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# Project 2019

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Manage project resources,  
calendars, and budgets

Create a dynamic schedule  
that keeps a project moving

Get the “golden rules” that  
keep projects on track

Cynthia Snyder Dionisio





# Project 2019

by Cynthia Snyder Dionisio

for  
**dummies**<sup>®</sup>  
A Wiley Brand

## Project 2019 For Dummies®

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# Introduction

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Over the years, project management has evolved from a discipline that began with index cards and yarn to one that now uses sophisticated analyses, techniques, projections, reporting, and time and money tracking. Project management software brings functionality to project management that makes planning and tracking the complex projects we undertake a little more manageable.

## About This Book

---

Microsoft Office Project 2019, the most recent incarnation of the world's most popular project management software, offers a tremendous wealth of functionality to users. In the beginning, however, as with most software, mastering it can seem like a daunting process. It helps to understand how Project's features relate to what you do every day as a project manager.

In *Project 2019 For Dummies*, my goal is to help you explore Project 2019, providing information on relevant project management concepts while also offering specific procedures to build and track a Project schedule.

Here are some broad topics that I help you explore in this book. You can:

- » Start out in Project 2019 by entering tasks and dependencies, estimating durations, and working with views
- » Work with resources, calendars, and costs
- » Negotiate constraints, fine-tune the schedule, and set a baseline
- » Gather data, analyze progress, take corrective actions, and report project status

Throughout this book, I offer advice on how to make all these features and procedures mesh with what you already know as a project manager to ease the transition to using Project 2019. Within this book, you may note that some web addresses break across two lines of text. If you're reading this book in print and want to visit one of these web pages, simply key in the web address exactly as it's noted in the text, pretending as though the line break doesn't exist. If you're reading this as an e-book, you've got it easy — just click the web address to be taken directly to the web page.

Finally, Microsoft Office only runs on Windows 10 (as of this printing), and not Windows 7 or 8.1, so you'll need to have Windows 10 in order to run Project 2019. This book is written as if you're using the “stand-alone” or “one-time-purchase” version of Microsoft Project. If you have an Office 365 subscription, you may already be familiar with Project 2019 features, because they're added to previous versions of Project biannually. Because this book assumes stand-alone software, I don't spend time on project management service features; the Roadmap service; or anything associated with enterprise versions, server features, or cloud functionality. But the good news is, regardless of whether you're running the stand-alone or subscription version of the software, this book is packed full of useful information for getting to know Project 2019.

## Foolish Assumptions

I've made some assumptions about you, gentle reader. I figure that you're computer-literate and that you know how to use the mouse, the keyboard, and the Ribbon. I assume that you know how to use most common Windows functions (such as the Clipboard), as well as many basic software functions, such as selecting text and dragging and dropping items with the mouse.

I also assume that you have experience in managing projects. Whether you manage very large projects that are several years long or you have been a team lead on a project, the information in this book is more accessible if you have a background in project management.

I do *not* assume that you've used Project or any other project management software. If you're new to Project, you'll find what you need to get up to speed, including information on how Project works, finding your way around the Project interface, and building your first Project plan. If you've used an earlier version of Project, you'll find out about Project 2019 and the features it provides.



# Icons Used in This Book

One picture is worth . . . well, you know. That's why *For Dummies* books use icons to provide visual clues to what's going on. Essentially, icons call your attention to bits of special information that may well make your life easier. The following icons are used in this book.



REMEMBER

The Remember icon signals either a pertinent fact that relates to what you're reading at the time (but is also mentioned elsewhere in the book) or a reiteration of a particularly important piece of information that's, well, worth repeating.



TIP

Tips are the advice columns of computer books: They offer sage advice, a bit more information about topics under discussion that may be of interest, or ways to do things a bit more efficiently.



WARNING

Warning icons spell trouble with a capital *T*: When you see a warning, read it. If you're not careful, you might do something at this point that could cause disaster.

# Beyond the Book

In addition to what you're reading right now, this product also comes with a free access-anywhere Cheat Sheet that includes tips on creating your project schedule, shortcut keys, and helpful websites to hone your expertise. To get this Cheat Sheet, simply go to [www.dummies.com](http://www.dummies.com) and type **Project 2019 For Dummies Cheat Sheet** in the Search box.

# Where to Go from Here

Take what you've learned in the project management school of hard knocks and jump into the world of Project 2019. When you do, you'll be rewarded with a wealth of tools and information that help you manage your projects much more efficiently.

Your first step might be to read the table of contents and find the sections of this book that you need — or simply turn to Chapter 1 and start reading.



# 1

## **Getting Started with Project 2019**

## **IN THIS PART . . .**

Get familiar with the Ribbons and its tabs in Project 2019.

See how to open a new project, enter tasks, and organize a project.

Become skilled in working with summary tasks, milestones, and notes.

Identify and arrange task dependencies to create a network diagram.

Develop duration estimates for tasks.

Customize Project views to meet your needs.

## IN THIS CHAPTER

- » Understanding the elements of a project
- » Laying out the project manager's role
- » Benefitting from Project 2019
- » Exploring the software interface
- » Finding help in Project

# Chapter **1**

# Project Management, Project 2019, and You

**W**elcome to the world of computerized project management with Microsoft Project. If you've never used project management software, you're entering a brave new world.

Everything you used to do with handwritten to-do lists, sticky notes, word processors, and spreadsheets magically comes together in Project. However, this transition doesn't come in a moment, and you need a basic understanding of what project management software can do to get you up to speed. If you've used previous versions of Project, the overview in this chapter can refresh your memory and ease you into a few of the new Project 2019 features.

Even if you're a seasoned project manager, this chapter provides the foundation for how to work with Project.

## Introducing Project Management

You probably handle projects day in and day out. Some are obvious, because your boss named them so that any fool would know that they're projects: Acme Drilling Project or Network Expansion IT Project, for example. Others are less obvious,

such as that presentation you need to put together for your director or that how-to guide on planting a vegetable garden in your backyard.

In this book, a project is defined as a unique venture undertaken to produce distinct deliverables, products, or outcomes. In the context of a project, a *deliverable* is an individual component or item that meets the requirements of the project, such as a design document or a prototype. Projects have multiple variables; some are straightforward to define, and others aren't.

Using the information about variables in Table 1-1, you can say that *project management* is the practice of organizing, managing, and controlling project variables to meet the project outcomes and mission.

**TABLE 1-1** Project Variables

Variable	Description
<b>Defined</b>	
Scope	The work needed to produce the deliverables, products, or outcomes for the project.
Time	The duration required to complete the project work.
Cost	The funds required to complete the project.
Resources	The people, equipment, material, supplies, and facilities needed to accomplish the project.
<b>Undefined</b>	
Change	The type, timing, number, and degree of modifications from a project baseline; can affect the project's scope, time, cost, or resources.
Risk	Uncertainty (associated with the scope, time, cost, resources, stakeholders, or environment) that can threaten the completion of any aspect of the project. Fortunately, risks can also present opportunities to accelerate the schedule or come in under budget.
Stakeholder	A person who can affect, or who is affected by, the project, either positively or negatively.
Environment	The location, culture, or organization in which the project occurs.

## Defining project manager

Although understanding the role (let alone the usefulness) of certain managers isn't always easy, you can easily spot the value of a *project manager*: This person creates the master plan for a project and ensures that it is implemented successfully. Along the way, the project manager uses technical, business, and leadership skills to manage the completion of tasks and keep the schedule on track.



TIP

A truly professional project manager may have a degree in project management or a professional certification. For example, if you see the initials *PMP* beside a name, that person has been certified as a project management professional by the Project Management Institute, the leading global organization establishing project management standards and credentials.

## Identifying what a project manager does

A project manager isn't always the highest authority in a project. Often, that role belongs to whoever manages the project manager — including, possibly, members of senior management. Rather, the project manager is the person who ensures that aspects of the project are integrated and assumes hands-on responsibility for successes as well as failures.



TIP

In project management parlance, the person who champions (and funds) a project is the *project sponsor*. Although the project manager may work for the project sponsor, the project often also has a *customer* — outside the project manager's own company or within it — for whom the end product is produced.

The project manager manages these essential pieces of a project:

- » **Scope:** Define and organize all work that needs to be done in order to meet the project mission and create deliverables.
- » **Schedule:** This element, which you create by working with Project, includes the estimated tasks, duration, and timing involved in reaching the project goal.
- » **Resources:** Assign resources and track their activities on the project as well as resolve resource conflicts and build consensus. This part of the job also involves managing physical resources such as materials and equipment.
- » **Cost:** Estimate project costs and apply those estimates across the schedule to create a time-phased budget.
- » **Communication:** Notify appropriate *stakeholders* (everyone who has a legitimate stake in its success) of the project status.

Creating a logical balance of the defined variables of scope, time, cost, and resources is at the core of a good project manager's job throughout the life of a project. Managing a project requires overseeing all its variables to ensure that the project goals are accomplished on time, within the limits of the budget, and using the assigned resources while also addressing risks, managing change, and satisfying stakeholders. Sound easy? Maybe not. However, one thing is certain: Having software to help organize and structure the work makes managing the project less daunting. That's where Project 2019 can help.

# Introducing Project 2019

Project 2019, which is a scheduling tool, helps you organize, manage, and control defined variables, as identified in the preceding section. Project can also help you manage the undefined variables as well. In this book, I show you how to use Project to organize and manage your work, create realistic schedules, and optimize your use of resources.

Take a moment to look at some of the wonderful ways in which Project can help you organize, manage, and control your project. Now that you have, or your company has, bought Project (and this book) and you're investing your time to understand how to use it, you can enjoy these benefits:

- » **Use built-in templates to get a head start on your project.** Project *templates* are prebuilt plans for a typical business project, such as commercial construction, an engineering project, a new product rollout, software development, or an office move.
- » **Organize your project by phase, deliverable, geography, or any other method.** The outline format allows you to progressively elaborate the information in greater granularity depending on how detailed you want your plan to be.
- » **Determine costs by your chosen method.** Examples are time period, resource type, deliverable, or cost type.
- » **Organize resources by resource type.** Level your resources to avoid overallocation, or determine the impact on the duration of a task based on a change in resources.
- » **Calculate costs and timing based on your input.** You can quickly calculate what-if scenarios to solve resource conflicts, maintain costs within your budget, or meet a deliverable deadline.
- » **Use views and reports with the click of a button.** A wealth of information is now available to you — and those you report to. You no longer have to manually build a report on total costs to date to meet a last-minute request from your boss.
- » **Manage complex algorithms** (that you couldn't even begin to figure out on your own) to complete such tasks as leveling resource assignments to solve resource conflicts, filtering tasks by various criteria, modeling what-if scenarios, and calculating the dollar value of work performed to date.





No matter how cool the tool, you have to take the time to enter meaningful data. Great software doesn't ensure great outcomes; it only makes them easier to achieve.

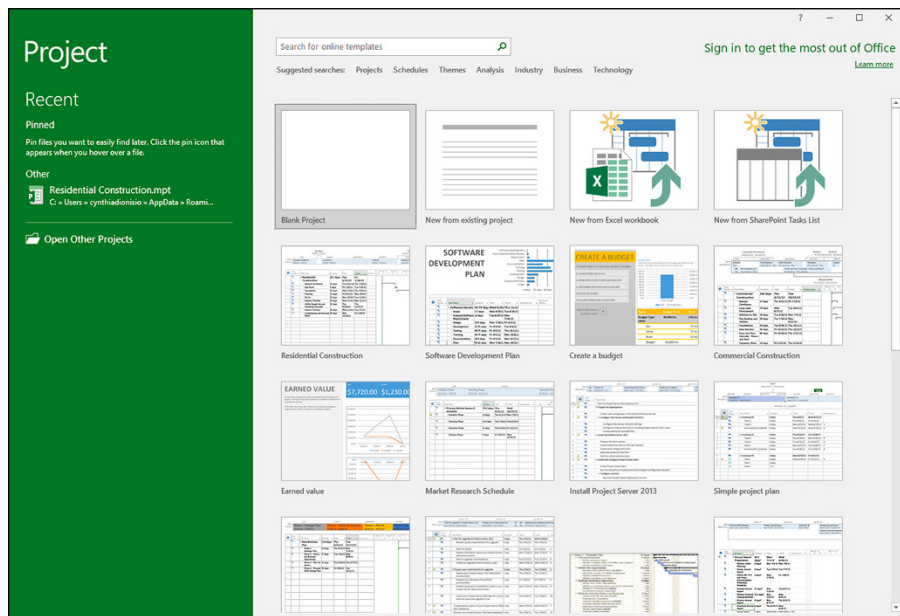
## Getting to Know You

The file you create in Project is a *Project schedule model*. It's a model because it models what you think will happen given what you know at the time. However, for ease of reference, I just refer to it as a schedule. The schedule has a plethora of data about various aspects of your project as well as graphical representations of that information.



Some people refer to the project schedule as the project plan. In reality, the project plan *contains* the project schedule — plus information such as the budget, work breakdown structure, project life cycle, risk management plan, and many other ingredients necessary to effectively manage a project.

When you first open Project 2019, you see several options for starting a new project, as shown in Figure 1-1.



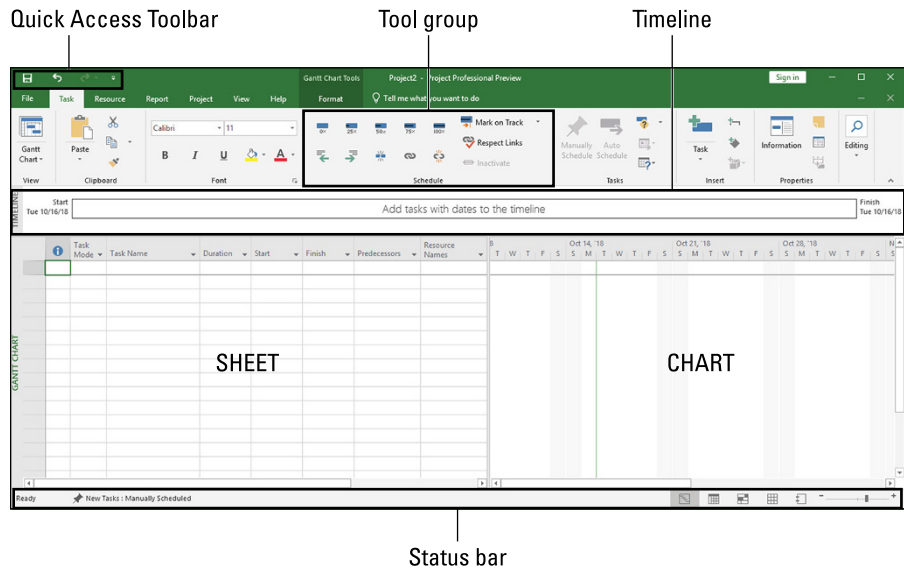
**FIGURE 1-1:**  
What you see  
when you open  
Project 2019.

You can open a blank project, create a new project from an existing project, or create a new project by importing information from Microsoft Excel or SharePoint. You can also take advantage of premade templates for common project types, such as these examples:

- » Residential construction
- » Software development
- » New product launch
- » Merger or acquisition evaluation

If you don't see the template you need, you can search for online templates by entering keywords in the search box at the top of the page. For purposes of this discussion, I assume that you're starting with a new, blank project.

When you open a new project, you see the Quick Access toolbar, a few Ribbon tabs, the Ribbon, the Timeline, a pane with a sheet and a chart, and the status bar, as shown in Figure 1-2.



**FIGURE 1-2:**  
A blank project.

In Figure 1-2, you see Gantt Chart view. (I discuss views in Chapter 6.) For now, here's an overview of the major elements in Project (refer to Figure 1-2):

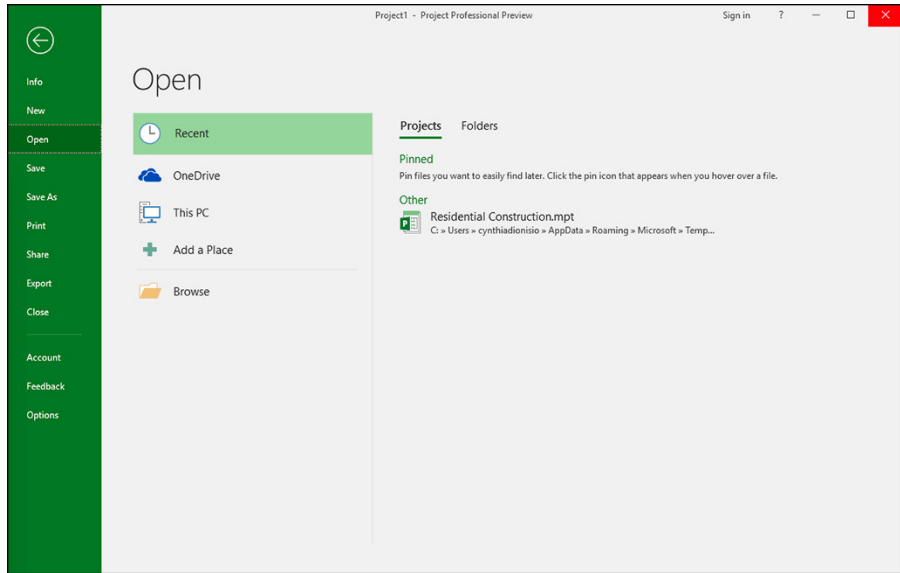
- » **Quick Access toolbar:** The Quick Access toolbar, above and to the left of the Ribbon, is onscreen at all times and in all views.
- » **Ribbon tab:** The Ribbon tabs organize commands based on a particular type of activity. For example, if you're working with resources, you'll likely find the command or setting you want on the Resource tab.
- » **Ribbon:** The Ribbon provides easy access to the most commonly used tools and commands. When you change tabs, the available tools on the Ribbon change.
- » **Group:** A *group* is a set of related commands or choices on the Ribbon. For example, to format text in a cell on the sheet, first find the formatting information you need in the Font group on the Task tab of the Ribbon.
- » **Timeline:** The Timeline provides an overview of the entire project — a graphical view of the project from start to finish. You have the option of showing the Timeline or hiding it.
- » **Sheet:** Similar to a spreadsheet, the sheet displays the data in the project. The default fields change depending on the Ribbon tab you're working in. You can customize the columns and fields in the sheet to meet your needs.
- » **Chart:** The *chart* is a graphical depiction of the information on the sheet. Depending on the view or Ribbon tab you see, you might also see a bar chart depicting the duration of a task or a resource histogram showing resource usage.
- » **Status bar:** The status bar, at the bottom of the Project window, has information on views and zoom level on the right, and information on how newly entered tasks are scheduled on the left.

## Navigating Ribbon tabs and the Ribbon

Each of the Ribbon tabs in Project shows different options on the Ribbon. In this section, I provide an overview of each Ribbon tab and of the Ribbon and the Quick Access toolbar. I elaborate on various functions and commands on the Ribbon in later chapters.

Each Ribbon tab has a different group of controls or functions. You can navigate from one tab to another by clicking on the tab name.

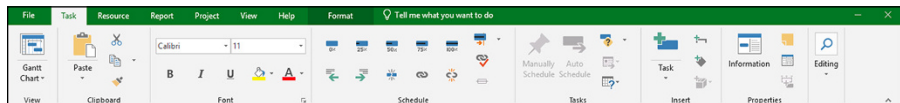
The first tab on the left is the File Ribbon tab. After you click this tab, you see the Navigation plan down the left side, as shown in Figure 1-3.



**FIGURE 1-3:**  
The File Ribbon  
tab menu.

The Ribbon tab puts you into Backstage view, where you find choices for working with files and changing options. For example, you can create a new project, open an existing project, save your current project, or print your current project. From Backstage view, you can also share, export, or close your current project. If you're feeling adventurous, you can click Options and customize the Ribbon and the Quick Access toolbar.

The Task Ribbon tab is where you spend a lot of your time in Project. As you can see in Figure 1-4, on the far left side of the Task Ribbon tab is the View. The default view is Gantt Chart view. It shows the task information and the chart that displays a bar chart representing the duration of each task.



**FIGURE 1-4:**  
The Task  
Ribbon tab.

In addition to Gantt Chart, you can choose these views:

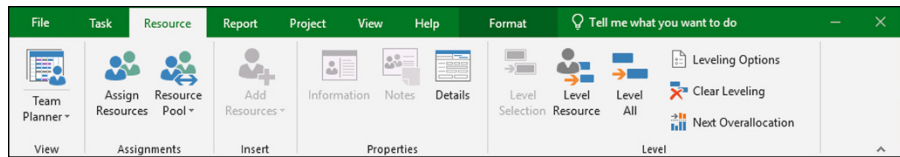
Calendar	Network Diagram
Resource Sheet	Resource Usage
Resource Form	Resource Graph

Task Usage	Task Form
Task Sheet	Team Planner
Timeline	Tracking Gantt

You may recognize some of the groups of commands on the Task Ribbon tab. For example, the Clipboard and Font groups are standard in many Windows applications. Other groups, such as Schedule and Tasks, are specific to a particular view — in this case, Gantt Chart view. Look for the Gantt Chart Tools above the Format tab when you see the Task Ribbon tab in Gantt Chart view. In other views, you see different tools above the Format tab.

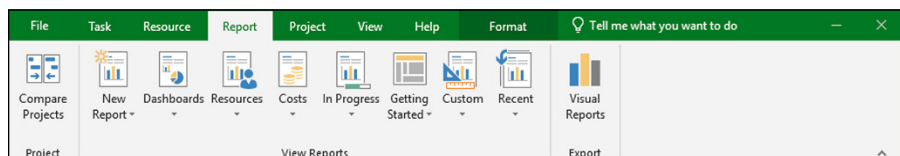
The Resource Ribbon tab, shown in Figure 1-5, helps you organize resources, such as assigning and leveling resources across tasks. In Project, resources include people, equipment, material, locations, and supplies. You can assign costs and calendars to resources. (I talk more about resources in Chapter 7.)

**FIGURE 1-5:**  
The Resource  
Ribbon tab.



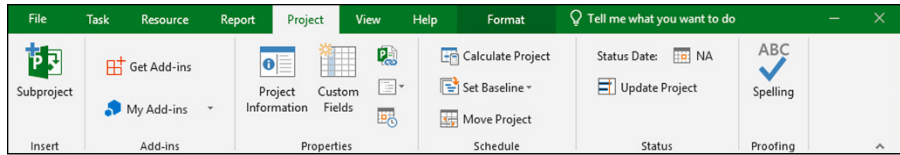
The Report Ribbon tab, shown in Figure 1-6, is where you can create reports on resources, costs, or progress, or put them all together in a dashboard report. You can create a report that compares your current status to previous versions of your project. I tell you all about reports, including how to customize and export your reports, in Chapter 18.

**FIGURE 1-6:**  
The Report  
Ribbon tab.



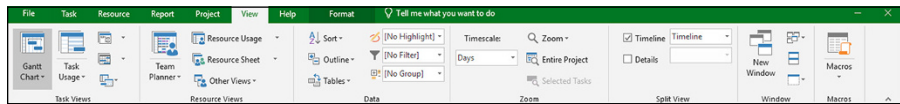
On the Project Ribbon tab, shown in Figure 1-7, you find commands to help you manage your project as a whole, rather than by task or resource. For example, you can enter or change the project start and finish dates and the baseline. If you need to change working time or add a subproject, this is the place to do it.

**FIGURE 1-7:**  
The Project Ribbon tab.



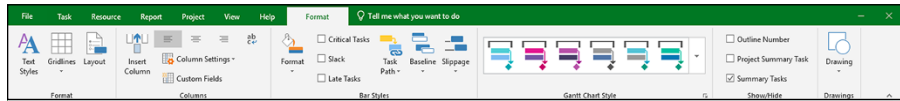
The View Ribbon tab, shown in Figure 1-8, lets you see some standard views. Examples are Task views, such as Gantt Chart, and Resource views, such as Resource Usage or Team Planner. You can use the View Ribbon tab to look at information sorted by date or a specific period. This tab also lets you see the entire project, show or hide the Timeline, and set the timescale you see.

**FIGURE 1-8:**  
The View Ribbon tab.



The Format Ribbon tab, shown in Figure 1-9, has commands that help you present your schedule, such as text styles, Gantt chart styles, and column settings.

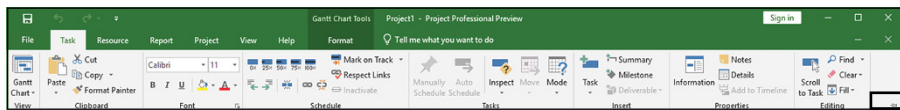
**FIGURE 1-9:**  
The Format Ribbon tab.



**TIP**

You can either show or hide the Ribbon to produce more real estate on your screen. The pushpin to the far right of the Ribbon pins it to your display, keeping it open and visible (as shown in Figure 1-10). The upward-facing arrow (Λ) on the far-right side hides the Ribbon. If your Ribbon is closed, click on any tab, look in the lower-right corner of the Ribbon and you will see a pushpin. Click on the pushpin to keep your Ribbon open. You can also press Ctrl+F1 to show or hide the Ribbon.

**FIGURE 1-10:**  
Keeping your Ribbon visible.



Pin the ribbon