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Welcome to the
Eastwood Harris Pty Ltd
Microsoft Project 2010
training course
presented by
Paul E Harris

PMI REP No 3001 – Course Number TBA

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Administration

- Evacuation
- Timings, meals and facilities
- Mobile phones and emails
- Introductions
  - Your name
  - Your position or job
  - Experience in scheduling software
  - What you expect from the course
- Course attendance sheet.

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Course Agenda

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Module 1 – Introduction

Topics:

- Purpose of the course
- Required Background Knowledge
- Purpose of Planning
- Project Planning Metrics
- Planning Cycle
- Levels of Planning
- Monitoring and Controlling a Project.

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Purpose of the course

- Provide a method for planning, scheduling and controlling projects,
- Using Microsoft Office Project Professional 2010 or Microsoft Office Project Standard 2010
- In a single project environment
- Up to an intermediate level.

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Required Background Knowledge

- The ability to use a personal computer and understand the fundamentals of the operating system,
- Experience using application software such as Microsoft Office, and
- An understanding of how projects are managed, such as the processes that take place over the lifetime of a project.

Level 1 – Planning Without Resources

- Create the project
- Define the calendars
- Defining the WBS using Outlining
- Add tasks
- Add the logic & constraints
  - Mandatory dependencies
  - Discretionary dependencies
  - External dependencies
- Schedule the project
- Consider contingent time
- Format the output and distribute the plan.

Creating Projects

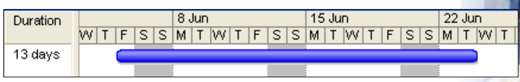
To create the project in Microsoft Project, you will require the following information:

- Project Name
- The Project Start Date (and perhaps the Finish Date)
- It would be helpful to know other important information such as:
  - Client name, and
  - Other project data such as location, project number and stakeholders.

Defining the Calendars

- The finish date and time of an task is calculated from the start date and time plus the task duration over the calendar assigned to the task.

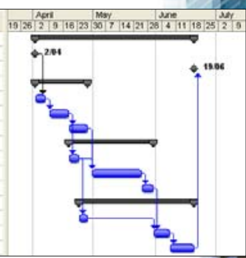
November 2012						
M	T	W	Th	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		



Defining a WBS and Adding Tasks

- A WBS may be defined as a hierarchical breakdown of all the project deliverables or products,
- The principal method of assigning a WBS to a project with Microsoft Project is using a function entitled **Outlining**, which creates a hierarchy of summary tasks:

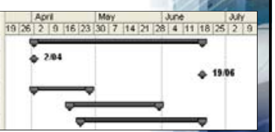
	Task Name	Duration	Start	Finish
1	**Project Summary Task**	**57 days**	**2 Apr**	**19 Jun**
2	Start Milestone	0 days	2 Apr	2 Apr
3	Finish Milestone	0 days	19 Jun	19 Jun
4	**WBS Node 1**	**20 days**	**2 Apr**	**27 Apr**
5	Task 1	5 days	2 Apr	6 Apr
6	Task 2	8 days	9 Apr	18 Apr
7	Task 3	7 days	19 Apr	27 Apr
8	**WBS Node 2**	**30 days**	**19 Apr**	**30 May**
9	Task 4	3 days	19 Apr	23 Apr
10	Task 5	19 days	30 Apr	24 May
11	Task 6	4 days	25 May	30 May
12	**WBS Node 3**	**41 days**	**24 Apr**	**19 Jun**
13	Task 7	4 days	24 Apr	27 Apr
14	Task 8	6 days	31 May	7 Jun
15	Task 9	8 days	8 Jun	19 Jun



Summarizing a Schedule

- The project schedule may be rolled up using these summary tasks:

	Task Name	Duration	Start	Finish
1	**Project Summary Task**	**57 days**	**2 Apr**	**19 Jun**
2	Start Milestone	0 days	2 Apr	2 Apr
3	Finish Milestone	0 days	19 Jun	19 Jun
4	**WBS Node 1**	**20 days**	**2 Apr**	**27 Apr**
8	**WBS Node 2**	**30 days**	**19 Apr**	**30 May**
12	**WBS Node 3**	**41 days**	**24 Apr**	**19 Jun**



Adding the Logic

There are several types of dependencies that may be used when planning a project:

- **Mandatory dependencies**, also known as **Hard Logic**, are relationships between tasks that may not be broken,
- **Discretionary dependencies**, also known as **Sequencing Logic** or **Soft Logic**, are relationships between tasks that may be changed when the plan is changed,
- **External dependencies** are usually events outside the control of the project team that impact the schedule.

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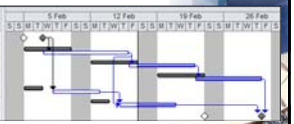
Level 2 – Monitoring Progress Without Resources

- Set the Baseline
- Tracking and record progress
- Entering in Actual Start Dates, Percent Complete and Actual Finish dates
- Take corrective action.

	Task Name	Act. Start	Act. Finish	% Comp.	Act. Dur.	Rem. Dur.	Finish Variance
1	Start Milestone	7 Feb	7 Feb	100%	0 days	0 days	2 days
2	Task 1	7 Feb	15 Feb	100%	7 days	0 days	4 days
3	Task 2	16 Feb	NA	20%	1 day	4 days	4 days
4	Task 3	NA	NA	0%	0 days	5 days	4 days
5	Task 4	8 Feb	12 Feb	100%	3 days	0 days	4 days
6	Task 5	15 Feb	NA	50%	2 days	2 days	5 days
7	Finish Milestone	NA	NA	0%	0 days	0 days	4 days



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Level 3 – Scheduling With Resources and Costs

- Are you estimating or planning for control?
- Consider the balance between the number of Tasks and Resources,
- Creating and using Resources,
- Creating and using Expenses,
- Task Type and Effort Driven option,
- Resource Optimization.

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Level 4 – Monitoring Progress of a Resourced Schedule

- A decision needs to be made if the actual units and costs are to be collected and entered into the software or the software is to calculate these and then the appropriate options selected,
- Statusing Projects with Resources records,
  - The quantities and/or costs spent to-date per task for each resource, and
  - The quantities and/or costs required per resource to complete each task,
- At this point in time it is possible to undertake a great deal of analysis and often Earned Value Performance Measurement is used.

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Now lets get our hand dirty!

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Module 3 - Navigation and Setting the Options

Topics:

- Identify the Parts of the Project Screen
- Customizing the Screen
- Microsoft Project 2010 Windows
- Status Bar
- Forms Available from the Ribbon Groups
- Right-clicking with the Mouse
- Finding the Task Bars in the Gantt Chart
- Setting up the Options
- Mouse Pointers
- Workshop 1 – Navigation and Setting Your Project Options

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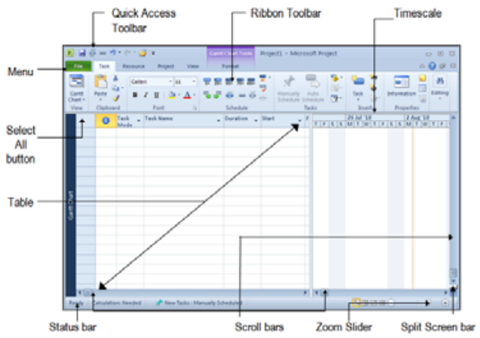
Identify the Parts of the Project Screen



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Opening an Existing Project and Re-opening a Project

- To open an existing project display the **Open** form by selecting:
  - **File**, **Open**, or
  - **Ctl+O**
- The **New Project from existing** form may be used to open an existing project:
  - Select **File**, **New**, **New from existing project**,
  - Then select the file you want to open from the **Open** form,
- Selecting **File**, **Recent** will show a list of recently opened project files.

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Project Templates

- Project templates allow organizations to create standard project models containing default information applicable to the organization,
  - Create a template by saving a project, with or without tasks, in **Template (*.mpt)** format,
  - This template will be available when you select **File**, **New**, **My templates**,
- To create a new project from a template:
  - Select **File**, **New** and there are template location options:
  - **My templates** allows you to open templates on your computer and is covered in the next paragraph,
  - **Recent templates** takes you to your recently used templates,
  - **Office.com Templates**, this will allow you to access Microsoft's templates.

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Saving Additional Project Information

- Often additional information about a project is required to be saved with the project such as location, client and type of project,
- This data may be saved in the **File**, **Info**, **Project Information**, **Advanced Properties** form and these fields may be inserted into reports.

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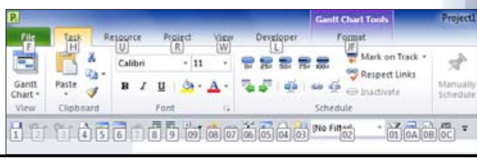
Using the Alt Key and Keystrokes to Access Commands

- Microsoft Project 2010 has introduced a function that displays the keystroke commands when the **Alt** key is pressed,
- The picture below shows the keystroke commands after pressing and holding down the **Alt** key,
- For example try holding down the **Alt** key, see the letters in the menu and then pressing the **F** key will open the **File** menu:



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Saving a Project and Closing Microsoft Project

- To save a project file use the **File**, **Save** and **File**, **Save As** commands,
- To close a project either:
  - Select **File**, **Close**,
  - Click on the **Close Window** button and when the last window of a project is being closed you will be asked if you wish to save any changes,
  - Click on the **Close** button to close all projects and close Microsoft Project.

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Workshop 2 - Creating a Project

- You are an employee of OzBuild Ltd and are responsible for planning the bid preparation required to ensure that a response to an RFQ (Request For Quote) from Wilson International is submitted on time,
- Your company has completed the Startup Phase of the project, the Bid Strategy has been developed and approval to bid for this project has been given,
- Follow the workshop instructions carefully.

Understanding Change Highlight

- New tasks mat have Start and/or Finish dates highlighted,
- This is due to **Change Highlighting** that highlights any changed dates and durations as a result of an edit, addition or deletion of another task,
- Remove the highlighting produced by the last change by:
  - Pressing the **F9** key which will also recalculate the project, or
  - Saving the project, or
  - Entering a value into a changed cell twice,
- Your should add the **Display Change Highlighting** button to the **Quick Access Toolbar** to hide/display the highlighting.

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Copying and Pasting Tasks

- Tasks may also be copied from another project or copied from within the same project using the normal Windows commands such as **right-click Copy** and **Paste** or **Ctrl+C** and **Ctrl+V**,
- Tasks are always inserted when pasted,
- **Note:** Copy and Pasting Cells will always paste over existing data.

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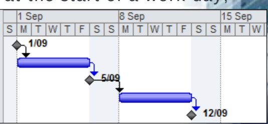
Milestones

- A Milestone normally has a zero duration and is used to mark the start or finish of a major event,
- A Milestone is a Start Milestone when it has no predecessors and is scheduled at the start of a work day,

Task Name	Duration	Start	Finish
Start Milestone	0 days	1 Sep 08:00	1 Sep 08:00
Task	5 days	1 Sep 08:00	5 Sep 17:00
Finish Milestone	0 days	5 Sep 17:00	5 Sep 17:00
Task	5 days	8 Sep 08:00	12 Sep 17:00
Finish Milestone	0 days	12 Sep 17:00	12 Sep 17:00



- A Finish Milestone when it has predecessors and is scheduled at the end of a work day,
- To create a Milestone either:
  - Assign a task a zero duration, or
  - Click on the **Task**, **Insert** group, **Insert Milestone** button.

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Reordering Tasks by Dragging and Sorting

- The instructor will demonstrate how to reorder and sort tasks by:
  - Dragging and
  - The Sort function.

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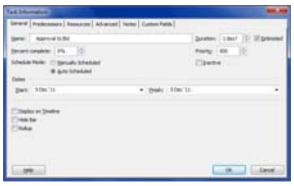
Task Information Form

- The Task Information form may be opened many ways including:
  - Double-clicking on a task line, or
  - Clicking on the **Task**, **Properties** group **Task Information** button when the task is highlighted, or
  - Right-clicking, or Shift+F2,
- The instructor will outline the contents of this form.



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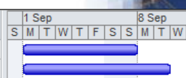
Elapsed Duration

- A task may be assigned an **Elapsed** duration and the task will ignore all calendars and the task will take place 24 hours a day and 7 days per week,
- This is useful for tasks such as curing,
- To assign an elapsed duration type an "**e**" between the duration and units to enter an elapsed duration. The example below shows the difference between a 7-**Elapsed Day** task and a 7-day task on a **Standard** (5-day per week) calendar.

Task Name	Duration	Start	Finish
7 day task with elapsed duration	7 edays	1 Sep 08:00	8 Sep 08:00
7 day task	7 days	1 Sep 08:00	9 Sep 17:00



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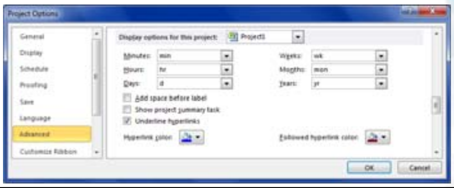
Formatting Time Units

- Select **File**, **Options**, **Advanced**, **Default options for this project:**
- The **Display options for this project:** always specifies the time units, for example **day**, **dy** or **d**.
- Uncheck the **Add space before label** check box to remove a space between the value and label in date columns which allows a narrower Duration column to be displayed.



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Formatting the Bars

- Microsoft Project has several options for bar formatting:
  - All the bars may be formatted to suit user definable parameters, or
  - Individual bars may be formatted,
- The instructor will demonstrate:
  - Formatting all task tars using the **Bar Styles** form,
  - Format **Bar Styles** group menu,
  - **Gantt Chart Styles g**roup menu,
  - Formatting Bars Using the Gantt Chart Wizard,
- **Note:** Projects formatted with the **Gantt Chart Wizard** and projects created in earlier versions of Microsoft Project will have formatting that is incompatible with the Microsoft Project 2010 **Format**, **Bar Styles** group buttons.

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Row Height

- Row heights may be adjusted to display text that would otherwise be truncated by a narrow column,
- The row height of one or more columns may also be adjusted in a similar way to adjusting row heights in Excel, by clicking on the row and dragging with the mouse,
- If all the rows are to be adjusted, then click on the **Select All** button above row number 1, to highlight all the tasks,
- Microsoft Project 2010 has introduced a **Wrap Text** command found on the **Format**, **Columns** group, **Column Settings**, **Wrap Text** which automatically adjusts the row height to fit the text into the available column width.

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Format Fonts

- Format Cells
  - The **Format**, **Font...** function from Microsoft 2007 and earlier has been replaced with a right-click option and allows you to format any selected text in selected cells, rows or columns,
- Format Text Styles
  - The **Format**, **Format** group, **Text Styles** command opens the **Text Styles** form,
  - This allows the selection of a text type from the **Item to Change:** drop-down box and apply formatting to the selected item.

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Format Timescale

- Zoom Slider
  - The **Zoom Slider** was introduced with Microsoft Project 2010 and replaced the **View**, **Zoom...** function, found at the bottom right-hand side of the screen,
  - You may receive some interesting results with this function,
- Ribbon menu
  - There are some new commands available with Microsoft Project 2010 on the **Ribbon**,
- Timescale Form
  - The **Timescale** form provides a number of options for timescale display, which is located above the Bar Chart, and the shading of **Nonworking** time,
  - To open the **Timescale** form, double-click on the timescale, or add the **Timescale** button to the Ribbon or Quick Access Toolbar.

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Format Gridlines

- **Gridlines** are important to help divide the visual presentation of the Bar Chart,
- To format the Grid Line select **Format**, **Format** group, **Gridlines**, **Gridlines...** to open the **Gridlines** form,
- The instructor will now demonstrate these functions.

Adding Dependencies

- The instructor will demonstrate the following methods of adding relationships:
  - Graphically Adding a Dependency
  - Using the Link and Unlink Buttons
  - Task Linking Using the Keyboard
  - Adding and Deleting Predecessors with the Task Information Form
  - Predecessor and Successor Details Forms
  - Editing or Deleting Dependencies Using the Task Dependency Form
  - Autolink New Inserted Tasks or Moved Tasks
  - Editing Relationships Using the Predecessor or Successor Columns.

Scheduling the Project

- Once you have your tasks and logic in place, Microsoft Project calculates the tasks' dates/times,
- More specifically, Microsoft Project has **Scheduled** the project to calculate the **Early Dates**, **Late Dates**, **Float** and the **Critical Path** of the project,
- To prevent the **Automatic Calculation** of your project's start/end dates select **File**, **Options**, **Schedule** tab, **Calculation**, click on **Off**,
- To calculate the schedule with the calculation mode set to manual:
  - Press the **F9 Key**, or
  - Click on the **Select All** button, top left-hand corner of the Gantt Chart view, right-click to open a menu and select **Calculate Project**, or
  - Add a **Schedule Project** button to the **Ribbon** or **Quick Access Toolbar**.

Workshop 7- Adding the Relationships

- You have determined the logical sequence of tasks, so you may now enter the relationships.

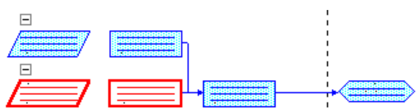
Module 10 – Network Diagram View

Topics:

- Understanding the Network Diagram View
- Adding and Deleting Tasks in the Network Diagramming View
- Adding, Editing and Deleting Dependencies
- Formatting the Task Boxes
- Formatting Individual Boxes
- Formatting the Display and Relationship Lines
- Early Date, Late Date and Float/Slack Calculations
- Workshop 8 – Schedule Calculations.

Understanding the Network Diagram View

- Summary tasks, detail tasks and Milestones are normally formatted with a different shape.
- Typical shape examples are provided as follows:
  - Summary tasks are trapezoidal
  - Detail tasks are rectangular
  - The Milestone Task is an elongated diamond:



Adding and Deleting Tasks in the Network Diagramming View

- A **New Task** may be created with a **Finish-to-Start** relationship by dragging from the center of a Task Box into a blank part of the screen,
- A **New Task** may be created without a relationship below the tasks position in the Gantt Chart by:
  - Using the **Insert Key**, or
  - Selecting **Task**, **Insert** group, **Task,** New Task button.

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Workshop 9 - Constraints

- Management has provided further input to your schedule,
- The client requires the submission on 26 Jan 12,
- Because the **Format**, **Bars Styles** group **Slack** button only displays the Free Float and does not display the Total Float or Negative Float we will use the Gantt Chart Wizard to format the bars to show these important pieces of information.

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Module 12 – Filters

Topics:

- Understanding Filters
- Understanding the Filter Menu
- Applying an Existing Filter
- Creating and Modifying Filters
- Defining Filter Criteria
- AutoFilters
- Workshop 10 – Filters.

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Understanding Filters

- Microsoft Project has an ability to display tasks that meet specific criteria using filters,
- Microsoft Project defaults to displaying all tasks,
- It has a number of predefined filters available that you may use or edit and you may also create one or more of your own,
- A filter may be applied to display or to highlight tasks that meet a criteria,
- There are Task filters that apply to Task views and Resource filters that apply to Resource views,
- There are two types of filters:
  - The first is where you select a Filter which exists or has been created using the Filters form,
  - The second is to create an AutoFilter which is very similar to the Excel AutoFilter (Drop-down filter) function.

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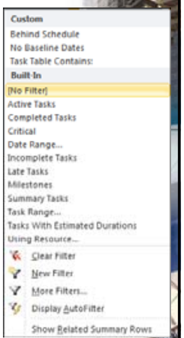
Understanding the Filter Menu

- The **Filter** menu is opened from the **View**, **Data** group, **Filter:** drop-down box,
- You should put a **Filter** menu item on your **Quick Access Toolbar**,
- This may not display a complete list of available filters, as this list displays only filters selected to be displayed in the **Filter Definition** form,
- More Filters may be available when selecting the **More Filters…** option,
  - **Custom** filters are those that the user has created or were created as part of a template,
  - **Built-In** filters are those that exist as part of the Microsoft Project Global.mpt which is used to create a project when no template has been used.



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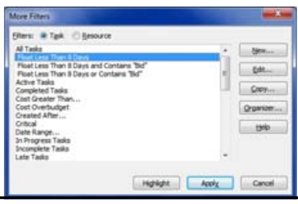
Applying an Existing Filter

- To apply a filter:
  - Select **View**, **Data** group, **Filter:** and select a filter from the drop-down list,
  - Select **View**, **Data** group, **Filter**, **More Filters…** to open the **More Filters** form,
- The **More Filters** form displays all filters available in a project, some of these may not be displayed in the Filter menu:



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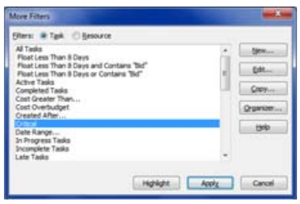
Creating and Modifying Filters

- New filters are created from the **More Filters** form,
- This may be opened by selecting **View**, **Data** group, **Filters:**, **More Filters …**,
- The instructor will now demonstrate how to create a new filter from the **More Filters** form,



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Understanding Views

- A **View** is a function where the formatting such as **Grouping**, **Table**, **Filter, Print Settings** and **Bar** formatting are saved as a **View** and reapplied later,
- In a project a **View** could be created for each type of report and for displaying contract package plan or a Phase Plan activities,
- It is highly recommended that a View be produced for each frequently-created report,
- A **View** is based on one of 16 **Screens** when it is created,
- The **Screen** may not be changed after the **View** is created.

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Creating a New View

- A new View may be created by copying and editing an existing View, or creating a new View,
- The instructor will demonstrate how to create a new view.

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Details Form

- **Details** forms are the third level of formatting that may be assigned in some views,
- Each **Details** view has a number of options, which tends to make this aspect of Microsoft Project difficult for all levels of users,
- The **Details** forms may be selected in the bottom pane by right-clicking in the active pane to open a menu,
- The instructor will demonstrate examples of Details forms.

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Timeline View

- The Timeline view allows you to clearly understand how much of the Gantt Chart is displayed on the screen,
- The **Timescale** view is shown above the Gantt Chart by selecting **View**, **Split View** group and checking the **Timeline** check box,
- A task may be added to the **Timeline** view by selecting the **Add to Timeline** found in many menus.

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A Logical Process for Developing a View

The following process is suggested for creating a new View;

- Collect the View requirements,
- Plan the naming/coding system to be used if there are a number of views to be created,
- Create any Custom fields required,
- Create the Table, Filter and Grouping to be used with the View,
- Create the View and assign the Table, Filter and Grouping,
- Create the print headers and page setup,
- Format the Timescale, Gridlines, Bars,
- Apply any special sorting or font formatting,
- Save the file.

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Workshop 12- Organizing Your Data Using Views and Tables

- Having completed the schedule you want to report the project schedule with different views.

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Practical Methods of Recording Progress

- Normally a project is updated once a week, fortnightly, or monthly,
- As a guide, a project would typically be updated between 12 and 20 times in a project life cycle,
- Progress is recorded on or near the **Status Date**, which is set in the **Project Information** form,
- The following information is typically recorded for each task when updating a project:
  - When complete the Actual Start and Actual Finish dates,
  - When in progress the Actual Start date, the remaining duration or the date when the task is expected to finish, and the percentage complete.

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Updating the Schedule

- There are many methods available for updating tasks, which you may explore in your own time and include:
  - Move Project
  - Using Update Project
  - Update Tasks Form
  - Updating Tasks Using the Task Information Form
  - Updating Tasks Using the Task Details Form
  - Updating Tasks Using Columns
  - Reschedule Uncompleted Work To Start After
  - Updating Tasks Using Task, Schedule Functions
- The workshop uses **Tracking** table columns to update tasks, so the instructor will later demonstrate how to update a schedule using columns by completing the workshop.

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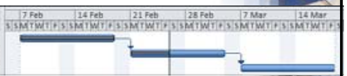
Understanding Tracking Progress Concepts

There are three stages of a task's lifecycle:

- **Not Started** – The **Early Start** and **Early Finish** dates are calculated from the logic, **Calendars**, **Constraints** and the **Task Duration**,
- **In-Progress** – The task has an **Actual Start** but is not complete. Milestones may be in-progress in Microsoft Project but in reality they should either be Not Started or Complete,
- **Complete** – The task is in the past, the **Actual Start** and **Actual Finish** dates have been entered into Microsoft Project, and they override the logic and constraints.

	Task Name	Act. Start	Act. Finish	% Comp.	Act. Dur.	Rem. Dur.
1	Complete	7 Feb	18 Feb	100%	10d	0d
2	In-Progress	21 Feb	NA	50%	5d	5d
3	Not Started	NA	NA	0%	0d	10d



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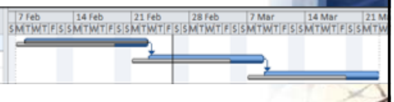
Important Points – Completed Tasks

- A **Milestone** must only have the Actual Start and 100% entered because entering an Actual Finish date will convert the Milestone to a tasks,
- A complete task should have the Actual Start date, and
- Then the Actual Finish date entered,
- The % Complete will turn to 100%.

Act. Start	Act. Finish	% Comp.	Act. Dur.	Rem. Dur.
8 Feb '11	22 Feb '1	100%	11d	0d
NA	NA	0%	0d	10d
NA	NA	0%	0d	10d



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Important Points – In-Progress Tasks

- There is an in-built proportional link between **Duration**, **Actual Duration**, **Remaining Duration** and **% Complete**,
- It is not possible to unlink these fields and therefore not possible to enter the **Remaining Duration** independently of the **% Complete**,
- The **Physical %** Complete may be used to show the progress of a task that is independent of the durations,
- There are many methods of updating an in-progress task that you may explore in your own time.

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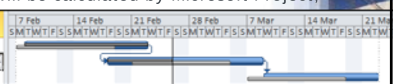
Important Points – In-Progress Tasks continued

The workshop in this book uses the following method:

- The **Tracking** table is applied and **Status Date** set,
- The **Actual Start** is entered,
- The **Actual Duration** should be entered so that progress is up to the **Status Date**,
- Then the **Remaining Duration** may then be entered so the Finish date is correct and the Actual Duration will not change,
- The **% Complete** will be calculated by Microsoft Project,

Act. Start	Act. Finish	% Comp.	Act. Dur.	Rem. Dur.
8 Feb '11	22 Feb '11	100%	11d	0d
18 Feb '11	NA	46%	6d	7d
NA	NA	0%	0d	10d



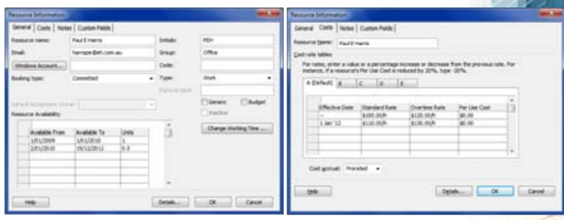
Grouping Resources in the Resource Sheet

- Resources may be grouped on any data fields, such as Custom Fields and Custom Outline Codes, using the **View**, **Data**, **Group by:** function. The example below shows resources grouped by **Resource Group**:

	Resource Name	Type	Material Label	Initials	Group	Max. Units	Std. Rate	Base Calendar	Cost/Use	Ovt. Rate	Accrue At
	Type: Work	**Work**				**00%**			**0.00**		
1	Project Manager	Work		PM	Office	00%	120.00/hr	Standard	0.00	0.00/hr	Prorated
2	Systems Engineer	Work		SE	Office	00%	90.00/hr	Standard	0.00	0.00/hr	Prorated
3	Project Support	Work		PS	Site	00%	80.00/hr	Standard	0.00	0.00/hr	Prorated
4	Purchasing Officer	Work		PO	Office	00%	70.00/hr	Standard	0.00	0.00/hr	Prorated
5	Clerical Support	Work		CS	Office	00%	50.00/hr	Standard	0.00	0.00/hr	Prorated
	Type: Material	**Materi**							**0.00**		**Prorated**
7	Report Binding	Material	each	RB			100.00		0.00		Prorated
	Type: Cost	**Cost**									**Prorated**
6	Specialists Consultant	Cost		SC	Contractor						Prorated

Resource Information Form

- The **Resource Information** form is opened by double-clicking on a specific row within the **Resource Sheet** view.



Resource Calendars

- Tasks calendars may not accommodate specific resource availability,
- Resource Calendars, on the other hand, can be used to schedule this resource-specific nonworking time,
- A unique resource calendar is created automatically when a resource is created and is a copy of the project **Base Calendar** when the resource is created,
- This topic is extremely complex and is covered in the book in detail but will not be covered in this course.

Workshop 15 - Defining Resources

- The resources must now be added to this schedule,
- Since we have updated our project, we need to revert to the original schedule that we saved prior to updating the current schedule.

Module 19 – Assigning Resources and Costs to Tasks

Topics:

- Fixed Costs
- Assigning Work without a Resource
- Resource Definitions
- Task Type and Effort-Driven
- Resource Calendars
- Assigning Resources
- Assignment of Resources to Summary Tasks
- Rollup of Costs and Hours to Summary
- Tasks Contour the Resource Assignment
- Workshop 16 - Assigning Resources to Tasks.

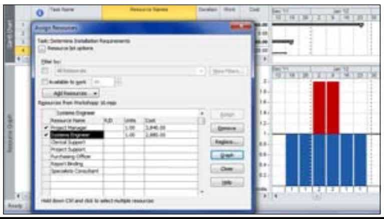
Fixed Costs

- Fixed costs are a function where you may assign costs to a task without creating resources,
- It is a useful function if you require a cash flow only but not so useful with a progressed schedule as actual costs are linked to the % Complete,
  - A fixed cost is assigned using the **Fixed Cost** column.
  - The fixed cost may be accrued at the **Start**, **End** or **Prorated** over the duration of the task,
  - Fixed Costs are added to resource costs and the total is shown in the **Cost** column.

Task Name	Fixed Cost	Fixed Cost Accrual	Resource Initials	Cost
Summary	**$0.00**	**Prorated**		**$8,800.00**
$200.00 Fixed cost accrued at Start	$200.00	Start		$200.00
$200.00 Fixed cost Prorated	$200.00	Prorated		$200.00
$200.00 Fixed cost accrued at End	$200.00	End		$200.00
Activity With Resources Only	$0.00	Prorated	PEH	$4,000.00
Activity With Costs & Resources	$200.00	Prorated	PEH	$4,200.00

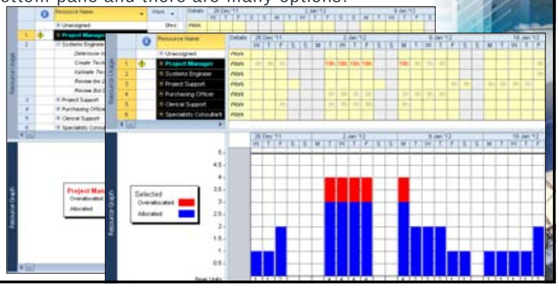
Resource Graph Form

- The **Resource Graph** form was a new feature to Microsoft Project 2002 and was removed in Microsoft Project 2010,
- Selecting **Graph** from the **Assign Resources** form will now display the **Resource Graph** form in the Bottom Pane:



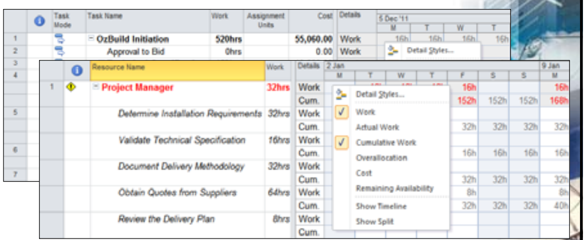
Resource Graph View

- A **Resource Graph** may be displayed with the **Resource Graph** view,
- The **Resource Graph** may be viewed in the top or bottom pane and there are many options:



Resource Tables View

- Resource tables are displayed using the **Task Usage** or **Resource Usage** views.

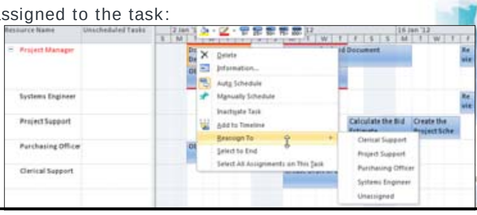


Detailed Styles Form

- This form may be opened from the **Resource Usage** and **Task Usage** forms by right-clicking and selecting **Detailed Styles…**,
- This allows further options for formatting these views including creating a single S-Curve:

Team Planner View

- This view allows a **Production Planning** type view where tasks may be assigned to resources as opposed to **Project Planning** where resources are assigned to tasks,
- The picture below clearly shows where the Project Manager is overloaded as he/she is assigned to two tasks at the same time and then another resource is assigned to the task:



Printing Resource Profiles and Tables

- To **Print** a **Task Usage**, **Resource Usage**, or **Resource Graph**, make the appropriate **Pane** active and use the print functions as described in the **PRINTING AND REPORTS** chapter.