

## CHAPTER 3

# CREATING A NEW PROJECT

**INFocus**

WPL\_J402

The first step in using **Microsoft Project** to manage the project you are working on is to create a new project file and set up some of the operational parameters.

If it hasn't been done already you'll need to update Microsoft Project's definition of a work day, and then specify the working times associated with your project and that of the resources available to you.

**In this session you will:**

- ✓ gain an understanding of the requirements needed to create a new project file
- ✓ gain an understanding of the project case study
- ✓ learn how to create a new project file
- ✓ gain an understanding of how **Microsoft Project** options control the way time is handled
- ✓ learn how to change the calendar options
- ✓ gain an understanding of calendars and how they are used
- ✓ learn how to adjust non working time in the **Standard Calendar**
- ✓ learn how to enter public holidays and leave periods into a calendar
- ✓ learn how to create a new working calendar
- ✓ learn how to specify project information and properly set up a project
- ✓ learn how to specify project summary information.

# STEPS IN CREATING A PROJECT

Creating a new **project file** in Microsoft Project is not as clear-cut as creating a new document in Microsoft Word or a new workbook in Microsoft Excel. There are a number of housekeeping jobs

that need to be done before you even contemplate entering tasks and resources into a project file.

## Before You Begin

Before you create a new project file in **Microsoft Project** you should have a good understanding of what your project is about. For example, you will need to have established basic information such as when you want your project to start and when you want your project to finish so that **Microsoft Project** can help you schedule critical tasks.

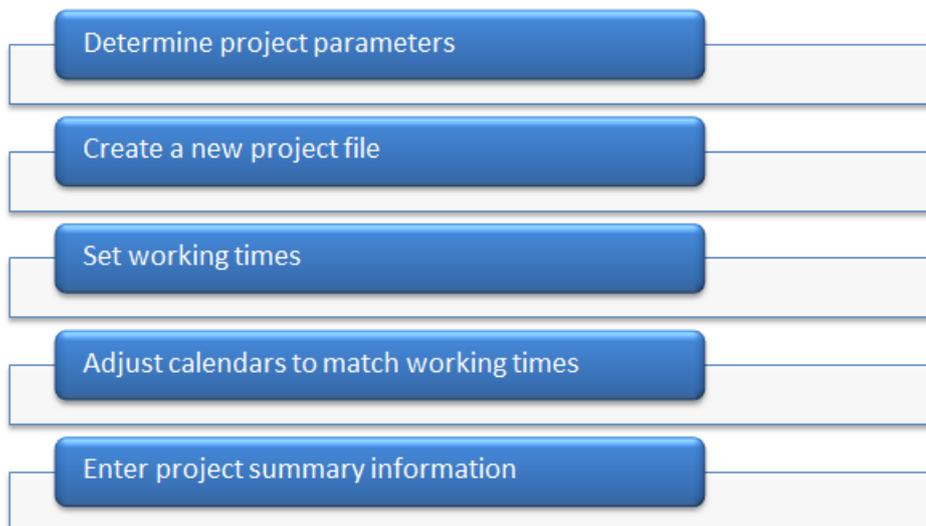
You will also need to specify some basic definitions and assumptions such as the duration of a standard working day, the public holidays or other non-working periods during the anticipated project period, the normal working times of the resources required for the project, and any anomalies in working time that specific resources may have that differ to the standard working times.

Once all of these things are clear in your head, you can start a new project file and enter this information so that **Microsoft Project** will be set up to work through your project the way that you want.

## The Basics Steps For Creating A New Project File

Generally, creating a new project requires these steps:

- determine an understanding of your project as detailed above
- create a new project file in **Microsoft Project**
- set your own working times in the project file (or use the defaults)
- adjust the standard resource calendars in accordance with the working times of the resources
- enter project information that will be used in report headers and that will also determine the way in which the project will be tracked by **Microsoft Project**.



It doesn't matter in which order you tackle the steps involved in creating a new project. You can actually change these settings after you have started a project. However, changing assumptions midway through a project is sometimes the source of much anguish and grief. You are better advised therefore to get all of your assumptions and settings defined before you start scheduling tasks in your project.

# UNDERSTANDING YOUR PROJECT

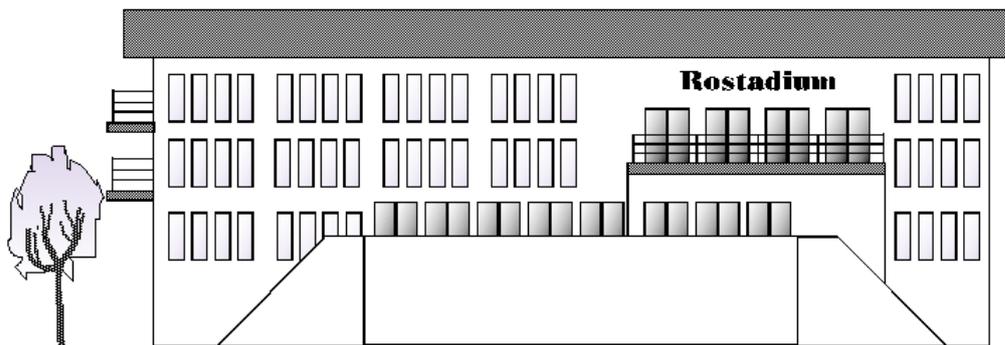
The best way to learn how to create a new project is through a case study. In this courseware you are going to help manage the construction of a new state-of-the-art stadium

called **The Rostadium**. **The Rostadium** is a football-oriented stadium built for the local community to conduct games in all codes of football.

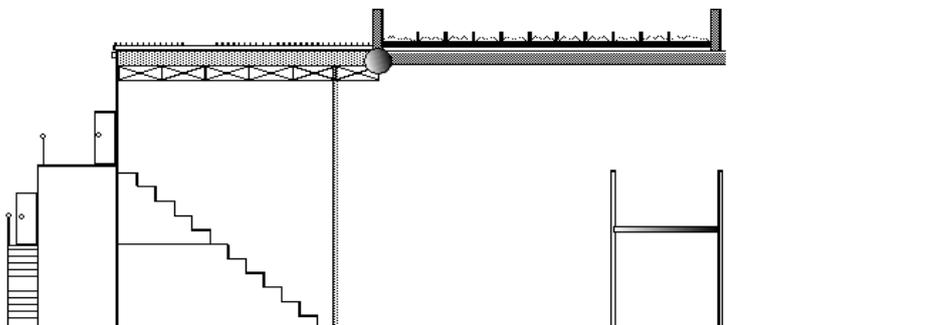
## The Case Study

**The Rostadium** is designed as a scaled-down version of some of the newer stadiums that have been built in recent times. It will feature a retractable roof, detachable turf, and removable goal posts and paraphernalia.

The architect's proposed drawings are shown below for your reference.



The retracting roof of the stadium should be able to open in stages. A cut-away section of the stadium showing the roof half-open is shown below.



## Key Construction Details

Construction of **The Rostadium** is expected to commence on Monday May 11, 2015. The building should be ready for use within 10 months and is budgeted at a total cost not exceeding \$125 million.

The stadium will be built with contract labour hired for the job but paid through the normal payroll system. Some specialised tasks, such as the laying of turf, the acoustics system, and the like, will be conducted by external contractors.

The normal site working day will begin at 7:30 am and conclude at 3:30 pm with a half-hour break for lunch at 12:30 pm. This makes it a 7.5 hour working day. The normal working week is from Monday to Friday – a total of 37.5 hours (5 x 7.5).

This is the key information that you need to begin a new project.

# CREATING A NEW PROJECT FILE

The new project you are about to begin will need to be stored in a new project file. A new project is created using the **New** option on the **Backstage** (accessed from the **File** tab). This command

allows you to base your project file on a specific **template** which already has settings and information stored in it, or to base your project on a blank template.

## 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 **New** to see the available templates

*Spend a few moments studying the options here...*

- 2 Double click on **Blank project** to create a new project based on a totally blank and empty template

*Even though we haven't entered anything yet it is a good idea to save the new project to create the file...*

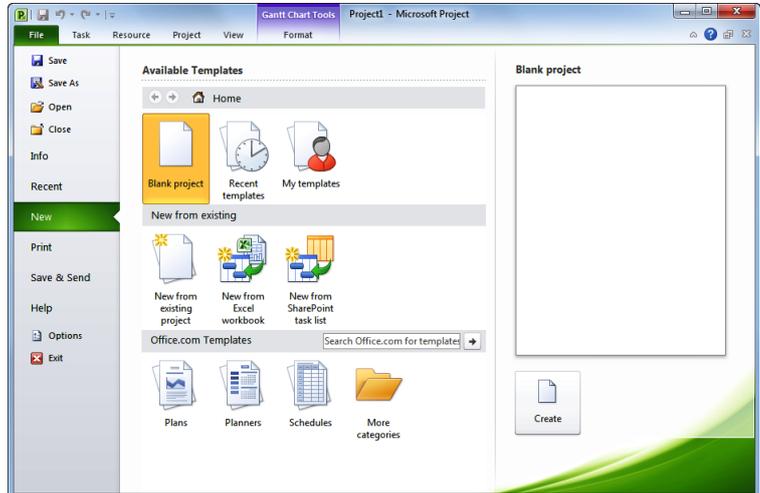
- 3 Click on the **File** tab and click on **Save** to display the **Save As** dialog box

- 4 Type **The Rostadium Project** in the **File name**

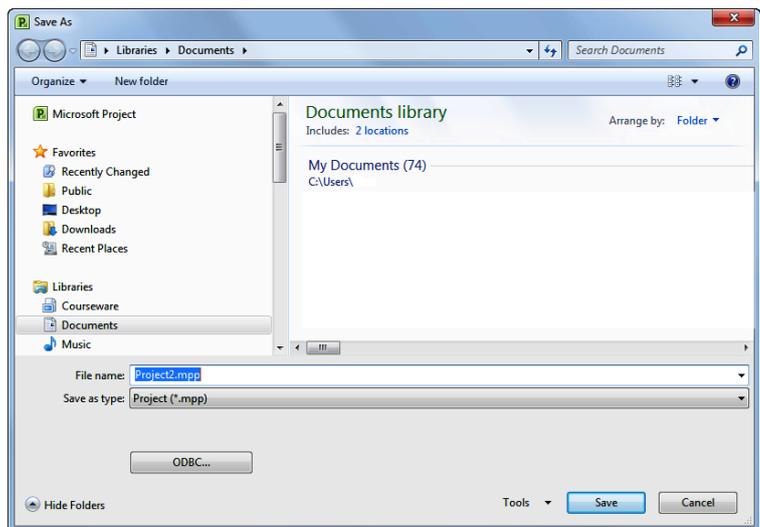
- 5 Change the filing location to where your student files are located (e.g. **C:\Course Files for Project 2010**)

- 6 Click on [**Save**] to save the project file

*Notice that the file name appears in the title bar of Microsoft Project*



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## For Your Reference...

To create a new blank project file:

1. Click on the **File** tab on the **Ribbon** and click on **New**
2. Double click on **Blank project**

## Handy to Know...

- **Templates** are project files with settings and information already in them. While they can save time it is generally a good idea to understand how to create a new file from scratch so that you can fully understand what actually happens in a file.

# UNDERSTANDING THE CALENDAR OPTIONS

As you will see later when you enter tasks, you can enter their durations in a number of different ways. For example you can enter the duration in days, or weeks, or even months. For Microsoft

Project to be able to calculate appropriate dates around these durations it has to have a common set of rules to work to. These calendaring rules are set up in the calendar options.

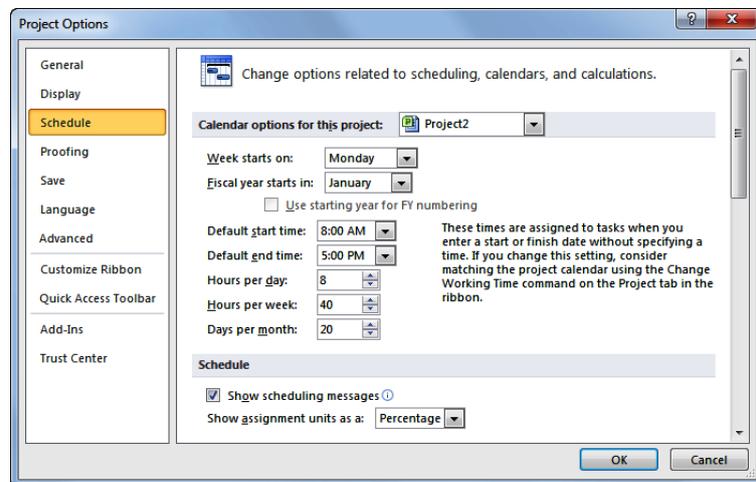
## Project Options

The way that **Microsoft Project** behaves and works can be controlled through its options which are found in the **Project Options** dialog box. This dialog box can be found on the **Backstage** and is accessed from the **File** tab.

Customising these options will vary from project to project, and you need to be aware of the more important ones.

One of the most critical options that you will need to examine is the definition of a **day** and a **week**. Microsoft Project calculates everything based on minutes. When you enter a duration for a task Microsoft Project internally converts that duration to minutes based on the definition of a day in the **Options** dialog box.

For example, if the **Options** dialog box shows that there are 8 hours in a day, Microsoft Project will internally convert a 1-day task to 480 minutes (that is, 8 hours x 60 minutes). If the **Options** dialog box shows that there are 10 hours in a day, Microsoft Project will internally convert a 1-day task to 600 minutes.



## Default Start and End Times

These are *backup* values for **Microsoft Project**. Usually a task start time is determined by the finish time of the predecessor task. However, the **Default start time** is used only when you don't enter a specific start time or one is not calculated for you based on a predecessor. Similarly the finish time of a task is automatically calculated for you based on the task's start date and time and its duration. If you specifically enter a finish date and don't enter a finish time the **Default end time** is used to calculate a finish time for the task.

Don't worry if this sounds a bit hard to comprehend for the moment. Until you know otherwise you should ensure that the **Default start time** and the **Default end time** match the start and end times for a normal working day in your organisation.

## 24 hour versus 12 hour time settings

Windows can be configured to show time in a 24 hour or 12 hour format. Microsoft Project shows time based on how your Windows is configured. You can change the setting using the **Clock, Language and Region** settings in the **Windows Control Panel**.

To display a 24 hour clock the **Short Time** style will need to be set to **H:mm** and the **Long Time** set to **H:mm:ss**. To display a 12 hour clock the **Short Time** style will need to be set to **h:mm** and the **Long Time** set to **h:mm:ss** (in lowercase letters).

## Fiscal Year

Another trap to watch out for is the definition of a **fiscal year**. By default as you can see from above, the fiscal year on a Gantt chart is shown in the American format, beginning in January and running through to December. Australia's fiscal year starts in July and continues on to June of the following year. If this will be an issue for your projects then you should adjust the **Fiscal year starts in** setting appropriate to your needs.

# CHANGING THE CALENDAR OPTIONS

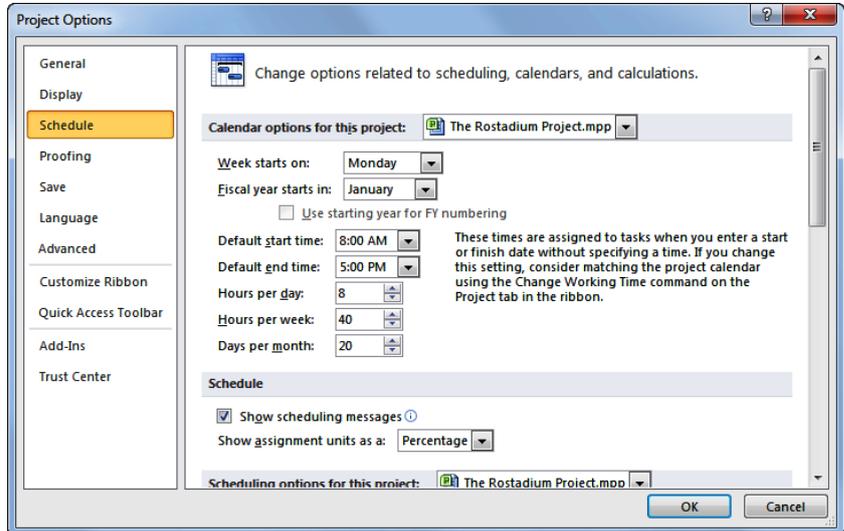
The **Calendar** options affect the duration of the tasks. In the **Options** dialog box, the **Schedule** tab allows us to set our default start and finish times for tasks. We can also set which day the

week starts on in our project and which month the fiscal year starts in. Most importantly, however, we can specify how many hours per day and week the project requires.

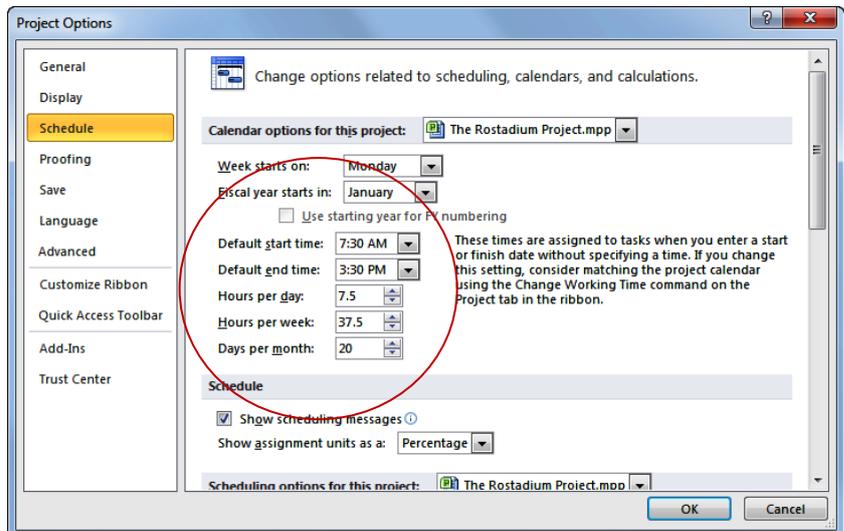
## Try This Yourself:

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

- 1 Click on the **File** tab and click on **Options** to display the **Project Options** dialog box
- 2 Click on the **Schedule** tab and study the **Calendar** options
- 3 Click on the drop arrow  for **Default start time** and click on **7:30 AM** (or **07:30** for 24 hour settings)
- 4 Click on the drop arrow  for **Default end time** and click on **3:30 PM** (or **15:30** for 24 hour settings)
- 5 Press **Tab** to jump to **Hours per day** and type **7.5**
- 6 Press **Tab** to jump to **Hours per week** and type **37.5**
- 7 Click on **[OK]** to close the **Options** dialog box



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## For Your Reference...

To **set default working time**:

1. Click on **File** then **Options**
2. Click on the **Schedule** tab
3. Change the options as required
4. Click on **[OK]**

## Handy to Know...

- The **Options** dialog box also allows you to specify the number of days in a **month**. Since months are variable Microsoft Project needs to have your mathematical interpretation of how many days exist in a month in your business. Unless you really want to change this leave it at 20 days.

# WORKING WITH CALENDARS

**Calendars** are used in Microsoft Project to define the working and non-working days of the resources and tasks in your project. While there can be several calendars simultaneously in use

throughout your project there will at least be one **standard calendar** available as the default project calendar. This calendar should contain settings that reflect the basic working time of your organisation.

## Calendars and Working Time

Having changed the **Options** in our case study project, Microsoft Project now assumes that a normal working day is 7.5 hours and that there are 37.5 hours in a working week. While we entered a **Default start time** and a **Default end time** these don't really give Microsoft Project a clue as to how a working day or indeed a working period is made up.

For instance, are there lunch breaks and if so when? How do we specify days off such as public holidays, annual leave, and the like? And what happens if we have people such as shift workers who don't work the hours specified in the **Options**?

To address these situations Microsoft Project uses **calendars** which can be applied to the tasks and resources in your project. In a calendar you can define the working time (referred to as working weeks) for a resource as well as any exceptions for time off, holidays, and the like.

**Calendars** are extremely important in **Microsoft Project** and basically provide the guidelines for calculating how much work is required to complete tasks in your project.

Microsoft Project already has several calendars built into it which can, and should, be modified for the project you are working on. These are template calendars, known as base calendars, which can either be used as is, or modified or even cloned. The three calendars are:

- **Standard** – which includes a typical (at least in America) working time scenario from Monday to Friday, starting at 8:00 am and finishing at 5 pm with lunch between 12 noon and 1 pm.
- **Night shift** – which sets the working time from Monday to Friday, starting at 11 pm and concluding at 8:00 am, with lunch between 3 and 4 am.
- **24 Hours** – where work is scheduled 24 hours a day, 7 days a week.

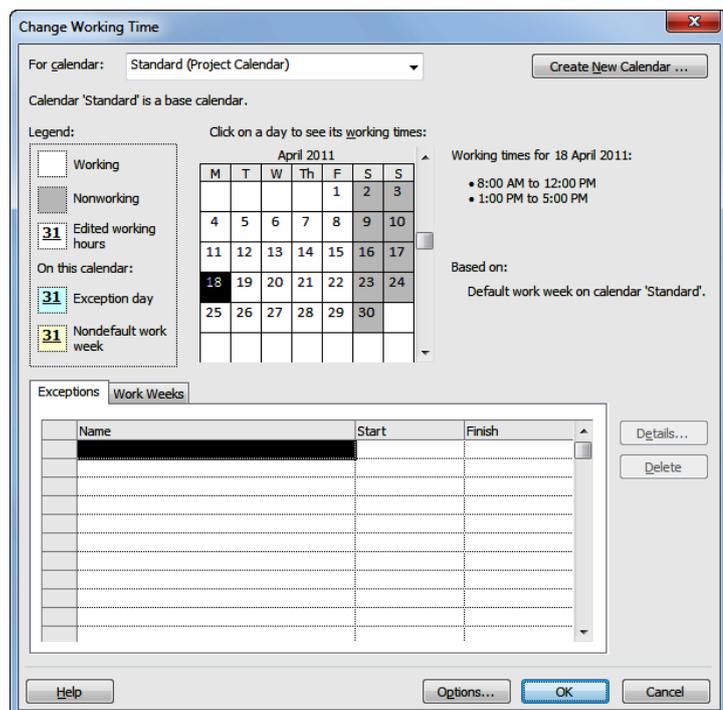
The **Standard** calendar is the one most commonly used and the one that will be used for our case study. Its hours should be adjusted to match those of the standard working time in our case study.

Calendars are accessed from the **Change Working Time** dialog box.

This dialog box displays a view of one month which shows working and non-working days.

Normal daily working times are adjusted using the **Work Weeks** tab in the dialog box.

The **Exceptions** tab is used for specifying things such as public holidays and non-routine non-working times and days.



# MODIFYING THE STANDARD CALENDAR

The **Standard** calendar, sometimes also known as the *project calendar*, is the one that will be assigned as the default calendar to any tasks or resources that are entered into the project. The

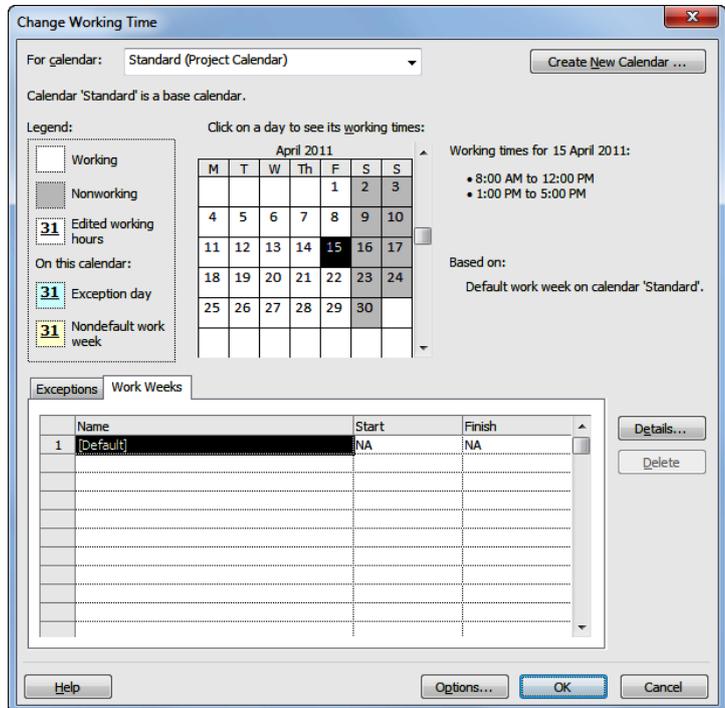
**working times** in this calendar should be adjusted to match the normal working times of your organisation. This can be done using the **Change Working Time** command on the **Project** tab.

## Try This Yourself:

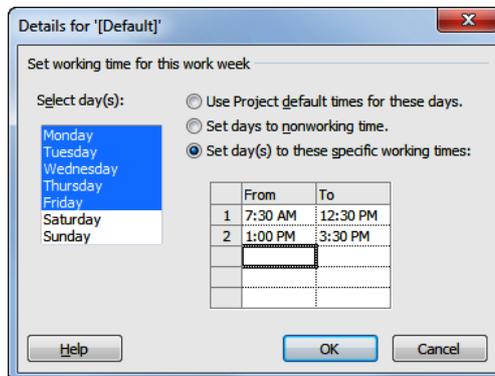
Same File

Continue using the previous file with this exercise, or open the file *J402 Creating A New Project\_1.mpp...*

- 1 Click on the **Project** tab on the **Ribbon** and click on **Change Working Time** in the **Properties** group to display the **Change Working Time** dialog box  
*The Standard calendar will appear showing the current date as the default...*
- 2 Click on the **Work Weeks** tab to see the hours set up for the working week
- 3 Click on **Default** and click on **[Details]** to display the **Details** dialog box
- 4 Click on **Monday**, hold down the **Shift** key and click on **Friday** to select the working days to change
- 5 Click on **Set day(s) to these specific working times**
- 6 Click in the times and adjust them as follows:  
7:30 AM 12:30 PM  
1:00 PM 3:30 PM
- 7 Click on **[OK]** and notice how the times have now been updated
- 8 Click on **[OK]** to close the **Change Working Time** dialog box



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## For Your Reference...

To modify the **Standard** calendar:

1. Click on the **Project** tab and click on **Change Working Time** in **Properties**
2. Click on the **Work Weeks** tab
3. Click on **Default** and change the times as required

## Handy to Know...

- The **Default start time** and **Default end time** in the **Calendar** options have no impact or bearing on the working times in the **Standard** calendar. You must always ensure that the working time in the **Standard** calendar matches those of your organisation.

# ENTERING PUBLIC HOLIDAYS

The **Standard** calendar, indeed any calendar, can be updated to take account of public holidays, holiday leave, and other forms of absence from the workplace that directly interfere

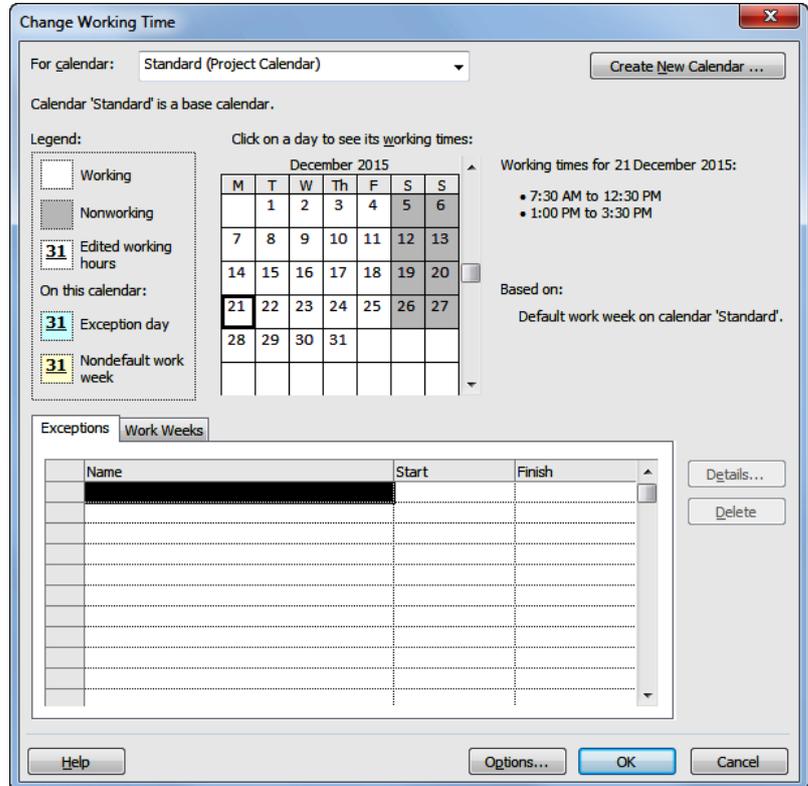
with the scheduling of the project. **Work weeks** in the calendar are used to specify working and non-working times, while leave and holidays are entered as **exceptions** to these times.

## Try This Yourself:

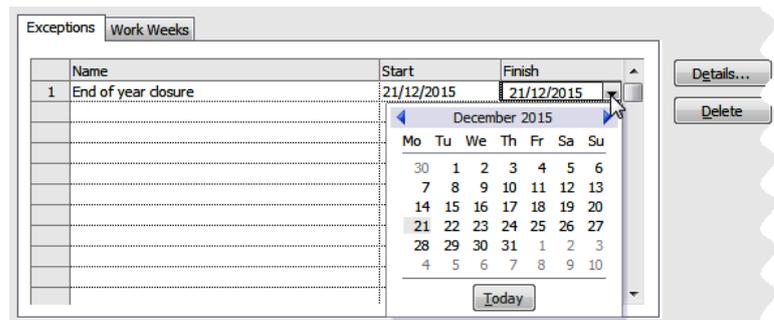
Same File

Continue using the previous file with this exercise, or open the file *J402 Creating A New Project\_2.mpp...*

- 1 Click on **Change Working Time** in the **Properties** group on the **Project** tab to see the **Change Working Time** dialog box
- 2 Click on the scroll arrow on the calendar part of the box until **December 2015** appears in view and click on **Monday the 21<sup>st</sup>**
- 3 Click in **Name** in **Exceptions** and type **End of year closure**
- 4 Click in **Finish** and click on the drop arrow  that appears to display a calendar
- 5 Scroll until you can see **January 2016** and click on the **4<sup>th</sup>**
- 6 Click on **[OK]**



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## For Your Reference...

To enter public holidays and leave in a calendar:

1. Display the **Change Working Time** dialog box
2. Enter the leave or holiday as an exception with a start and finish date

## Handy to Know...

- The next time you open the **Change Working Time** dialog box and display the calendar the dates entered as leave or holidays will be shaded out as non-working days.

# CREATING A NEW CALENDAR

In some cases you will find that it is necessary to create a whole new calendar for a particular group of resources. This is often the case where projects use two or more different types of

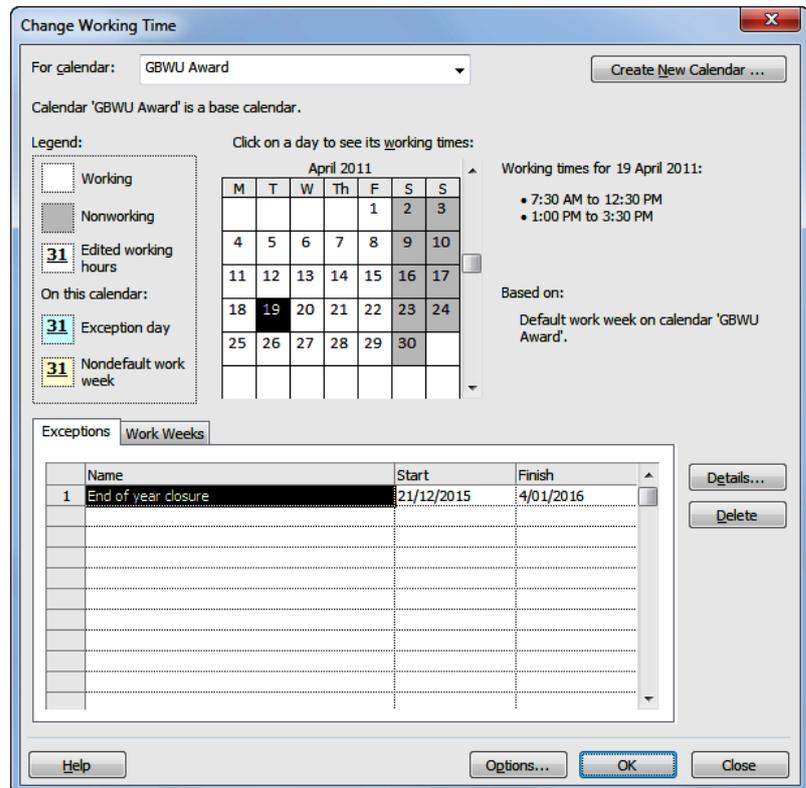
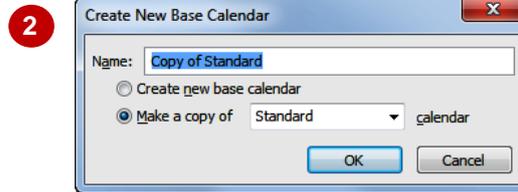
**resources.** For example, some of the contract labour in our case study are members of the fictional union, **GBWU**, and they work a four day week: Monday through to Thursday.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file J402 Creating A New Project\_3.mpp...

- 1 Click on **Change Working Time** in the **Properties** group on the **Project** tab to see the **Change Working Time** dialog box
- 2 Click on **[Create New Calendar]** to display the **Create New Base Calendar** dialog box
- 3 Type **GBWU Award** in **Name** and click on **[OK]**  
*You will now have cloned your standard calendar...*
- 4 Click on the **Work Weeks** tab and click on **[Details]** which will allow you to set the working time
- 5 Click on **Friday** and click on **Set days to nonworking time**
- 6 Click on **[OK]** to return to the **Change Working Time** dialog box where **Friday** should now appear shaded as a non-working day
- 7 Click on **[OK]**



## For Your Reference...

To copy a calendar:

1. Click on **Change Working Time** in the **Properties** group
2. Click on **[Create New Calendar]**
3. Type a name for the new calendar and click on **[OK]**

## Handy to Know...

- By cloning a calendar you have created a new **base** (i.e. *template*) calendar. This template can be applied to as many resources and tasks as you like. When you make a change to the calendar the changes will be made to all of the resources and tasks that use the calendar.

# SETTING UP PROJECT INFORMATION

Projects have a definite start and end date. This information can be entered into the **Project Information** dialog box which allows you to specify the basic operational parameters of your

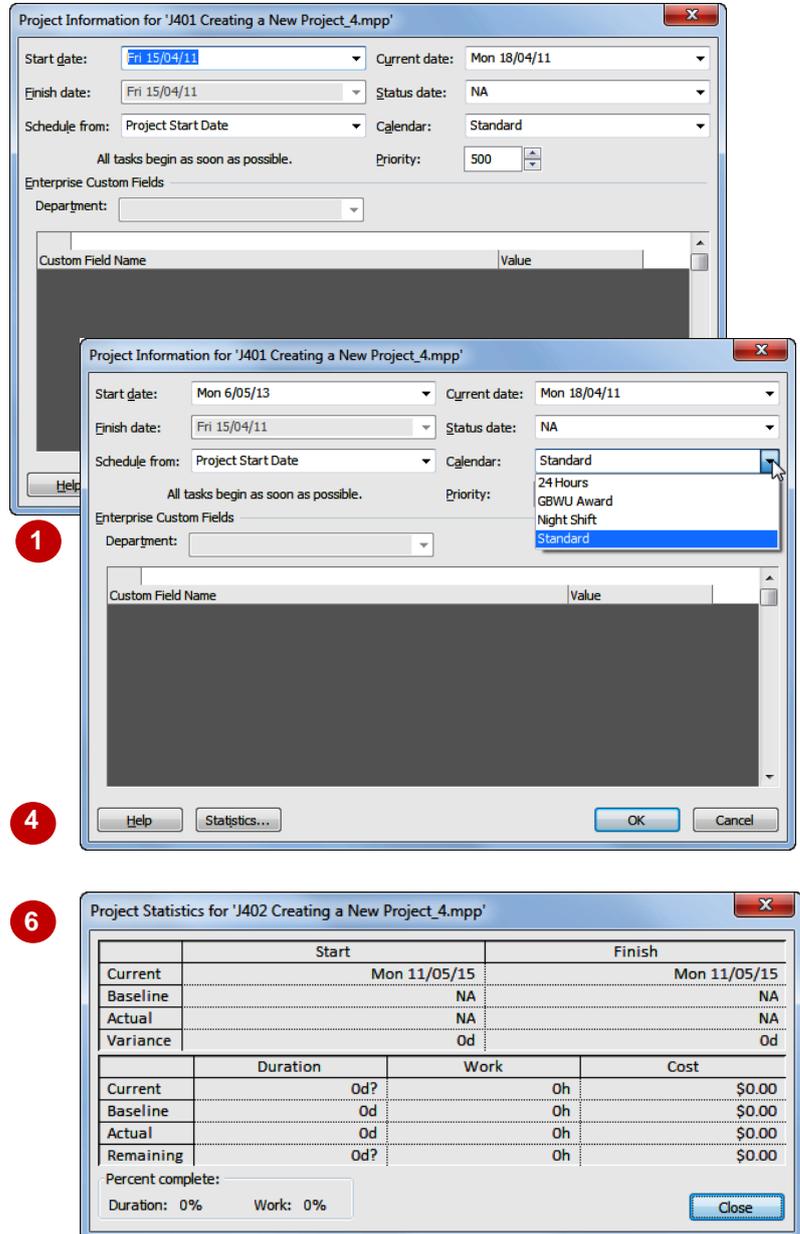
project, including start and end dates, the project calendar to use, and more. Probably the most important detail to enter here is the project start date from which all tasks will be scheduled.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file J402 Creating A New Project\_4.mpp...

- 1 Click on **Project Information** in the **Properties** group on the **Project** tab to display the **Project Information** dialog box
- 2 Click on the drop arrow for **Start date** to display a calendar
- 3 Change the date to **Monday May 11, 2015**
- 4 Click on the drop arrow next to **Calendar** to display a list of calendars that have been set up to be used
- 5 Click on **Standard** (it was probably there already but in Project it is better to be safe and sure than sorry)
- 6 Click on **[Statistics]** to take a sneak peek at the project situation thus far – given that nothing has been entered yet this will be rather sparse
- 7 Click on **[Close]**



## For Your Reference...

To set up project information:

1. Click on **Project Information** in the **Properties** group on the **Project** tab
2. Change the start date to the appropriate start date for your project
3. Ensure the correct project calendar is used

## Handy to Know...

- Microsoft Project is a calculation machine – if you enter either a start date or an end date the other will be automatically calculated for you. We don't have any scheduled tasks at the moment so in our project the project finishes when it starts.

# ENTERING FILE PROPERTIES

All computer files on your computer have specific **properties** associated with them – their name, location, author, etc. In most cases the relevant details are entered by the computer whilst the

other details are ignored. In Microsoft Project some of these properties find their way into reports and it is a good idea to at least set up some of the **Summary** properties of your project file.

## Try This Yourself:

Same File

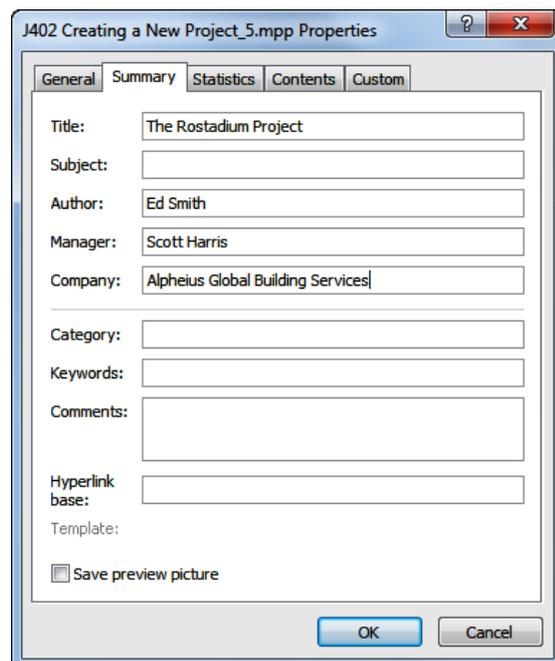
Continue using the previous file with this exercise, or open the file *J402 Creating A New Project\_5.mpp...*

- 1 Click on the **File** tab on the **Ribbon** and click on **Info** to see the project details (aka *Project Information*) at the right
- 2 Click on the small drop arrow next to **Project Information** and click on **Advanced Properties** to see the **Properties** dialog box
- 3 Click on the **Summary** tab
- 4 Change the **Author** to your name and enter the other details as shown
- 5 Click on **[OK]**



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## For Your Reference...

To enter file properties:

1. Click on the **File** tab on the **Ribbon** and click on **Info**
2. Click on the small drop arrow next to **Project Information** and click on **Advanced Properties**

## Handy to Know...

- File properties are not an earth-shatteringly important part of Microsoft Project. However they do tend to tidy things up and neaten the whole affair if they have some basic information in them.