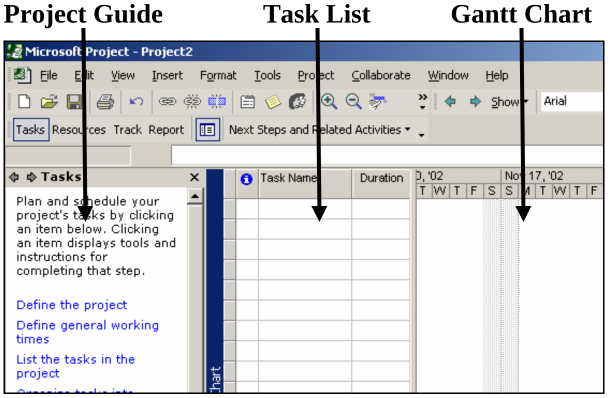
Ohio University
Computer Services Center
May, 2002
Microsoft Project Standard 2002

A. Project groundwork

Start MS Project
Click **File**, then **New**.
Select **Blank Project** from the task pane. The screen pictured below will appear.
Note the **Project Guide**, **Task List** area, and **Gantt Chart** area. (The Project Guide is also referred to as the Task pane when the Tasks button is selected, and the Resource, Track, or Report pane when either of those buttons is selected.)

Project Guide **Task List** **Gantt Chart**



Click the blue **Define the project** link in the project guide at the left side of the screen.

1. Select the date the project will start on, then click the **Save and go to Step 2** link at the bottom of the Project Guide.
2. Decide whether to collaborate via the web with others. For the seminar, select **No,** then click the **Save and go to Step 3** link at the bottom of the Project Guide.
3. Click **SAVE** and name the project.
4. Click the **Save and go to Step 4** link in the Project Guide.
5. Click **Save and Finish.**

Click the **Define General Working Times** link in the Task Pane.

1. Select a **calendar** (Standard, 24-hour, or Night Shift) which *most* workers will follow, then click the **Save and go to Step 2** link in the Project Guide.
2. Select the days and hours that will usually be devoted to this project each week, then click the **Save and go to Step 3** link.
3. Click the **Change Working Time** link to select **days off** and holidays, then click the **Save and go to Step 4** link.
4. Define **time units** (hours per day, hours per week, days per month) then click the **Save and go to Step 5** link.
5. Click the **Save and Finish** link in the Project Guide.

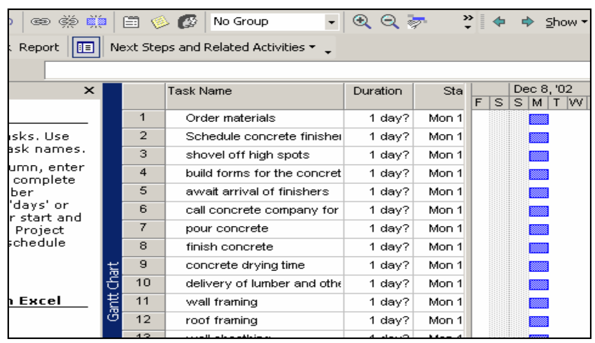
B. Enter tasks and estimate durations

Click the **List the tasks in the project** link in the Project Guide.

Enter the tasks needed to complete the project:

- Task Name
- Duration of the task

If you don't elect to specify a duration, Project 2002 will assign a duration of one day along with a question mark to indicate that this is an estimate.

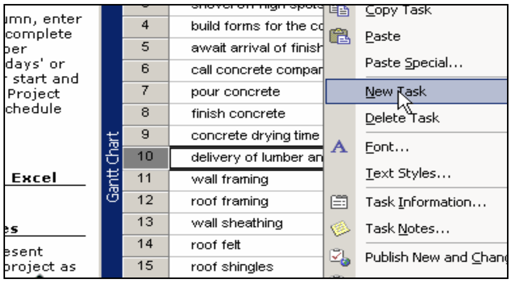


Entering tasks. Unless specified, an estimate of one day is entered for each task's duration.

Note: As you enter tasks, you might see that several tasks can be logically grouped under one overall task name. For instance, in our seminar we entered tasks named *Plant shrubs* and *Spread grass seed.* These tasks might logically fall under a heading of *Planting.* If you think of such headings, it can be handy to include them in the task list as you create it. Later, the headings can be used as phase names in the **Organize Tasks into Phases** step.

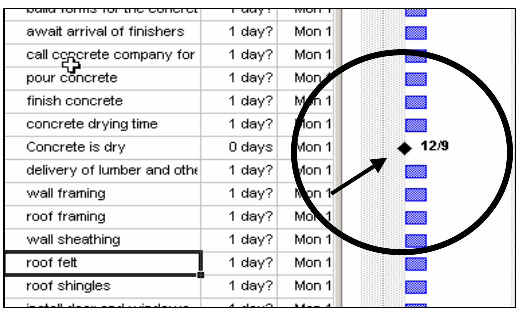
Enter a Milestone

- Right-click the gray row selector <u>under</u> where you want to insert a milestone.
- Select **New Task.**



Preparing to enter a new task under "concrete drying time"

- Enter a task name for the milestone
- Enter a **duration** of **0 days (0d)** in the **Duration** column. Milestone marker will appear in the Gantt chart for this task.



A black diamond shape designates a milestone.

Organize tasks into phases

- Click the **OrganizeTasks into Phases** link in the Project Guide.
- Insert new rows for new tasks if needed
- Use Indent and "Outdent" buttons to specify which tasks are subordinates of others.

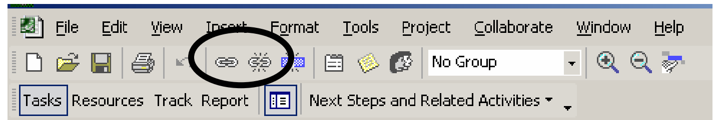
So far, all the tasks are scheduled to start on the same day.

Link Tasks to establish start times

Click the **Schedule Tasks** link in the Tasks Pane. Select two tasks, then select the type of start/finish relationship that should exist between them.

Tip: if you have a long sequence of tasks and want the finish-to-start link established for each task:

1. Click to select the first task.
2. Hold the **SHIFT** key and click to select the last task in the sequence.
3. Click the **Link Tasks** icon to apply the default finish-to-start link to all selected tasks.



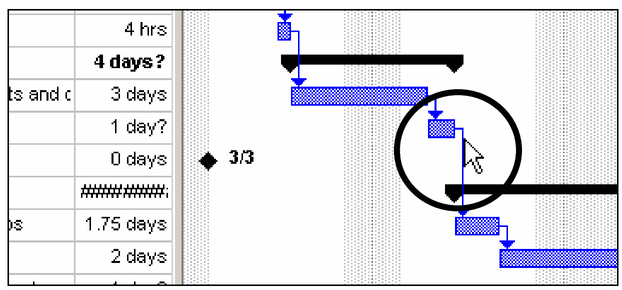
The ***Link Tasks*** and ***Unlink Tasks*** icons

To change the TYPE of relationship:

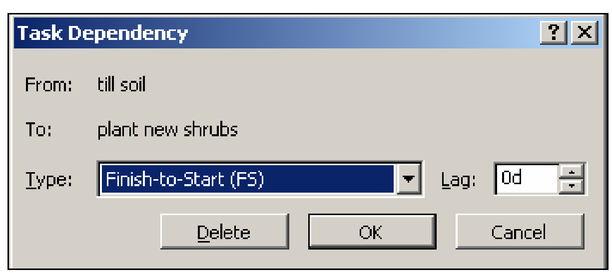
1. Select a single task.
2. **Right-click** on that task.
3. Select **Task Information**.
4. In the Task Information dialog box, click the **Predecessors** tab.
5. Click in the **TYPE** column for that task to see a drop-down list of start/finish relationships.
6. Choose a new relationship.
7. Click **OK**.

~ OR ~

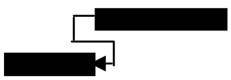
1. Double-click on the line between two tasks whose relationship you'd like to change as shown below.



2. In the resulting **Task Dependency** dialog box (shown below), click the down-arrow for the **Type** field and select the type of relationship you need for the tasks.



3. Click **OK**.

This task relationship	Means
Finish to Start (FS) 	The finish date of the predecessor task determines the start date of the successor task.
Start to Start (SS) 	The start date of the predecessor task determines the start date of the successor task
Finish to Finish (FF) 	The finish date of the predecessor task determines the finish date of the successor task.
Start to Finish (SF) 	The start date of the predecessor task determines the finish date of the successor task.

Document Tasks

1. Click the task that you want to document.
2. Click **TASK** to see the tasks project guide.
3. Click **Link to or attach more information** link in the Project Guide.
4. Click the **Add a Note** link to display a **Task Information** dialog box.
5. Click the **NOTES** tab in the Task Information dialog box.
6. Type your documentation.

~ OR ~

1. Click on the **Task Notes** icon in the menu bar to display the **Task Information** dialog box.

2. Click on the **Notes** tab and type your explanatory note.
3. Click **OK.**
   The **Note** icon will display in the **Indicators** column. (to delete the note, double-click the Note icon, then erase the text in the Notes tab of the Task Information dialog box.)

Constrain a task

1. Click the **Task** button to see the Project Guide for Tasks.
2. Click the **Set deadlines and constrain tasks** link in the Project Guide.
3. Click a task in the task list, then apply a deadline or constraint.

~ OR ~

1. Click the **PROJECT** menu item.
2. Select **TASK INFORMATION**
3. Click the **ADVANCED** tab.
4. Click the **CONSTRAINT TYPE** down arrow to select the type of constraint, then choose a constraint date if needed.

Check the Project Plan's duration

1. In the **Project** menu, click **Project Information.** The Project Information dialog box will appear.
2. Note the **Finish date** (middle left).
3. Click the **Statistics** button.
4. Here, you can see the finish date again at the upper right, and the project's duration in the bottom section in the **Duration** column.
   Note that no work hours or costs are reflected here yet.
5. Click the **Close** button when finished.

Insert a column

- Click **Insert** on the menu bar
- Select **Column**
- Click the down arrow in the **Field Name** box and select the column you'd like to add. Add the **% Complete** column.

Move a column

1. Click the **column header** of the column you want to move. The entire column will be selected, and the mouse pointer will become a four-headed arrow.
2. **Left-click and HOLD** the mouse while dragging the column to the position you want. A broad gray column border will appear in the white cells under the row headers and shows where the column will be placed when the mouse is released.
3. **Position** the gray column border, then **release the mouse button**.

C. List resources and costs

There are two types of resources:

- ***Work*** resources are the **people** and **equipment** that do the work of the project.

- ***Material*** resources are **consumables** that will be used during the project, such as nails for construction or paper for an office-oriented project.

Set up people resources (<u>work</u> resources)

1. Click the **Resources** button to see the **Project Guide**.
2. Click the **Specify people and equipment for the project** link.
3. Select the **Enter resources manually** option. *Notice that the Gantt chart is replaced with the **Simple Resource Sheet** (the title of the sheet is in the vertical blue line which separates the Project Guide from the Simple Resource Sheet).*
4. **Enter** the names of the people who will work on the project.

To enter a "generic" resource (such as "electrician"):

1. Click **View**, then **Resource Sheet**. This is a more detailed version of the Simple Resource sheet.
2. Enter a resource such as Electrician.
3. Press TAB to move to the **TYPE** field, and select **Work**.
4. Press TAB several times to go to the **Max. Units** field. Enter 100% if one person will work all his hours on the project, 50% if one person will work half his hours on the project, or 200% if two people will work all their hours on the project.
5. Click in the **Max. Units** field for other resources, if desired, and change their Max. Units according to how much time they can devote to the project.

Set up equipment resources (<u>work</u> resources)

Equipment resources are entered much like people resources. But, equipment resources are not confined to the hours of the standard calendar. Equipment may be scheduled for 24 hours a day if needed.

1. Click the next empty cell in the **Resource Name** column.
2. Enter a resource, such as Computer, specify its **Type** as WORK, and specify a percentage of time it will be available. If there will be 3 computers used, show this by typing 300% in the Max Units column.

Set up material resources

Material resources are consumables that are used as the project proceeds. Unlike work resources, material resources do not use overtime cost rates, resource calendars, or maximum units.

1. Click the next empty cell in the **Resource Name** column.
2. Enter the name of a resource such as Paper, and press TAB.
3. In the **type** field, specify **Material**, and press TAB.
4. In the **Material Label** field, type a description such as "500-sheet ream".

Enter resource pay rates

For **work** resources, click in the **Std. Rate** field to specify a pay rate.
Examples:

- "800/**w**" for $800/week
- "200/**d**" for $200.00/day
- "16.75/**h**" for $16.75/hour

For **material** resources, click in the **Cost/Use** field to specify the cost of a resource. Don't use "per hour", "per day", or "per week". Enter just the cost per unit, such as the cost for one ream of paper.

Adjust working time for individual resources

The **Standard Base** calendar was specified as the resource calendar for most resources at the beginning of this project. **Other calendars** can be created for specific resources if needed. For example, some people working on the project might need specialized resource calendars to take into account a different standard work day such as a 10-hour day 4 days a week.

To create a different calendar to accommodate a work resource with a different work schedule, such as four 10-hour days:

1. On the **Tools** menu, click **Change Working Time**. The Change Working Time dialog box appears.
2. In the **FOR** box, select the resource.
3. Select the Monday through Thursday **column headings**. Using the column heading for a day of the week instead of a specific date will cause *every* occurrence of that day – past, present, and future – to be affected.
4. In the lower **To** box, click 5:00 PM and replace with 7:00 PM.
5. Click the **column heading** for Friday.
6. In the **Set Selected Date(s) To** section at right, click **Nonworking time**.
7. Click **OK**.

Now, Project will schedule this resource as late as 7:00 PM every Monday through Thursday, but it will not schedule this resource for Fridays.

To set days off for a particular resource (for vacation or training, for instance):

1. On the **Tools** menu, click **Change Working Time**. The Change Working Time dialog box appears.
2. In the **FOR** box, select the resource.
3. In the calendar in the dialog box, scroll to the year and month in which non-standard work days will occur for that resource, then click the specific day or days. You can click and drag to select a range of days.
4. In the **Set Selected Date(s) To** section at right, select **Nonworking time**. Microsoft Project will not schedule that resource for these days and times.

Attach a note to a resource

You might elect to document a resource's non-standard calendar with a note. That way, the explanatory note resides in the project plan, and can be easily viewed or printed.

1. In the **Resource Name** column, click the name of the resource.
2. On the **standard toolbar**, click the **Resource Notes** button to display the Resource Information dialog box .

3. Click the **Notes** tab if necessary.
4. Type an explanation of the non-standard work schedule, then click **OK**.

A **note** icon will appear in the **indicators column.**

Assign Work resources to tasks

1. Click the **Resources** button on the Project Guide toolbar.
2. In the Resources pane that appears, click **Assign People and Equipment to Tasks**.

- The **Assign Resources Project Guide pane** and **Gantt chart view** will appear.

3. In the Assign Resources Project Guide pane, click the **Assign Resources** link.

- The Assign Resources dialog box will appear, and you'll see the resources you entered in a previous step. This dialog box can be dragged to the lower right of the screen if it obscures the Task Name column.

4. In the **Task Name** column, click a task to which you want to assign a resource. Note that the task name will appear in the gray area at the top of the dialog box.
5. In the **Resource Name** column in the Assign Resources dialog box, click the resource you want to assign to the task.
6. Click the **Assign** button.

- A check mark will appear next to that resource name to indicate that it has been assigned to the task. And, the resource name will appear next to the task's bar in the Gantt chart.
- In the **"4) Review Information"** section of the Assign Resources pane in the Project Guide on the left, notice that the task's duration, work, and resource appear. Work is how many hours need to be spent by one resource or several resources in concert to complete the task. Thus, the duration of the task is dependent on the number of resources assigned to do the work of that task, as well as the percent of each resource's time to be spent on the task. If it's appropriate to add a second resource to a task, repeat steps 4 through 6. Scrolling to the bottom of the Assign Resources pane at left will show a reduced duration because more resources are now assigned to the task.

Assign Material Resources to Tasks

1. In the **Task Name** column, select the task that you want to assign a material resource to.
2. Click the **Assign Resources** button  in the standard toolbar.

Unlike the version of this dialog box that shows when using the Project Guide, this version includes a **Units** column.

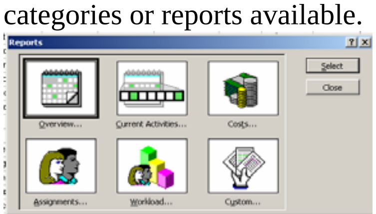
3. Select the **Units** field for the material resource you want assign to the task.
4. Type the **number of units** that you want the task to use.
5. Click the **Assign** button.
6. Close the Assign Resources dialog box.

Notice that the quantity of units now shows in the Gantt chart beside the bar for the task this resource is assigned to.

- Click **Project**, **Project Information**, then click the **Statistics** button to see project duration and costs.

Formatting and printing reports

1. On the view menu, click **Reports**. A Reports dialog box appears showing six broad categories or reports available.



2. Select a report category, then click the **Select** button. A selection of reports for that report type will appear.
3. Click on your preferred report, then click the **Select** button. A preview of the report will show, but it might be too small to be legible.
4. Click on the report to zoom to a more legible size. Use the horizontal and vertical scroll bars to move the report around on your screen.
5. If a report has more than one page (as indicated in the status bar at the lower left of the screen), use the **Multiple Pages** button in the toolbar.

Save the baseline

To judge the *actual* performance of your project plan properly, it will have to be compared to the initial project plan which is called the baseline.

1. Click the **Track** button on the Project Guide toolbar. The Track pane will appear in the Project Guide.
2. Click the ***Save a baseline plan to compare with later versions*** link. (Or Tools, Tracking, Save Baseline…) A **Save Baseline** pane will appear.
3. Click the **Save Baseline** button.

The baseline is saved, though there is no immediate apparent difference in the Gantt chart view. Up to 11 baselines can be saved.
Close the Project Guide by clicking the Close button at the upper right corner of the guide.

Tracking a Project

The degree to which an individual task has been completed can be entered as a percentage. MS Project will calculate the actual duration, remaining duration, actual costs and other values based on the percentage entered. For instance, if 20% of the work on a task that will consume 100 reams of paper over a duration of 5 days is completed, MS Project will calculate the cost of 20% of 100 reams, and will display a progress bar that is 20% of the length of the Gantt bar representing that task.

Update a range of tasks simultaneously

1. On the **View** menu, click **Gantt Chart**.
2. On the **Tools** menu, point to **Tracking**, then click **Update Project**.
3. Make sure that the **Update Work as Complete Through** option is selected. In the adjacent date list, type a date, then click the **OK** button.

Note that **check marks** appear in the indicators column adjacent to tasks that have been completed, and “progress bars” are drawn in the Gantt bars to show percent of work completed for a task.

Update each task individually

1. On the **View** menu, click **Tracking Gantt.**

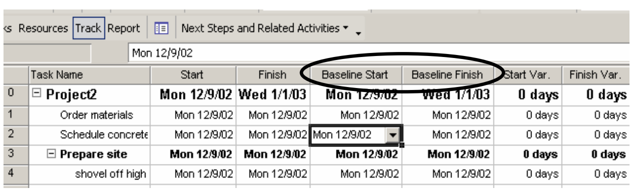
2. Click in the **%Complete** column for a task and enter the percentage of the work that's been completed.

Viewing variances from plan

Click **View**, then **More Views**.
Click **Task Sheet** then click the **Apply** button. This will show the Task Sheet without the accompanying Gantt chart.
Next, look at an augmented task sheet that compares the plan to actual performance:
Click the **View** menu item, then point to **Table:Summary**, then click **Variance**.

> (if Table:Summary isn't available, click View, then click Table:(whatever), then click Summary. Now, click View, Table:Summary, then click Variance)

Your table should look similar to the table below. In particular, note the **Baseline Start, Baseline Finish, Start Var. and Finish Var.** columns.



	Task Name	Start	Finish	Baseline Start	Baseline Finish	Start Var.	Finish Var.
0	Project2	Mon 12/9/02	Wed 1/1/03	Mon 12/9/02	Wed 1/1/03	0 days	0 days
1	Order materials	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	0 days	0 days
2	Schedule concrete	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	0 days	0 days
3	Prepare site	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	0 days	0 days
4	shovel off high	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	Mon 12/9/02	0 days	0 days

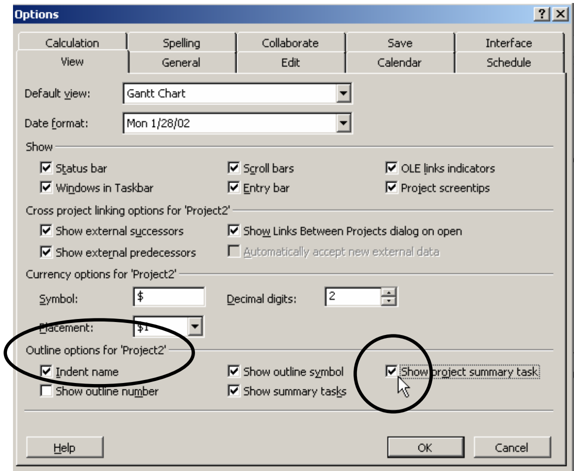
D. Customizing views

Creating a Custom Gantt Chart View

1. Click **Tools**, then click **Options**.
2. Click the **View** tab in the **Options** dialog box.

Look in the <u>**Outline options for**</u> section at the bottom of the dialog box.

3. Click in the **Show Project Summary Task** check box.
4. Click **OK**.



Project will display the summary task at the top of the Gantt chart view.

> If there are ## signs in the project summary task's duration field (left side of screen), complete these two steps:
> - Drag the vertical divider bar between the table and the chart to the right until you can see the right edge of the duration column.
> - Double-click the right edge of the duration column, in the column heading. The column will widen to show the widest value in the column.

5. Click **View**, then **More Views**.
6. Click the **Copy** button in the More Views dialog box. You're copying a view and will rename that copy next.
7. In the name field, type **Custom Gantt Chart**, then click **OK.**
8. The View Definition dialog box will close, and the More Views dialog box will remain open with Custom Gantt Chart selected.
9. Click **Apply.**

The Gantt chart view will remain the same, but the title on the left edge of the view will show the new title of the view (Custom Gantt Chart).

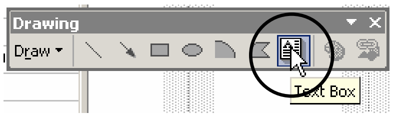
10. Click **Format**, then select **Gantt Chart Wizard**.
11. At the Welcome page of the wizard, click **Next.**
12. On the next page you're asked what kind of information you want to display in the Gantt chart. Click **Other**, then select **Standard: Style 4** from the drop-down list.
13. Click the **Finish** button. The last page of the wizard will appear.
14. Click the **Format It** button, then click the **Exit Wizard** button.

Attach a note to a Gantt Chart bar

1. Click **View** on the standard toolbar.
2. Click **Toolbar**s.
3. Select **Drawing**

The drawing toolbar will appear.

4. Click the **Text Box** button



5. Drag a small square anywhere on the chart portion of the Gantt chart view.
6. Type explanatory text.
7. Click the **Format** menu item, point to **Drawing**, then click **Properties**.

The Format Drawing dialog box will appear.

8. In the Format Drawing dialog box, click the **Line & Fill tab**.
9. In the **color** box under the Fill label (RIGHT side), click Yellow.
10. Click the **Size & Position tab**.

You can attach this note to a specific date, or to a specific Gantt bar. Next steps will attach this note to a specific task.

11. Select **Attach To Task**, then type in the task number that the note applies to.
12. Enter the desired height of the text box in the **Vertical** box, then click OK.

Temporarily change the duration of the selected task to 20 days. Note that the text box just created stays at the end of the Gantt bar when the bar lengthens.

Formatting text in a view

Text can be formatted two ways. A format can be applied to a style of text, such as the text for a Summary Task, or formatting can be applied to one specific text selection.

(Click **View**, then select **Gantt Chart** if not already in Gantt Chart view.)

1. On the **View** menu, click **More Views**.
2. In the **Views** box, click **Task Sheet**, and then click the **Apply** button.

The task sheet will appear. There is no chart component with the task sheet.

3. On the **View** menu, point to **Table: (xxxx)**, then click **Summary**.

The **Summary** table appears. Call attention to one particular category by formatting as follows:

4. Click **Format**, then **Text Styles**.
5. In the **Items to Change** list, click **Summary Tasks**.
6. Select a size and color, then click **OK**.

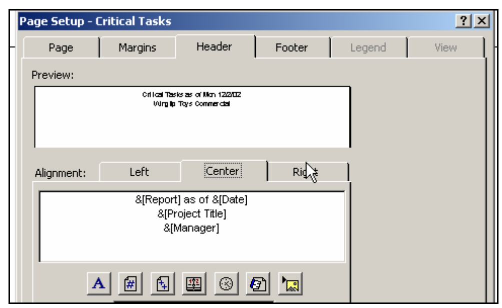
MS Project applies the new format to the summary tasks. The format changes will apply to all tables that can be displayed in the Task Sheet view. If another view is chosen, the Summary Tasks will not be formatted in the other view.

To change the appearance of one task

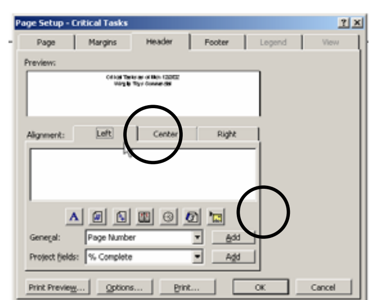
1. Click the task you wish to format.
2. On the **Format** menu, click **Font.**
3. Select a style from the **Font Style** box, then click the **OK** button.

Add a Custom Header to a Report

1. Click **View**, then **Reports**
2. Select **Current Activities**, then **Unstarted Tasks**
3. Click the **Page Setup** button at the top of the print preview screen.
4. Click the **Header** tab. A **page setup** dialog box will appear.



5. In the **Alignment** section, click the **Left** tab.
6. Click the **Insert Picture** button.



7. Navigate to the picture to be inserted in the header, then click the **Insert** button.
8. Click **OK**. Close the report after viewing.