Project Management: Intermediate Microsoft Project 2010

This document includes instructions for managing resources, updating project plans, and designing visual reports.

Managing Resources in a Project

Creating a Resource Calendar

A resource calendar is a calendar created for a particular resource (or employee). By creating resource calendars, managers are able to directly change a resource’s working hours, dates they are available to work on a project, and scheduled time-off.

To create a resource calendar,

1. Under View on the Task tab, select Resource Sheet.

2. Under Resource Name, double click the resource for which you wish to edit information.
3. In the **Resource Information** box, select **Change Working Time**.

4. Select the day to view the working times for the resource.

5. To edit the working time for a resource, select a date on the calendar, click the **Work Weeks** tab and select **Details**.

6. Under **Select Days**, hold down the **Ctrl** key to select multiple days of the week for which you wish to set a working time. Choose **Set day(s) to these specific working times** and double click in the From cell to enter the beginning time, then double click in the To cell to enter the ending time. Click **OK**.
7. The selected days of the week will now display the new working time. Check a day to see its working times:

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   Working times for October 7, 2011: 8:00 AM to 1:00 PM

8. Under the Exceptions tab, users are able to enter specific date(s) off for the resource. Enter a Name for the exception, and the Start and Finish dates.

9. To change the availability of a resource, in the Resource Information box, under Resource Availability, enter the dates a resource is Available From and Available To.

10. To enter a note pertaining to the working times of the resource, select the Notes tab, enter the note, and click OK to add the note to the resource.

Assigning Resources to Tasks

To assign resources to tasks,

1. Display the Gantt Chart view.
2. Under the **Task Name** field, click to highlight the selected task for which you wish to assign resources.

![Task Name](image)

3. Under the **Resource** tab in the Ribbon, select **Assign Resources**. For a shortcut, click **Alt+F10**.

![Resource Tab](image)

4. Under **Resource Name**, select the resource you wish to assign to the specific task. To select multiple resources, hold the **Ctrl** key. Click **Assign**.

![Assign Resources](image)

5. Resources can also be added via the **Resource Names** column in the **Gantt Chart**.

![Gantt Chart](image)
**Entering Costs**

To enter cost information for **work resources**,


2. Under the **Standard Rate (Std. Rate)** column for the resource chosen, enter the payment per hour and click **Enter**.

To enter the costs for **material resources**,


2. Under the **Standard Rate (Std. Rate)** column for the **material** resource chosen, enter the standard rate for the resource and press **Enter**.

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**Resolving Conflicts**

After resource information is entered and resources are assigned to tasks, conflicts may occur if a resource is overscheduled. **Leveling** is a way to resolve conflicts by delaying or splitting tasks.

To see if a resource is overallocated on the **Resource Sheet**, look for the resources highlighted **red** with an exclamation point in the indicators column. In the **Gantt Chart** view, a **red person**
appears in the indicator column when a resource is overallocated. Right-click the indicator and choose **Fix in Task Inspector** to see options for resolving the conflict.

To resolve resource conflicts by using leveling,

1. Click the **Resource** tab, and select **Leveling Options** in the **Level** box.

2. Make the necessary choices for leveling, and click **Level All**.

   - **Select Manual**
   - Choose to level the entire project, or just specific dates
   - Select the order of tasks which will be leveled
3. Review the changes in the Leveling Gantt Chart view, and save the file if you wish to keep the changes.

Updating a Project Plan

**Entering Task Progress**

Entering task progress information helps to view task progress and determine if the project and its tasks remain on schedule.

To enter task progress information,

1. On the **View** tab, choose **Tables**, then **Tracking**.

2. Choose the task that is to be updated, and in the **% Complete** column, enter the appropriate % of completion.

Tasks can also be updated on the **Task** tab by clicking the appropriate % Complete button.

**Working with Overtime**

Extra hours of work put in by employees outside of their regular hours can be entered for work resources. To enter overtime work,

1. Under the **View** tab, choose **Task Usage**.
2. Click the arrow next to **Add New Column**.

3. Scroll to select **Overtime Work**.

4. Enter the **Overtime Work** for the resource.

5. After adding the overtime work, the total hours of work for the resource will remain unchanged. Increase the total hours of work for the resource to include the overtime work.

6. An **Exclamation** will then appear next to the resource name. Click the **Exclamation point** and choose the desired option.

**Editing Tasks**

There are various ways to account for any changes that may abruptly occur during a project that will affect the completion of tasks. If a project is interrupted by an unexpected event (for example, weather conditions) then a task can be split to account for this change.

To split a task,

1. Select the task.
2. Under the **Task** tab, select **Split Task**.
3. In the **Gantt chart** view, place the split-task cursor over the taskbar you want to split. Move the cursor along the taskbar until the date on which the task is to be split appears. **Click** to split the taskbar with an interruption of **one day**.

4. To make the interruption more than one day, place the cursor on the **right side** of the split task in the Gantt chart. When a **four-sided arrow** appears, hold down and drag the bar to increase the duration interruption. The dates will change as you drag the cursor.

Another option is to make tasks **inactive** and **active**. An inactive task is a task that was cut from the project, but does not actually disappear, so it will still appear on the project record to be used for future reference.

To inactivate a task,

1. **Select** the task you wish to inactivate, and **right click**. Choose **Inactivate task**.

2. The task will remain to appear on the project, but will have a line through it indicating it is inactive.

3. To **reactivate** the task, **right click** on the task and **uncheck** the **Inactivate Task** option.

**Rescheduling Tasks**

To reschedule a task,

1. **Select** the task that is to be rescheduled.
2. On the **Project** tab, select **Update Project**.

3. Choose **Reschedule uncompleted work to start after**, and select the date the work will begin again. Choose for **Selected tasks**, and click **OK**.

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**Filtering Tasks**

Tasks can be filtered to display only those that meet a given certain criteria. It allows managers to easily locate a problem without having to search through the entire project.

To filter a task,

1. On the **View** tab, click the **Filter** dropdown menu.
2. Choose how you wish to filter the data.

   Filter by various characteristics, including **Date Range**, **Late Tasks**, **Incomplete Tasks**, **Active Tasks**, etc. Enter the requested information in the dialog box and click **OK**.
Reporting Visual Data

Creating a Visual Report

Visual Reports are graphical representations of the data in your project. They are created as charts and tables in either Excel or Visio.

To create a Visual Report,

1. On the Projects tab, choose Visual Reports.

2. Under the All tab, select the desired visual report template. Under Select level of usage dropdown menu, choose the duration of the data you wish to appear in the report.
3. Click **View** to generate the report and open it.

![Budget Cost Report](image)

**Customizing a Visual Report**

To customize a Visual Report in Excel,

1. Generate the selected visual report and display it in Excel.
2. Click on the **Chart** to display the different editing properties.
   a. Use the **PivotTable Field List** to edit fields to add to the report.
   b. On the **Layout** tab, adjust the options as desired.

   ![PivotTable Field List](image)

   **Check** the boxes next to the fields you wish to add to the chart. As you check and uncheck them, the chart will automatically reflect the changes.