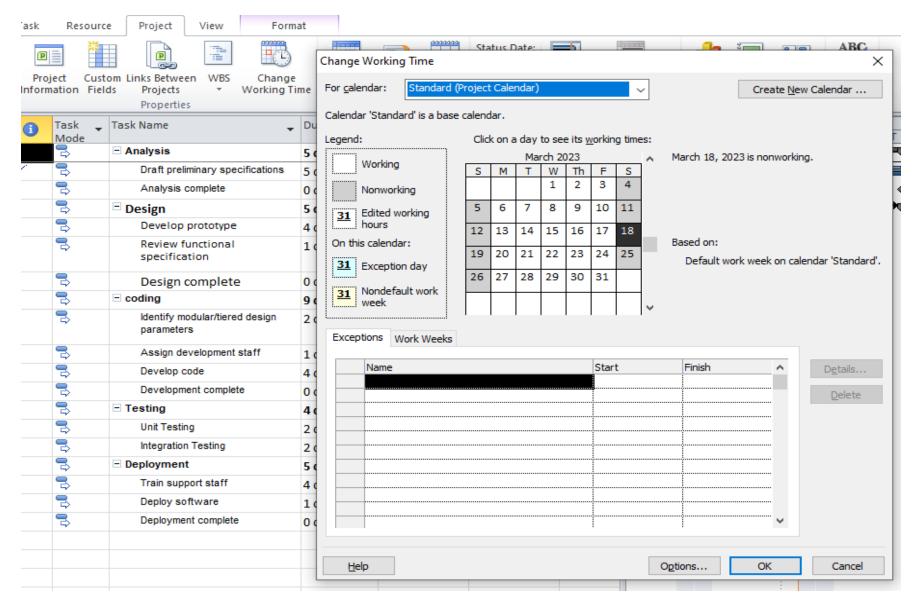
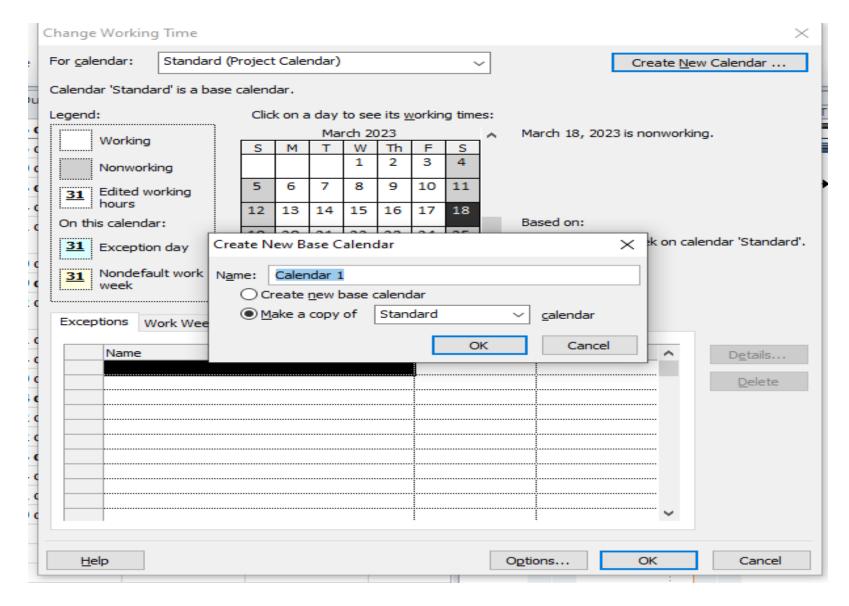
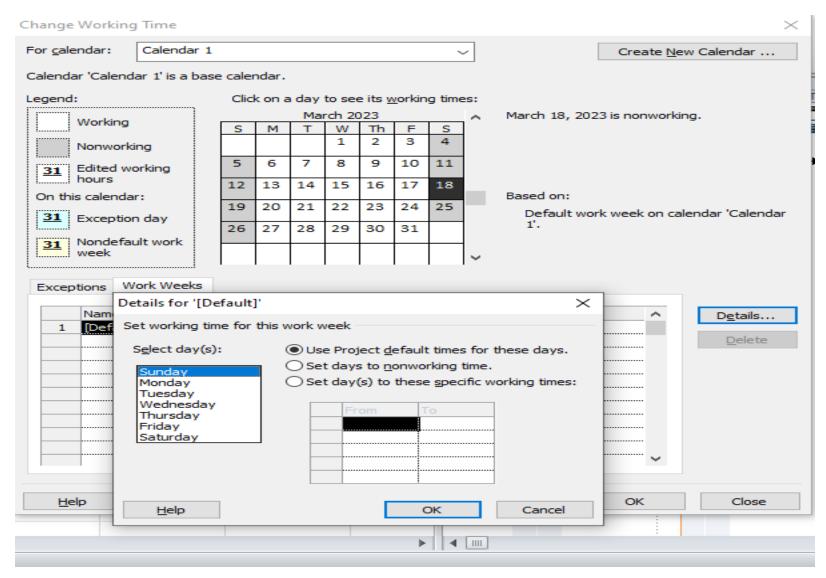
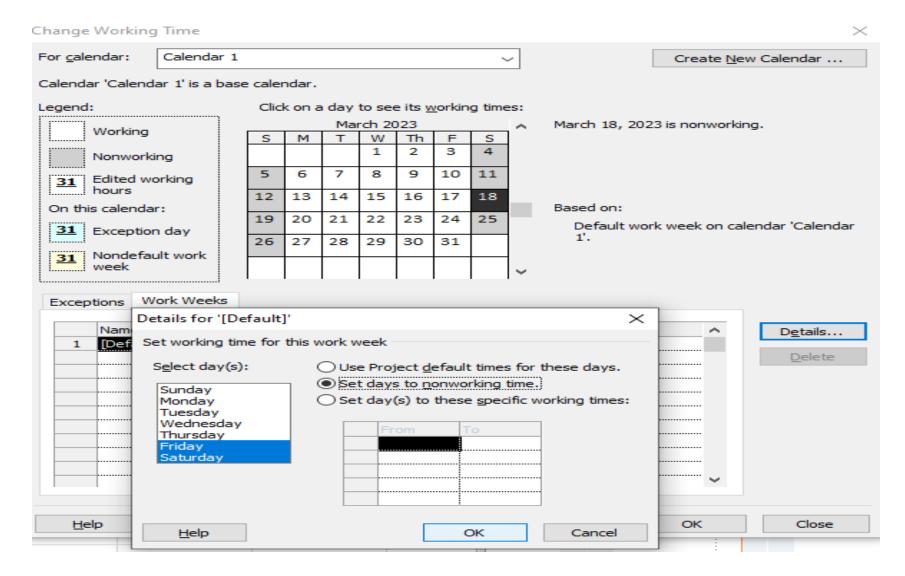
Microsoft Project Management

Chapter 3: Setting Up Resources

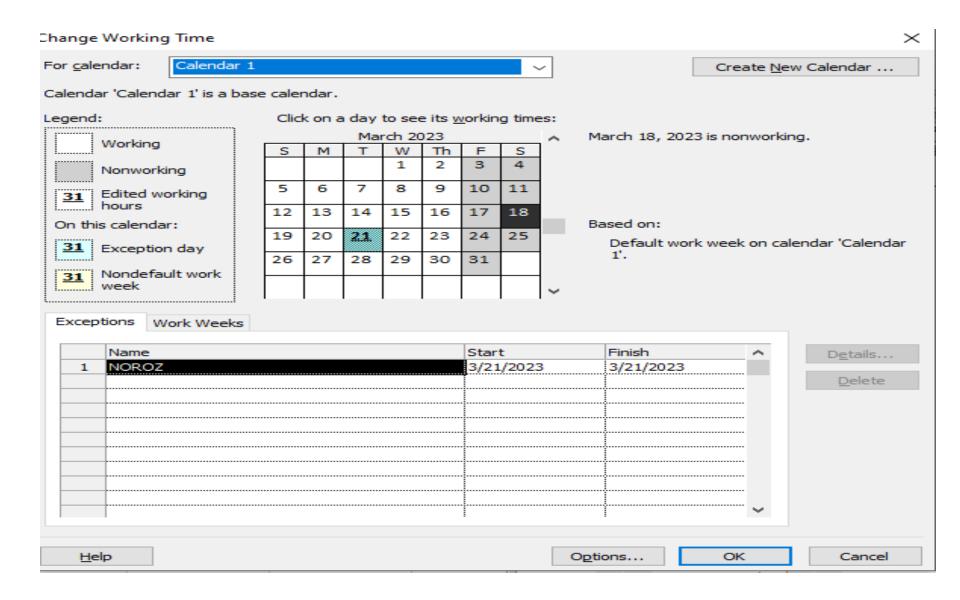


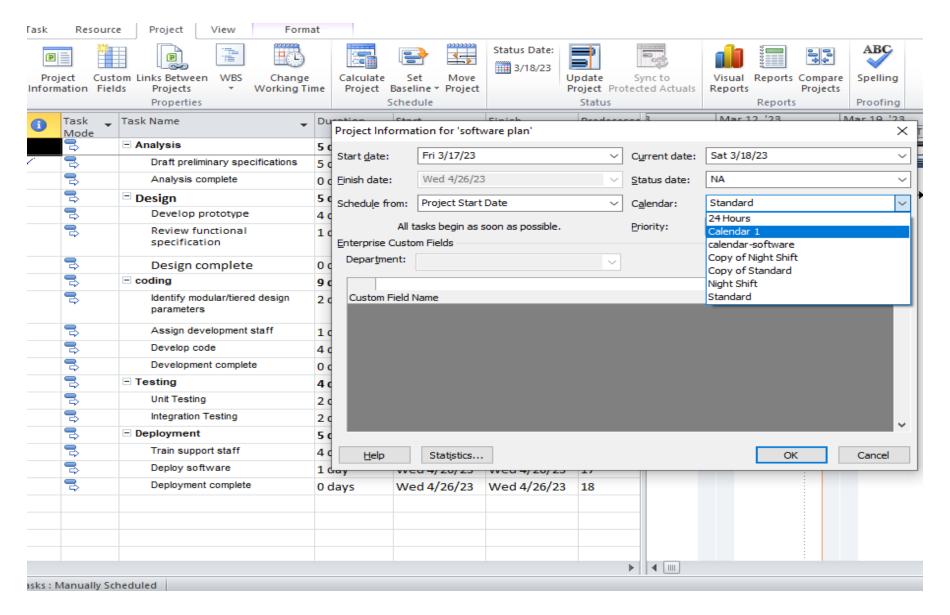






Change Working	Time			\times
For <u>c</u> alendar:	Calendar 1	~	Create No	ew Calendar
Calendar 'Calend	ar 1' is a base calendar.			
Legend:	Click on a day to see March 202		March 18, 2023 is nonwork	ing.
Working	1	Th F S 2 3 4		
31 Edited wo	Details for '[Default]'		×	
On this calendar		: week Jse Project <u>d</u> efault time	es for these days.	
31 Exception	Sunday	Set days to nonworking Set day(s) to these spe	g time.	alendar 'Calendar
31 Nondefau week	Tuesday Wednesday	From To	editc working unles:	
Exceptions W	Thursday ork \ Friday Saturday	1 8:00 AM 12:00 2 1:00 PM 5:00		
Name				Details
1 [Default				<u>D</u> elete
	<u>H</u> elp	ОК	Cancel	
			-	
<u>H</u> elp		Og	ptions OK	Close
		•		





Microsoft Project supports three types of resources:

- Work resources include the people and equipment needed to complete the tasks in a project.
- Cost resources represent a financial cost associated with a task that you need to account for Examples include categories of expenses like travel, entertainment, and so on.
- Material resources are consumables that you use up as the project proceeds. For example, a construction project might need to **track steel** or **concrete** as it is used throughout the project.

Work resources are the people and equipment that do the work of the project. Project focuses on two aspects of work resources: their **availability** and their **costs**.

Availability determines when specific resources can work on tasks and how much work they can perform.

costs refer to how much money will be required to pay for those resources.

Some examples of work resources are listed in this table.

Work resource	Example
Individual people identified by name	Ali, Omar, Zac,
Individual people identified by	Programmer, Publisher,
job or function	tester,
Groups of people who have	Programmers,
common skills	copyeditors,
Equipment	Printer

Equipment Resource Considerations

In Project, you set up **people and equipment resources** in exactly the same way; they are both examples of work resources.

However, you should be aware of important differences in how you can schedule these two work resources. Most **people resources** have a **working day of typically 8 and usually no more than 12 hours**, but **equipment resources** might have **much more varied capacities for work, ranging from short durations (followed by maintenance) to around the clock without interruption.**

Moreover, people resources might be flexible in the tasks they can perform, but equipment resources tend to be more specialized. For example, a content editor for a book project might also act as a copyeditor in a pinch, but a desktop copy machine cannot replace a printing press.

In this exercise, you enter the names of several people resources.

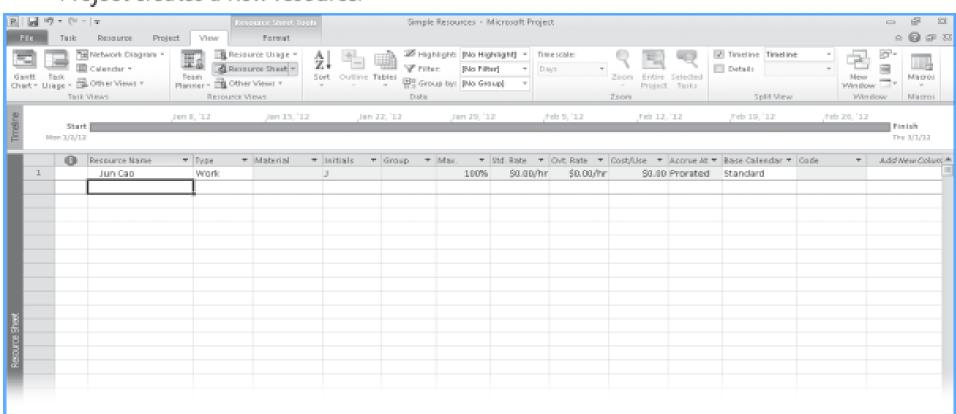
SET UP Start Project if it's not already running.

- On the File tab, click Save As.
 - Project displays the Save As dialog box.
- In the File name box, type Simple Resources, and then click Save.
 - **Tip** You can instruct Project to automatically save the active project plan at predefined intervals, such as every 10 minutes. On the File tab, click Options. In the Project Options dialog box, click Save, select the Auto Save Every check box, and then specify the time interval you want.
- On the View tab, in the Resource Views group, click Resource Sheet.

You will use the Resource Sheet view to enter the initial list of resources for the new book launch project.

- Click the cell directly below the Resource Name column heading.
- 5. Type Jun Cao, and press the Enter key.

Project creates a new resource.



6. On the next empty rows in the **Resource Name** column, enter the following names:

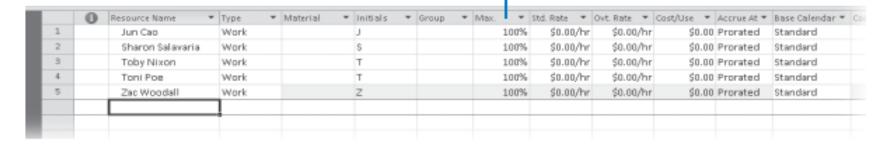
Sharon Salavaria

Toby Nixon

Toni Poe

Zac Woodall

When you create a new work resource, Project assigns it 100% Max. Units by default.



These are all individual people. You can also have a resource that represents multiple people. You'll enter such a resource next.

In the Resource Name field, below the last resource, type Copyeditors, and then press Enter.

Entering Resource Capacity

The Max. Units field represents the maximum capacity of a resource to accomplish any task. Specifying that a resource has 100% maximum units means that 100 percent of that resource's working time is available to work on assigned tasks in the project plan.

Project will alert you if you assign the resource to more tasks than they can accomplish at 100% maximum units (in other words, if the resource becomes over allocated). 100% is the default Max. Units value for new resources. For a resource that represents not a specific person, but a category of interchangeable people with a common skill set, you can enter a larger Max. such as 800% for such a resource means that you can expect that eight individual people who all belong to that resource category will be available to work full time every workday.

In this exercise, you adjust the Max. Units values to indicate one resource that represents multiple people, and another resource whose capacity to work in this project plan is less than full time.

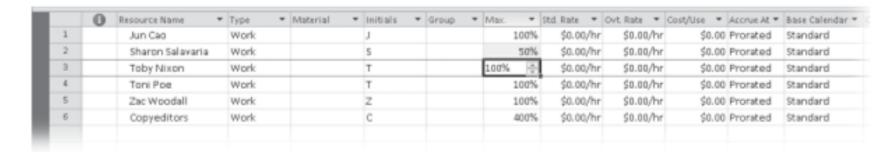
Entering Resource Capacity

- Click the Max. Units field for the Copyeditors resource.
- Type or select 400%, and then press Enter.

Tip When you click a numeric value in a field like Max. Units, up and down arrows appear. You can click these to display the number you want, or simply type the number in the field.

Next you'll update the Max. Units value for Sharon Salavaria to indicate that she works half time.

Click the Max. Units field for Sharon Salavaria, type or select 50%, and then press Enter.



Tip If you prefer, you can enter maximum units as partial or whole numbers (.5, 1, 4) rather than as percentages (50%, 100%, 400%). To use this format, on the File tab, click Options. In the Project Options dialog box, click the Schedule tab. In the Show assignment units as a box, click Decimal.

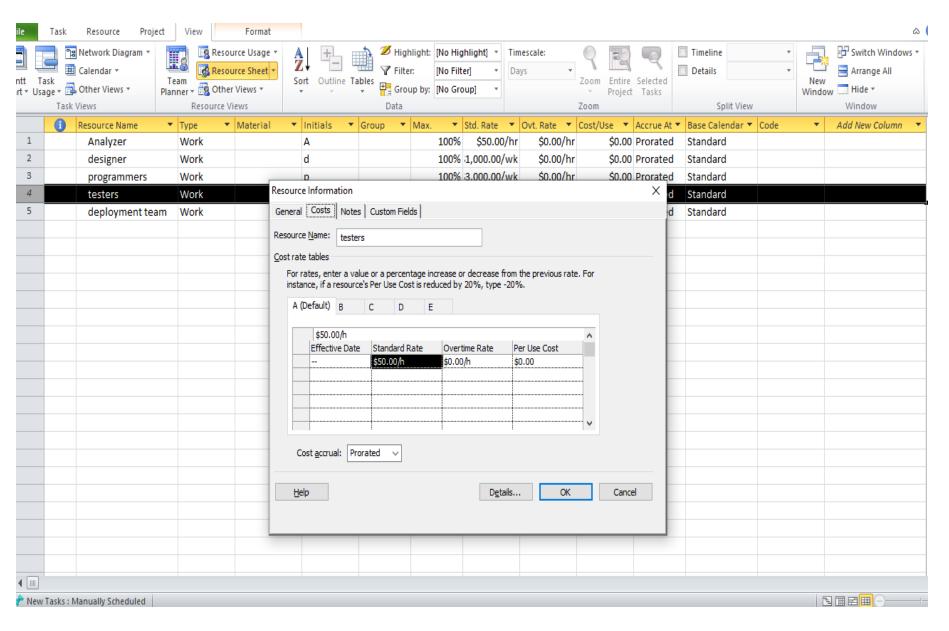
Entering Resource Pay Rates

In this exercise, you enter standard and overtime pay rates for work resource.

- In the Resource Sheet, click the Std. Rate field for Jun Cao.
- 2. Type 42 and press Enter.
 - Jun's standard hourly rate of \$42 appears in the Std. Rate column. Note that the default standard rate is hourly, so you did not need to specify cost per hour.
- In the Std. Rate field for Sharon Salavaria, type 1100/w and press Enter.
 Sharon's weekly pay rate appears in the Std. Rate column.

	0	Resource Name ==	Type ==	Material *	Initials *	Group *	Max. *	Std. Rate 💌	Ovt. Rate 💌	Cost/Use * Accrue At 1	* Base Calendar *
1		Jun Cao	Work		J		100%	\$42.00/hr	\$0.00/hr	\$0.00 Prorated	Standard
2		Sharon Salavaria	Work		S		50%	1,100.00/wk	\$0.00/hr	\$0.00 Prorated	Standard
3		Toby Nixon	Work		Т		100%	\$0.00/hr	\$0.00/hr	\$0.00 Prorated	Standard
4		Toni Poe	Work		T		100%	\$0.00/hr	\$0.00/hr	\$0.00 Prorated	Standard
5		Zac Woodall	Work		Z		1.00%	\$0.00/hr	\$0.00/hr	\$0.00 Prorated	Standard
6		Copyeditors	Work		C		400%	\$0.00/hr	\$0.00/hr	\$0.00 Prorated	Standard

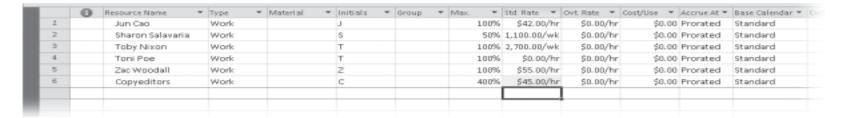
Entering Resource Pay Rates



Entering Resource Pay Rates

4. Enter the following standard pay rates for the given resources:

Resource Name	Standard Rate						
Toby Nixon	2700/w						
Toni Poe	Leave at 0 (Toni is the book author and you're not tracking her rate-based costs in this project plan)						
Zac Woodall	55						
Copyeditors	45						



As you can see, you can enter pay rates with a variety of time bases—hourly (the default), daily, weekly, and so on. In fact, you can enter pay rates in all the increments of time for which you can enter task durations—from minutes to years.

Next, you will enter an overtime pay rate for one of the resources.

5. In the Overtime Rate field for Jun Cao, type 67, and then press Enter.

Tip If you work with a large number of resources who have the same standard or overtime pay rates, you can set up Project to apply these pay rates automatically whenever you add a new resource. You do this in the Advanced tab of the Project Options dialog box, which is accessible from the File tab.

you modified the project calendar to specify nonworking days for the entire project. In this exercise, you will focus on the resource calendar.

A resource calendar controls the working and nonworking times of an individual resource. Project uses resource calendars to determine when work for a specific resource can be scheduled. Resource calendars apply only to work resources (people and equipment), not to material or cost resources.

When you initially create resources in a project plan, Project creates a resource calendar for each work resource. The initial working time settings for resource calendars exactly match those of the project calendar, which by default is the Standard base calendar.

The Standard base calendar is built into Project and accommodates a default work schedule from 8 A.M. to 5 P.M., Monday through Friday, with an hour off for lunch each day. If all the working times of your resources match the working time of the project calendar, you do not need to edit any resource calendars. However, chances are that some of your resources will need exceptions to the working time in the project calendar—such as

- A flex-time work schedule
- Vacation time
- Other times when a resource is not available to work on the project, such as time spent training or attending a conference

In this exercise, you specify the working and nonworking times for individual work resources.

On the Project tab, in the Properties group, click Change Working Time.
 The Change Working Time dialog box appears.

2. In the For calendar box, click Toby Nixon.

Toby Nixon's resource calendar appears in the Change Working Time dialog box. Toby has told you he will not be available to work on Thursday and Friday, January 19 and 20, because he plans to attend a book industry conference.

On the Exceptions tab in the Change Working Time dialog box, click in the first row directly below the Name column heading and type Toby attending a conference.

The description for the calendar exception is a handy reminder for you and others who may view the project plan later.

- Click in the Start field and type or select 1/19/12.
- 5. Click in the Finish field, type or select 1/20/12, and then press the Enter key.

Every work resource calendar is based on the project calendar;
 the default project calendar is the Standard base calendar.

hange Workir	ng Time											100		
or galendar:	Toby Mixon									0	Create Nev	v Calendar		
ase calendar:	Standard			+										
egend:		Clic	k on a	a day	to se	e its s	yorkin	g time	951					
Working Norworking Stated working hours On this calendar:			January 2012 🗻						January 19, 2012 is nonworking.					
		5	M 2	3	W 4	Th 5	F 6	5						
								14						
		8	9	10	11	12	13	173/	-					
		15	1.6	17	18	19	20	21		Based on:				
31 Excepti	774	22	23	24	25	26	27	28		Exception Tr	n Toby attending a' on 'Toby Nixon'.			
		29	30	31						calendar Tot				
31 Nondef	ault work													
Exceptions	Work Weeks						Star	t		Finish		Details		
1 Toby 8	Toby attending a conference						1/19/2012			1/20/2012	(10)			
-						-	-	-	_	-	-	Delete		
									-					
							-			-				
			-		-	-	-	-	-					
			-				-							
										-				
Help									-	Options	ОК	Cancel		

Project will not schedule work for Toby on these dates.

Tip To set up a partial working time exception for a resource, such as a portion of a day when a resource cannot work, click Details. In the Details dialog box, you can also create recurring exceptions to the resource's availability.

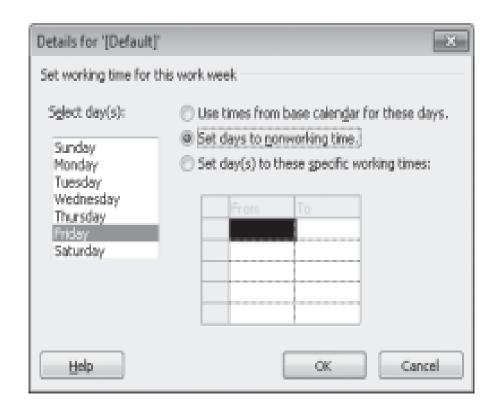
To conclude this exercise, you will set up a "4 by 10" work schedule (that is, 4 days per week, 10 hours per day) for a resource.

- In the For box, click Jun Cao.
- When prompted to save the resource calendar changes that you made for Toby Nixon, click Yes.
- Click the Work Weeks tab in the Change Working Time dialog box.
- Click [Default] directly under the Name column heading, and then click Details.
 Next, you will modify the default working week days and times for Jun Cao.
- Under Selected Day(s), select Monday through Thursday.
 These are the weekdays Jun can normally work.
- 11. Click Set day(s) to these specific working times.

Next you'll modify Jun's regular daily schedule for the days she normally works.

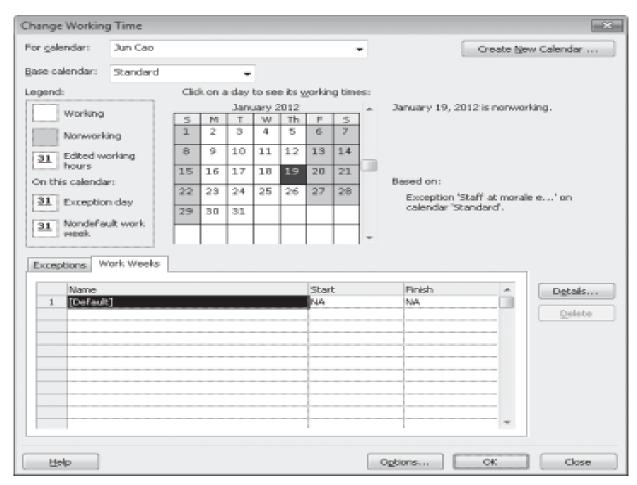
- 12. In row 2, click 5:00 PM and replace it with 7:00 PM, and then press Enter. Finally, you will mark Friday as a nonworking day for Jun.
- Click Friday.
- Click Set days to nonworking time.

Now Project can schedule work for Jun as late as 7 P.M. every Monday through Thursday, but it will not schedule work for her on Fridays.



Click OK to close the Details dialog box.

You can see in the calendar in the Change Working Time dialog box that Fridays (as well as Saturdays and Sundays) are marked as nonworking days for Jun Cao.



16. Click OK to close the Change Working Time dialog box.

Because you have not yet assigned these resources to tasks, you don't see the scheduling effect of their nonworking time settings. You will observe this in Chapter 4.

Setting Up Cost Resources

Another type of resource that you can use in Project is the cost resource.

- 1-You can use a cost resource to represent a financial cost associated with a task in a project
- 2- the sole purpose of a cost resource is to associate a particular type of cost with one or more tasks
- 3- Cost resources do no work and have no effect on the scheduling of a task
- 4- After you assign a cost resource to a task and specify the cost amount per task, you can then see the cumulative costs for that type of cost resource, such as total travel costs in a project.

Setting Up Cost Resources

In this exercise, you'll set up a cost resource.

- 1. In the Resource Sheet, click the next empty cell in the Resource Name column.
- Type Travel and press the Tab key.
- In the Type field, click Cost.



You will assign a cost resource in Chapter 4.

you can record any additional information about a task, resource, or assignment in a note. For example, if a resource has **flexible skills** that can help the project, it is a good idea to **record this in a note**. In that way, the note resides in the project plan and can be easily viewed or printed.

You can enter resource notes in a similar way (via the Notes button on the Resource tab of the Properties group) but in this exercise, you'll use a different method.

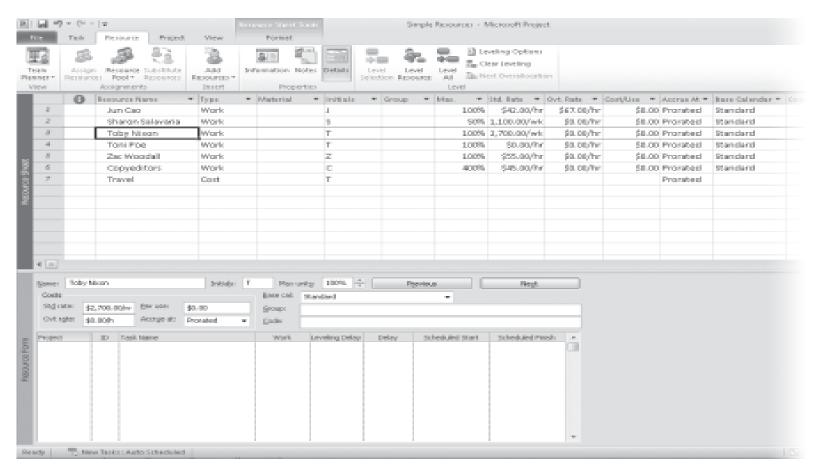
You'll use the Resource form, which allows you to view and edit notes for multiple resources more quickly.

In this exercise, you'll enter notes in the Resource Form.

- In the Resource Name column, click Toby Nixon.
- On the Resource tab, in the Properties group, click the Details button.

Tip You can also click Details, Resource Form on the View tab of the Split View group.

The Resource Form appears below the Resource Sheet view.



In this type of split view, details about the selected item in the upper view (a resource, in this case) appear in the lower view. You can quickly change the selected resource name in the upper view by clicking directly on a name, using the upper view or down arrow keys, or by clicking Previous or Next in the Resource Form.

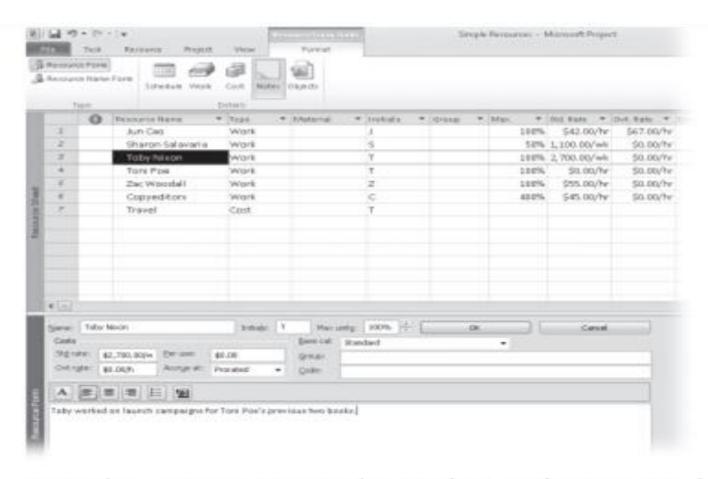
The Resource Form can display one of several details; initially it displays the Schedule details. Next you'll switch it to display the Notes details.

- Click anywhere in the Resource Form.
- On the Format tab, in the Details group, click Notes.

Tip You can also right-click in the gray background area of the Resource Form and, in the shortcut menu that appears, click Notes.

The Notes details appear in the Resource Form.

In the Notes box, type Toby worked on launch campaigns for Toni Poe's previous two books.

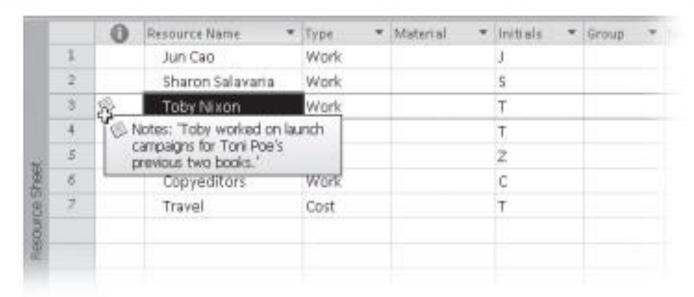


Notice that as soon as you started typing the note, the Previous and Next buttons changed to OK and Cancel.

6. Click OK.

In the Resource Sheet view, a note icon appears in the Indicators column.

7. Point to the note icon that appears next to Toby's name in the Resource Sheet.



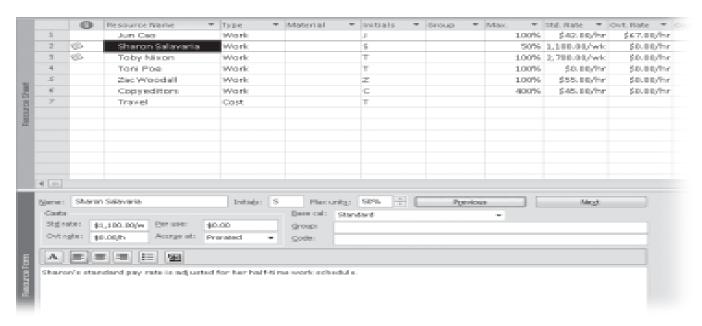
The note appears in a ScreenTip. For notes that are too long to appear in a ScreenTip, you can double-click the note icon to display the full text of the note. You can also see more of long notes in the Resource Form or in the Resource Information dialog box.

To conclude this exercise, you'll add a note for one more resource.

 In the Resource Form, click Previous to shift the focus to Sharon Salavaria and display her details.

Tip You can also click on Sharon's name in the Resource Sheet view above the Resource Form.

In the Notes box, type Sharon's standard pay rate is adjusted for her half-time work schedule. Then click OK.



Finally, you'll close the Resource Form.