using a series of **tabs** across the top. Commands on each tab are further organised into **groups** of like-commands. It's not too hard to get the hang of where a command can be found. Remember, a project is simply a view of task and resource data – hey, have a look at the **Ribbon** and you'll find a **Tasks** and a **Resources** tab! So whatever you need to do with tasks can be found on the **Tasks** tab, and anything you want to do with resources can be found on the **Resources** tab.



Backstage

When you want to do something with the data in your work area, such as save it so that you can access it again later, print it, share it with a colleague, send it to your boss, protect it from prying eyes, or whatever, you will need to access the **Microsoft Office Backstage** area of Microsoft Project. The **Backstage** is accessed using the **File** tab on the **Ribbon**. Rather than offering you commands on a **Ribbon**, **Backstage** occupies the entire screen and has a series of options down the left side. Here the **Print** option is active, and that is why you can see a preview of the work area and a series of print-related options on the right side of the **Backstage**.



USING THE RIBBON

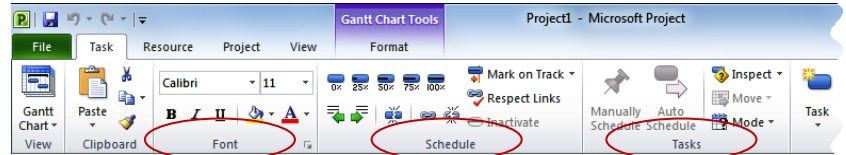
The **Ribbon** is the command centre for Microsoft Project. It provides a series of **commands** organised into **groups** and placed on relevant **tabs**. Tabs are activated by clicking on their

name to display the command groups. **Commands** are activated by clicking on a button, tool or gallery option. Everything you could possibly want to do in Project will be found somewhere on this **Ribbon**.

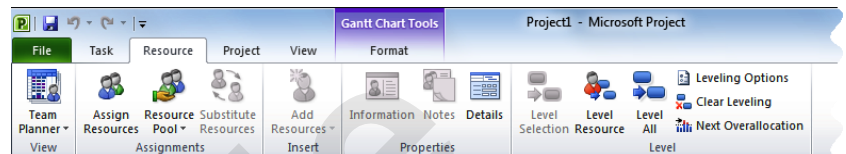
Try This Yourself:

Before starting this exercise ensure that Project has started...

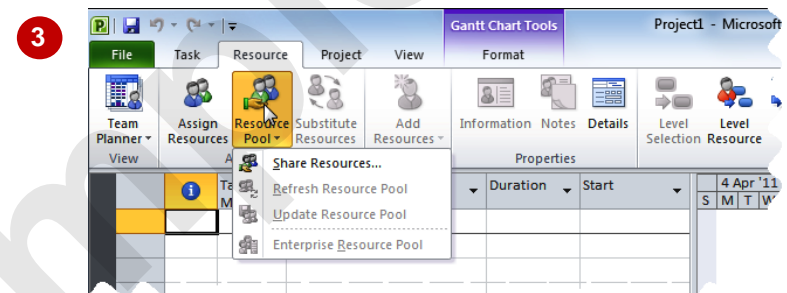
- 1 Examine the various groups on the **Task** tab
The group names appear at the bottom of the Ribbon...
- 2 Click on the **Resource** tab
The commands on this tab are used to work with resources. Many will not be available because there are no resources in the blank project on the screen. You can never be too sure what you'll get when you click on a command...
- 3 Click on **Resource Pool** in the **Assignments** group to display a *menu*
- 4 Click on **Share Resources** to display the **Share Resources** dialog box
- 5 Click on **[Cancel]** to pop the box away
- 6 Click on the other tabs and spend some time examining the groups and commands they contain
- 7 Click on the **Task** tab



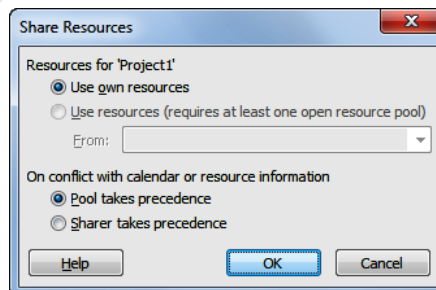
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For Your Reference...

To **use** the **Ribbon**:

1. Click on a **tab** to display the commands
2. Click on a **button** to activate a *command*, display a *gallery*, or display a *dialog box*

Handy to Know...

- Additional tabs known as **Contextual tabs** appear in specific circumstances. For example, if you insert a picture, the **Picture Tools: Format** tab will appear. This provides quick access to all of the tools you may need to modify and work with the picture.

UNDERSTANDING THE BACKSTAGE VIEW

The **Ribbon** allows you work *on the content* in a worksheet – you can add more content, colour it, chart it, analyse it, copy it, and much more. The **Backstage**, which is accessed using the **File** tab,

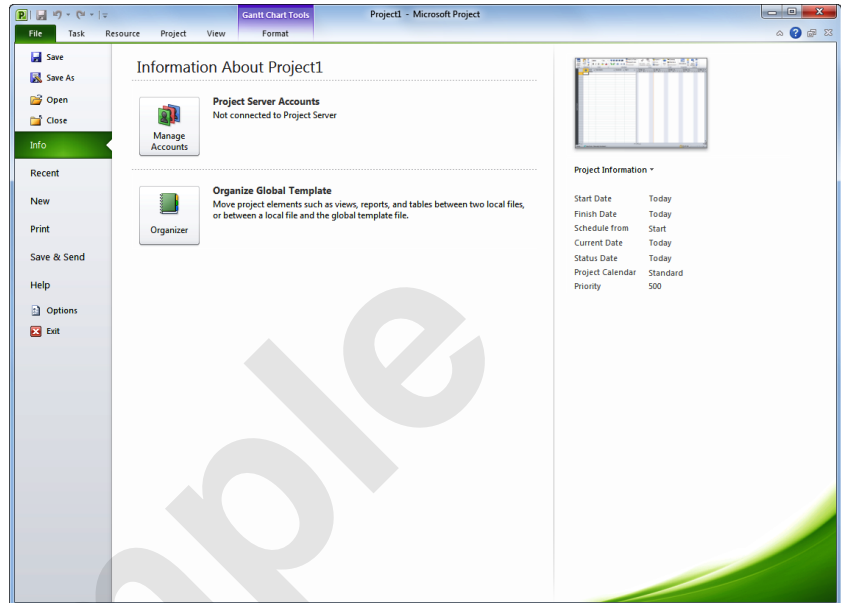
allows you to *do something with* the content you create. You can save it for reuse later, print it on paper, send it via email, and more using the options found in **Backstage** view.

The Backstage Screen

The **File** tab on the **Ribbon** is not a normal tab – as you can tell by the fact that it is coloured. Clicking on the **File** tab launches a mini-program within Microsoft Project known as **Backstage View**. **Backstage**, as it's known for short, occupies the entire screen although the tabs from the **Ribbon** still remain visible at the top.

At the left of the **Backstage** is a navigation pane which is made up of **Quick commands**, smallish buttons which will perform an operation immediately, and largish **tabs** which display more options and information to the right of the screen.

The whole underlying purpose of the **Backstage** is to allow you to protect your data, to share it with others, and to provide you with valuable information both about your data and the status of Microsoft Project.



Quick Commands

The **Quick commands** provide immediate access to an operation.

	Save	Saves the current project
	Save As	Allows you to save the current project under a different name or location
	Open	Opens a previously saved project
	Close	Closes the current project
	Options	Provides access to options that allow you to control how Project looks and works
	Exit	Allows you to close and exit from Microsoft Project

Backstage Tabs

The **Backstage tabs** provide more options for working with a project

	Info	Provides status information about the current project, and allows you to manage versions and permissions
	Recent	Provides a list of recently saved projects
	New	Allows you to create a new project and provides access to a huge gallery of templates
	Print	Allows you to print the current project and also previews it
	Share	Allows you to share your project with other people
	Help	Provides access to Microsoft's help network and also provides licensing information about your software

THE PROJECT WORK AREA

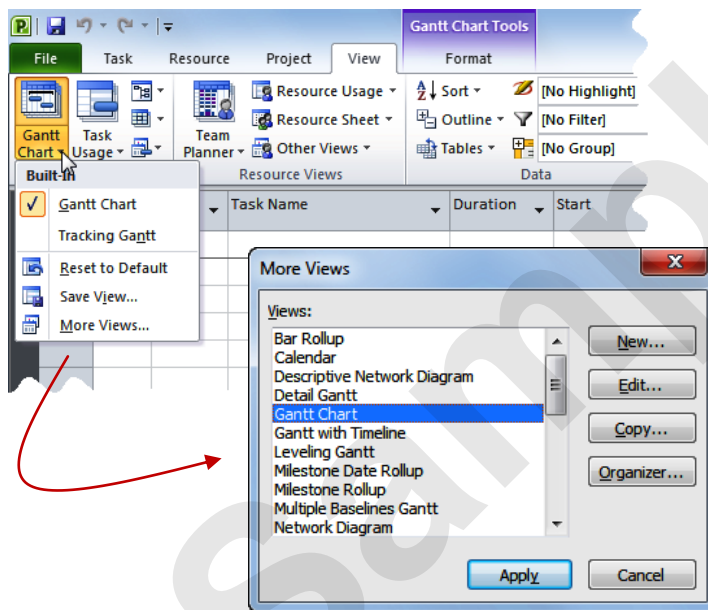
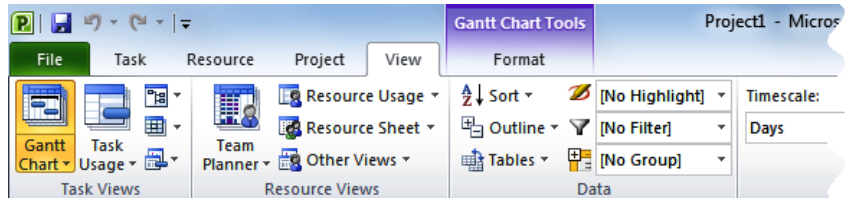
The main part of the Microsoft Project screen is made up of the **work area** where your project data is displayed. Remember, Project is really just two tables of data – **tasks** and **resources**.

The work area shows you different aspects and sometimes combined **views** of this data. For example you can view your tasks and the resources assigned to them.

The View Tab

The **View** tab on the **Ribbon** provides you with access to the views for your project's data.

Notice, there is a **Task Views** grouping and a **Resource Views** grouping here!



When you click on the arrow for one of the **View** commands you'll receive a menu of further views available to you. All of the menus feature the **More Views** command which displays the **More Views** dialog box which lists all of the standard views available to you in Microsoft Project.

Built-In Project Views

Microsoft Project contains 27 different built-in views for you. Seven of these views are available from the **Task Views** and **Resource Views** groupings on the **View** tab, while the full 27 are available from the **More Views** dialog box. Here's a list of the 27 views – the ones marked with a **(T)** or **(R)** are accessible directly from the **View** tab of the **Ribbon**.

Bar Rollup	Multiple Baselines Gantt	Task Details Form
Calendar (T)	Network Diagram (T)	Task Entry
Descriptive Network Diagram	Relationship Diagram	Task Form
Detail Gantt	Resource Allocation	Task Name Form
Gantt Chart (T)	Resource Form	Task Sheet
Gantt with Timeline	Resource Graph	Task Usage (T)
Levelling Gantt	Resource Name Form	Team Planner (R)
Milestone Date Rollup	Resource Sheet (R)	Timeline
Milestone Rollup	Resource Usage (R)	Tracking Gantt

WORKING WITH VIEWS

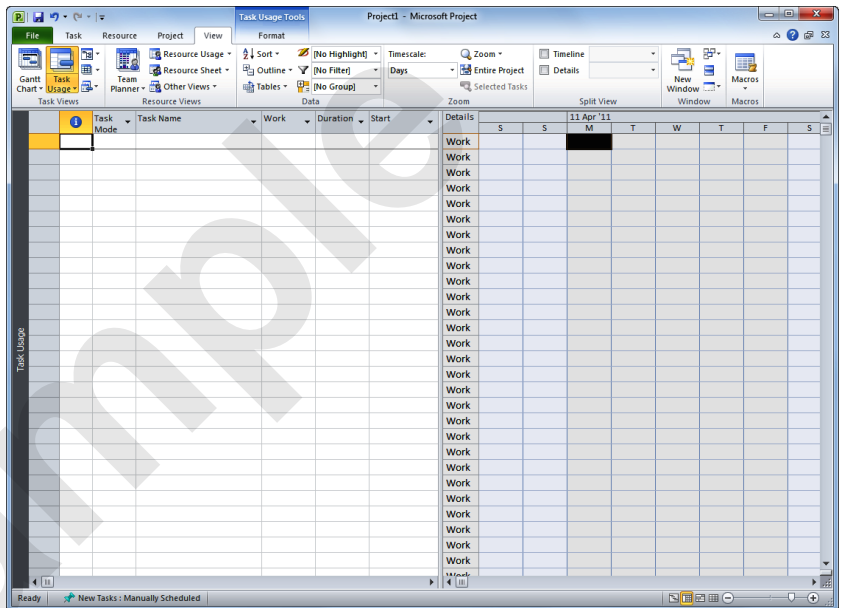
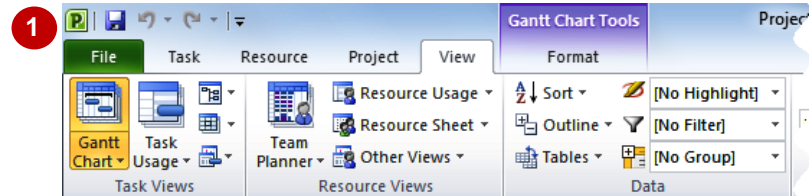
A **view** is the way we look at the project and the data it contains. In order to work with your project successfully, you will need to learn how to operate and manipulate the many different views.

The main way to change the view of your project is through the commands on the **View** tab or through the **Quick Views** buttons at the bottom right of the screen.

Try This Yourself:

Before starting this exercise ensure that Microsoft Project has started...

- 1 Click on the **View** tab and spend a few moments studying the options in the **Task Views** and **Resource Views** groupings
- 2 Click on **Task Usage** in **Task Views** to see the work allocations on the screen
- 3 Click on **Calendar** in **Task Views** to see the screen laid out as a calendar
- 4 Click on **Other Views** in **Task Views** to display a menu and click on **Task Form**
- 5 Click on **Resource Sheet** in **Resource Views** to see a spreadsheet-like view of the resources
- 6 Click on **Gantt Chart** in **Task Views** to return to the **Gantt Chart** view



- 2 *There is an obvious lack of data presented on this screen! Don't worry too much at this stage about what the view is all about. All we are doing at this stage is examining the View commands to see how they work and what they offer.*

For Your Reference...

To **display** different **views**:

1. Click on a command on the **View** tab
or
Click on the arrow of a command and click on **More Views** to display a list of all available views

Handy to Know...

- The **Gantt Chart**, **Task Usage**, **Team Planner**, and **Resource Sheet** views appear as buttons at the bottom right of the screen.

WORKING WITH SPLIT SCREENS

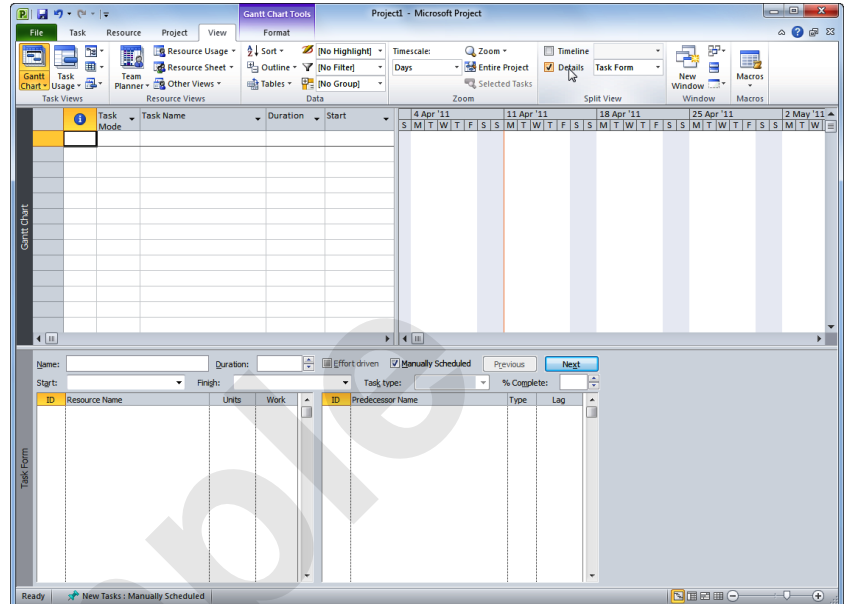
Sometimes in Microsoft Project one view of your data is not enough! Project, therefore, allows you to **split** your screen horizontally into two views. For example, you might want to see tasks at the

top and their resources at the bottom. One of these views is deemed to be the **active** view – as indicated by the **active pane indicator** at the left of the screen.

Try This Yourself:

Before starting this exercise ensure that Microsoft Project has started...

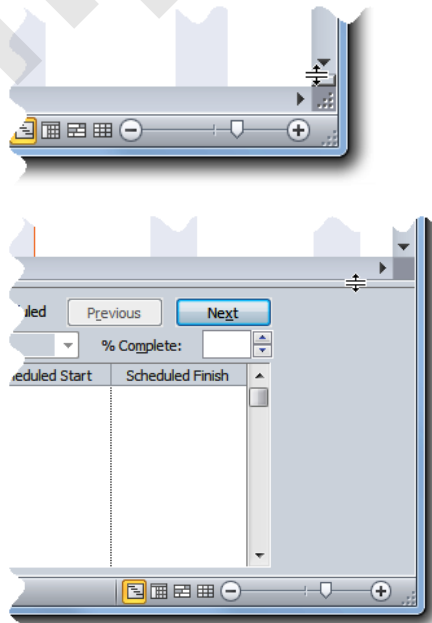
- 1 Click on the **View** tab of the **Ribbon** and click on **Details** in **Split View** to see the **Task Form** in the bottom half of the screen
- 2 Click on the drop arrow to see the different views you can have
- 3 Click on **Resource Form** to see it in the lower area
- 4 Click on **Details** in **Split View** to return to the **Gantt Chart** view
- 5 Move the mouse pointer to the **split screen** button at the bottom right of the screen
- 6 Hold down the left mouse button and drag the button up about one third of the screen to create a custom split
- 7 Double click on the button (which now runs the full width of the screen) to return to a single view



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For Your Reference...

To display a **split** view:

1. Click on **Details** in the **Split View** group on the **View** tab
2. Optionally, click on the drop arrow for **Details** and choose the desired view

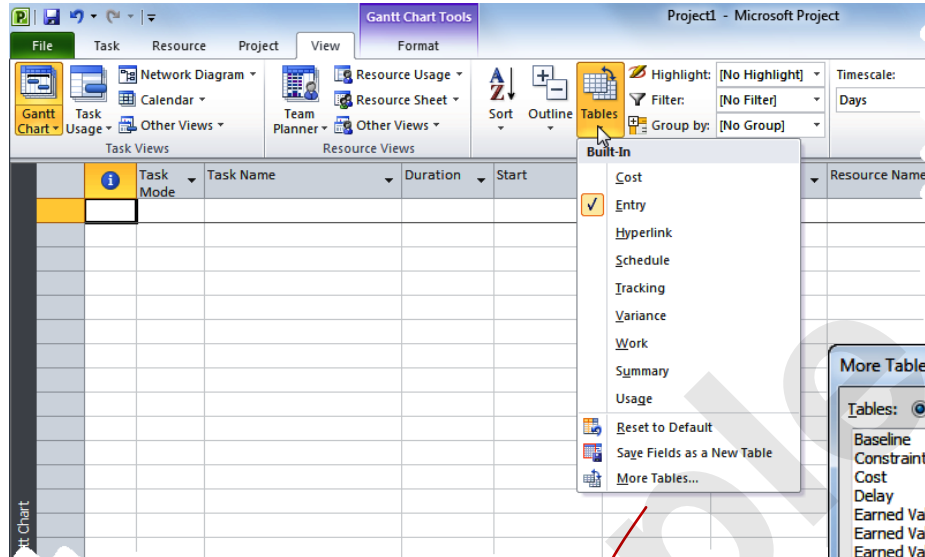
Handy to Know...

- There is also a **Timeline** view in the **Split View** group. This shows a timeline which embraces the start to end of the project. It's a useful view for quickly moving to specific times in your project.

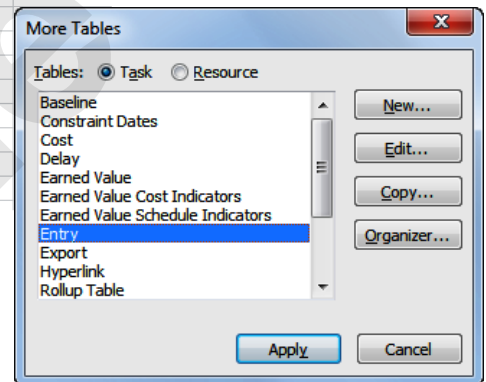
UNDERSTANDING SHEET VIEWS

Sheet views of data are common to database and spreadsheet applications. Microsoft Project also uses **sheet views** where data is presented in rows and columns. In Project there are literally

dozens of columns (called **fields**) for *tasks* and similarly for *resources*. To make it easier to work with these columns, oops *fields*, they have been organised into **tables**.



The **Tables** command on the **View** tab provides access to the tables in Microsoft Project. The menu presents a few of the more commonly used tables but all of the tables are obtained using the **More Tables** command.



About Tables

Since there are literally dozens of fields for both *Tasks* and *Resources*, Microsoft Project organises these in specialised groupings into **tables**. For example, fields for tasks associated with costs are organised into a **Cost** table, fields that are commonly used for data entry are organised into an **Entry** table, and so on.

Task Tables

There are 17 pre-defined tables for *tasks* as follows:

Baseline	Earned Value	Export	Summary
Constraint Dates	Earned Value Cost Indicators	Hyperlink	Tracking
Cost	Earned Value Schedule Indicators	Rollup Table	Usage
Delay	Entry	Schedule	Variance
			Work

Resource Tables

There are 10 pre-defined tables for *resources* as follows:

Cost	Entry – Material Resources	Hyperlink	Usage
Earned Value	Entry – Work Resources	Summary	Work
Entry	Export		

WORKING WITH TABLES

Microsoft Project consists of two databases: **tasks** which contains over 240 columns of data, and **resources** which contains over 200 columns of data. **Tables** display information from these

columns (or *fields*) into organised and logical groupings. Once a **Sheet** view has been chosen you can change the table of fields that are presented.

Try This Yourself:

Before starting this exercise ensure that Microsoft Project has started...

- 1 Click on the **View** tab on the **Ribbon**, click on **Other Views** in the **Task Views** group and click on **Task Sheet** to see tasks presented in a sheet view
- 2 Click on **Tables** in the **Data** group and click on **Cost** to see **Cost** columns
- 3 Click on **Tables** again and click on **More Tables** to display the **More Tables** dialog box
- 4 Click on **Delay** and click on **[Apply]**
- 5 Click on **Gantt Chart** in **Task Views** to see the **Gantt Chart** view again – together with the **Entry** table
- 6 Click on **Tables** in the **Data** group and click on **Cost** to see the **Cost** table with the **Gantt Chart** view
- 7 Click on **Tables** again and click on **Entry**

For Your Reference...

To change the **tables** in view:

1. Click on **Tables** in the **Data** group on the **View** tab and click on the desired table or click on **More Tables**
2. If you are using the **More Tables** box click on the desired table and click on **[Apply]**

Handy to Know...

- To quickly see the name of the current **table view**, move your mouse pointer to the **All Cells** box. This is located in the top left hand corner of the table, where the rows and columns intersect. A **ToolTip** will be displayed containing the table view name.