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.
**Microsoft Project Basics**

**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.

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Fixed</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Erect fencing</td>
<td>2 days</td>
<td>1/2/2013</td>
<td>3/2/2013</td>
<td>No</td>
<td>$500</td>
</tr>
</tbody>
</table>

### Resources

This table contains over 200 fields (or columns).

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Initials</th>
<th>Group</th>
<th>Max Units</th>
<th>Standard Rate</th>
<th>Overtime Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Builder</td>
<td>FG</td>
<td>Contractor</td>
<td>4</td>
<td>$55.00/h</td>
<td>$75.00/h</td>
</tr>
</tbody>
</table>

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*.

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.

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 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

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.

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Save" /></td>
<td>Saves the current project</td>
</tr>
<tr>
<td><img src="image" alt="Save As" /></td>
<td>Allows you to save the current project under a different name or location</td>
</tr>
<tr>
<td><img src="image" alt="Open" /></td>
<td>Opens a previously saved project</td>
</tr>
<tr>
<td><img src="image" alt="Close" /></td>
<td>Closes the current project</td>
</tr>
<tr>
<td><img src="image" alt="Options" /></td>
<td>Provides access to options that allow you to control how Project looks and works</td>
</tr>
<tr>
<td><img src="image" alt="Exit" /></td>
<td>Allows you to close and exit from Microsoft Project</td>
</tr>
</tbody>
</table>

Backstage Tabs

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

<table>
<thead>
<tr>
<th>Tab</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Info" /></td>
<td>Provides status information about the current project, and allows you to manage versions and permissions</td>
</tr>
<tr>
<td><img src="image" alt="Recent" /></td>
<td>Provides a list of recently saved projects</td>
</tr>
<tr>
<td><img src="image" alt="New" /></td>
<td>Allows you to create a new project and provides access to a huge gallery of templates</td>
</tr>
<tr>
<td><img src="image" alt="Print" /></td>
<td>Allows you to print the current project and also previews it</td>
</tr>
<tr>
<td><img src="image" alt="Share" /></td>
<td>Allows you to share your project with other people</td>
</tr>
<tr>
<td><img src="image" alt="Help" /></td>
<td>Provides access to Microsoft’s help network and also provides licensing information about your software</td>
</tr>
</tbody>
</table>
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
Calendar (T)
Descriptive Network Diagram
Detail Gantt
Gantt Chart (T)
Gantt with Timeline
Levelling Gantt
Milestone Date Rollup
Milestone Rollup

Multiple Baselines Gantt
Network Diagram (T)
Relationship Diagram
Resource Allocation
Resource Form
Resource Graph
Resource Name Form
Resource Sheet (R)
Resource Usage (R)

Task Details Form
Task Entry
Task Form
Task Name Form
Task Sheet
Task Usage (T)
Team Planner (R)
Timeline
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.

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**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.

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.

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**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.

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**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.

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.

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
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.

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
- Constraint Dates
- Cost
- Delay
- E earned Value
- E earned Value Cost Indicators
- E earned Value Schedule Indicators
- Hyperlink
- Rollup Table
- Schedule
- Summary
- Tracking
- Usage
- Varian ce
- Work

Resource Tables

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

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

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.
## 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:

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.
**Gantt Chart View**

There is one view in Microsoft Project that acts kind of like home base – and that is the Gantt Chart view. This view contains all of the elements that are usually required to obtain a quick visual snapshot of a project. At the left the Gantt Chart view displays tasks in a sheet view. At the right the tasks are displayed in a timeline so that a quick visual overview can be obtained.

**Understanding the Gantt Chart View**

The Gantt Chart view is a split view of sorts – rather than being split horizontally it is split vertically so that there is a sheet representation on the left and a timeline, or more visual, representation on the right.

These views are overlapping. In its default mode the sheet shown on the left is the Task Entry table. This table has quite a number of columns, yet only a handful are seen on the screen. It is possible therefore to scroll this sheet view to see more columns – that is why there is a scroll bar at the bottom of the sheet view.

Similarly the Gantt Chart on the right can be scrolled if the timescale goes out beyond the physical limits of the screen. Again a scroll bar is displayed at the bottom of the chart to facilitate the scrolling operation.

In addition to scrolling, though, the Gantt Chart on the right can also be zoomed in or out, thereby making it larger or smaller on the screen.
WORKING THE GANTT CHART VIEW

The Gantt Chart view is used to display tasks and durations as bars plotted on a time scale. It provides an overview of the project, plus the capacity to enter or edit task information. It is the default view in Microsoft Project and the most common view. It also contains a few useful features for displaying your data.

Try This Yourself:

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

1. Click on the right arrow of the horizontal scroll bar in the left pane to scroll the sheet view and see different columns.
2. Click on the left arrow until the first field is back in view.
3. Click on the right arrow of the horizontal scroll bar in the right pane and notice how the timeline scrolls.
4. Click and hold the mouse pointer on the grey button on the right scroll bar to reveal the date that the timeline is currently viewing.
5. Hold down the left mouse button on the line that divides the table on the left from the timescale on the right and drag it to the right to see more of the sheet view.
6. Double-click on the vertical line to precisely align it to the nearest field.

For Your Reference...

To work with a Gantt Chart:
1. Click on the horizontal scroll buttons in the left pane to scroll the sheet and the right pane to scroll the timeline.
2. Drag the elevator button on the right pane to a specific point in time.

Handy to Know...
- Press `Ctrl + Home` to jump to the first task.
- Press `Alt + Home` to see the start of the Gantt bar for the selected task.
- Press `Home` to jump to the start of a task row.
- Press `End` to jump to the end of a task row.
WORKING WITH THE QAT

The Quick Access Toolbar (QAT), which appears at the very top left hand corner of the screen, is a handy location to place commands from the Ribbon that you use frequently. This is done by choosing the Add to Quick Access Toolbar option which appears when you right click on the command when it is in the Ribbon. The command appears as an icon in the QAT.

Try This Yourself:

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

1. Click on the Project tab on the Ribbon
2. Right click on Project Information in the Properties group to see a shortcut menu
3. Click on Add to Quick Access Toolbar to display the command as a small icon on the QAT
4. Click on the Project Information icon on the QAT to display the Project Information dialog box just as it would if you’d used the command on the Ribbon
5. Click on [Cancel] to close the dialog box without doing anything
6. Right click on the Project Information icon on the QAT and click on Remove from Quick Access Toolbar to remove the icon

For Your Reference...

To display a command on the QAT:
1. Right click on the command in the Ribbon
2. Click on Add to Quick Access Toolbar

Handy to Know...

- Changes you make to the QAT are global in scope – this means that they stay in Microsoft Project for every project you create.
WORKING WITH PROJECT FILES

When you first start Microsoft Project it appears with a new, empty project. This allows you to enter details and create a new project. However, you will often want to work with a project that you have worked with before. To open an existing project file, to save changes you have made in a project, or to close a project file you will need to access the Backstage commands.

Try This Yourself:

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

1. Click on the File tab on the Ribbon and click on the Open command to display the Open dialog box.
2. Change the location path to the one containing the student files (C:\Course Files for Project 2010) and double click on Sample Project.mpp.
3. Click on the File tab again and click on New.
4. Double click on Blank Project to display a new project.
5. Click on the View tab and click on the Switch Windows command in the Window group to see a menu of open projects.
6. Click on 3 Sample Project.mpp.
7. Click on the Arrange All command in the window to see all open projects.

For Your Reference...

To open an existing project file:
1. Click on File and click on Open
2. Locate the drive and folder where the file is stored
3. Select the name of the project file and click on the [Open] button

Handy to Know...

- If you attempt to close a project file that has been changed since it was opened Microsoft Project will prompt you and ask you to save the file before it is closed. You therefore have some protection against losing data.
EXITING FROM MICROSOFT PROJECT

Although several methods exist, the best way to leave Microsoft Project is through the Exit command on the Backstage menu. If you have made changes to the current project file since you started Microsoft Project you will be prompted to save these changes. You may be prompted to save even though you have only changed the views of a project.

Try This Yourself:

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

1. Click on the File tab on the Ribbon to access the Backstage

2. Click on Exit
   You may be prompted to save changes made to the project. We haven’t made any changes worth keeping so we can ignore this message...

3. If the prompt to save the project appears click on [No]

For Your Reference...
To exit from Microsoft Project:
1. Click on the File tab on the Ribbon to access the Backstage
2. Click on Exit

Handy to Know...
- The keyboard shortcut for exiting Microsoft Project (and most other Windows applications) is \texttt{ALT} + \texttt{F4}.

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