

# Set a project start date

#### Tell me more

The first steps in creating a project plan are to create a new file, designate the project's start date or finish date, and then enter other general project information. If you don't enter a project start date or finish date, Microsoft Project automatically uses the current date as the start date.

- 1 Click New
- **2** Enter a start date or a finish date.
  - To enter a start date, type the date on which you want to start your project in the **Start date** box.
  - To enter a finish date, click **Project Finish Date** in the **Schedule from** box, and then type a finish date from which to schedule your project in the **Finish date** box.

**Tip** If your plans change, you can change your project information at any time by clicking **Project Information** on the **Project** menu. For example, if the project start date is postponed because you need to hire a new project manager, you can change the start date.

#### **Enter tasks**

#### Tell me more

A typical project consists of a series of related tasks, which are the building blocks of your schedule. Enter all the tasks that are important to your project, in the approximate order that you expect to do them.

1 On the View Bar, click Gantt Chart



- 2 In the **Task Name** field, type a task name.
- 3 Press ENTER.

Tip It can be difficult to decide how finely to break down your tasks. As a general rule, a task should be less than 2 weeks in length. It should be large enough to be a significant chunk of work, but small enough that you can track its progress regularly and identify problems early.

#### **Enter durations**

#### Tell me more

When you enter a task, Microsoft Project automatically assigns it a <u>duration</u> of 1 day. You can change this duration to more accurately represent how long the task will take.

1 On the View Bar, click Gantt Chart



- In the **Duration** field of the task you want to change, type the duration you want. 2 You can enter durations in minutes, hours, days, or weeks.

Tip You can schedule your tasks most effectively by entering a duration for each task and letting Microsoft Project calculate the start and finish dates for you.

#### Link tasks

#### Tell me more

Tasks usually happen in sequence: you prepare the walls, then paint them, and then hang pictures. To create a sequence, you link dependent tasks and tell Microsoft Project how they are dependent.

1 On the View Bar, click Gantt Chart



- 2 In the **Task Name** field, select two or more tasks you want to link.
- 3 Click Link Tasks ... Microsoft Project creates a finish-to-start task link, where one of the tasks must finish before the next task can start.

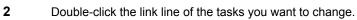
**Note** A simple finish-to-start link may not be appropriate. You can create other types of task links, such as start-to-start or finish-to-finish links.

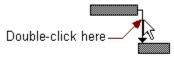
<u></u> How?

# Change a task link

1 On the View Bar, click Gantt Chart







 $\boldsymbol{3}$  In the  $\boldsymbol{Type}$  box, click the  $\underline{task\;link}$  you want.

# Assign resources

#### Tell me more

Most tasks require a resource to do the work. A resource can be a person, piece of equipment, building, or any physical item necessary to complete a task.

1 On the View Bar, click Gantt Chart



- In the **Task Name** field, select the task to which you want to assign a resource. 2
- Click Assign Resources 3
  - In the **Name** field, select the resource you want to assign to the task. If the resource isn't already listed, type the name of the resource in the **Name** field.
- 5 Click Assign.

A check mark to the left of the **Name** field indicates that the resource is assigned to the selected task.

Tip You can also assign resources part-time or overtime and assign more than one resource. Note that a resource's working hours are indicated in the resource's calendar. For more information about assigning 

#### Set a baseline

#### Tell me more

Once you complete the initial process of creating a plan—entering tasks, establishing dependencies, assigning resources, and fine-tuning your schedule—you're ready to set a <u>baseline plan</u>. By comparing the information in your baseline plan to your updated schedule during the course of the project, you can identify and solve discrepancies. After the project ends, you can use the baseline plan to schedule similar, future projects more accurately.

- 1 On the Tools menu, point to Tracking, and then click Save Baseline.
- 2 Click Entire project or Selected tasks to save the portion of the schedule you want.

# Fine-tune the project plan

You've created an initial project plan, but it may not meet your goals, yet. For example, if you follow the current plan, your project may take too long or cost too much. To remedy these and other problems, you'll need to fine-tune your project plan.

$\gg$	Shorten the project schedule
>>	Reduce the costs of tasks
>>	Reduce the costs of resources
>>	Ensure that the resources can do their work in the time available

# View the critical path

The first step to shortening your schedule is to identify the tasks that are delaying it, called <u>critical path tasks</u>. Once you've identified the critical path tasks you can shorten the schedule by adjusting them.

1 On the View Bar, click Gantt Chart



- Click GanttChartWizard 2
- 3 ≫ Follow the GanttChartWizard instructions to format critical path tasks.
- Next Step

# Critical path task

For the purpose of optimizing, a critical path task is either a task that finishes on the project's finish date or one of a series of linked tasks in which the last task finishes on the project's finish date.

# Shorten the schedule

Once you've identified the critical path tasks, you can adjust them in a variety of ways to shorten the schedule. Adjust those task that have the biggest impact on the schedule and that you have the most flexibility to change.

≫	Delete a task
$\gg$	Change a task duration to reflect a reduction in its scope
$\gg$	Assign more resources to a task
≫	Assign overtime work to shorten critical path tasks
>>	Check task dependencies to see if the task can start earlier

#### **Reduce costs**

Once you know where you're spending your money, consider ways to reduce the highest costs. Generally, you can reduce costs by either:

- Eliminating tasks from the project, thereby reducing the scope of tasks so that they take less time and cost less to complete.
- Using fewer or cheaper resources.

- Delete a task
- Change a task duration to reflect a reduction in its scope
- Remove a costly resource from a task
- Assign a cheaper resource to a task

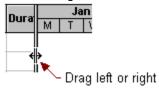
# View the cost per task

If the total project <u>cost</u> does not meet your budget, you may need to examine the total cost of each individual task to see what can be changed.

1 On the View Bar, click Gantt Chart



- 2 On the View menu, point to Table, and then click Cost.
- 3 Drag the <u>divider bar</u> to the right to view the **Total Cost** field.



Next Step

# View the cost per resource

You can view the total cost per resource to see how the standard, overtime, and per-use costs add up.



2 On the **View** menu, point to **Table**, and then click **Cost**.

Tip To see resource cost totals displayed graphically, click Resource Graph

Details on the Format menu, and then click Cost or Cumulative Cost.

on the **View Bar**, point to

Next Step

#### Check resource workload

To find out which resources are <u>overallocated</u> or underallocated (not working to capacity), use the Resource Usage view. You'll see the total hours each resource is working, the hours each resource is working on each task, and the hours worked per time period. Overallocated resources are highlighted and displayed with an icon in the Indicators field.

• On the View Bar, click Resource Usage



**Tip** If you see pound symbols (##) in the timescale portion of the Resource Usage view, the columns in the timescale are not wide enough to display the information. To change the width of the columns, click **Timescale** on the **Format** menu, and then increase the value in the **Enlarge** box.

Next Step

# **Reduce resource overallocations**

Keep in mind that minor amounts of overallocation, such as less than 1 hour per day, may not be significant enough for you to resolve and may be unavoidable. You can use any of several methods to resolve larger overallocations.

$\gg$	Resolve resource overallocations automatically
$\gg$	Assign extra resources to a task, thereby reducing the hours that the overallocated resource must work
>>	Set different working hours and days off for a resource
≫	Decrease the amount of work assigned to the resource

#### **Enter actuals**

You can update your schedule as frequently as you want to monitor progress. To update your schedule, evaluate the status of each task and enter the latest, actual information in your schedule. You can then determine your progress by using the baseline information you stored to compare your original plan with the current status.

$\gg$	Update actual start and finish dates for a task
$\gg$	Update progress on a task as a percentage
$\gg$	Determine if tasks are starting and finishing according to plan
>>	Determine if tasks cost more or less than budgeted

# Adjust the project plan

As you update your project plan, you may uncover problems, some of which may threaten your project's success. For example, if a critical path task finished late, the schedule may show that the project will finish late. You'll need to adjust the plan to solve the problems that arise.

≫	Shorten the project schedule
$\gg$	Reduce the costs of tasks
>>	Reduce the costs of resources
$\gg$	Ensure that the resources can do their work in the time available
$\gg$	Reschedule the remaining work on a task to continue at a later time

# Print the project plan

# Tell me more

To review your project plan before fine-tuning it, you can print the Gantt Chart view or any view in Microsoft Project. You can also customize views and then print them.

Click Print



You can't hit the target if you can't see it. So, your first step is to set the project's objective. The objective should be measurable, define a definite end to the project, and include any assumptions about and constraints on the project. To prevent problems later, be sure everyone affected agrees to your definition of the objective.

Once you know where your project is going, you need to figure out the best way to get there. To do that, you'll gather project information such as a list of the tasks that need to be done and estimates for how long each task will take. Then, you'll enter the information into Microsoft Project. As you enter information, Microsoft Project creates a plan for getting your project done.

Once your project starts, it's up to your team to execute the plan. But you'll need to keep close tabs on their progress, because you'll undoubtedly encounter problems you didn't expect. By keeping Microsoft Project up to date, you can see the latest status of the project and identify and resolve problems early on that might affect your project's success.

Every project is a learning experience. No matter how well you planned at the beginning, by the end of your project, you'll find your plan has changed from the original version. To make the most of your experience, use the information you've kept in Microsoft Project to compare your original project plan with the way the project actually progressed.