CHAPTER

5

Setting Up a Project File

For days, weeks, sometimes months, you build the foundation of your project plan—the project's goal, objectives, scope, requirements, and so on. At long last, you're ready to build the project schedule, the map that guides the project from beginning to end. It tells everyone what work is required, who's supposed to do it, when it should be done, and how much it should cost. Something this fundamental to project management takes some preparation—and the next several chapters of this book—to construct.

The project schedule is where Microsoft Project becomes indispensable. In Project, you build a list of project tasks, link them to define their sequence, and assign resources and costs. This chapter is the first leg of this schedule-building marathon. It begins with creating and saving a new Project file, whether you make one from scratch or start from an existing project or template.

This chapter continues with a few key elements of every project schedule. You learn the pros and cons of scheduling from the project start or finish date, as well as how to tell Project which method you want to use. You'll also learn how to define working days and times for your overall project and for project resources. As you proceed to the remaining chapters in this section, you'll learn the rest of the process for building a project schedule.

Creating a New Project File

Before you can create that schedule you're itching to get started on, you have to create a new Project file. This file is like a container that holds the project's tasks, its resources, and the relationships between them. You can even attach other project documents to it (page 154), like your scope statement or requirements. This section describes several ways to create a new Microsoft Project file: from scratch, using predefined templates, from an existing Project file, or from an Excel workbook. The box on page 85 describes the guided tour offered by Project's Get Started template.

NOTE If you have tasks set up in SharePoint, Project can also create a new project from a SharePoint task list. On Backstage view's New page (to display it, click File→New), click the "New from SharePoint Tasks List" icon. Online-only Chapter 25 (available from this book's Missing CD page at *www.missingmanuals.com/cds*) shows you how this works.

Creating a Blank Project File

If you're starting an unconventional project or want to unleash your maximum creativity, a new blank Project file is like an empty canvas. Here are two easy ways to create a blank file:

- **From Backstage view.** Choose File→New. On the New page, at the top left of the set of template icons, click "Blank project," and voilà—Project creates a new blank file, called something like Project1.
- **With a keyboard shortcut.** Anytime the ribbon tabs are visible, simply press Ctrl+N to create a blank Project file.

NOTE Backstage view contains many of the same commands that appeared on the File menu in Project 2007 and earlier versions (New, Open, Save, and so on). It also includes the Options command, which opens the Project Options dialog box, where you can tell the program how you want it to behave. The online-only Project Options reference (go to this book's Missing CD page at *www.missingmanuals.com/cds*) describes several options you might want to set for new projects you create.

UP TO SPEED

Project's Get Started Template

Previous versions of Project used to throw you into the pool without water wings: The first time you launched Project, all the program did was open a blank Project file. In Project 2013, the Get Started template helps you ease into the water. When you launch Project 2013 for the first time, the Get Started template (Figure 5-1) greets you, assuring you that you can get your project started in four simple steps. (If you skipped the Get Started template the first time you opened the program, you can get back to it anytime you want. In Backstage view's New page, click the Get Started template in the list of featured templates, and then click Create.) To take the tour, simply click the Start button.

When you click Start, the "Schedule your work" screen appears, highlighting the first three steps to getting your schedule started: adding tasks, organizing them, and linking them to create a sequence. If you're itching to learn the details of any of these steps, click the "Learn more" link below the graphic. When you're done with scheduling, click the Next button at the screen's top right. (You might have to scroll to see the Next button, depending on the size of your monitor.)

The next three screens cover creating a timeline, creating reports, and sharing Project information with your team using SharePoint. Click the Next button on each screen to proceed to the next one. On the "Collaborate with your team" screen, clicking the Next button takes you to a final screen with a few links to places where you can learn even more: the Project 2013 Getting Started Center, and the Project blog. Click the "Try out the new features" link to open a small, pre-built project to practice with.

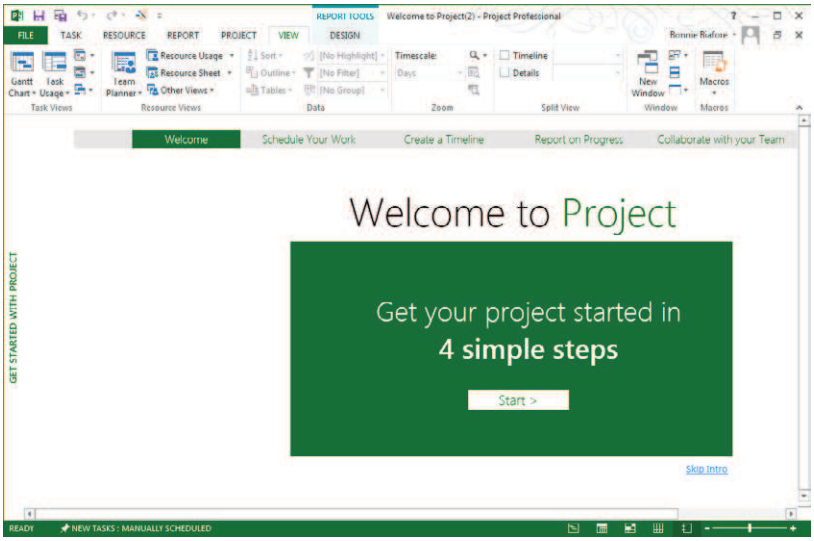

FIGURE 5-1
The Get Started template steps you through the basics of creating a Project schedule and introduces several Project features. It appears when you launch Project 2013 for the first time, but you can go back for a refresher by choosing the Get Started template on Backstage view's New page.

Using a Template to Create a Project File

Projects, by definition, are unique endeavors, so you might think that a template won't be much help for creating a new Project file. But it turns out that the basic tasks for similar projects are often pretty much the same, even if the dates, team members, and results are different.

Templates are often great to use as the basis for a new file, because they contain elements that are common to many other projects. Just edit the tasks, names, dates, and so on to match your current project. Templates usually include typical tasks linked to one another in a logical sequence. Sometimes, they include durations if the work almost always takes the same length of time.

Microsoft Project displays several templates on Backstage view's New page (File→New). If you don't see a template that sounds like your project, you can search Office.com for additional templates, as the box on page 87 explains.

TIP If your projects tend to follow a regular approach, you can create your own templates. In addition to a sequence of tasks with estimated durations, you can include resources and resource assignments if you always use the same team. If you customize elements like your company's working calendar, views, tables, reports, and so on, those are all fair game to include in your own templates. See page 708 for instructions on creating templates. (To learn how to create a new project based on the Project file for a project you've done before, see the box on page 89.)

No matter where you get the template you want to use, the steps for creating a new project file from a template are similar:

1. **Click File→New.**

   Backstage view's New page appears with commands for creating Project files in different ways and choosing featured templates, as shown in Figure 5-2.

2. **If a template's name sounds like it describes your project, click its icon. If you've created your own templates and set up a folder for them (page 88), click the Personal heading below the search box, and then click the icon for the personal template you want to use.**

   If you choose a featured template, a dialog box opens, showing a thumbnail of the project, the name of the person or company that developed it, and a brief description. For personal templates, the dialog box displays only the template name and the Create button. If the featured templates aren't what you're looking for, the box on page 87 tells you how to search online for more templates.

3. **In the dialog box, click the Create button.**

   If the template is a featured template, Project downloads it and then creates a new file from it. With personal templates, Project simply creates a new file from the template—no download required.

Presto! You're ready to work on or save your new file (page 92).

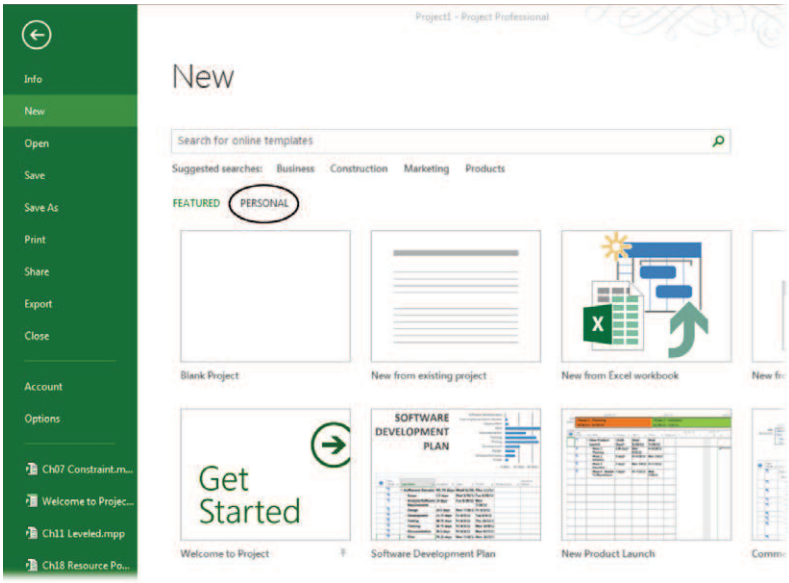

FIGURE 5-2

The first several icons on the New page represent different ways to create a new project: a blank Project file, from an existing project, from an Excel workbook, and from a SharePoint Tasks List. Below those choices, the New page initially lists several templates it thinks might interest you. If you want to use your own templates, click the word "Personal" (circled) below the Search box. Your templates appear only if you tell Project which folder holds them, as described in the steps on page 88.

UP TO SPEED

Searching for Templates Online

Project 2013 makes it easy to search Office.com for just the right template. After you choose File→New, type keywords in the "Search for online templates" box, and then click the magnifying glass icon. For example, if you're planning to start a new business, type a keyword like "startup." Project displays a list of the templates it finds. To start a new Project file from one of these templates, click its icon and then click Create.

You can also search Office.com using your web browser. Go to *http://office.microsoft.com* and then click Templates at the top of the page. The quickest way to find project templates is to type keywords in the "Search all templates" box, and then click the magnifying glass icon. Because Office.com has templates for several Microsoft Office programs, be sure to include "project" as one of your keywords. The results identify the program and version that the template was created with, such as Project 2010, Project 2013, or Excel 2010.

If you find a template you want, put your pointer over the template's icon, and then click the Download link. In the dialog box that appears, select the Save File option and then click OK. In the Save dialog box that opens, navigate to the folder where you want to save the template, type a name for the template in the "File name" box, and then click Save. If you save it in your personal template folder (page 88), you can easily select the template right from the New page (page 86).

Specifying a Template Folder

If you've invested time and effort in creating templates (page 708), you want them to be easy to find. It's a good idea to store the templates you create in a folder that your backup procedure saves along with your other data. If you share templates with other project managers, then keep your project templates where all the project managers in your organization can reach them, so everyone can take advantage of the work others have done.

Project has an option for specifying your template folder. The templates you store in this folder appear when you click the Personal heading on the New page (Figure 5-2).

TIP Another way to keep your templates close by is to *pin* them to the template list on the New page. To do so, point your cursor at the template you want to pin to the New page. When the horizontal pushpin icon appears at the bottom-right of the template icon, click it. The pushpin rotates to vertical and the template appears at the top of the template list.

Here's how to specify your template folder:

1. **Click the File tab. On the left side of the Backstage view screen, click Options.**

   The Project Options dialog box opens.

2. **On the left side of the dialog box, click Save. Head to the "Save templates" section, and, to the right of the "Default personal templates location" box, click Browse (Figure 5-3).**

   The Modify Location dialog box appears.

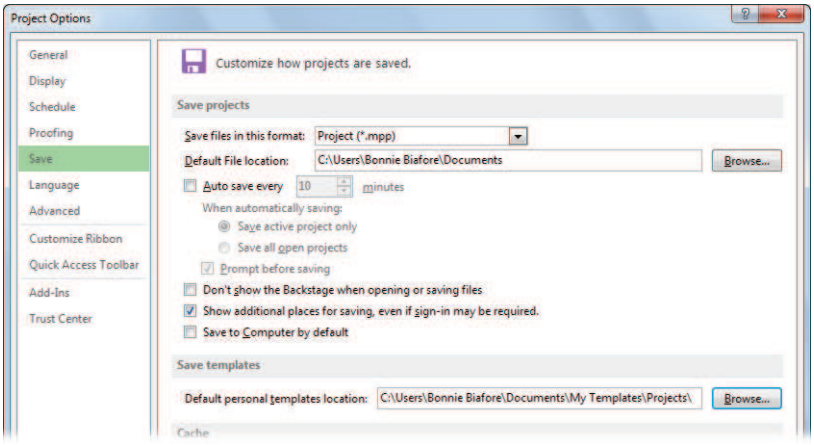

FIGURE 5-3
The "Default personal templates location" box specifies where Project should go to find the templates that you create or download (the filenames of templates end in .mpt). Below the "Save projects" heading, the "Default File location" option tells Project where you save the regular Project files you create (.mpp files).

3. **In the Modify Location dialog box, choose the folder where you store your templates, and then click OK.**

   When you click OK, the Modify Location dialog box closes and the path to the folder you chose appears in the "Default personal templates location" box.

4. **To tell Project which folder to open for your Project *schedule* files (*.mpp* files), under the "Save projects" heading, click Browse to the right of the "Default File location" box, navigate to the folder with your schedules, and then click OK.**

   When you specify a default file location, Project will point the Open and Save As dialog boxes to this folder whenever you choose Computer on Backstage view's Open or Save As page and then click the Browse button.

5. **Click OK to close the Project Options dialog box.**

   The next time you click the Personal heading in the New page, you'll see the templates in your personal templates folder. If you store your templates in subfolders within your personal templates folder, you'll see a folder icon for each subfolder. Click one of these icons to see the templates stored within that folder.

GEM IN THE ROUGH

Creating a New Project from an Existing Project

If you're planning a project similar to one you've done in the past, you may long to borrow those ready-made tasks and dependencies. But you might not use the same people, monetary values, and other details of that old project. You could clear the values from all those fields, but that would take just as long as creating the new project from scratch. Although Project's New page contains a "New from existing project" command, clicking it simply opens the file you select so you can save it as a new file with a different name. This command doesn't remove any of the old values you want to leave behind.

The best way to turn an existing project into a *clean* new project is to create a template from the existing project. Here's what you do:

1. Open the existing project, and then immediately choose File→Save As.
2. Choose a location for the new file. (For example, choose Computer or your SkyDrive location, and then choose the folder where you want to store the file.) If you plan to use the file as a new project *and* a template for future projects, then choose your personal templates folder (page 88).
3. In the Save As dialog box's "File name" box, type a new name.
4. In the "Save as type" drop-down list, choose Project Template ("Project Template (*.mpt)" if you have Windows Explorer set to show file extensions), and then click Save.
5. In the Save As Template dialog box that opens, turn on the checkboxes for the data you want to *remove* from the project (not the data you want to keep). You can remove baseline values, actual values, resource rates, and fixed costs—typically, you want to remove all of those.
6. Click Save to close the dialog box. Project creates a template file, which uses an *.mpt* file extension, and opens it.
7. Now, to save that template as a new squeaky-clean Project file, choose File→Save As. Choose the location for the new Project file. In the Save As dialog box, make sure that the "Save as type" box is set to Project, and then save the file in the folder you want, with the name you want.

Creating a Project File from an Excel Workbook

If you define tasks in an Excel workbook, you can import those tasks into Project. Here's the easiest way to do it:

1. **Choose File→New.**

   The New page displays commands for creating a new project in several ways.

2. **Click the "New from Excel Workbook" icon.**

   The Open dialog box appears. In the box to the right of the "File name" box, choose the file type for your Excel file: Excel Workbook, Excel Binary Workbook, or Excel 97-2003 Workbook. You can also choose Text (Tab delimited), CSV (Comma delimited), and XML Format, if the data is in one of those formats.

3. **Double-click the name of the workbook.**

   The Import Wizard opens. See page 540 to learn how to use it to bring tasks into Project from Excel.

You can also create a Project file from an Excel workbook with the Open command. Choose File→Open, and then select the location where you stored the Excel workbook (such as Computer and the folder). When the Open dialog box appears, in the file type drop-down list to the right of the "File name" box, choose Excel Workbook, and then click Open. The Import Wizard launches to help you import tasks into Project (page 541).

Setting the Project Start Date

Projects rarely start on the day you create your Microsoft Project file. You usually have some business to take care of before the work begins, like obtaining project plan approvals or lining up funding. The date on which you plan to start the project is the setting you're most likely to change in any Project file.

TIP To ensure that you set the project start date and other key file options, you can tell Project to ask you for that information when you create a new file. Choose File→Options, and then, on the left side of the Project Options dialog box, choose Advanced. In the General section, turn on the "Prompt for project info for new projects" checkbox, and then click OK to close the dialog box. Exit and restart Project. After that, as soon as you create a new project, the Project Information dialog box appears.

Here are the steps:

1. **With the Project file open and active, in the Project tab's Properties section, click Project Information.**

   The Project Information dialog box opens, as shown in Figure 5-4. If you created the file from scratch, Project sets the "Start date" box to today's date. If you create a new Project file from a template or an existing project, the "Start date" box contains the start date that was set in the original file.

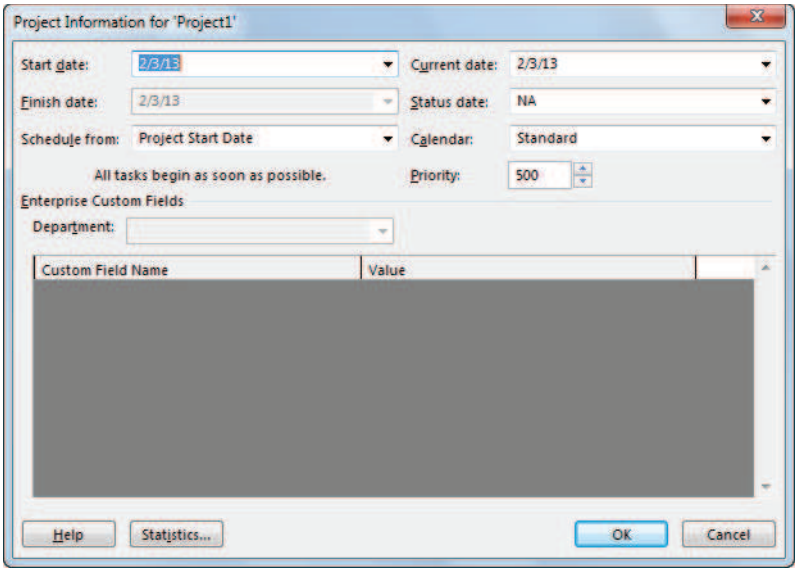

FIGURE 5-4

Out of the box, the "Schedule from" box is set to Project Start Date, which is almost always what you want. When you set the start date, Project calculates the finish date for you. Even if you know the end date you want, you're better off scheduling from the start date, as the box on page 92 explains.

2. **In the "Start date" box, type or choose the date on which you plan to start the project, and then click OK.**

   If you choose a weekend day or other non-workday, Project adjusts the start date you entered to the next business day.

   The "Finish date" box shows the date Project calculates for when the project will finish. If the Project file doesn't have any tasks yet, then the "Finish date" value is the same as the "Start date" value. The date in the "Finish date" box isn't meaningful until you've completely defined your project schedule.

NOTE You can also add information about the project, like a subject and keywords, to the Project file's properties as you can with files for other Office programs. With the Project file open and active, choose File→Info. Click the down arrow next to the Project Information heading, and then choose Advanced Properties. In the "[project name] Properties" dialog box ([project name] is the filename prefix), fill in a title for the project. If you want, fill in other fields like Author, Manager, Company, Category, and Keywords. (You can include the Title and Author fields in Project report headers; then, if this information changes, your report headers use the current values automatically.) Any text in the Comments box appears in a note attached to the project summary task (page 156), so this box is a good place to write a brief summary of what the project is about. You can also search these fields in Windows Explorer (type keywords in the Search box).

UP TO SPEED

Scheduling from the Start or Finish Date

You can schedule a project in two ways: by entering a start date and working forward, or by entering an end date and working backward. Although customers and executives always seem to have a finish date in mind, scheduling projects from the start date is usually the best approach. Entering a specific end date cripples one of Project's most powerful features—the ability to calculate a realistic end date based on tasks, resources, and work time.

If you know when the project can start and how long tasks should take, Project spits out when the project should end. With a calculated end date, the first advantage is that you can show the stakeholders when the project can realistically finish. Armed with this information, you may be able to negotiate for a different deadline.

If the end date *can't* move—as in the case of the cycling fundraiser, which has a fixed event date for the race—schedule from the start date anyway. If the project deadline date is earlier than the finish date that Project calculates, you can evaluate whether techniques like crashing or fast-tracking (both of which are described in Chapter 14) can shorten the schedule sufficiently.

Another reason to avoid scheduling from a finish date is that, when you do that, Project sets all the task constraint types to As Late As Possible (page 188). As the name implies, this constraint type means that tasks are scheduled to start as late as possible, which removes any wiggle room that you might need to respond to problems.

Saving a New Project

Whether you created a file with a blank project or a template, the first time you save it by choosing File→Save, Project opens Backstage view's Save As page instead so you're sure to save a new file. That's Project's way of protecting you from saving blank projects named Project1. Project, like other Microsoft programs, automatically uses the Save As command whenever you save a file created from a template, so you can name the new file whatever you want. Most of the time, you choose a location, folder, and filename, and you're done. But Project mavens know that there are other handy tools for saving files in special ways, which are described on pages 96 and 98.

TIP To bypass Backstage view's Save As page and open the Save As dialog box directly, press F12. If you want Ctrl+S to open the Save As dialog box the way it did in earlier versions of Project, choose File→Options, and then, on the left side of the Project Options dialog box, choose Save. Turn on the "Don't show the Backstage when opening or saving files" checkbox, and then click OK.

Here are the steps for saving a new project, whether you store your files on your computer or in the cloud:

1. **Choose File→Save.**

   Backstage view's Save As page appears (Figure 5-5).

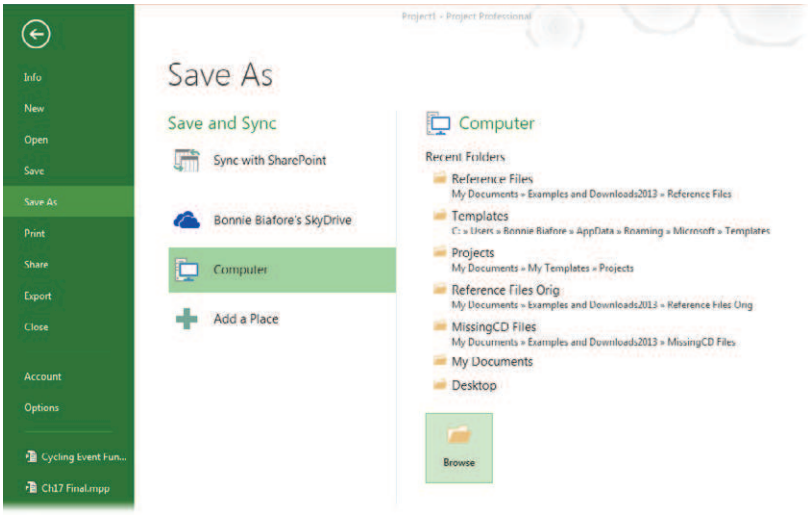

FIGURE 5-5
The Save As page includes a list of file-storage locations, including your computer, your SkyDrive cloud storage, and SharePoint in case you use that program for collaborating with team members. You can add other locations by clicking "Add a Place."

TIP If you opened an existing project and want to save it as a new one, then choose File→Save As instead of File→Save. Otherwise, all Project will do is save any changes you made to the existing project.

2. **On the left side of the Save As page, select where you want to save the new file, such as Computer or <your name>'s SkyDrive, where <your name> is the name on the Microsoft account you use to log into Project (page 732).**

   When you select a location, a list of recent folders appears on the right side of the page below the Recent Folders heading. (In case you grow weary of clicking a bunch of times to save files, the section "File Saving Shortcuts" on page 94 offers several timesavers for saving files.)

3. **Select the location where you want to save your file.**

   If the name of the folder you want appears in the Recent Folders list, simply click its name, and the Save As dialog box opens to that folder.

   If the folder where you want to save the project *isn't* in the Recent Folders list, then click Browse to open the Save As dialog box. Then navigate to the folder.

4. **In the "File name" box, type a name for the project.**

   Short but meaningful filenames—like *CyclingEventFundraiser*—help you and your colleagues find the right files.

5. **Leave the "Save as type" drop-down list set to Project to create a regular Project .mpp file, and then click Save.**

   If Windows Explorer is set up to show file extensions, the "Save as type" drop-down list includes the file extension, such as "Project (*.mpp)." See page 96 to learn about the different file formats in which you can save Project files, and when to use them.

If you want to specify how Project both saves and opens the file that's specified in the Save As dialog box's "File name" box, click Tools→General Options. The Save Options dialog box opens (Figure 5-6).

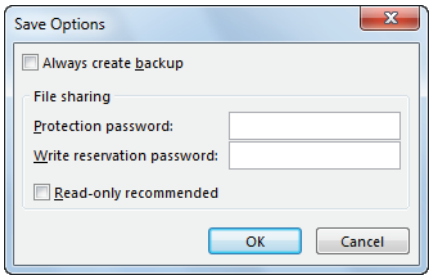

FIGURE 5-6

To open this dialog box with options for saving and opening files, click the Tools button in the Save dialog box, and then select General Options. These settings are described in detail on page 98.

TIP To automatically associate your name and initials with files you create, in Project, choose File→Options. In the Project Options dialog box, choose General. Under "Personalize your copy of Microsoft Office," type your name and initials in the "User name" and Initials boxes.

File-Saving Shortcuts

After you save a file for the first time, you can prevent untold grief by getting into the habit of frequently pressing Ctrl+S to save your file as you work. The old adage "Save early, save often" applies just as much to Project as it does to old favorites like Word and Excel. This section describes options and keyboard shortcuts that can help you save files in no time. To access the settings described in this section, choose File→Options, and then on the left side of the Project Options dialog box, choose Save.

SETTING FILE FORMAT AND LOCATION

You can tell Project the file format and storage location to use when you create and save your projects. These settings are located below the "Save projects" heading:

- **File format.** Initially, Project is set up to save files using the Project (*.mpp) format. However, you can specify another file format if, for example, your colleagues still use Project 2003 or Project 2007. In the "Save files in this format" drop-down list, choose the format you want, such as Microsoft Project 2007

(*.mpp) or Microsoft Project 2000 - 2003 (*.mpp). You can also choose Project Template (*.mpt) if, for instance, it's your job to create template files for the project managers in your organization.

- **File location.** If you specify a folder in the "Default File location" box, Project automatically opens the Save As dialog box to that folder.

SETTING UP PROJECT TO SAVE AUTOMATICALLY

If you've lost work in the past because you forgot to save files often enough, you'll be happy to know that Project can automatically save your work every so often. You can tell the program to ask you whether you want to save, as well as which projects to save. Use these options (below the "Save projects" heading) to control how Project automatically saves projects:

- **Auto save frequency.** To tell Project to save your files automatically without any action on your part, turn on the "Auto save every __ minutes" checkbox, and then type a number of minutes in the box. For example, 45 minutes is a good trade-off between security and interruption.

NOTE Auto Save saves your Project files with any changes you've made. That means that if you're playing what-if with a schedule, Auto Save could make the current scenario permanent. However, Auto Save is indispensable if you get lost in schedule work and forget to save for hours.

- **Active or all files.** Unless you change it, Project selects the option to save only the *active* file (the one you're currently working on). If you work on several files simultaneously, select the "Save all open projects" option instead.
- **Prompt before saving.** If you want Project to ask your permission before saving a file, keep the "Prompt before saving" checkbox turned on so the program doesn't save files without your knowledge.

SETTINGS FOR SAVING TO YOUR COMPUTER AND THE CLOUD

Project 2013 makes it easy to work with files whether they're stored on your computer or in the cloud. So it's no surprise that the program has a few new options related to opening and saving files. Here's what the options at the end of the "Save projects" section do:

- **Open the Open and Save As dialog boxes directly.** If you store files on your computer, you don't need more steps for opening and saving files. Initially, the "Don't show the Backstage when opening or saving files" checkbox is turned off, which means that choosing File→Open takes you to the Open page of Backstage view, and choosing File→Save As displays the Save As page of Backstage view. To open the Open and Save As dialog boxes with a single keyboard shortcut, turn this checkbox off. Then, you can press Ctrl+O to jump straight to the Open dialog box, and press F12 or Ctrl+S to jump right to the Save As dialog box.

- **Show all storage locations.** Out of the box, the "Show additional places for saving, even if sign-in may be required" checkbox is turned on. With this setting on, the Save As page shows *every* location you've set up for file storage, even if you have to sign in to access it. If you're working offline and don't want to be distracted by file locations you can't use, then turn this checkbox off.
- **Save to your computer.** Initially, when you try to open or save a file, Project 2013 selects your SkyDrive location automatically. If you store your files on your computer, turn on the "Save to Computer by default" checkbox to make Backstage view's Save As page automatically select Computer instead and show the recent folders you've used to save files.

NOTE The Cache section includes two additional settings, which let you save projects locally to a cache in case you're disconnected from Project Server or SharePoint, for example. When you're back online, you can publish your updates from the cache to Project Server or SharePoint. You can specify the size of the cache and where it's stored.

Saving Projects to Other File Formats

The most common file format for a Project file is the .mpp file extension, which stands for Microsoft Project Plan. Project 2013 can open .mpp files created in Project 2010, 2007, 2003, 2002, 2000, and 1998. However, people with earlier versions of Project can't open Project 2013 .mpp files, so you have to save your files in these *legacy formats* (Microsoft's term for earlier file formats). In addition, you can save Project files in other formats to do things like use Excel to analyze costs, or to publish project information to the Web. (Chapter 19 covers exporting from and importing to Project using different file formats.)

To save a Project file in another format, choose File→Save As, and then select the location and folder (page 93) in which you want to save the file. Then, from the "Save as type" drop-down list, choose the format you want. Here are some occasions when you might choose other formats:

- **Working with earlier versions of Project.** If a colleague uses an earlier version of Project, you can save a Project 2013 file that opens in those versions by choosing Microsoft Project 2007 or Microsoft Project 2000-2003. Project warns that you may lose data from Project 2013's new enhanced features and lists the changes or omissions that come with saving to the earlier format. If you use Project 2013 to open files created in Project 2007 or earlier, you can edit them, although with reduced functionality.
- **Exporting data to Excel.** If you want to export data from Project fields to a spreadsheet (to create a budget from estimated costs, say), then choose Excel Workbook, Excel Binary Workbook, or Excel 97-2003 Workbook. When you save in these formats, Project launches the Export Wizard (page 548), which steps you through selecting and exporting the data you want in the way you want. You can also *import* Excel spreadsheets into Project (page 551).

- **Exporting Project data to use in other programs.** As you manage projects, other programs are sometimes better tools for working with data—creating a WBS, estimating, or managing risk, for example. Depending on the format that the other program reads, choose "Text (Tab delimited)" or "CSV (Comma delimited)" to create a file in a generic text format (page 545). When you save in these formats, Project saves just the active table (the table area in the left pane of the view), not the entire project.
- **Publishing to the Web or interchanging data.** If you want to publish a project online or use extensible markup language (XML) to exchange structured data, choose "XML format."

Project 2013's factory settings don't let you open or save files in older (legacy) Project file formats or to other formats like database-file formats (called *non-default formats*). So if your and your compatriots' files are in older formats, one of the first actions to take after installing Project 2013 is to tell it to work with these older files. To save and open legacy and non-default formats, do the following:

1. **Click File→Options→Trust Center.**

   The Trust Center opens, containing several links related to privacy and security.

2. **Click the Trust Center Settings button.**

   The Trust Center lets you sprinkle your trust onto publishers, add-ins, macros, legacy formats, and more. In addition to the options for working with file formats, you can clear a few file properties when you save a file. On the left side of the Trust Center, click Privacy Options and then turn on the "Remove personal information from file properties on save" checkbox. This setting removes Author, Manager, Company, and Last Save By, presumably to cover your tracks when distributing a project to others.

3. **Click Legacy Formats, and then select the Legacy Format option you want, as shown in Figure 5-7. Then click OK.**

   Project automatically selects "Do not open/save file with legacy or non-default file formats in Project," but this option means that you can't work with existing files in older formats. If you have lots of files in legacy or non-default formats, then the most sensible option is "Allow loading files with legacy or non-default file formats," although this choice lowers your security level and increases the chance of your computer becoming infected by a virus embedded in a file. However, it lets you open and save legacy and non-default file formats without any interruptions. Otherwise, select the "Prompt when loading files with legacy or non-default file format" option so Project will ask if you want to open or save a file with an older or non-default format.

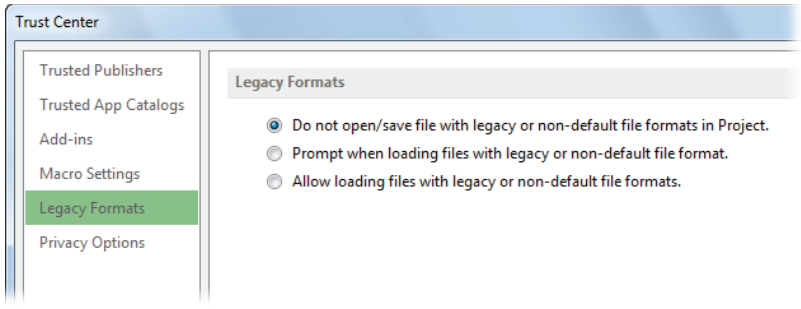

FIGURE 5-7

If you select the "Prompt when loading files with legacy or non-default file format" option and then try to open an older file format or a file format that Project doesn't work with directly, a dialog box asks you whether you want to load the file. And when you save these types of files, Project asks whether you want to save them in the Project 2013 format.

Protecting Your Project Files

Your investment of time and brainpower grows as you build your project schedule. At some point, you've probably been devastated by the disappearance of an important file. You can protect the work in your Project files from inadvertent changes by creating backup copies. Moreover, passwords can protect files from unauthorized editing by a desperate team member trying to obtain more time for a task.

Some security options don't appear in the Project Options dialog box. Instead, they're tucked away in the Save and Save As dialog boxes. If you choose File→Save while you're working on a Project file that you've already saved, the program immediately saves the file without opening a dialog box. So if you want to add security options to an existing file, choose File→Save As instead, and then select the location and folder in which you want to save the file. In the Save As dialog box, click Tools→General Options; the Save Options dialog box (shown back in Figure 5-6) opens. After you choose the security options you want (they're described below), click OK, and then click Save.

TIP Even if you open the Save As dialog box, you can save the file with the same name.

Here's what the settings in Project's Save Options dialog box can do for you:

- **Always create backup.** Creates a backup copy of a file when you first open it, so you can quickly eliminate all the changes from the current session. The file extension for a backup is .bak. To open a backup file, choose File→Open. In the Open dialog box, in the "Files of type" box, choose All Files. Select the backup file, which looks like *FileName.BAK*, and then click Open.

- **Protection password.** Sets a password that you have to type before Project will open the file. Without the password, the file can't be opened for editing or even viewed as read-only. When you type a password in this text box and then click OK to close the Security Options dialog box, a Confirm Password dialog box opens, so you don't end up with a file you can't open due to a typo in the password. Retype the password, and then click OK.

  When you open a file with a protection password, a Password dialog box opens. In the Password box, type the password, and then click OK. Project opens the file.

WARNING There's no way to remove passwords once you add them, so be sure to store your passwords in a safe place.

- **Write reservation password.** Sets a password that you have to type if you want to *edit* the file. (You can open the file as read-only without a password.) Type a password in this box and, when you click OK to close the Security Options dialog box, a Confirm Password dialog box opens so you can retype the password.

  When you open a file with a write reservation password, a Password dialog box opens. To open the file for editing, in the Password box, type the password, and then click OK. If you want to open the file as read-only, click Read Only instead.

- **Read-only recommended.** When you open a file that has this setting turned on, a message box appears that tells you to open the file as read-only unless you need to write to it. To take Project's advice, click Yes; the file opens as read-only. To write to the file, click No.

Opening a Project File

Project 2013 has new features to help you open Project files, whether you store them on your computer or in the cloud. This section explains how to open files in Backstage view and also tells you about some shortcuts for opening files.

TIP To bypass Backstage view's Open page and jump straight to the Open dialog box, press Ctrl+F12.

Here's how you open files using Project 2013's Backstage view:

1. **Choose File→Open.**

   Backstage view's Open page appears and displays a list of recent projects, as shown in Figure 5-8.

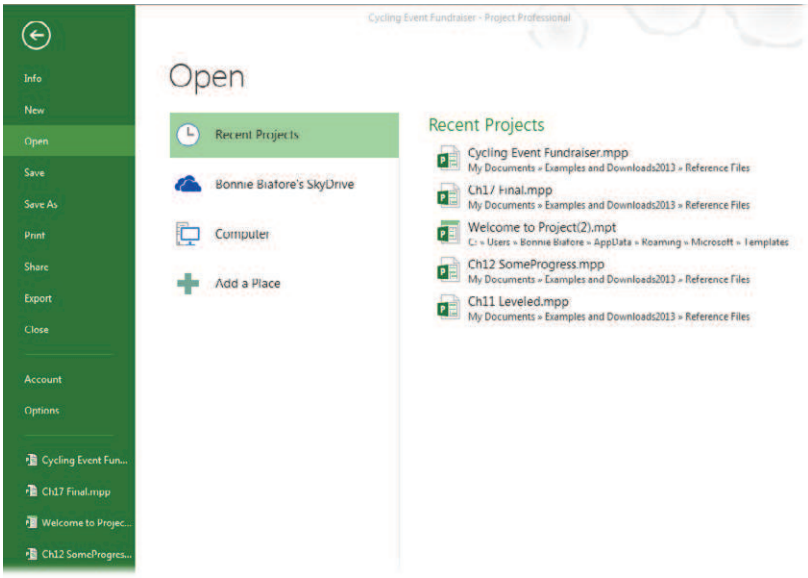

FIGURE 5-8
The Open page initially shows projects you've worked on recently. If the project you want to open appears in the list, simply click its name to open it. Otherwise, select a storage location, such as Computer or your SkyDrive. Then select the folder in which the file is stored. In the Open dialog box, select the file, and then click Open.

2. **If you recently worked on the project you want to open, click its name below the Recent Projects heading.**

   Project immediately opens the file, so you can skip the rest of the steps in this list.

3. **If the project you want to open doesn't appear in the Recent Projects list, then on the left side of the Open page, select where you stored the file, such as Computer or <your name>'s SkyDrive, where <your name> is the name on the Microsoft account you use to log into Project (page 732).**

   When you select a location, a list of recent folders appears on the right side of the Open page below the Recent Folders heading.

4. **Choose the folder where the file is stored.**

   If the folder that contains the file you want appears in the Recent Folders list, click its name. The Open dialog box opens to that folder.

   If the folder *isn't* in the Recent Folders list, click Browse. In the Open dialog box, navigate to the folder.

5. **In the file list on the right side of the dialog box, click the name of the project you want to open, and then click Open.**

   The file type drop-down list to the right of the "File name" box is initially set to Projects. If you want to open a different file format, click the Projects down arrow, and then choose the format you want, such as Project Templates or Excel Workbook.

File-Opening Shortcuts

Although File→Open is the tried and true method for opening Project files, the program offers several shortcuts for opening a file:

- **Choose recent projects on the Start page.** When you launch Project, it opens to the Start page, which is like Backstage view's New and Open pages rolled into one. On the left side of the page, you'll see files you've worked on recently, starting with any files you pinned to the Recent Files list (page 48). To select a recent project, click its name. To open other projects, click Open Other Projects at the bottom of the menu.
- **Jump directly to the Open dialog box.** Pressing Ctrl+F12 bypasses Backstage view and opens the Open dialog box. If you want Ctrl+O to open the Open dialog box the way it did in earlier versions of Project, then choose File→Options, and then, on the left side of the Project Options dialog box, choose Save. Turn on the "Don't show the Backstage when opening or saving files" checkbox and then click OK.
- **Open recent projects.** When you choose File→Open, Backstage view's Open page selects the Recent Projects category and displays several recent projects, as shown in Figure 5-8. Simply click a filename in this list to open it.

  To specify how many recent projects appear in this list, choose File→Options. In the Project Options dialog box, choose Advanced. Scroll to the Display section. Change the value in the "Show this number of Recent Projects" box to control how many projects appear on Backstage view's Open page.

TIP If you work on a few projects for months at a time, you can pin projects to the top of the Recent Projects list so they won't be replaced by other files. Point to the filename in the Recent Projects list, and then click the horizontal pushpin icon that appears to the right of the filename. The pushpin rotates to vertical, and the project name leaps to the top of the list.

- **Display projects on Backstage view's menu.** When you click the File tab, Backstage view opens with a menu on its left side. You can display projects on that menu (also shown in Figure 5-8) so you don't have to choose Open in the menu. To set this shortcut up, choose File→Options. In the Project Options dialog box, choose Advanced. Scroll to the Display section, and then turn on the "Quickly access this number of Recent Projects" checkbox and type the number you want. Project displays that number of recent projects, starting with projects that are pinned to the Recent Projects list. Click a filename to open that Project file.

- **Open the last file you worked on when Project launches.** If you work on only one project at a time, a slick shortcut is to have Project open the last file you worked on automatically. That way, each time you launch Project, your latest project is waiting for you. Choose File→Options. In the Project Options dialog box, choose Advanced. In the General section, turn on the "Open last file on startup" checkbox and then click OK.

Setting Standard Workdays

The amount of available working time has a big impact on how quickly a project finishes. A mission-critical project to beat the competition to market might opt for longer workdays during the week with some weekend overtime as well. On the other hand, if you're building a vacation house on a tropical isle, you might have to adjust the working time for the more relaxed work schedules that hot sun and siestas induce. You need a calendar to indicate which days and times are available for work.

In Microsoft Project, *calendars* have working and nonworking days and times blocked out. You can use one of the program's built-in calendars, modify existing calendars, or build brand-new ones for unusual work schedules. Then you can apply a calendar to an entire project to set the standard working times, which is perfect for specifying the holidays for your organization or telling Project that Fridays are half-days for your company. You can also define and apply calendars to individual people—for instance, to specify luxuriously long scheduled vacations—or to tasks—for example, to schedule a task to run around the clock until it's done. (See the box on page 103 for more details.)

To keep Project's work and duration calculations accurate, it's important that the number of hours Project assumes for duration match the hours those durations represent in your organization's typical work schedules. Project's calendar options control how the program converts durations (page 105) into hours of work.

This section shows you how to select the project calendar you want to use and to set calendar options to match your project's working times. If you want to set up customized calendars, jump to "Defining Work Times with Calendars" on page 107.

Choosing a Project Calendar

Project uses the project calendar to schedule tasks and resources that don't have their own special calendars. For most projects, the project calendar looks a lot like your organization's work schedule—its standard workdays, the official start and end of the workday, the time off for lunch, and official holidays. But some projects follow a different drummer. For instance, construction work on a busy highway might take place from 9 p.m. to 5 a.m. to minimize agonizing gridlock during rush hour.

Project comes with three built-in *base calendars*, which are calendar templates you can use as-is or modify to represent your organization's work schedule:

- **Standard.** Sets working time to Monday through Friday from 8 a.m. to 5 p.m. with an hour for lunch from 12 p.m. to 1 p.m., shown in Figure 5-9.
- **Night Shift.** Sets working times from Monday through Friday from 11 p.m. to 8 a.m. with lunch from 3 a.m. to 4 a.m.
- **24 Hours.** Schedules work 24 hours a day, 7 days a week. Although many high-pressure projects *feel* like they run on 24-hour schedules, this calendar is suitable for projects that *actually* run three shifts or tasks that run 24 hours a day.

UP TO SPEED

How Calendars Control Schedules

Calendars can affect different aspects of a Project file with dramatically different scheduling results. Calendars can apply to entire projects, resources, and tasks. Here are the three kinds of calendars Project offers and how to apply them:

- **Project calendar.** Assigning a calendar to a project sets the standard working days and times for the entire project. If tasks or resources don't use special calendars, then your calendar work is done. If all your projects follow your organization's work schedule, you can modify the built-in Standard calendar with your company's standard workdays, work times, and holidays (page 109). When you create new project files, Project automatically assigns the Standard calendar from your *Global.mpt* file as their calendar, and your working times are set. If, on the other hand, you work with other companies and subcontractors who don't have the same work schedules and holidays, you can copy the Standard calendar give it a copy to reflect your organization's work schedule. Then you can apply the modified copy to your projects.
- **Resource calendar.** A resource calendar is ideal when an individual or a group of resources work specialized schedules. If your project spans multiple shifts, then you can define a calendar for each shift and apply the shift calendar to the folks who work that shift. For the ultimate in schedule accuracy, you can set up a resource calendar for each person to reserve dates for scheduled vacations. Individual resource calendars help you see whether your schedule needs tweaking to deliver a deadline before a key resource heads off on a Tahitian honeymoon. See page 214 to learn how to assign a calendar to a resource.
- **Task calendar.** Most tasks run according to the project calendar and any resource calendars applied to the assigned resources. But occasionally, tasks follow their own schedules, in cases like installing new security cameras only when the bank vault is open. Applying a calendar to a task is ideal to specify offbeat work times that apply only to that task.

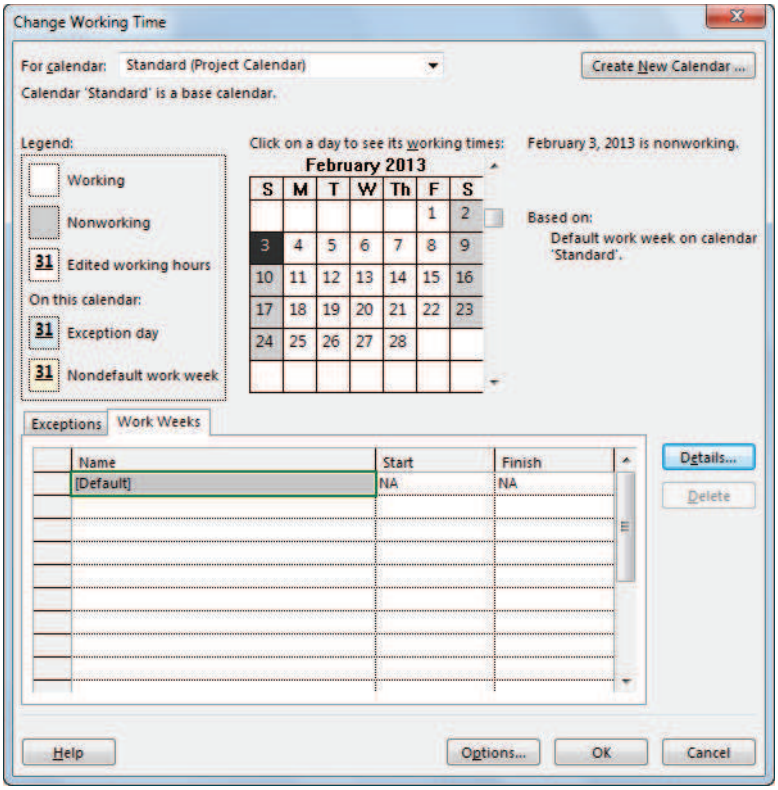

FIGURE 5-9

The Standard calendar comes without any days off for holidays, but you can—and should—change this calendar to add holidays or tweak working times. Project automatically assigns this calendar to new projects you create.

TIP Whether you modify the Standard calendar to mirror your organization's work schedule or create a brand-new calendar for that purpose, you can tell Project to use that calendar for every new project file you create. To do so, first, use the Organizer to copy that calendar to the *Global.mpt* template, as described on page 702. Then apply the calendar to a new project by following the steps in this section.

Once the Standard calendar (or a customized copy of it) reflects your working and nonworking times, you're all set. When you create a new project, Project automatically assigns the Standard calendar to it. To use a different project calendar, follow these simple steps:

1. **With the project open, in the Project tab's Properties section, click Project Information.**

   The Project Information dialog box opens.

2. **In the Calendar drop-down menu, shown in Figure 5-4 on page 91, choose the calendar you want, whether it's a built-in calendar or one you've customized (page 109), and then click OK.**

   If you open the Change Working Time dialog box described on page 109, then in the "For calendar" box, you see "(Project Calendar)" to the right of the name of the calendar that the entire project uses. The working and nonworking time for all tasks and resources without special calendars conform to the project calendar work schedule.

Setting Calendar Options

Calendars, like the project calendar you assigned in the previous section, specify working days and times. But calendar options, stored in the Project Options dialog box, tell Project how to translate durations for those working times into hours of work. For example, if the "Hours per week" option is set to 40, a task with a 2-week duration represents 80 work hours. But if "Hours per week" is set to 35, then a 2-week task represents only 70 hours of work. Because calendar options and calendar work times have to match, calendar options can be different for each project, as Figure 5-10 shows. (The box on page 107 describes some of the problems created by mismatched calendars and calendar options.)

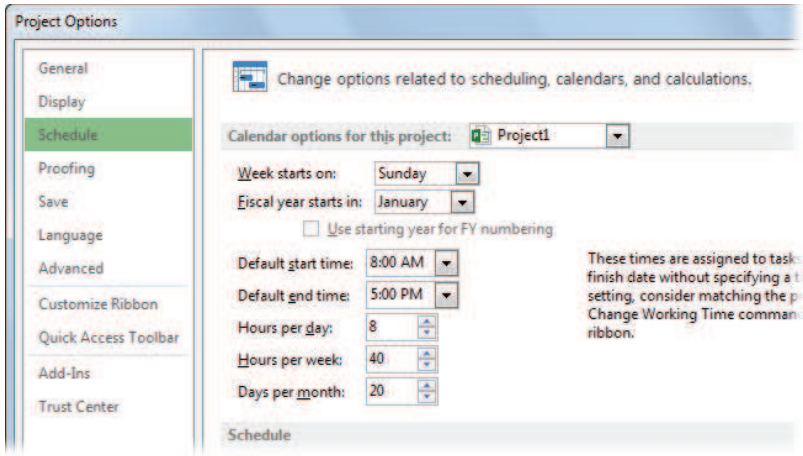

FIGURE 5-10

The label "Calendar options for this project" means that the option settings in the section apply to the project whose name appears in the box. You can modify these options without affecting the calendar options in other projects. When more than one project is open, you can choose a different project name in this box to assign calendar options to that project.

SETTING STANDARD WORKDAYS

Project's out-of-the-box calendar options are perfect for your typical 8-to-5 operation. Usually, a quick glance at these options confirms that they fit your organization's schedule, and you can move on to other project-management duties. To view Project's calendar options, choose File→Options. In the Project Options dialog box, click Schedule. Here are the options you can set and what each one does:

- **Week starts on.** This option specifies the first day of the week in your schedule and is initially set to Sunday, which is usually fine. You might change this option when you exchange actual project values with your corporate time-tracking system, for example, so both programs start work weeks on the same day of the week.

TIP If your organization uses an unusual work schedule for *all* its projects and you want to adjust the calendar options to follow suit, then in the drop-down list to the right of the "Calendar options for this project" label, choose All New Projects to apply the current calendar options to all *new* (not existing) projects. If you want to change the settings for existing projects, you have to open each project and follow the instructions in this section to change the calendar options.

- **Fiscal year starts in.** You need to change this option only when your corporate fiscal year starts in a month other than January *and* you want to produce fiscal-period reports in Project. When you set the month for the fiscal year, the Gantt Chart timescale displays the fiscal year. For example, if the fiscal year begins in July, then September 30, 2013, appears under the 2014 fiscal year. If you set the "Fiscal year starts in" box to a month other than January, the "Use starting year for FY numbering" checkbox springs to life. Turning on this checkbox sets the fiscal year to the calendar year in which the fiscal year begins. For example, with this checkbox turned on and the fiscal year set to start in July, July 2013 is in fiscal year 2013. With this checkbox turned *off* and the fiscal year set to start in July, July 2013 is the beginning of fiscal year 2014.
- **Default start time.** For most tasks, the start time depends on when predecessor tasks finish. The time in this box affects a task's start time only when you create a task and specify a start date without a start time. This option is set to 8:00 a.m. initially. If your workday starts earlier or later, adjust the value of this box accordingly.
- **Default end time.** The finish time for most tasks depends on when the task begins and how long it takes. The time in this box becomes the finish time for a task only when you specify a task's finish date without specifying a finish time. This box is set to 5:00 p.m. initially. If your workday ends earlier or later, adjust this value accordingly.
- **Hours per day.** Sets the number of working hours for a single workday. For example, with the standard setting of 8.00, one workday represents 8 hours of work.
- **Hours per week.** Defines the number of working hours in one week and is set to 40.00 initially.

- **Days per month.** This option is the conversion between days and months and is set to 20 workdays (4 weeks each with 5 workdays) per month initially.

WORKAROUND WORKSHOP

Calendars and Calendar Options

Project doesn't warn you when your calendar options and project calendar don't jibe, so it's a good idea to make sure they do. Project uses the calendar options to convert one time period into another—for instance, to calculate the work hours that correspond to a duration you enter in weeks. If the calendar options and the calendar disagree, then duration and work estimates don't agree, and resource assignments may not make sense.

Suppose the Hours Per Day option is set to 6 hours. For a task with a 5-day duration, Project multiplies the 5 days by 6 hours per day to get task work of 30 hours. Someone assigned to the task at 100 percent may work 8-hour days according to the project calendar. But when Project converts workdays into work hours, it thinks he's working only 6 hours a day because of the Hours Per Day option. The solution to this brainteaser is to set the same number of work hours per day in your calendar options *and* the calendar.

Defining Work Times with Calendars

Resources aren't at your beck and call 24/7. Team members take vacations, attend training and conferences, and get sick. They may also work part time or work 4 long days and take Fridays off. Incorporating nonworking time and specialized work arrangements makes a Project schedule more likely to forecast how the project will actually play out. In Project, *calendars* carve out working and nonworking times.

Calendars are multitalented: You can apply a calendar to an entire project, individual resources (page 120), or specific tasks (page 120). For instance, you can set up a calendar to reflect your organization's standard working times, corporate holidays, and factory closures, and use that calendar for all your projects. On the other hand, a resource calendar can represent a shift-work schedule or a team member's particular work schedule and time off.

Project comes with a few built-in calendars (page 103) and automatically applies the built-in Standard calendar to new projects you create. However, you can modify existing calendars or build completely new ones and then apply them to custom-fit your projects' and resources' work hours.

This section explains creating and customizing calendars in Project. You'll also find a quick review of how to apply calendars to projects, resources, and tasks. See page 213 to learn how to integrate calendars, resource units, and resource availability to resolve common resource-scheduling issues.

TIP You can copy calendars you create using the Organizer so they're available to other projects. If you create a copy of the Standard calendar in one Project file to include company holidays, for example, then copy that calendar into the Project global template (page 703) to share that calendar with all new projects.

Creating New Calendars

You can create as many calendars as you need. Whether you want to create a calendar for a project, a resource, or a task, the steps are the same: Create the new calendar, edit it to reflect the working and nonworking times, and then apply it. Here are the steps for creating a new calendar:

1. **In the Project tab's Properties section, click Change Working Time.**

   The Change Working Time dialog box opens. The "For calendar" box shows the calendar you've applied to this project. For example, "Standard (Project Calendar)" indicates that the Standard calendar is set as the project calendar for the current Project file.

2. **Click Create New Calendar.**

   The Create New Base Calendar dialog box appears, as shown in Figure 5-11 (foreground). *Base calendar* is Project's name for calendars that act as templates for other calendars. For example, the Standard calendar is a base calendar because you can use it as the foundation for customized project calendars and resource calendars.

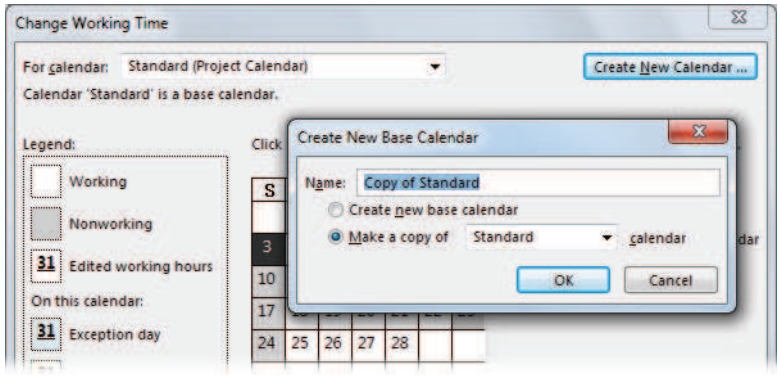

FIGURE 5-11

Project suggests that copying an existing calendar is the preferred way to create a new base calendar by automatically selecting the "Make a copy of" option. Although you can modify the built-in Standard calendar to represent your organization's customized work schedule, it's better to copy the Standard calendar instead and give the copy a meaningful name like Fundraiser or Half Time Schedule.

3. **In the Name box, type a new name for the calendar.**

   If you copy an existing calendar, Project adds "Copy of" in front of the calendar's name. If you create a new calendar, Project fills in the box with a name like Calendar 1. The best names are short but give you a good idea of the working time they represent, like Night Shift.

4. **Tell Project whether you want to make a copy of an existing calendar or create a brand-new one.**

   To use an existing calendar as your starting point, leave the "Make a copy of" option selected, and then, in the "Make a copy of _ calendar" drop-down list, choose the calendar you want.

   For a calendar that's very different from any you have already, you can create one from scratch by selecting the "Create new base calendar" option.

5. **Click OK.**

   The Create New Base Calendar dialog box closes, and the new calendar's name appears in the "For calendar" box. Because this new calendar isn't assigned as the project calendar for the current project, only the calendar name appears in the box [it doesn't have "(Project Calendar)" after it]. (Page 120 shows how to make a calendar the project calendar.) Now you're ready to set the calendar's working times, which the next section describes in detail.

Modifying Calendars

Any calendar in a Project file, whether it's built-in or one of yours, is fair game for modification. Although you can modify the built-in Standard calendar, copying it to create a separate calendar for your organization's work and holiday schedule makes it easy to tell which calendar defines your organization's work time and days off. Then, if you store that custom calendar in the Project global template (page 703) and apply it as the project calendar for new projects (page 120), every new Project file knows about your work weeks and time off.

Setting up work schedules for people and tasks is another reason to modify calendars. You could create a "Half time" calendar for the people who work the company's part-time schedule and specify the work times as 8 a.m. to 12 p.m. Then you apply that calendar to every resource who works half time.

If you create a brand-new calendar as explained in the previous section, Project selects it in the Change Working Time dialog box's "For calendar" box as soon as you create it. However, if you want to modify an existing calendar, you have to select it first by performing the following steps:

1. **In the Project tab's Properties section, click Change Working Time.**

   The Change Working Time dialog box opens, showing the current project calendar in the "For calendar" box.

2. **In the "For calendar" drop-down list, choose the calendar you want to modify, as illustrated in Figure 5-12.**

   The "For calendar" drop-down list starts with built-in calendars and any new calendars you've created. Calendars for each resource in the Project file appear at the end of the list.

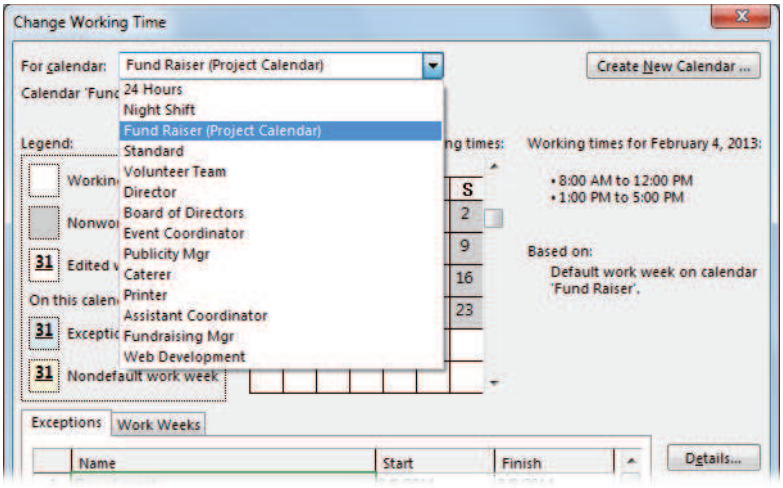

FIGURE 5-12
The "For calendar" drop-down list displays the built-in calendars, any new calendars you've created, and calendars for each resource in the Project file.

Now you're ready to modify the selected calendar as described in the following sections.

Defining Work Weeks and Exceptions

Project calendars offer two features for defining working and nonworking time: work weeks and exceptions. This section explains what each one does and how to use them to specify workdays and non-workdays and times.

UNDERSTANDING WORK WEEKS

Work weeks identify the workdays and non-workdays in a 7-day week, as well as the work hours for each workday. Set up an additional work week when a work schedule lasts several weeks or months, with different workdays and times—like a stint of 10-hour days Monday through Saturday to meet a critical deadline. You tell Project the date range within which that work week schedule applies and define the work week (by clicking the Details button in the Change Working Time dialog box). Project then modifies the current calendar to use that work week between the start and stop dates you specified.

You can set up more than one work week within the same Project calendar, which is great if your organization has different work schedules at different times during the year. Here are some examples of why you might create additional work weeks:

- **Company-wide work schedules.** Create additional work weeks when your company has a summer-schedule work week, a winter-schedule work week, and the standard work week in force the rest of the year.

- **Extended company-wide nonworking time.** You can also set up a work week for company-wide *nonworking* time that lasts one or more weeks—for example, a factory shutdown for the last two weeks of the year.

NOTE You can't create a work week and apply it to several different time periods. So if you set up a summer-schedule work week, you have to create separate work weeks for *each* summer.

- **Resource work schedules.** Work weeks in a resource calendar are great when someone works an altered schedule for a few weeks or months; for example, when someone works half-days for two months while recuperating from an illness. You simply select the resource calendar and then create a work week for the recuperation schedule.

UNDERSTANDING EXCEPTIONS

Exceptions are primarily for nonworking time, like company holidays, but you can also use them for alternate work schedules that run for a shorter period of time. In a Project calendar, you create a separate exception for each company holiday or other special day. You can also set up recurring exceptions—for example, to schedule a non-workday once a quarter for the ever-popular all-hands meeting.

Consider using calendar exceptions for the following situations:

- **Single days with a different schedule.** A company holiday and a half-day for a corporate meeting are perfect examples of single-day exceptions.
- **Multiple days with a different schedule.** For example, you can set a modified schedule for a multiday training class that someone attends, a conference, or a series of short days when the auditors are in town.
- **Recurring changes.** Use exceptions to specify altered work times that occur on a regular schedule, like company meetings or the monthly ice cream social.
- **Altered work schedules longer than a week.** You can use an exception for a schedule change that lasts longer than a week as long as all the days of the exception are either nonworking days or have the same working times. (For that reason, work weeks and exceptions work equally well for factory shutdowns and people's vacations.)

DEFINING WORK WEEKS FOR A CALENDAR

Every calendar in a Project file comes with one work week. When you select a calendar and select the Work Weeks tab, the name of the first entry is [Default]. The Start and Finish cells are set to NA, which means that the work week applies to all dates.

NOTE Initially, the [Default] work week considers weekdays as workdays and weekends as non-workdays. To set different work times on specific days, you have to specify those work times in either calendar work weeks or exceptions. Also, when you specify start and end times for work hours for calendar days, make sure the start and end work times you specify in Project's calendar options (page 106) are set to the same times.

If you need an additional work week (see page 110 for why you might need one), it needs a name as well as start and stop dates for the modified work schedule. Here are the steps for creating a new work week:

1. **In the Change Working Time dialog box, in the "For calendar" drop-down list, select the calendar, and then click the Work Weeks tab.**

   "[Default]" appears in the table's first row with any other work weeks you've defined in rows 2 and higher.

2. **On the Work Weeks tab, click the first blank Name cell, and then type a name for the work week schedule.**

   Use a meaningful name, like Summer2014, for the summer work week. If you create a work week in a resource calendar, you might call the work week Spring Vacation or Medical Leave.

3. **Click the Start cell in the same row, click the down arrow that appears in the cell, and then choose the first date to which the work week applies, as shown in Figure 5-13. Click the Finish cell in the same row, and then choose the last date to which the work week applies.**

   When you click the down arrow in a Start or Finish cell, a calendar drop-down appears. Click the left arrow or right arrow to move one month into the past or future, respectively. To select a date, click the date in the monthly calendar. If the date is several months in the future, typing the date (like *6/1/14*) may be faster.

4. **To specify workdays and times, click Details. Then specify the workdays and times as described in the next section. Click OK when you're done.**

   When you set up additional work weeks with alternate work schedules, the calendar in the top half of the Change Working Time dialog box underlines the dates with non-standard workdays, as you can see for June 2014 in Figure 5-13.

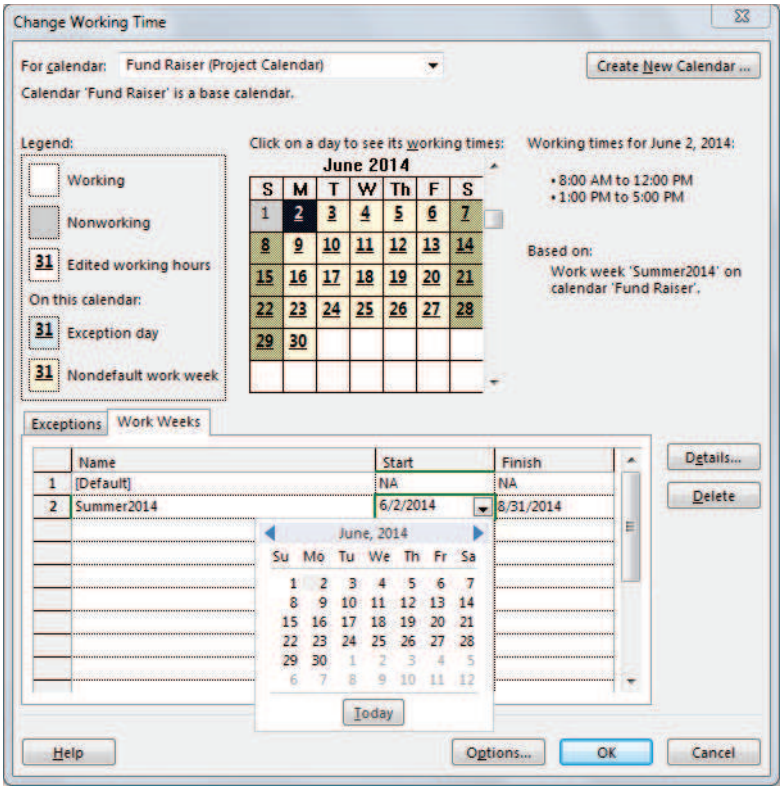

FIGURE 5-13

If you click a day in the calendar at the top of the Change Working Time dialog box, Project displays the working times for that day, and the work week that applies to that day.

DEFINING A WORK WEEK'S WORKING AND NONWORKING DAYS AND TIMES

Here's how you define workdays and work hours for a work week, whether you want to change a calendar's standard work week or modify a special work week you created:

1. **In the Change Working Time dialog box, select the calendar, and then click the Work Weeks tab. In the Work Weeks table, click the cell that contains the name of the work week you want to modify.**

   If you haven't added any additional work weeks, the only entry you see in the Work Weeks tab is "[Default]" in the Name cell of Row 1.

2. **To specify the workdays and times, click Details.**

   The Details dialog box appears with the heading "Details for <work week name>" as shown in Figure 5-14.

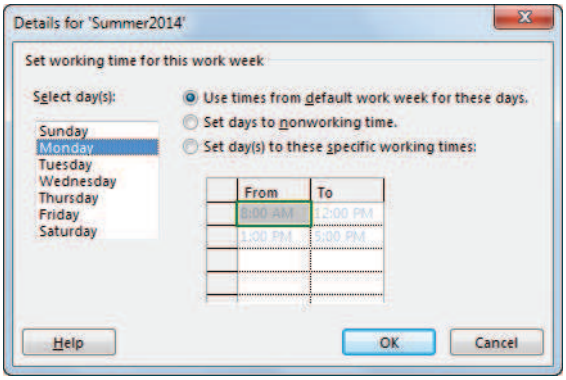

FIGURE 5-14

If you select a workday, you see the current work hours in the working-time table. If you select a nonworking day, the table is empty.

3. **In the "Select day(s)" list, select the day(s) you want to modify.**

   To select a single day, click it. To select several adjacent days, drag over the days (or click the first day and Shift-click the last). To select nonadjacent days, Ctrl-click each day you want to select.

   If you select multiple days that use different settings, none of the options in the dialog box are selected and the working-time table is blank. When all selected days use the same settings, Project shows the common work times in the working-time table.

4. **Select the appropriate working-time option.**

   The initial setting for every day of the week is "Use times from the default work week times for these days," which sets weekdays as workdays and weekends as non-workdays. (If you're modifying the [Default] work week, the label reads "Use Project default times for these days.") To change a workday to a non-workday (for example, to change Friday to a non-workday), select the "Set days to nonworking time" option.

   To change the work hours for any workday, select the "Set day(s) to these specific working times" option. This option makes the working-time table editable, so you can change the work hours for the selected days. In addition to changing work hours, use this option to change a non-workday (like a weekend day) to a workday.

5. **To change the work hours in an existing entry in the table, click the cell, and then type the new time.**

   When you click a cell in the working-time table, Project selects the cell's entire contents, so you can simply start typing to change the value.

   Working-time text boxes behave like all other text boxes. You can edit times by clicking to position the insertion point, or by dragging to select the text you want to edit. The box on page 115 provides some shortcuts for editing times.

6. **To add a new row of working times, click the first blank From cell, and then type the starting time.**

   Suppose you switch to 14-hour days and add a second break in the late afternoon. You can add a new row for the third set of work hours.

7. **To remove a row of work times, click in either the From or To cell, and then press Delete.**

   Project removes the times in both the From and To cell. For example, to change a full workday to a half workday, you can delete the after-lunch work hours.

8. **To specify working times for other days, repeat steps 3–7.**

   When you're done, click OK to close the dialog box.

UP TO SPEED

Telling Project Time

Project recognizes a few shortcuts in the working-time table. For example, if you type *8* in a cell, Project fills in 8:00 AM. In fact, Project switches to an a.m. time whenever you type a number from 7 to 11. Project changes the number 12 and the numbers from 1 to 6 to p.m. times; for instance, *12* becomes 12:00 PM. To enter a time including a.m. or p.m., simply type a value like *8 pm*.

Project double-checks the times you enter and tries to be helpful. If you type a time in a From cell that's later than the To time, Project automatically adjusts the To time to be one hour later than the From time. For example, suppose the first set of work times run from 8:00 a.m. to 12:00 p.m. If you change the From cell to 1:00 PM, then Project changes the To cell to 2:00 PM.

Overlapping times in different rows are a problem. For instance, suppose you enter work times of 1:00 PM to 5:00 PM in the first row and 4:00 to 5:00 PM in the second row. Project doesn't complain until you click OK, when it warns you that the start of one shift has to be later than the end of the previous shift. Click OK and remove the overlap.

SETTING ASIDE HOLIDAYS AND OTHER EXCEPTIONS TO THE WORK SCHEDULE

Work weeks assign the same schedule of workdays and times over a specific period of time. As their name implies, calendar *exceptions* are better for shorter changes to the work schedule. Here are the steps for defining an exception in a calendar:

1. **In the Change Working Time dialog box, in the "For calendar" drop-down list, select the calendar, and then click the Exceptions tab.**

   Project doesn't set up any exceptions automatically, so all the rows in the Exceptions table start out blank.

2. **On the Exceptions tab, click the first blank Name cell, and then type a name for the exception, like *Day of event* for the cycling fundraiser race day.**

   You can create as many exceptions in a calendar as you need—to set each company holiday in the year or to reserve vacation time for someone who frequently flits around the world, for example.

3. **Click the Start cell in the same row, click the down arrow that appears in the cell, and then choose the first date to which the exception applies. Click the Finish cell in the same row, and then choose the last date for the exception.**

   Start and finish dates can be the same day, a few days apart, or any two dates you want. The only restriction is that all the days within that date range must be either non-workdays or have the same working times.

4. **To define the days and times for the exception, click Details.**

   The "Details for <calendar name>" dialog box opens. Because many exceptions are holidays and other days off, Project automatically selects the Nonworking option at the top of the dialog box. If the exception is for nonworking time, just click OK. However, if you're creating an exception for a few days of altered work times, select the "Working times" option instead, as shown in Figure 5-15.

   For one or more adjacent days, you can ignore the settings in the "Recurrence pattern" and "Range of recurrence" sections. (The next section of this chapter explains how to create recurring exceptions.)

5. **If the exception represents modified working times, set the working times in the "Working times" table (see the box on page 115 for time-setting shortcuts). Click OK when you're done.**

   The Details dialog box closes, and the exception is waiting for you on the Exceptions tab.

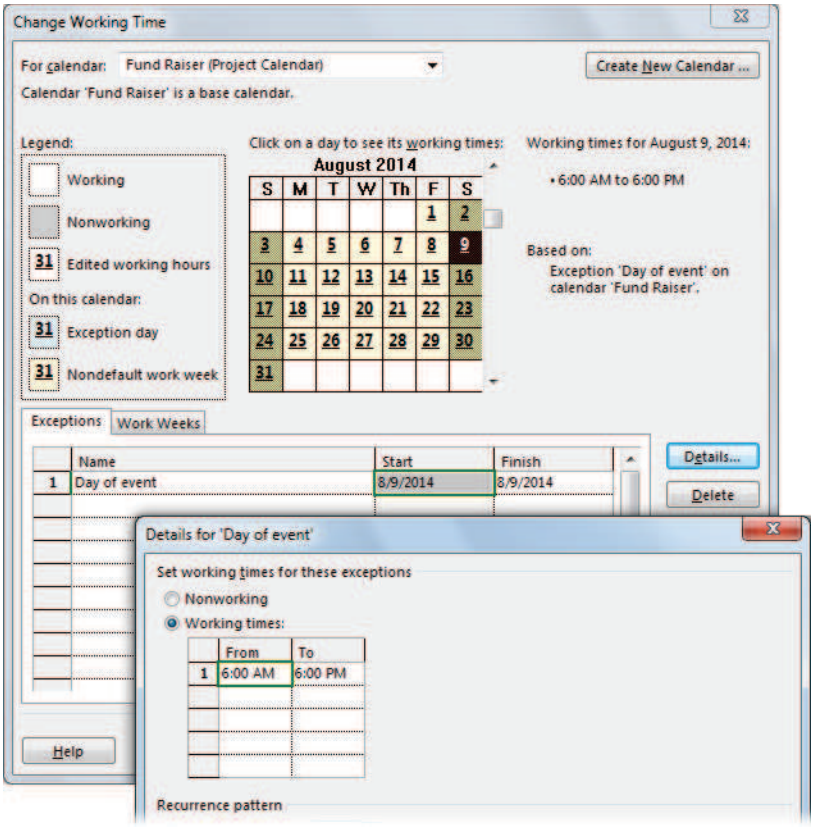

FIGURE 5-15

When an exception is for one or more days with working times outside the norm, select the "Working times" option. The working-time table springs to life, with the standard working times you set in the Project calendar options (page 106) already filled in. As you do for work week details, fill in the From and To times that apply to every day of the exception, and then click OK.

DEFINING RECURRING EXCEPTIONS

Sometimes, exceptions to the work week occur on a regular schedule—like the quarterly half-days of nonworking time for all-hands meetings. Recurring tasks and recurring exceptions have the same types of frequency settings, as the box on page 119 explains. However, recurring tasks represent project work that repeats, while recurring exceptions represent repeating special work times.

The details for a calendar exception specify whether exception days are nonworking or working days (along with the work hours). The lower part of the "Details for <calendar name>" dialog box has options to set a frequency for the exception and when it starts or ends. Here are the steps for defining a recurring exception in a calendar:

1. **In the Change Working Time dialog box, select the calendar from the "For calendar" drop-down list, and then click the Exceptions tab.**

2. **In the table, enter the name, start date, and finish date as you would for a regular exception (page 116).**

   Recurring exceptions tend to span longer periods of time than exceptions for holidays or training classes. For example, you might set up the start and finish dates for the charity's national board meetings to span two years.

3. **Click Details and specify the nonworking or working time settings for the days in the recurring exception.**

   The section "Defining a work week's working and nonworking days and times" on page 113 describes how to specify nonworking and working times for days. With a Project calendar exception, every day of the exception must use the same settings.

4. **In the "Recurrence pattern" section, select the correct frequency option, as demonstrated in Figure 5-16.**

   The options include Daily, Weekly, Monthly, and Yearly. The other settings that appear depend on which frequency option you select. For example, the Weekly option has a checkbox for specifying the number of weeks between occurrences (1 represents every week, 2 represents every other week, and so on) and checkboxes for the days of the week on which the event occurs. The Monthly option has one option for specifying the day of the month, and another for specifying the week and day of the week (like first Monday).

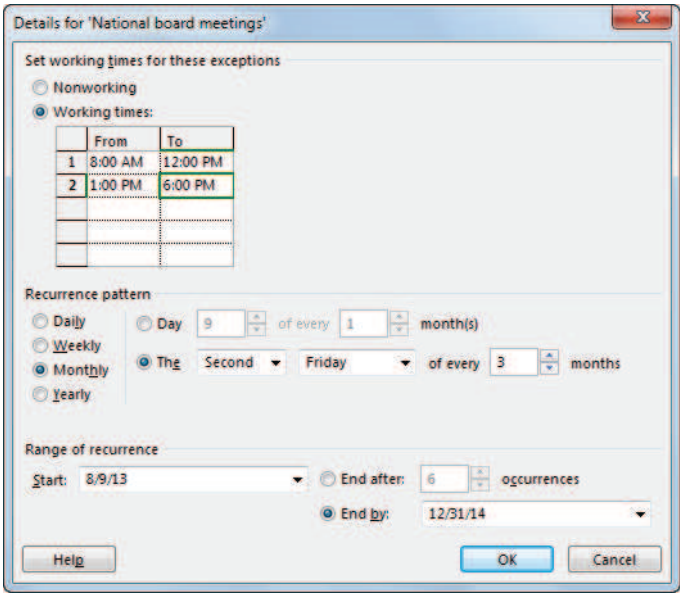

FIGURE 5-16

For a recurring exception, you specify the recurrence pattern as well as how long the pattern lasts. Project initially sets the pattern to every day by selecting the Daily option and filling in the "Every _ days" box with 1. Project also fills in the Start and "End by" dates with the exception's start and end dates.

5. **In the "Range of recurrence" section, specify the date range or the number of occurrences.**

   Project fills in the "Range of recurrence" Start box with the start date from the Exceptions tab—basically, the first date of the first exception. It also selects the "End after" option. Because the exception is initially set to Daily, it fills in the "End after" box with the number of days between the exception's start and finish date (from the Exceptions tab).

   Suppose you want to carve out time from your project for a national board meeting every 3 months starting in August 2013 until the end of 2014. In the "Recurrence pattern" section, select the Monthly option and specify the frequency, as described in the previous step. Then, in the "occurrences" box, type the appropriate number (*6* in this example). If the Finish date you set on the Exceptions tab is too early to fit all the occurrences, Project automatically changes that date. For example, if the Finish date were set to 6/1/14, Project would change it to 11/14/14 to accommodate the six quarterly meetings.

   The other approach tells Project to set up as many exceptions as fit between the start and "End by" dates. In this case, select the "End by" option and then fill in the date in the box. Project uses the recurrence pattern to set up exceptions, with the last exception occurring before the "End by" date.

6. **Click OK.**

   Whether you set dates or a number of occurrences, a recurring exception can repeat up to 999 times. If your recurrence pattern results in 1,000 occurrences or more, then Project displays a warning when you click OK.

UP TO SPEED

Recurring Tasks vs. Recurring Exceptions

The settings for recurring calendar exceptions look like the ones for recurring tasks (page 136). However, recurring exceptions and recurring tasks do very different things.

A recurring *task* is project work that occurs on a regular schedule, like a biweekly status meeting. When you add these tasks to your schedule as recurring tasks, you can track the work hours and meeting costs.

A recurring *exception* specifies a work or nonwork schedule that repeats regularly, like a half-day the last Friday of every month. Project takes the exception days and times into account when it schedules project work for any project that uses that calendar. When you copy a calendar from one file to another (page 702), the calendar's exceptions and work weeks copy over, too.

Applying Calendars

Sometimes, entire projects follow a different work schedule, like a subproject with a partner who has an enviable number of holidays. More often, one or more resources need their own work calendars to reflect work shifts, vacations, or unique working hours (like those of the token vampire on your team). And the occasional task may have its own calendar, like the server maintenance task that has to run from 9 p.m. to 5 a.m.

To apply a calendar to a *project*, follow these steps:

1. **With the project open, in the Project tab's Properties section, click Project Information.**

   The Project Information dialog box opens.

2. **In the Calendar box, choose the calendar you want, and then click OK.**

   Project uses this calendar for the project's working and nonworking time (except where you've applied a special calendar to any resource or task).

Applying a calendar to a *resource* is even easier:

1. **In the Resource Sheet (in the View tab's Resource Views section, click Resource Sheet), on the right side of the table, click the resource's Base Calendar cell (the column heading might say "Base" if the column is narrow).**

   A down arrow appears on the right side of the cell.

2. **In the drop-down list, choose the calendar you want to apply.**

   Project uses that calendar whenever you assign that resource to tasks. (If you add exceptions or additional workweeks to the calendar specific to the resource, Project goes by the resource's calendar if it differs from the resource's base calendar.)

TIP Resources start out using the calendar you apply to the project, unless you tell Project otherwise. If you want to define a resource's vacation time, for example, you make those changes in the resource's calendar: In the Project tab's Properties section, click Change Working Time. In the "For calendar" drop-down list, choose the resource's name. Now you can define the work weeks or exceptions for that resource. (Alternatively, if you double-click a resource's name in the Resource Sheet, the Resource Information dialog box opens. On the General tab, click Change Working Time. The Change Working Time dialog box opens right to that resource's calendar.)

Sometimes tasks need to run at specific times, like a planned outage that has to take place in the middle of the night. Although task calendars aren't that common, you *can* apply a calendar directly to a task. Here's how:

1. **Create the calendar you want to apply to the task (page 108).**

2. **In the table area of a task-oriented view like Gantt Chart, select the task(s) that require a special calendar, and then in the Task tab's Properties section, click Information.**

   If you select only one task, then the Task Information dialog box opens. If you select more than one task, then the Multiple Task Information dialog box opens instead. The fields in these two dialog boxes are identical.

3. **Click the Advanced tab and, in the Calendar drop-down list, choose the one you want to apply. Click OK to close the dialog box and apply the task calendar.**

   The "Scheduling ignores resource calendars" checkbox is initially turned off, which means that Project schedules work only during working hours common to both the assigned resources and the task. If the task calendar and resource calendars for the assigned resources don't have any mutual work time, a message box warns you that the calendars don't jibe. You can change either the task calendar or the resource calendar to create some common time. Another approach is to schedule work by the task calendar only—by turning on the "Scheduling ignores resource calendars" checkbox. Project then assumes that the assigned resources work during the task's work time.