

TOPIC A

Add Resources to a Project

Once you have entered project tasks into a blank Microsoft® Project® file, project resources are the next critical set of data. In this topic, you will add resources to a project plan.

Resources

Resources are people, equipment, materials, or other costs that are used to accomplish a project task. In other words, resources are the staff, supplies, equipment, and other expenses that you need to execute a project. In Microsoft Project, you can define your resources and assign them to tasks.

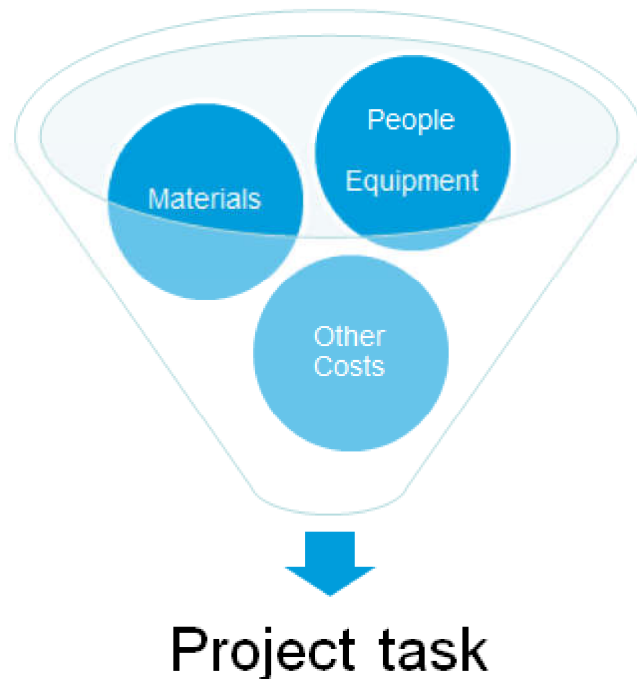


Figure 5-1: Resources are assigned to tasks.

Work Resources

A **work resource** is a person or piece of equipment used to complete tasks in a project. Work resources are tracked on a time basis. The most common work resources are the people who will perform the tasks, also known as human resources. You can refer to work resources by name (Gary Clark) or by generic labels (Landscaper), depending on your needs. In addition to human resources, work resources also include resources that you need to schedule or track cost on a time basis. For example, a printing press can only run one job at a time, so you may need to schedule it based on its availability. Or, you may need to rent equipment, such as a moving truck, to perform a task and you need to schedule most efficiently to minimize cost. Space can also be treated as a work resource if you need to schedule around its availability or track its cost by time. Examples include conference rooms, storage, convention centers, and so on.

You can also specify the maximum number of units that the resource can work on the project. For example, a person may only be able to devote 50% of his or her time to the project, or, if you have three identical pieces of equipment, you can create one resource for all three and set the **Max Units** field to **300%**.

Units

A *unit* is the representation of the percentage of a resource's time assigned to a task. The default percentage is 100. However, if a resource would work only half the time on a task, you can set that resource's assignment units to 50 percent.

Resource Name	Task	Units
Writer 1	Create Outline	100%
Writer 2	Search Web	100%
Artist 1	Add Graphics	50%
Editor	Check Grammar	75%

Figure 5-2: Units shown in Project.

Work

Work is the number of person-hours needed to complete each resource's assignment. The formula for calculating work is $\text{Work} = \text{Duration} \times \text{Units}$. For example, if the task "Write grant proposal" has a duration of 5 days, and the resource "Emma" will give 75% of her effort to the task, then the work is 3.75 days (5 days * 75%). The total work for a task is the sum of the work of all its assignments.

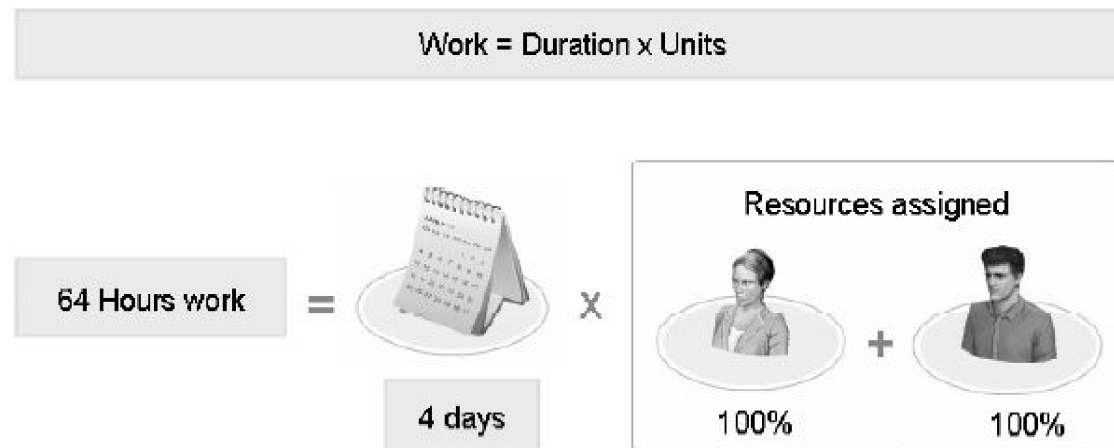


Figure 5-3: Calculating work.



Note: You will work with the scheduling formula later in this lesson.

Material Resources

A *material resource* is a consumable item used to complete tasks in a project. For example, you may need to use carpet to complete a flooring task. If you purchase carpet by the square foot, you

can create a material resource for the carpet and set its unit of measure to square foot. You can also enter the cost per unit and have Project calculate estimated costs per task.

Cost Resources

A **cost resource** is a miscellaneous expense that varies from task to task and does not change by the amount of work performed on the task. Standard cost resources are assigned to tasks to keep track of expenses associated with the task such as a travel expense, purchase of a license, and so on.

Budget Resources

A **budget resource** is a special type of resource used to keep track of labor, material, or costs versus budget through the project life cycle. You can set a budget work resource, a budget material resource, and/or a budget cost resource for a project. Budget resources can only be assigned to the project summary task and are used to track the budget at the project level.

The Resource Sheet

When you select the **Resource Sheet** button from the **Resource Views** group on the **View** tab on the ribbon, the **Resource Sheet** will be displayed. The **Resource Sheet** view shows you all the resources that you have defined for the project. You will see information about the resource in columns.

	Resource Name	Type	Material	Initials	Group	Max.	Std. Rate	Ovt. Rate	Cost/Use	Accrue	Base Calendar
1	Project Manager	Work		PM		100%	\$100.00/hr	\$150.00/hr	\$0.00	Prorated	GCNB Standard Calendar
2	Paper	Material	reams	P			\$5.00		\$0.00	Prorated	
3	Travel Expenses	Cost		T						Prorated	

Figure 5–4: You can view and enter resources on the Resource Sheet.

The table describes each column in the **Resource Sheet**.

Column	Description
ID	Contains an identifier number that Project automatically assigns to each resource.
Indicators	Displays icons that contain information about the resource.
Resource Name	Contains the name of the resource.
Type	Contains the resource type— Work , Material , or Cost .
Material Label	Specifies the unit of measurement for a material resource. For example, steel can be measured in tons.
Initials	Specifies the resource name's optional abbreviation. For example, Gloria Rodriquez could be abbreviated as GR.
Group	Contains the name of the group that the resource belongs to—for example, external or internal resources. For example, Gloria Rodriquez might be part of the Advertising group.
Max. Units	Describes the percentage of work a resource can do when assigned to a task.
Std. Rate	Specifies the rate paid to the resource for regular and nonovertime work.
Ovt. Rate	Specifies the rate paid to the resource for overtime work.
Cost/Use	Specifies the cost that is accrued each time a resource is used.

Column	Description
Accrue At	Displays choices based on which costs, whether regular or overtime, will be calculated for a resource. This is either at the start or end of a task, or as a task is completed (prorated).
Base Calendar	Displays the calendar that is in use.
Code	Contains extra information about a resource.

The Resource Information Dialog Box

In the **Resource Sheet** view, whenever you double-click the row number of a resource, the **Resource Information dialog box** opens. This dialog box contains all the information about the resource, grouped into four tabs. Notice that the **General** tab displays the **Resource name**, **Initials**, **Group**, **Type**, and **Material label** fields that correspond to several of the columns in the **Resource Sheet** view.

If you want to designate a resource as a **Budget Resource**, check the **Budget** check box.

Resource Information

General | Costs | Notes | Custom Fields

Resource name: Contractor

Email:

Logon Account...

Booking type: Committed

Initials: C

Group:

Code:

Type: Work

Material label:

Generic Budget Inactive


Change Working Time ...

Default Assignment Owner:

Resource Availability	Available From	Available To	Units
	NA	NA	100%

Help Details... OK Cancel

Figure 5-5: The Resource Information dialog box.

	Access the Checklist tile on your CHOICE Course screen for reference information and job aids on How to Add Resources to a Project Plan.
-------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------

ACTIVITY 5–1

Adding Resources

Data File

C:\091098Data\Managing Project Resources\HR Manual Resources.mpp

Before You Begin

Microsoft Project is open.

Scenario

Your work breakdown structure and schedule are looking good, and it is time to enter resources into your project plan. You will need people to perform the tasks, paper on which to print the HR manual, and money for travel for team members to attend meetings. The PMO has given you a budget for the project, and you need to enter it into the project plan so you can track progress and not run over the allotted funds.

At this point in the project, you do not know the names of the individuals who will work on it, so you decide to use their work roles instead. Later in the project you will replace the roles with names. Each individual can work on the project full-time.

1. Open the HR Manual Resources.mpp project plan file.

- a) On the **Open** tab in **Backstage View**, select **Browse**.
- b) In the **Open** dialog box, navigate to the **C:\091098Data\Managing Project Resources** folder containing your class files.
- c) Select **HR Manual Resources.mpp** and select **Open**.

2. Enter the work resources into the plan.

- a) On the ribbon, select **View→Resource Sheet**.
- b) Enter information for the first resource by using the **Tab** key to move between fields.
 - **Resource Name:** *Project Manager*
 - **Type:** *Work*
 - **Initials:** *PM*



Note: Leave the default information in the other fields unchanged. Note that Project automatically assigns the **GCNB Standard Calendar** to the resource.

- c) Enter the following roles and initials (initials are optional, but you will include them) of other work resources. As you **Tab** between fields, the **Type** field will automatically populate with **Work**, the default resource type.
 - **Resource Name:** *Writer 1*; **Initials:** *W1*
 - **Resource Name:** *Writer 2*; **Initials:** *W2*
 - **Resource Name:** *Editor*; **Initials:** *E*
 - **Resource Name:** *Attorney 1*; **Initials:** *A1*
 - **Resource Name:** *Attorney 2*; **Initials:** *A2*
 - **Resource Name:** *HR Manager*; **Initials:** *HRM*

3. Enter a material resource.

- **Resource Name:** *Paper*
- **Type:** *Material*

- **Material Label:** *reams*
4. Enter a cost resource.
- **Resource Name:** *Travel Expense*
 - **Type:** *Cost*
5. Enter a budget resource.
- **Resource Name:** *Project Budget*
 - **Type:** *Cost*
 - Double-click **Project Budget** to open its **Resource Information** dialog box.
 - On the **General** tab, check the **Budget** check box.
 - Select **OK**.
6. Save your changes as **My HR Manual Resources.mpp**.
- a) On the ribbon, select **File→Save As**.
 - b) Select **Browse** and then navigate to **C:\091098Data\Managing Project Resources**.
 - c) In the **File name** field, enter *My HR Manual Resources.mpp* and then select **Save**.
-