

Microsoft®
Project 2010



INTRODUCTORY

Bunin

This is an electronic version of the print textbook. Due to electronic rights restrictions, some third party content may be suppressed. Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. The publisher reserves the right to remove content from this title at any time if subsequent rights restrictions require it. For valuable information on pricing, previous editions, changes to current editions, and alternate formats, please visit www.cengage.com/highered to search by ISBN#, author, title, or keyword for materials in your areas of interest.

**New Perspectives on Microsoft Project 2010,
Introductory**

Vice President, Publisher: Nicole Jones Pinard

Executive Editor: Marie L. Lee

Associate Acquisitions Editor: Amanda Lyons

Senior Product Manager: Kathy Finnegan

Product Manager: Leigh Hefferon

Associate Product Manager: Julia Leroux-Lindsey

Editorial Assistant: Jacqueline Lacaire

Director of Marketing: Elisa Roberts

Senior Marketing Manager: Ryan DeGrote

Developmental Editor: Pam Conrad

Content Project Manager: Matthew Hutchinson

Composition: GEX Publishing Services

Art Director: Marissa Falco

Text Designer: Althea Chen

Cover Designer: Roycroft Design

Cover Art: © Cavan Images/Photodisc/Getty Images

Copyeditor: Michael Beckett

Proofreader: Foxxe Editorial

Indexer: Alexandra Nickerson

© 2012 Course Technology, Cengage Learning

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced, transmitted, stored or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the publisher.

For product information and technology assistance, contact us at
Cengage Learning Customer & Sales Support, 1-800-354-9706

For permission to use material from this text or product, submit all
requests online at **www.cengage.com/permissions**
Further permissions questions can be emailed to
permissionrequest@cengage.com

Some of the product names and company names used in this book have been used for identification purposes only and may be trademarks or registered trademarks of their respective manufacturers and sellers.

Microsoft and the Office logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Course Technology, Cengage Learning is an independent entity from the Microsoft Corporation, and not affiliated with Microsoft in any manner.

Disclaimer: Any fictional data related to persons or companies or URLs used throughout this book is intended for instructional purposes only. At the time this book was printed, any such data was fictional and not belonging to any real persons or companies.

Library of Congress Control Number: 2011925576

ISBN-13: 978-0-538-74676-2

ISBN-10: 0-538-74676-9

Course Technology
20 Channel Center Street
Boston, MA 02210
USA

Cengage Learning is a leading provider of customized learning solutions with office locations around the globe, including Singapore, the United Kingdom, Australia, Mexico, Brazil, and Japan. Locate your local office at:

international.cengage.com/global

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

To learn more about Course Technology, visit **www.cengage.com/course technology**

To learn more about Cengage Learning, visit **www.cengage.com**

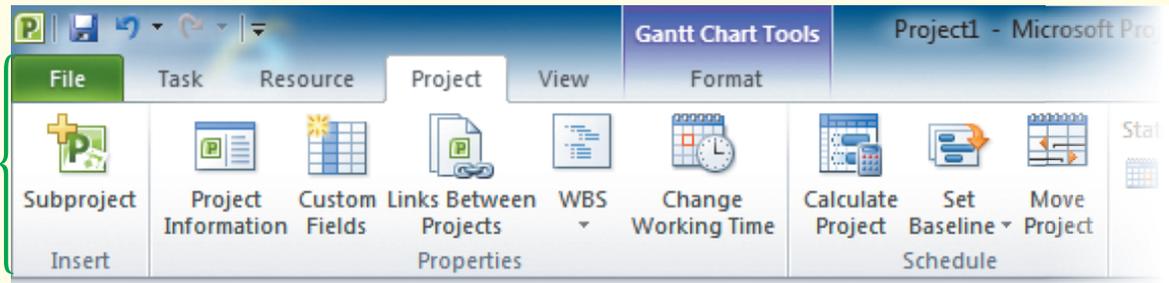
Purchase any of our products at your local college store or at our preferred online store
www.cengagebrain.com

Printed in the United States of America

1 2 3 4 5 6 7 8 9 15 14 13 12 11

SESSION 1.1 VISUAL OVERVIEW

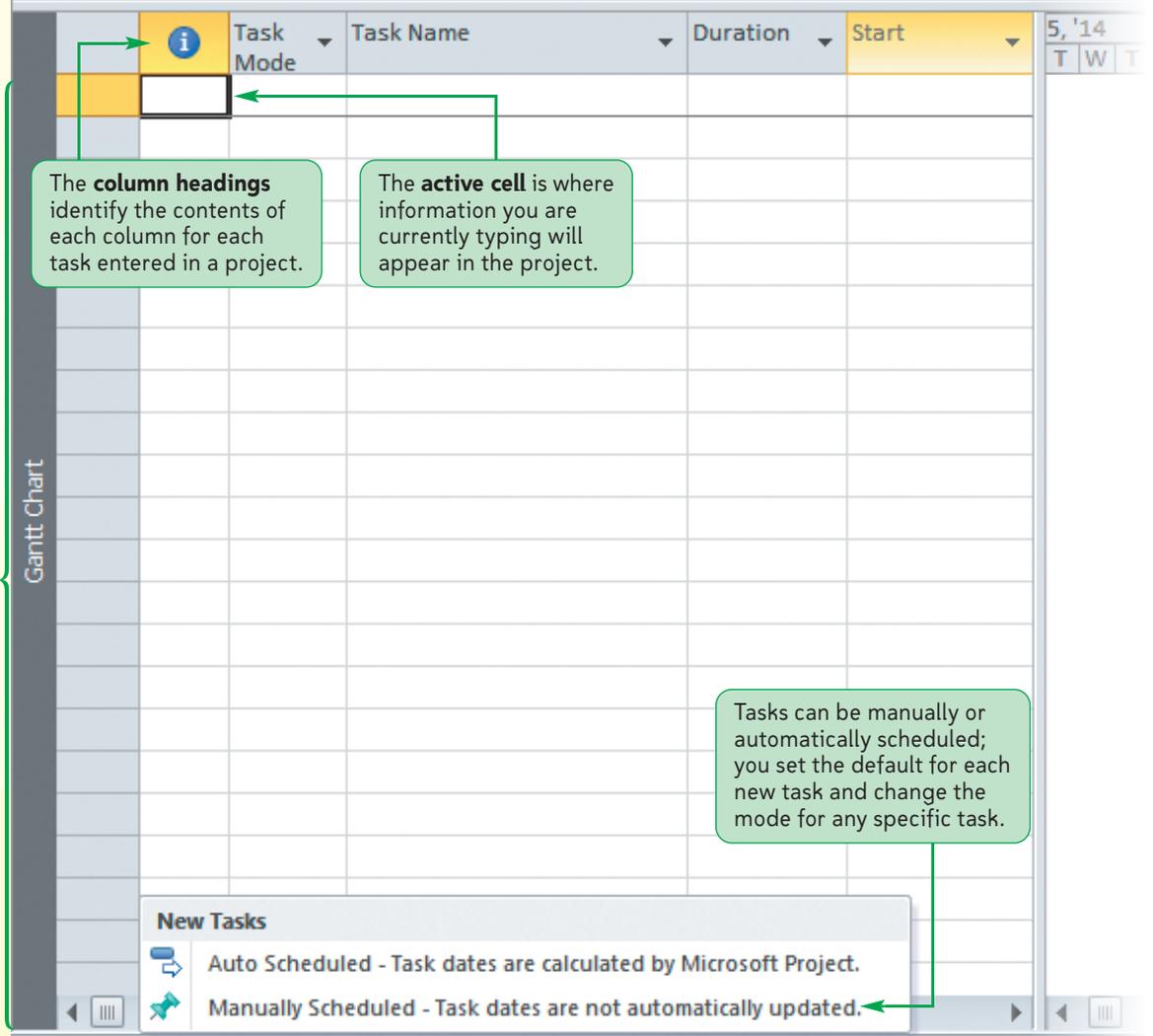
The **Ribbon** provides commands grouped on tabs to perform tasks necessary to set up and manage a project.



The **Timeline** shows an overview of the entire project schedule.



The **Gantt Chart**, one of several available views, shows task information in columns and rows on the left side of the window, with corresponding bars to the right of the window.



The **column headings** identify the contents of each column for each task entered in a project.

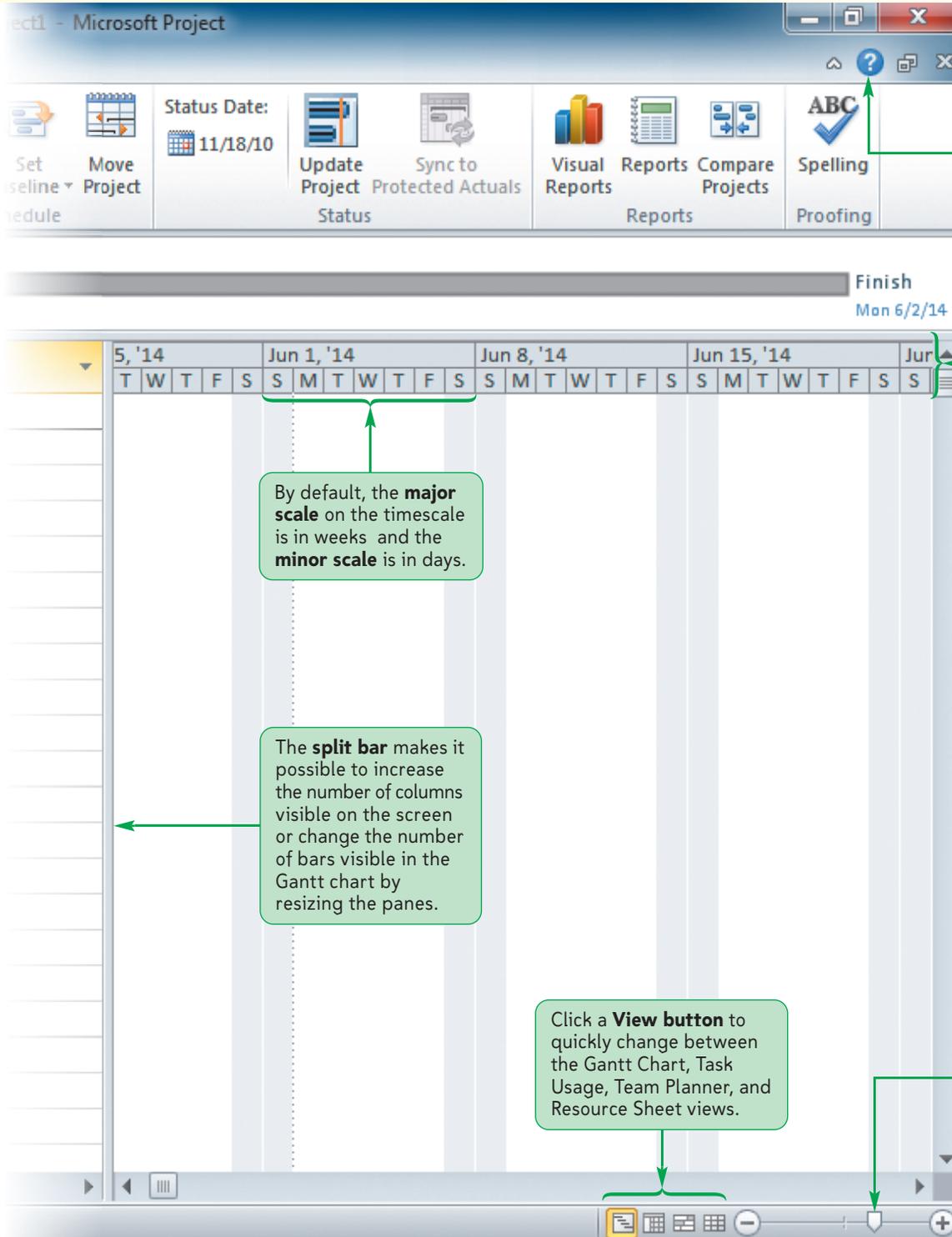
The **active cell** is where information you are currently typing will appear in the project.

The **status bar** displays important information such as whether tasks are manually or automatically scheduled, the cell mode, and the status of any filters.



Tasks can be manually or automatically scheduled; you set the default for each new task and change the mode for any specific task.

PROJECT WINDOW IN GANTT CHART VIEW



The Help button opens the Project Help window. In the Project Help window, you can type a keyword in the Search text box and then click the Search button to search for information about commands and features in the program.

By default, the **major scale** on the timescale is in weeks and the **minor scale** is in days.

The **timescale** appears above the Gantt Chart pane and shows the time period for the tasks. You can customize up to three tiers to display various time units such as months, weeks, and days.

The **split bar** makes it possible to increase the number of columns visible on the screen or change the number of bars visible in the Gantt chart by resizing the panes.

Click a **View button** to quickly change between the Gantt Chart, Task Usage, Team Planner, and Resource Sheet views.

The **zoom slider** allows you to zoom in or out of a timephased part of a view to show longer or shorter intervals of the project.

Introduction to Project Management

Having never managed a facility installation, you seek the advice of your friend, Alex Salazar. Alex tells you that installing technology for AV presentation rooms is nothing more than a **project**, a defined sequence of steps that achieve an identified goal. He suggests that you use **Microsoft Office Project 2010** to document and manage the AV Presentation Rooms Installation project because of its ability to help you calculate dates, assign responsibilities, and estimate costs. Alex explains that Project 2010 will also help you clearly communicate project information, such as the costs and status, to Sidney. He explains that all projects can benefit from professional project management but that technical and computer projects are especially good candidates due to their increased complexity, cost, and management expectations. You will learn how to use Project 2010 as you work on the ViewPoint Partners project.

The Project Goal

Project management includes the processes of initiating, planning, executing, controlling, and closing various tasks in order to meet the project's goal. The **project goal** is achieved when a series of tasks is completed that produce a desired outcome, at a specified level of quality, and within a given time frame and budget. Examples of project goals include: install a new computer system within six months for less than \$100,000; build a 2500-square-foot house within three months for less than \$350,000; earn a college degree in four years for less than \$80,000; and find a job within two months at which you can earn at least \$40,000 per year.

Microsoft Project 2010 helps you meet project goals by providing a tool for entering, analyzing, tracking, and summarizing information about the project. It also identifies ways to complete project tasks more efficiently and effectively. Being **efficient** means doing tasks faster, with fewer resources, and with lower costs. Being **effective** means meeting the actual goals of the project. Although being efficient is important and leads to greater productivity, being effective is much more important, as well as more difficult to achieve. It doesn't matter if a new computer system is installed in the specified time frame and under budget if the system doesn't work as intended. Using a tool such as Project 2010 will help you to be both efficient *and* effective by organizing task details, by allowing you to see how tasks are interrelated, by automatically updating date and cost information, and by providing communication tools used to make informed decisions.

INSIGHT

Knowing Where to Find Information

As a project manager, you should know where to get information that can help you in your job. Having resources readily available will give you an advantage as challenges and new phases of a project present themselves. One excellent source for information is an experienced project manager. Large corporations often employ several project managers all working together in a project management department to manage and support the various projects across the organization. The Internet is another excellent resource. Research the wealth of information about project management and related topics on the Web by using your favorite search engine. Another excellent resource for learning more about project management is the Project Management Institute's Web site at www.pmi.org. The Project Management Institute publishes the *Project Management Body of Knowledge (PMBOK®) Guide* and provides access to Project Management Professional (PMP) certification.

The first step in formally managing a project of any size is to define the project goal. The project goal should be as short and simple as possible, yet detailed enough to clearly communicate the specific scope, time frame, and budget expectations of the project.

Scope refers to all the work involved in creating the project products and the processes used to create them. Time frame refers to the length of time it will take to complete the project — from start to finish. Budget refers to the actual cost of the project. The **project manager** is the central person to whom all of the details of the project converge for entry into the project plan and the primary source of information regarding project status. The project manager along with management determines when a project is finished. A project is finished when all agree that the project goal has been met.

In your case, the project goal is to *install five AV presentation rooms to display media resources, to complete the installation within a time frame of three months, and to stay within a budget of \$100,000*. This broad goal assumes that you will describe additional project details, such as steps to define resources that need to be shared. Obtaining agreement from management on a project goal that addresses the issues of scope, time frame, and budget is essential if both the project manager and management are to stay synchronized with project expectations. Figure 1-1 compares vague project goals with improved project goals.

Figure 1-1 Setting project goals

Vague Project Goals	Improved Project Goals
Find a job	Secure a local job within the next six months working for a local college or high school that pays at least \$35,000 annually
Organize the company retreat	Plan the annual company retreat during the month of January in a convention center in a warm climate and within a budget of \$100,000
Build a house	Build a four-bedroom house in Dumont within a \$500,000 budget by July 1
Run a fund-raiser	Hold a fund-raising event to finance the new band uniforms by September 1

TIP

Project management skills can be applied to any project. You can apply project management skills to a small project, such as redecorating a room, or to a large project, such as building a bridge.

Often, during the course of a project, you will need to revise the project goal as unexpected issues alter the original plan. For example, you might have initially underestimated the cost or time required to complete the project. Project 2010 helps both the project manager and management predict and understand project progress and issues in order to minimize negative effects on the scope, time frame, or budget of the project.

Project Management Process Groups

A **process group** is a set of processes, or series of steps, that need to be completed in order to move on to the next phase of the project. The duration of a project is divided into five process groups: initiating, planning, executing, controlling, and closing. Each process group requires appropriate communication to management if you hope to stay synchronized with its needs and desires. Figure 1-2 describes some of the typical tasks and responsibilities that occur within each process group. Project 2010 supports each of these process groups by providing an integrated database into which you enter the individual pieces of project information. It uses the project information to create the screens and reports necessary to communicate project status throughout each process group.

Figure 1-2 Project management process groups

Process Group	Typical Responsibilities
Initiating	Setting the project goal
	Identifying the necessary project start or finish date limitations
	Identifying the project manager
	Identifying project budget and quality considerations
Planning	Entering project tasks, durations, and relationships
	Identifying project subdivisions and milestones
	Documenting available resources as well as their associated costs
	Entering applicable resource or task restrictions such as intermediate due dates or not-to-exceed costs
	Assigning resources to tasks
Executing	Producing work results, including the products or services required to meet project goals
	Requesting changes to the project
	Recommending quality and performance improvements
	Creating project records, reports, and presentations
Controlling	Updating project start, finish, and resource usage to completed or partially completed tasks
	Managing resource and task conflicts
	Working with the project to meet management timing, resource, and cost objectives
	Changing the project to meet new or unexpected demands
Closing	Entering the final status of the finished project, including task date, resource, and cost information
	Printing the final reports used to analyze the performance of the project

INSIGHT

Using Forms as Part of the Initiating Process

Many companies use forms, either electronic or paper, for collecting and organizing information to start the project planning and management process. Completing and approving forms can be a required part of the initiating phase or process group. For some companies, forms are regimented with strict guidelines. For others, forms are loosely organized and more flexible. Forms can identify the key players, general contact information, chain of command, and even scope and goals of a project. These forms often must be completed and approved through the management structure before a project can begin.

Project Management Terminology

Understanding key project terminology is fundamental to your success as a project manager. This section defines a few key terms that will help you when using Project 2010.

Task

A **task** is a specific action that needs to be completed in order to achieve the project goal. Because tasks are actions, task names generally start with a verb. Examples of tasks within the AV Presentation Rooms Installation project include “detail current status,” “purchase new equipment,” “wire the office,” and “train the users.” The specificity of the task depends on its complexity as well as on the needs of the users of the project information. If the task “train the users” involves learning multiple software applications, such as spreadsheets, word processing, and new accounting software, a single training task is probably too broad. If the task is to train the new users on how to create a new password for anything related to the AV presentation rooms, however, a single task describing this effort is probably sufficient.

Duration

Each task has a **duration**, which is how long it takes to complete the task. Some task durations are not flexible; they do not change regardless of the amount of resources applied. Meetings, for example, fall into this category because it generally doesn’t matter if five or six employees attend the orientation meeting—the scheduled duration of the meeting is still two hours. Most tasks, however, have a flexible duration, meaning that if two people of equal qualifications are assigned to a task, the task could be completed in less time. Wiring the office and taking the new equipment out of the boxes are examples of tasks with flexible durations.

In Project 2010, durations can be estimated or firm. An estimated duration appears with a question mark (?) after the duration unit of measure (such as day). So, for example, if you do not enter a duration for a new task, it will appear with an estimated default duration of one day, which appears as “1 day?.” By providing for both estimated and firm durations, Project 2010 gives you the ability to quickly find and filter tasks with durations that are not firm.

Start and Finish Dates

The **Start date** is the date that the project will begin. The **Finish date** is the date that Project 2010 calculates for completion of the project. By default, if you enter a Start date, Project 2010 will calculate the Finish date based on the task durations and relationships within the project. However, if you enter a Finish date, Project 2010 will calculate the Start date based on the task durations and relationships within the project.

Predecessors and Successors

A **predecessor** is a task that must be completed before a different task can be started, and a **successor** is a task that cannot be started until another task is completed. For example, if you are building a house, you cannot frame the roof until the walls are framed. Putting up the walls is the predecessor task for putting on the roof, and the roof task is a successor to the walls task. You can, however, start picking out flooring materials for the inside of the house without waiting for the walls or roof to be put up, so the task of choosing flooring materials does not have a predecessor.

Resources

Resources are the people, equipment, or facilities (such as a conference room) that must be assigned to a task in order to complete it. Some resources have defined hourly costs that will be applied as the task is completed (for example, the software trainer charges \$100 per hour). Some resources have per-use costs (for example, the conference room charge is \$200 per use). Some resource costs are not applied to a particular task but rather to the entire project (for example, a temporary receptionist is hired for the duration of the training task while existing employees are being trained). The degree to which you track task and project costs is defined by what management wants. If management is mainly concerned about when a project will be finished and if the project is well within budget, it might be unnecessary to spend extra time and energy tracking detailed costs and instead it might be acceptable to simply maintain a general accounting of costs. If management needs to track detailed project costs, then resource assignments and their associated costs must be entered and managed as part of the project.

Project Manager

As explained earlier in this tutorial, the project manager is the central person to whom all of the details of the project converge for entry into the project plan. The project manager also supervises the project's execution and is the main source of project status information for management. The project manager is expected to balance conflicting business needs, such as to not only finish a project by July 1 but also to finish it under budget. As such, the project manager must have excellent leadership, organizational, and communication skills.

Scope

As mentioned previously, scope is all the work involved in creating the products of the project and the processes used to create them. A clear project goal will help communicate the scope of the project. The more precise the project objectives and deliverables, the more clear the scope becomes. Projects that are not well defined, or those that do not have appropriate management involvement and support, can suffer from scope creep. **Scope creep** is the condition whereby projects grow and change in unanticipated ways that increase costs, extend deadlines, or otherwise negatively affect the project goal. For example, if a contractor is building a home with the help of an interior designer, scope creep can occur if the designer adds features and embellishments that were not part of the original plan.

Quality

Quality is the degree to which something meets an objective standard. Almost every project and task has implied quality standards. Without effective communication, however, they can be interpreted much differently by the project manager and by the employee or contractor completing the task. The more clearly those standards are defined, the more likely the task will be completed at a quality level acceptable to the project manager. Both the project manager and the person completing the task must agree on key quality measurements. For example, the task "install computer cabling" involves other issues that determine whether the task will be completed in a high-quality manner.

Quality concerns for the AV Presentation Rooms Installation project you are responsible for include the following:

- Will the installation be completed in a manner that doesn't interrupt the regular workday?
- How will the office furniture be moved and returned to its original location?
- What testing will be conducted?
- What type of documentation will be provided?
- When will payment be due?

Risk

Risk is the probability that a task, resource, or cost is miscalculated in a way that creates a negative impact on the project. Obviously, all risk cannot be eliminated. People get sick, accidents happen, and Murphy's Law is alive and well. Later in this book, you will learn how to use Project 2010 to minimize project risk.

INSIGHT

Maintaining Control of a Project

Just as all projects are unique, so too are the ways that project managers approach each project. Different project managers and businesses develop various methods for initiating and running a project. For example, some businesses set parameters and guidelines for their projects that do not exist in other businesses. Although approaches may differ, the project manager must always maintain control of the assignment of tasks, durations, and resources as well as watch for scope creep, monitor quality, and adjust for risk. If the project manager maintains this control, the project will be well managed.

Benefits of Project Management Software

As you have learned, the major benefit of formal project management is allowing you to complete a project goal at a specified level of quality within a given time frame and budget. On an organizational or enterprise level, providing consistent project delivery capability provides many advantages. As you review these advantages, shown in Figure 1-3, you begin to understand the benefits of project management as they relate to your project at ViewPoint Partners and your decision to use Project 2010.

Figure 1-3 Why would you use project management software?**Benefits of Using Project Management Software**

Better understanding of overall project goals and alignment with business objectives
Better understanding of project tasks, durations, schedule dates, and costs
More organized and streamlined way to manage the many details of a project
More accurate and reliable project status information
More efficient use of project resources
Better communication among management, the project manager, project participants, and other stakeholders
Faster response to conflicting project goals
Greater awareness of project progress
Faster project completion
Lower project costs
Fewer project failures

How Project 2010 Supports Successful Project Management

You use project management software, such as Project 2010, to manage and store all project information using one program. Project 2010 allows you to enter project information into one database so the information is centralized. By using one program, you are able to see how the various factors are interrelated and how changes to some of the information can impact the rest of the project. Project 2010 offers an organized, secure, and easy way to manage the many project details. In so doing, Project 2010 combines the functions of several types of application software, as explained in Figure 1-4. You could use all these different applications to assist in managing projects; however, Project 2010 allows you to use *one* software application to manage the entire project.

Figure 1-4 Project 2010 compared to other software applications

Application Software	Project 2010 Similarities
Database	Manages lists of tasks, durations, dates, resources, costs, constraints, and notes
Spreadsheet	Automatically recalculates durations and costs, task start and finish dates, and project start or finish dates
Chart	Provides several graphical views of project information, including the Gantt chart, Network Diagram, and Calendar views, to offer a visual overview of important data
Report Writer	Includes several predefined reports that provide varying degrees of detail in all areas of the project; allows the user to customize existing reports to show exactly the amount of detail needed
Enterprise Management	Allows integration with other enterprise applications when using Microsoft Project Server 2010

TIP

Software cannot tell if your tasks make sense in a real-world situation, and it will process the information based on what is entered in the program. So, be sure to input only valid and reasonable information.

With Project 2010, you start a project by entering a few tasks, often in sequential order. The integrated approach of Project 2010 allows you to expand the project as needed. As your project information requirements evolve, you can always enter and evaluate more information, such as planned, scheduled, and actual time frames, costs, and resource allocations.

Project 2010 includes several specialized tools to help you manage your projects. It also provides project planning assistance in the form of a guide.

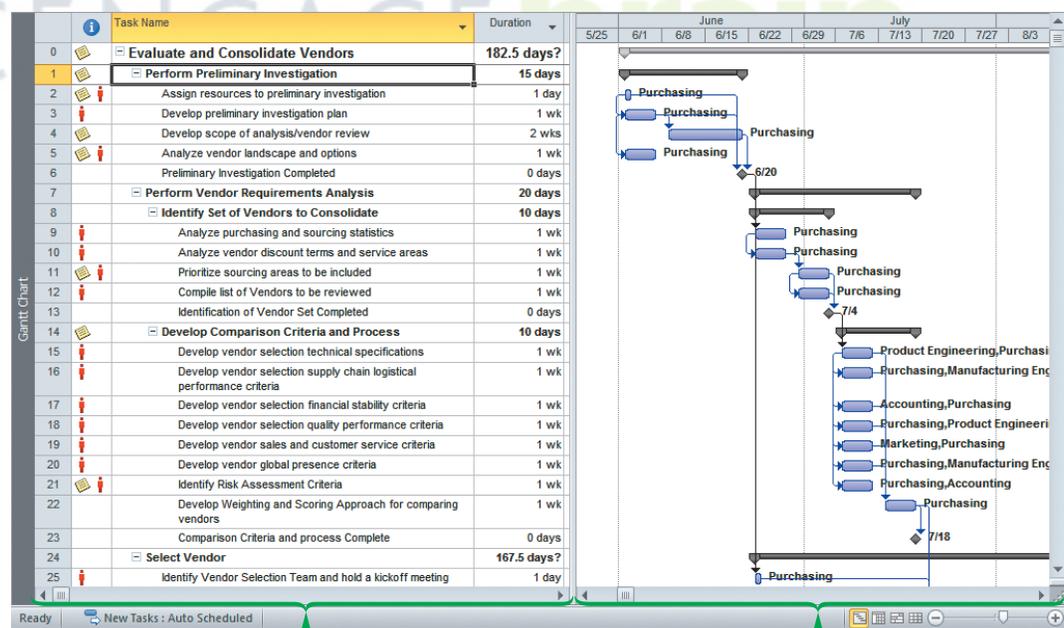
Chart and Diagram Tools

The Gantt chart and the network diagram are two important project management tools you can create using Project 2010.

Gantt Chart

The Gantt chart provides a graphical visualization of the project, with each task shown as a horizontal bar. The length of each bar in the Gantt chart corresponds to the duration of the task. Named for Henry Gantt (a pioneer of project management techniques), the Gantt chart graphically displays project schedule information by listing project tasks and their corresponding Start and Finish dates in a calendar format. The Gantt chart also depicts the dependencies between tasks by illustrating whether one task must be completed before another task begins. An example of a Gantt chart is shown in Figure 1-5. Project 2010 creates Gantt charts that you can view on the screen or print.

Figure 1-5 Example of a Gantt chart



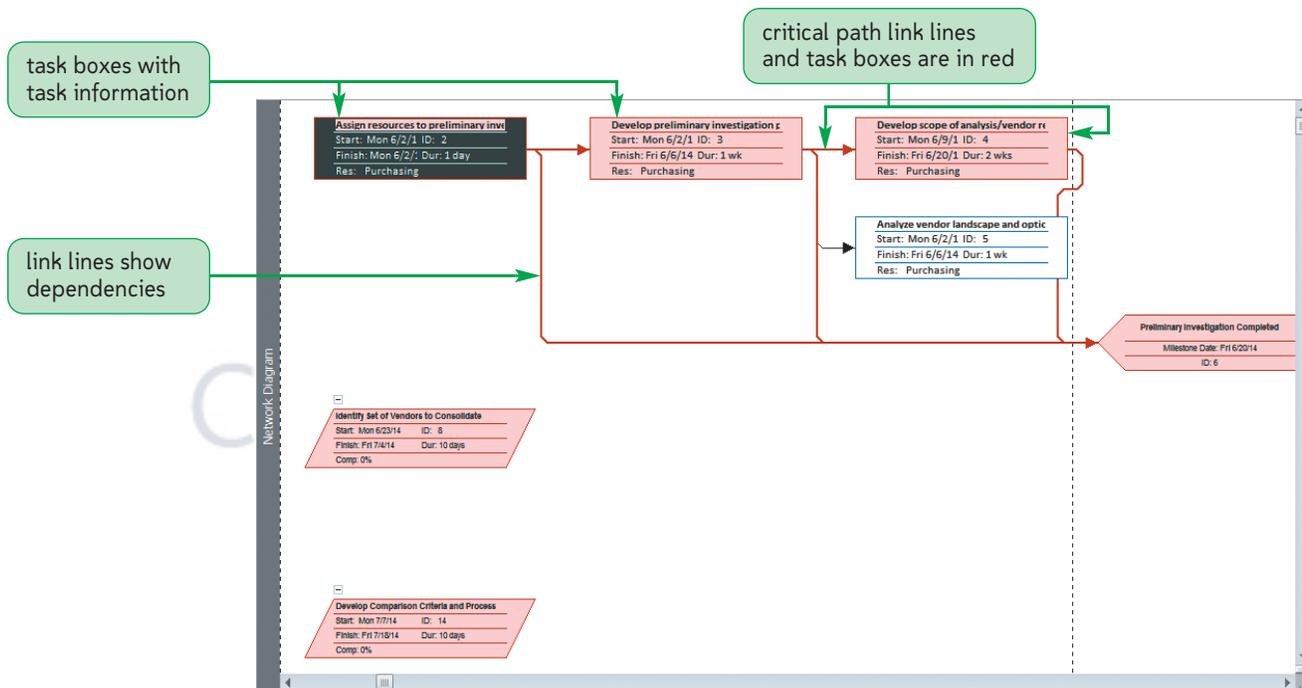
Entry table with tasks and durations used to create the Gantt chart

Gantt chart

Network Diagram

Although a Gantt chart illustrates whether one task is dependent on another, a **network diagram**, which displays each task as a box or **node**, more clearly illustrates the interdependencies of tasks. See Figure 1-6. Dependent tasks are linked together through link lines, thus creating a clear picture of how the tasks are sequenced. The primary purpose of the network diagram is to display the critical path. The **critical path** is the series of tasks (or even a single task) that dictates the calculated Finish date of the project. In other words, the critical path determines the earliest the project can be completed. Used together, the network diagram and the Gantt chart form a solid foundation for effective and efficient project management. You will create a simple Gantt chart and network diagram in this first tutorial and learn to create more complex ones in later tutorials.

Figure 1-6 Example of a network diagram




PROSKILLS

Decision Making: Choosing the Best Version of Project 2010 to Meet Your Needs

Because there are three versions of Microsoft Office Project 2010, it is useful to understand the differences among them so you can choose the version that best meets your needs. Fundamentally, you need to determine if a single-user version for individual contributors is appropriate, or if you need a server version that permits multiple users to work together using common data.

If you plan to manage projects independently from your desktop computer, you should choose **Project Standard 2010**, which provides the core tools that project managers, business managers, and planners need to manage schedules and resources independently. With Project Standard 2010, you can efficiently organize and track tasks and resources to keep your projects on time and within budget. You can integrate any Project 2010 project file with any Microsoft Office 2010 software, such as Microsoft PowerPoint and Microsoft Excel.

If you think that your needs will grow and you will eventually want to collaborate with others, then you should select **Project Professional 2010**, which can integrate with Project Server 2010, the enterprise management version. Project Professional 2010 provides all the capabilities in Project Standard 2010, however, Project Professional 2010 also includes the **Team Planner**, which shows resources and work over time. It also provides enterprise project management (EPM) capabilities, such as providing up-to-date information on resource availability as well as skills and project status across stakeholders. **Project Server 2010** is built on Microsoft SharePoint Server 2010, bringing together powerful business collaboration platform services with structured execution capabilities to provide flexible work management solutions. When a team publishes project information to the Microsoft Project Server, team members can view the information and report progress for their assigned tasks.

If you need to do any or all of the following:

- Communicate and collaborate with project team members and other stakeholders or partners over the Web, an intranet, or an extranet,
- Standardize project management processes across the organization,
- Understand resource workload and availability across projects, whether managed by you or others in the organization,
- Report across projects in the organization,

then you should choose the **Microsoft Project Server** solution. All versions of Microsoft Project integrate with the other Microsoft Office 2010 programs.

Project 2010 supports many features that help you to perform as an effective project manager. You will learn how to take advantage of these tools as you work through this book. Now that you know the benefits of project management and the basic terminology, you can start Project 2010 and begin to plan the AV Presentation Rooms Installation project for ViewPoint Partners.

Starting Microsoft Project 2010

Before you can create a project, you need to start Project 2010, set up your screen to match the figures in this book, and then learn about the organization of the Project 2010 window.

TIP

You can also start Project by clicking the Project button if it has been pinned to the taskbar.

To start Project 2010:

1. On the taskbar, click the **Start** button to display the Start menu, click **All Programs** to display the programs installed on your computer, and then click Microsoft Office. The Microsoft Office folder opens displaying the list of Microsoft Office programs installed on your computer.

2. Click **Microsoft Project 2010**. The Microsoft Project window opens. Refer back to the Session 1.1 Visual Overview shown earlier.

Trouble? If you don't see Microsoft Project 2010 after you click Microsoft Office, try typing "Project 2010" in the Search programs and files box on the Start menu. If you still don't see Microsoft Office Project 2010 on the menu, ask your instructor or technical support person for help.

Trouble? Project 2010 will prompt you to register or activate the product the first time it is used. If you are working with your own copy of Project 2010, it's a good idea to register the product with Microsoft in order to receive support and future product information.

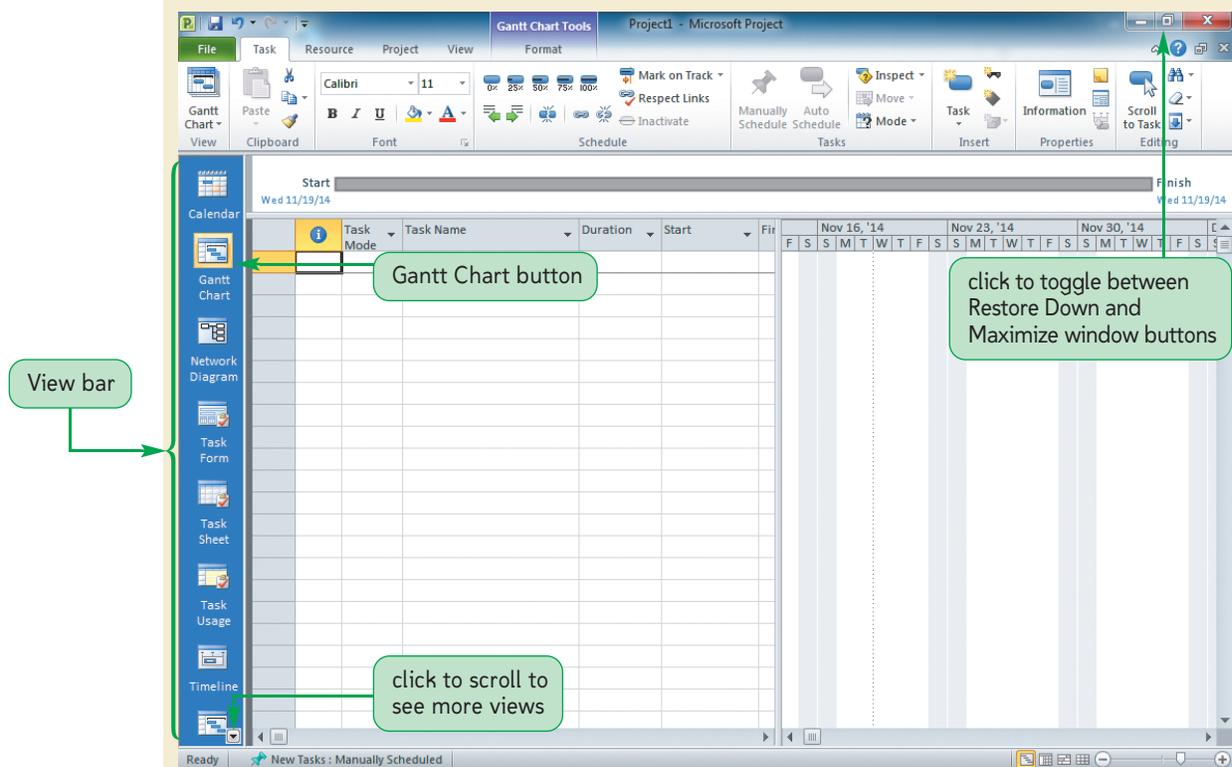
The View Bar, when open, provides quick access to the many project views. Each view is represented as an icon. You click the icons to switch views. (If the View Bar is open by default, skip Step 1.)

To open the View Bar:

1. Right-click the **Gantt Chart** text on the left side of the window, and then click **View Bar**. The View Bar opens on the left side of the window.
- Trouble?** If the Gantt Chart button is not selected in the View Bar (it should have an orange background), click it to select it.
2. If the Project program window is not maximized, click the **Maximize** button in the upper-right corner of the program window. Compare your screen to Figure 1-7.

Figure 1-7

Project window with View Bar open



Project 2010 is now running, and you can start entering tasks and durations. But first, you will take a closer look at the Project 2010 window.

Viewing the Project 2010 Window

The Project 2010 window consists of a number of elements that are common to Windows applications, such as the title bar, which identifies both the project name and the application name, the Ribbon for all the commands, and the status bar. Additional elements in the window are specific to Project 2010.

View Bar

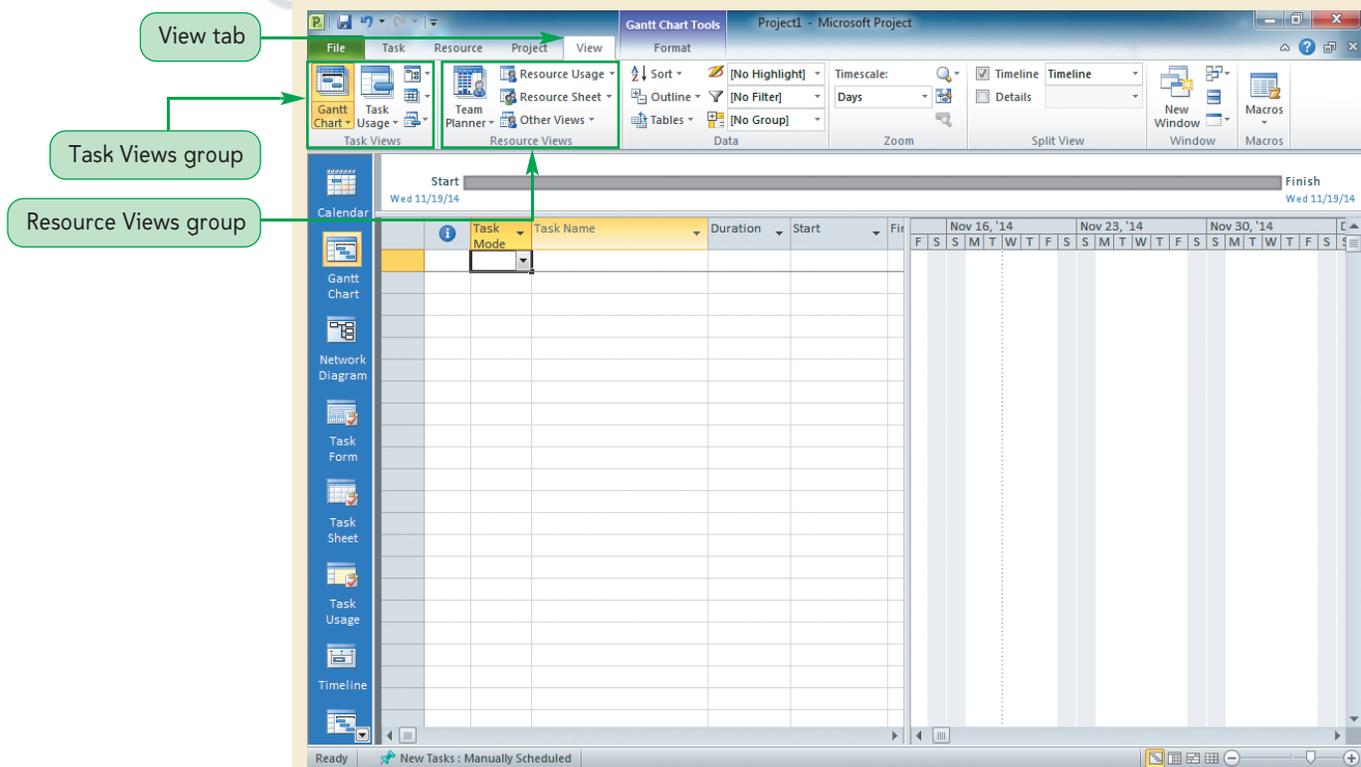
The **View Bar**, which appears to the left of the project window, contains View buttons that you use to switch from one project **view** to another. Views, such as Calendar, Gantt Chart, and Network Diagram, are different ways you can display your project. Each view displays task, resource, and cost information with varying levels of detail. If the bottom of the View Bar includes a small black triangle that points down, it indicates that more View buttons are available. Refer back to Figure 1-7. If your Window doesn't fill the screen, or your screen is set to a lower resolution, you might see fewer than the nine View buttons. To switch views, you click a button on the View Bar.

Depending on your personal preferences for the way the screen is set up, you may or may not want to open the View Bar. If you prefer to use the Ribbon interface, you click the View tab on the Ribbon, and then click the desired View button in the Task Views or Resource Views group.

To review the View tab and close the View Bar:

1. Click the **View** tab on the Ribbon. See Figure 1-8.

Figure 1-8 View Bar and View tab on the Ribbon



2. Point to each of the buttons in the Task Views group and read the ScreenTip.
3. Point to each of the buttons in the Resource Views group and read the ScreenTip.

- 4. Right-click the **View Bar**, and then click **View Bar**. The View Bar closes and the Entry table expands to fill the space.

You will learn about changing views in the next session.

Entry Table

The default view is Gantt Chart view. In this view, the pane on the left lists the tasks and associated information about each task. The pane on the right displays the Gantt chart. The list of tasks on the left is the **Entry table**, a spreadsheet-like display of project information organized in rows and columns. Each task entered becomes a new row, and the columns contain the individual pieces of information related to each task. The two most important pieces of information about a task are provided in the Task Name and Duration columns.

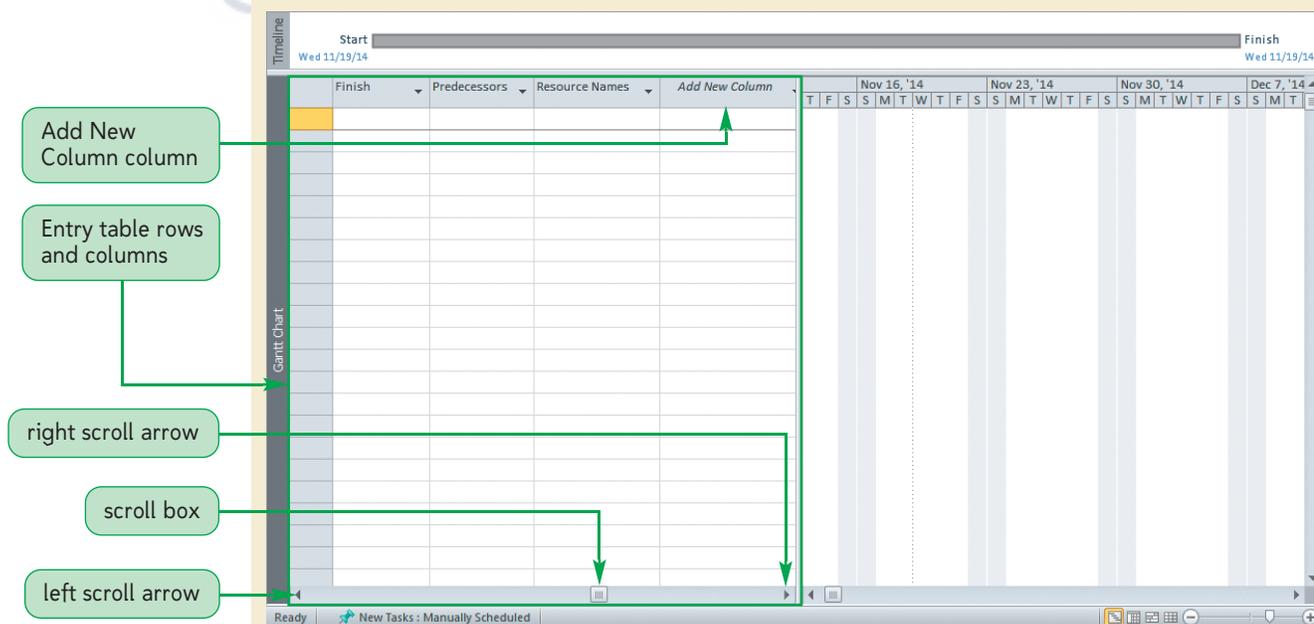
The Entry table consists of many more columns of information than are shown in Figure 1-8. To see these other columns, you can use the horizontal scroll bar at the bottom of the Entry table.

To scroll the Entry table:

- 1. Click the right scroll arrow in the horizontal scroll bar at the bottom of the Entry table pane as many times as necessary to scroll the table so that you can see the Resource Names column and the *Add New Column* column. Refer to Figure 1-9.

Figure 1-9

Scrolling the Entry table



- 2. Drag the scroll box in the horizontal scroll bar at the bottom of the Entry table all the way to the left. Some columns, such as the Resource Names column and the *Add New Column* column, are no longer visible in the Entry table pane.
- 3. Click the **Task** tab on the Ribbon.

Often, the columns in the Entry table are filled in automatically as you enter information about the task in another view, such as Calendar or Task Usage view. The Start date,

for example, is the current date, unless you specify something else. If you are using the Automatically Scheduled task mode, the Finish date is automatically calculated as the Start date plus the duration. The Predecessors and Resource Names columns will be filled in automatically as you specify task relationships and assign resources. You may type directly into the Entry table, but generally the Task Name and Duration columns are the only pieces of information that you enter manually. You will learn more about task modes when you enter tasks later in this Tutorial.

Gantt Chart

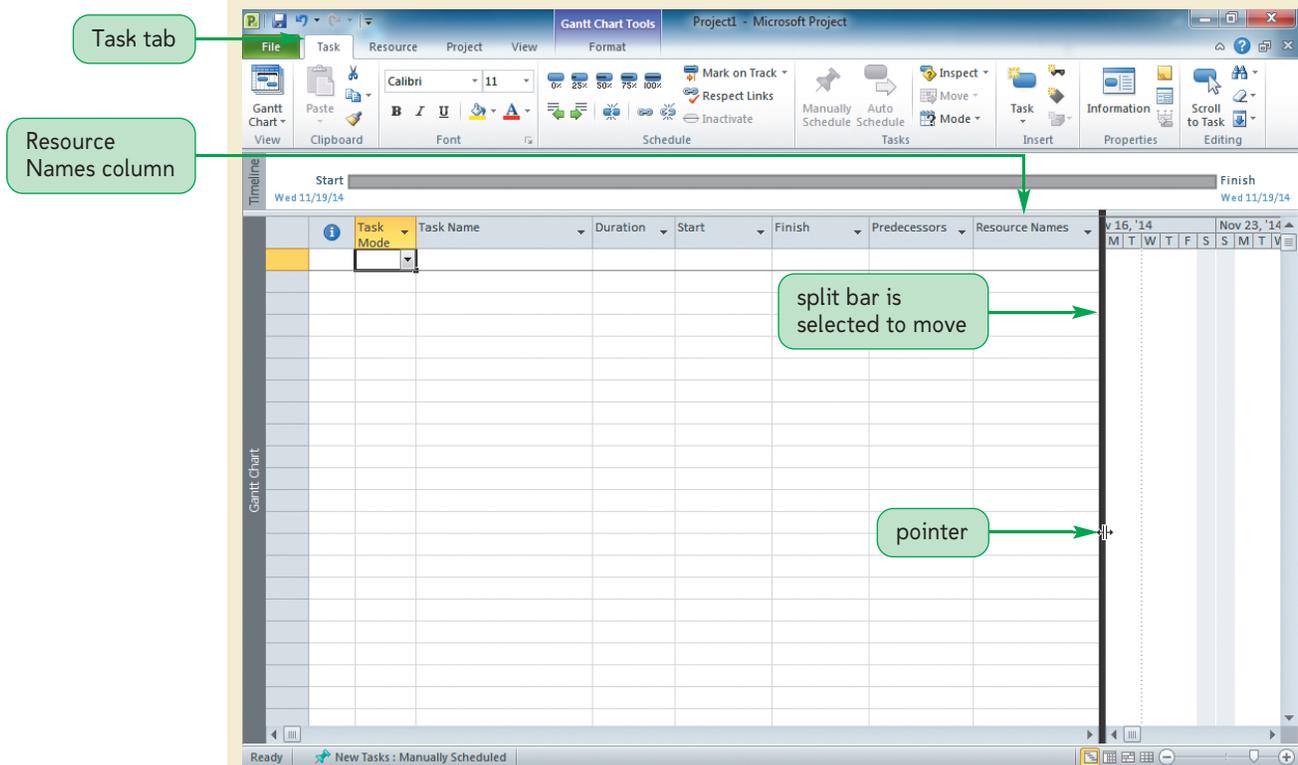
You have already learned that the Gantt chart is a primary tool used by project managers to graphically communicate information about a project. Each task is identified as a horizontal bar, the length of which corresponds to the duration of the task as measured by the timescale at the top of the Gantt chart. The Gantt chart can be formatted to show many other attributes of the project, including relationships between tasks, resource assignments, and dates. As you enter more information into the project, the Gantt chart changes to display the information.

In the project window, the Entry table and the Gantt chart are in separate panes with a vertical split bar dividing them. You can drag this split bar to resize the panes.

To drag the split bar:

1. Place the mouse pointer on the **split bar** between the Entry table and the Gantt chart. The pointer changes to $\leftarrow\rightarrow$.
2. Press and hold the left mouse button, drag the $\leftarrow\rightarrow$ pointer to the right, and then release the mouse button. The bar becomes a solid dark bar when you click and drag it.
3. Use the $\leftarrow\rightarrow$ pointer to continue to drag the split bar as needed until you can see the Resource Names column in the Entry table, as shown in Figure 1-10.

Figure 1-10 Dragging the split bar



Trouble? You might see more or less information in the Gantt chart depending on your screen resolution.

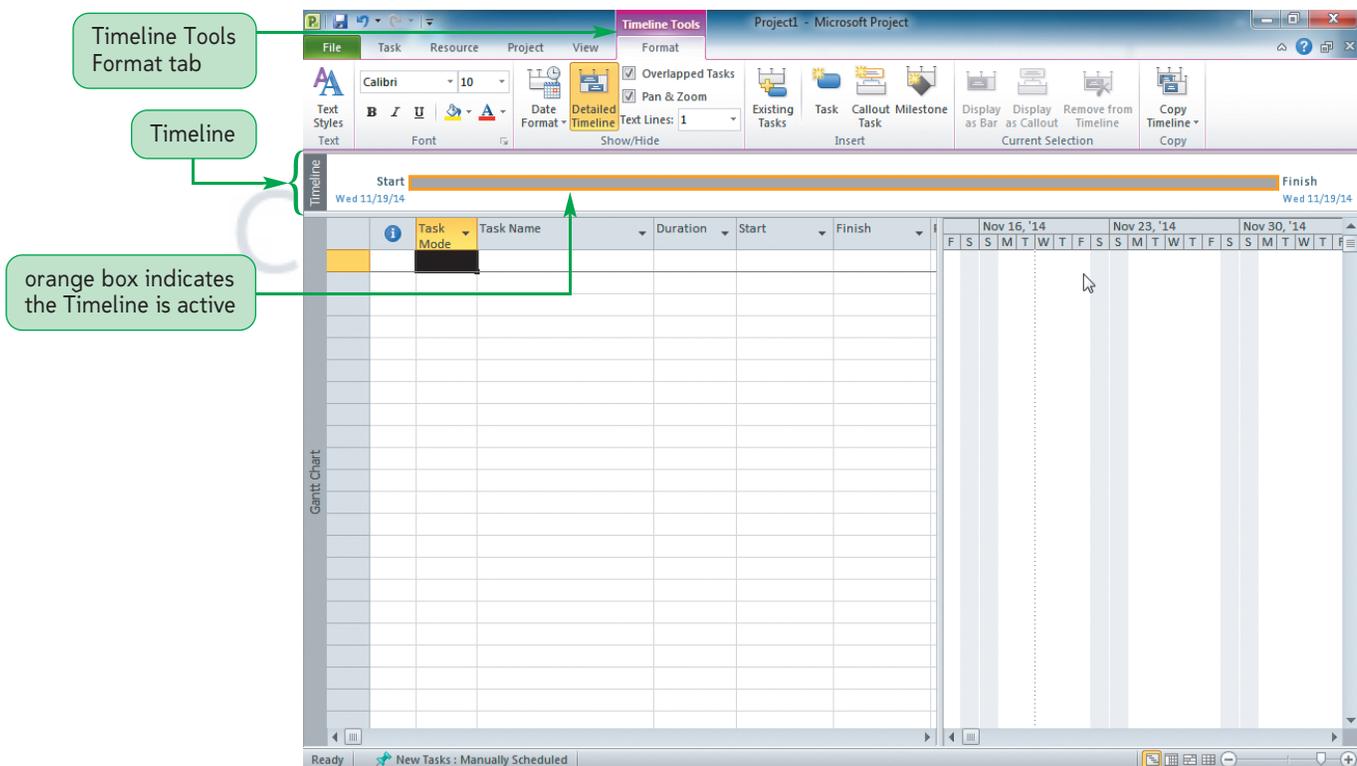
4. Use the $\leftarrow\rightarrow$ pointer to drag the split bar to the left until it is positioned at the right edge of the Finish column in the Entry table.

Timeline

The Timeline, displayed above the Entry table pane and the Gantt chart pane and below the Ribbon, provides a visual overview of the project from the Start date to the Finish date. You can elect whether or not to display the Timeline in the Gantt Chart view by right-clicking the Timeline and clicking Show Timeline, or by clicking the View tab and clicking the Timeline check box in the Split View group. When the Timeline is active, the Timeline Tools Format tab is available, providing access to commands you can use to enhance the Timeline. The Timeline has orange highlights when active. See Figure 1-11.

Figure 1-11

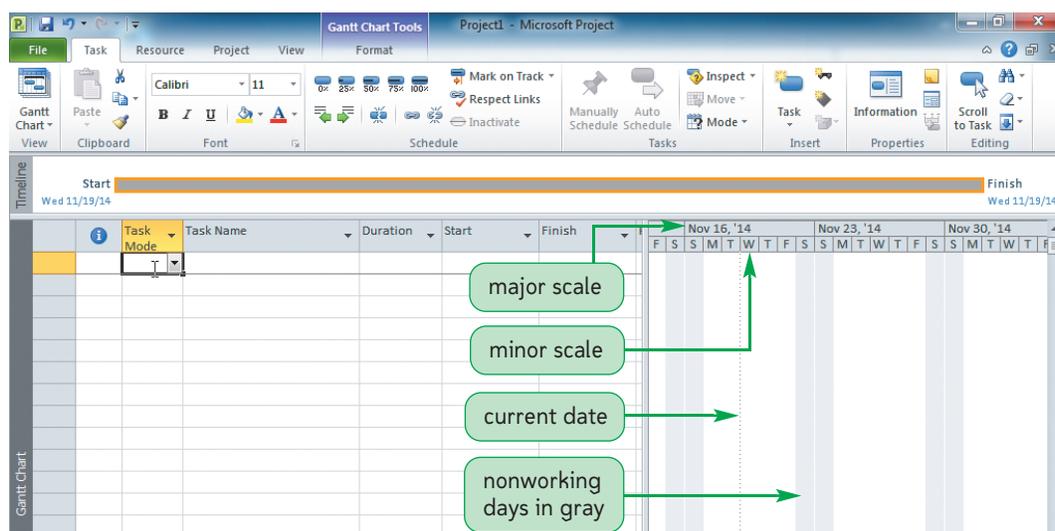
The Timeline



Timescale

The timescale, displayed along the top edge of the Gantt chart pane, displays the unit of measure that determines the length of each bar. See Figure 1-12. The timescale normally has two rows: a major scale (the upper scale) and a minor scale (the lower scale). By default, the major scale is measured in weeks and displays the date for the Sunday of that week, and the minor scale is measured in days and displays the first letter of the days of the week.

Figure 1-12 The timescale



Both the major and minor scales can be modified to display a different unit of measure (minutes, hours, days, weeks, months, quarters, and years) as well as different labels. For example, week labels can be displayed in different ways, such as January 30, 2014; Jan 30, '14; 1/30/14; and Tue 1/30/14. You can also add a third level to the timescale, which is used to further distinguish the time.

As with the Entry table pane, you can scroll the Gantt chart to see parts of the chart not currently in view. When you scroll the Gantt chart, you are essentially moving the timescale. Nonworking days are shaded in gray, by default. For new Project files, the current date is identified by default as a gold vertical line.

To scroll the Gantt chart:

1. Drag the **horizontal scroll** box in the Gantt chart pane to the far right of the scroll bar. As you drag the scroll box, a date ScreenTip appears to indicate how far you are moving the timescale.
Often, you'll want to return to the first bar in the Gantt chart.
2. Press and hold the **Alt** key, and then press the **Home** key. The Alt+Home keystroke combination moves the Gantt chart to the project's Start date so that the first bar is visible. The Alt+End keystroke combination moves the Gantt chart to the project's Finish date.
3. Click anywhere on the **Timeline**. Notice how the gray bar now has an orange outline. Colors, specifically orange highlighting, are used throughout Project 2010 as an indicator for active panes, columns, and buttons. If you place your pointer over a column in the Entry table, it too will take on an orange glow.

Current Date

By default, the **current date** is today's date, as determined by your computer's clock. It is represented in the Gantt chart by a gold vertical line. The Start date is represented by a dotted line. Unless specified differently, all tasks are scheduled and all progress is measured from the current date. You can, however, easily change the current date. Some project managers find it useful to change the current date when planning future projects. As you work on projects, you will develop your own preferences for working with the

current date settings. Note that the dotted line is not clearly visible if the current date is Saturday or Sunday or Monday because it appears in or next to the nonworking day line.

Working Days and Nonworking Days

Nonworking days are displayed as light gray vertical bars on the Gantt chart. By default, Saturday and Sunday are considered nonworking days. Therefore, if a task has a three-day duration and starts on Friday, the bar will stretch through Saturday and Sunday, and finish on the third working day, Tuesday. Or, if you happen to specify that a task starts on a Sunday, Project 2010 will move that task to begin on Monday. For specific holidays or vacation days in which no work should be scheduled, you can open the project's calendar and specify more nonworking days. Similarly, you can change Saturday or Sunday to be working days if you need to schedule work on those days. Later, you'll learn that individual resources can be assigned individual calendars to accommodate individual work schedules, vacations, and holidays.



Teamwork: Considering Working Days in a Global Economy

In order for teams to work together, the team members need to know when everyone is available to work. In many countries, working days are typically Monday through Friday, and Saturdays and Sundays are nonworking days. In some countries, however, work weeks are six rather than five days, and in still other countries, work weeks are a four-day week. Holidays also differ from country to country and from one group of people to another. All of this needs to be taken into consideration when planning a project so that team members are not being asked to work on a nonwork day or a holiday particular to them. Project 2010 allows you to specify any date as a working or a nonworking day. For example, if you work for a company in the United States that allows its employees to take the Friday after Thanksgiving off, you can set that day as nonworking. In Canada, the Canadian Thanksgiving is celebrated in October. For those projects that require different nonworking days for different project participants, you can specify the different working and nonworking days in the calendar so that all project participants are aware of the days that team members are and are not working. You will learn later how to apply different calendars to the different resources to accommodate those differences.

Understanding Start and Finish Dates and Manual or Automatic Scheduling

When you create a new project, the program assigns a Start and Finish date. The Start date is assumed to be the current date, unless specified otherwise. If you enter a Start date, Project 2010 will calculate the Finish date based on the task durations and relationships within the project. You can change this so that you can enter a Finish date, and Project 2010 will calculate a Start date, again based on task durations and relationships within the project. Specifying a Finish date is appropriate and necessary for projects such as conventions that must occur on a specific date. You can only set the Start date or the Finish date of the project. Project 2010 will calculate the other one. When there are no tasks in the project, the Start date and Finish date are the same date.

In addition to setting the Start or Finish date, you can set how tasks are scheduled. If tasks are set to be Automatically Scheduled by Project 2010, then task dates are automatically calculated and updated by Project. If tasks are set to be Manually Scheduled (which is the default setting), you enter Start and Finish date and these dates are not calculated by Project, regardless of changes. Manually scheduled tasks give project managers greater control over tasks, durations, Start, and Finish dates because project managers can assign durations that are not changed by dependencies or delays in other tasks.

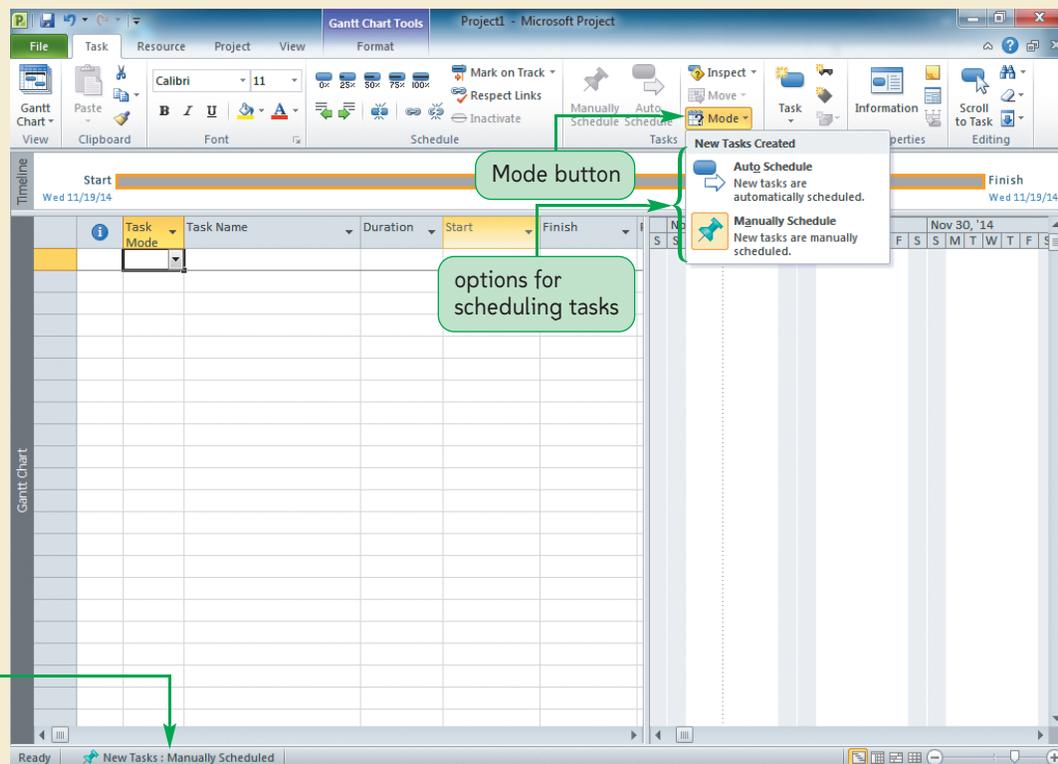
To set the automatic scheduling:

1. In the Tasks group on the Task tab, click the **Mode** button. The two options for determining how new tasks are scheduled are displayed on the menu that opens. See Figure 1-13.

Figure 1-13 Setting the scheduling mode

TIP

You can quickly switch between automatic and manual scheduling by clicking New Tasks: Manually Scheduled or New Tasks: Auto Scheduled on the status bar and selecting the option (manual or automatic) on the menu that opens to toggle between the two modes.



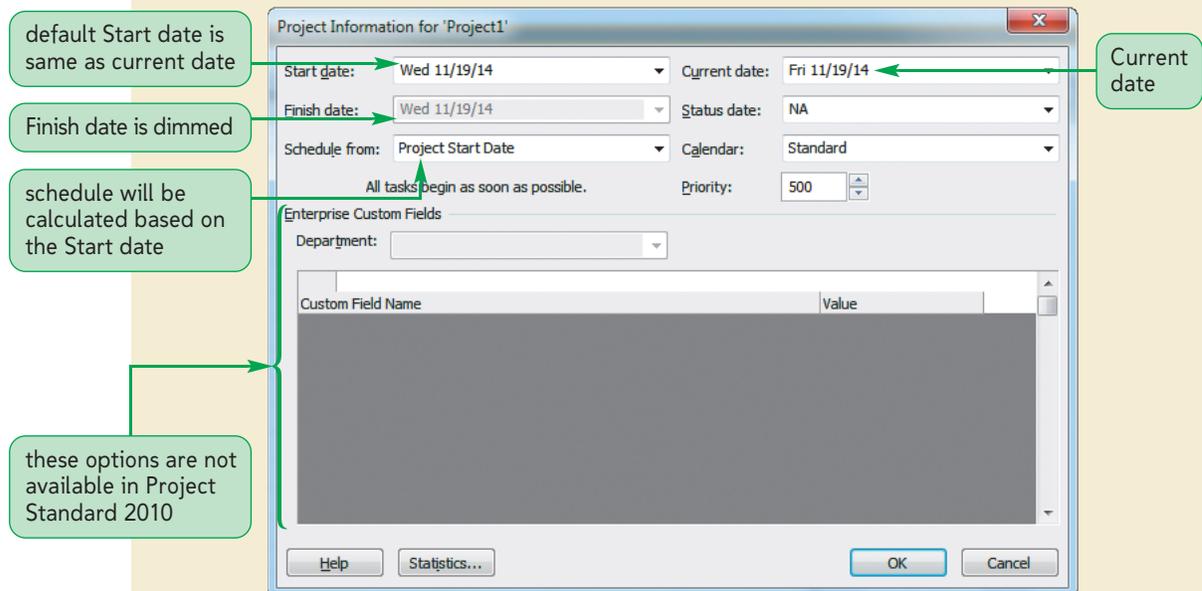
2. Click **Auto Schedule**. All new tasks for this project file will be scheduled automatically.

Now, Emily wants you to review the current project information which will change automatically as you enter new tasks, dependencies, calendars and constraints.

To set the project Start and Finish dates:

1. Click the **Project** tab on the Ribbon, and then, in the Properties group, click **Project Information** to open the Project Information dialog box. See Figure 1-14. The current date is listed as both the Start and Finish dates, and the Schedule from option indicates that the schedule will be calculated based on the Start date. When there are no tasks in the project, the Start date and Finish date are the same date. As you add tasks, the Finish date is recalculated based on the durations and relationships of the tasks entered. Notice that the Finish date option is in light gray, or dimmed. This means you cannot change it unless you change the Schedule from option to Project Finish Date.

Figure 1-14 Project Information dialog box for a new project

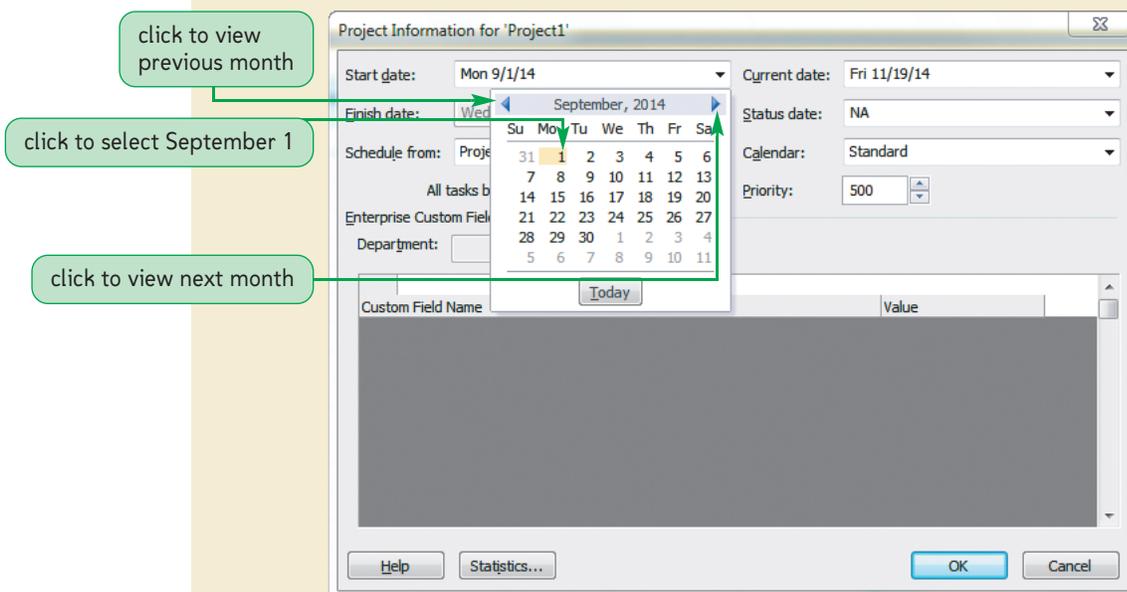


2. Click the **Schedule from** arrow, and then click **Project Finish Date**. Now the Start date option is dimmed. Next, you'll change the schedule option back to its default setting and set the Start date.
3. Click the **Schedule from** arrow, and then click **Project Start Date**.
4. Click the **Start date** arrow, click the **right** or **left arrow** on the calendar to scroll to September, 2014, and then click the **1** on the calendar, as shown in Figure 1-15. The Start date is now set to Monday, September 1, 2014. The Finish date will automatically change to September 1, 2014 when you close the dialog box.

TIP

You can also type the date using any format such as mm/dd/yy or mmm/dd in the Start date or Finish date text boxes.

Figure 1-15 Changing the current date



- 5. Click **OK** in the Project Information dialog box to apply your changes. Notice that the Gantt chart has scrolled to display the week in which September 1, 2014 appears, and the Timeline shows the updated Start and Finish dates as 9/1/2014.

Entering Your First Tasks

Every project contains tasks. Sidney and Emily met, and they gave you have a list of a few tasks necessary for the installation project. You will enter those tasks next. When you enter a task, Project 2010 enters a default estimated duration of one day. You can change this to any amount of time. The default unit of measurement is days, so to enter a duration of five days, you can enter "5," "5d," or "5days."

TIP

Task names should be as short as possible, and yet long enough to clearly identify the task.

To enter tasks and durations:

- 1. Click the **Task** tab on the Ribbon, verify that **New Tasks: Auto Scheduled** appears on the status bar, click the **Task Name** cell in row 1, type **Document hardware**, and then press the **Tab** key. See Figure 1-16.

Figure 1-16

Adding a task

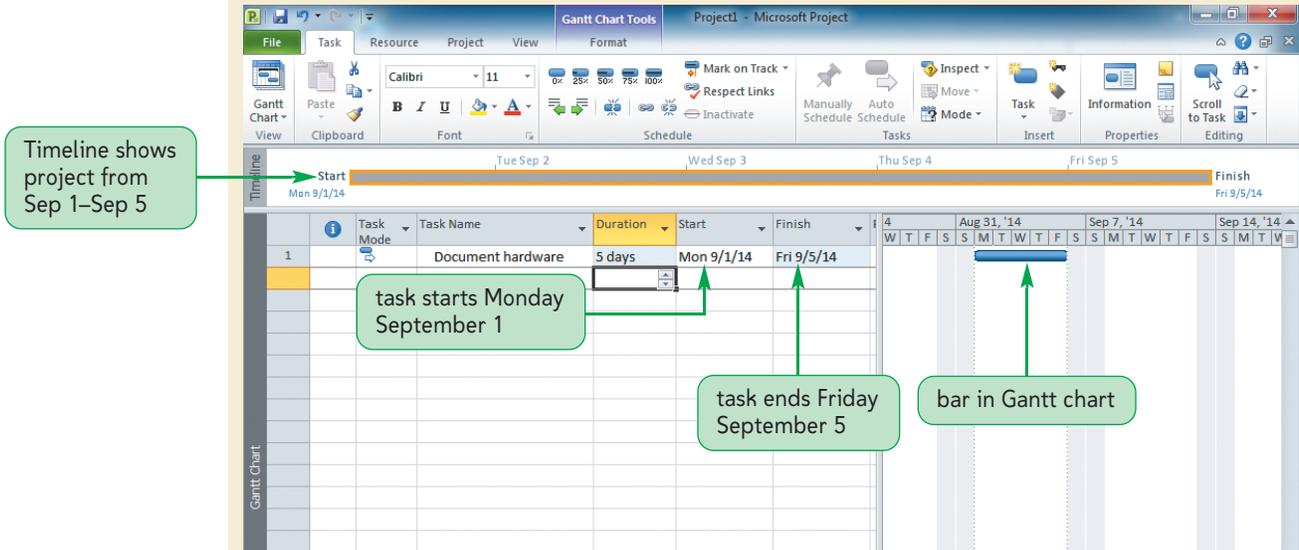
The screenshot shows the Microsoft Project 2010 interface. The 'Task' tab is selected on the ribbon. The 'Entry table' is visible, with the first row containing the task 'Document hardware' and a duration of '1 day?'. The 'Task Mode' column shows an icon indicating the task is automatically scheduled. The 'Timeline' and 'Gantt Chart' are also visible, showing a bar for the task starting on Monday, 9/1/14.

Task Mode	Task Name	Duration	Start	Finish
1	Document hardware	1 day?	Mon 9/1/14	Mon 9/1/14

The Duration cell for the first row is now the active cell. The default entry is 1 day?. The question mark indicates that the duration is an estimate. The default duration for a task is estimated at 1 day, but the unit of measure, such as hours, days, weeks, or months, for the duration can be changed at any time. The Task Mode column has the icon that identifies this task as an automatically scheduled task. Note that the row now contains a row number in the first column.

- 2. Type **5**, and then press the **Enter** key. You have made the duration for this task five days because it will involve researching, inspecting, and documenting each existing piece of equipment. ViewPoint Partners will be installing five AV presentation rooms and you think that this task will take one day per room. Because this project is scheduled from a Start date and not from a Finish date, tasks begin on the Start date. If the Start date you set is a nonworking day, the project starts on the next working day. Notice that the Timeline spans the five days of the project and a blue bar stretching five days has been added to the Gantt chart. Your screen should look like Figure 1-17.

Figure 1-17 First task entered

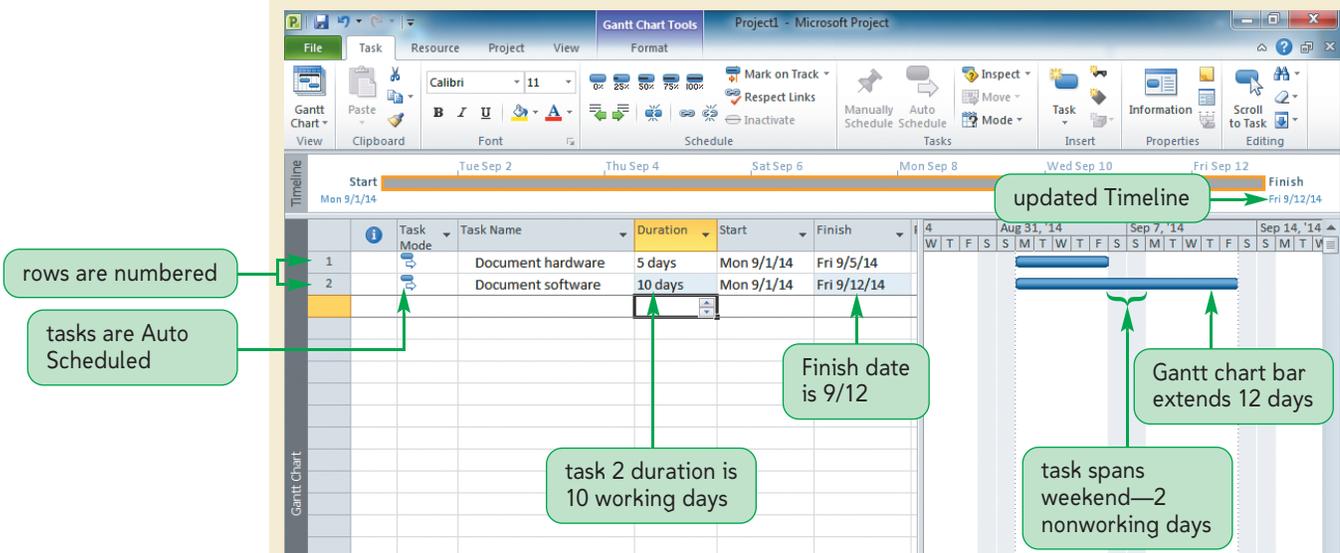


Trouble? If you can't see both the Task Name and Duration columns, drag the split bar as needed to show those columns.

The second task that you will enter, Document software, involves finding all existing software licensing agreements, making sure that each user is on the most current level of software possible, and documenting each workstation's software configuration. You estimate that the effort will take two days per room, and you must research five AV presentation rooms.

3. Click the **Task Name** cell in row 2, type **Document software**, press the **Tab** key, type **10** in the Duration cell, and then press the **Enter** key. As you can see in Figure 1-18, the Finish date is 9/12. The bar corresponding to this task in the Gantt chart ends September 12, which is 10 working days, but 12 actual days from the Start date. It spans one weekend or two nonworking days. The Timeline has also been updated to include the new task.

Figure 1-18 Two tasks entered



Trouble? The bars on the Gantt chart might or might not be visible, depending on the time period displayed on the timescale. You will learn more about the timescale later.

You can use the horizontal scroll bars at the bottom of each pane to scroll each pane. For example, you can scroll the pane on the left to see additional columns, or you can scroll the pane on the right to see more of the Gantt chart. When working on a project you will find you need more or less space in each pane. When this happens, you can close the Timeline or you can open or close the View Bar to organize your window panes to best meet your needs.

Saving a Project

Saving a project file is very similar to saving a word processing document or a spreadsheet. You specify a filename as well as a location for the file. The rules for filenames in Project 2010 follow Windows filename conventions. The location consists of the specified drive and folder or subfolders.

REFERENCE

Saving a Project for the First Time

- Click the Save button on the Quick Access toolbar *or* click the File tab on the Ribbon and then click Save.
- Change the folder and drive information to the location where you want to save your file.
- In the File name box, type the filename.
- Click the Save button (or press the Enter key).

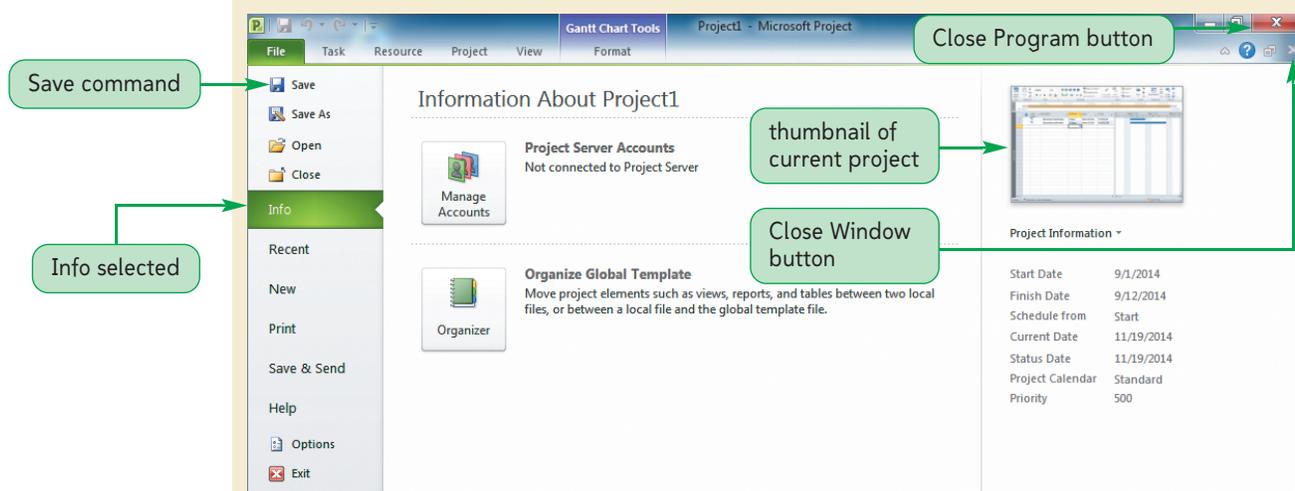
Project 2010 automatically appends the .mpp filename extension to identify the file as a Project 2010 file. Depending on how Windows is set up on your computer, however, you might not see the .mpp extension. These tutorials assume that filename extensions are displayed.

To save the project:

1. Click the **File** tab on the Ribbon. Project 2010 Backstage view opens. See Figure 1-19.

Figure 1-19

Backstage view



2. Click the **Save** command on the navigation bar. The Save As dialog box opens.

3. Type **Rooms** in the File name box.

4. Navigate to the **Project1\Tutorial** folder included with your Data Files.

Trouble? If you don't have the starting Data Files, you need to get them before you can proceed. Your instructor will either give you the Data Files or ask you to obtain them from a specified location (such as a network drive). In either case, make a backup copy of the Data Files before you start so that you will have the original files available in case you need to start over. If you have any questions about the Data Files, see your instructor or technical support person for assistance.

5. Click the **Save** button in the Save As dialog box. The dialog box closes and the file is saved in the location you specified with the filename you specified.

TIP

If you choose not to display filename extensions, the file extensions will not appear in the Open or Save As dialog boxes.

The name of your file, Rooms.mpp, now appears in the title bar, and the file is saved. If you have your system set up not to display filename extensions, you will see Rooms in the title bar.

Closing a Project File

As with other Windows applications, you may have more than one file open (in this case, a project file). You can switch between the open files by using commands in the Window group on the View tab or by hovering over the Project button on the taskbar and then clicking the thumbnail of the project you want as the active project. If, however, you are finished working with the current project, you have saved it, and you want to work on another project, you should close the current project to free computer resources for other tasks.

REFERENCE

Closing a Project File

- Click the Close Window button for the Project 2010 file *or* click the File tab on the Ribbon to open Backstage view, and then click the Close command on the navigation bar.
- If you're prompted to save changes to the project, click the Yes button to save the project with the existing filename.

You want to close the AV Presentation Rooms Installation project file to take a quick break before continuing to add tasks.

TIP

You can click the Close Window button under the Close Program button in the upper-right corner of the Project window to close a project but not exit the program.

To close the project file:

1. Click the **File** tab on the Ribbon.
2. Click the **Close** command on the navigation bar. If you have made any changes to the project file since you last saved the file, you will be prompted to save the file before closing it.

REVIEW

Session 1.1 Quick Check

1. When is the project goal achieved?
2. Differentiate "efficient" from "effective."
3. Define "scope creep."
4. What is a project manager?
5. What are the five process groups of project management?
6. Describe what a Gantt chart looks like, and identify its primary purpose.
7. Describe what a network diagram looks like, and identify its primary purpose.
8. Define the following project management terms:
 - task
 - duration
 - resources
 - quality
9. When entering a new task in Gantt Chart view, two pieces of information are generally entered first. What are they?
10. What does it mean if you see a question mark after a number in the Duration column?
11. Describe the default timescale in Gantt Chart view.

SESSION 1.2 VISUAL OVERVIEW

The **Task tab** for the Gantt Chart provides buttons for changing the formatting, scheduling, and properties of selected tasks as well as for inserting new tasks.

The **Finish column** displays the date the task is scheduled to finish or be completed.

The **Task Name column** contains all the tasks for the project. Subsequent columns display the information for each task.

The **row number**, entered automatically as you insert tasks, helps identify the sequential order of the tasks.

The **Indicators column** is an information column that displays relevant icons as needed to help with the project.

The **active task** has a border around the task name. Task information is available for this task in the Task Information dialog box.

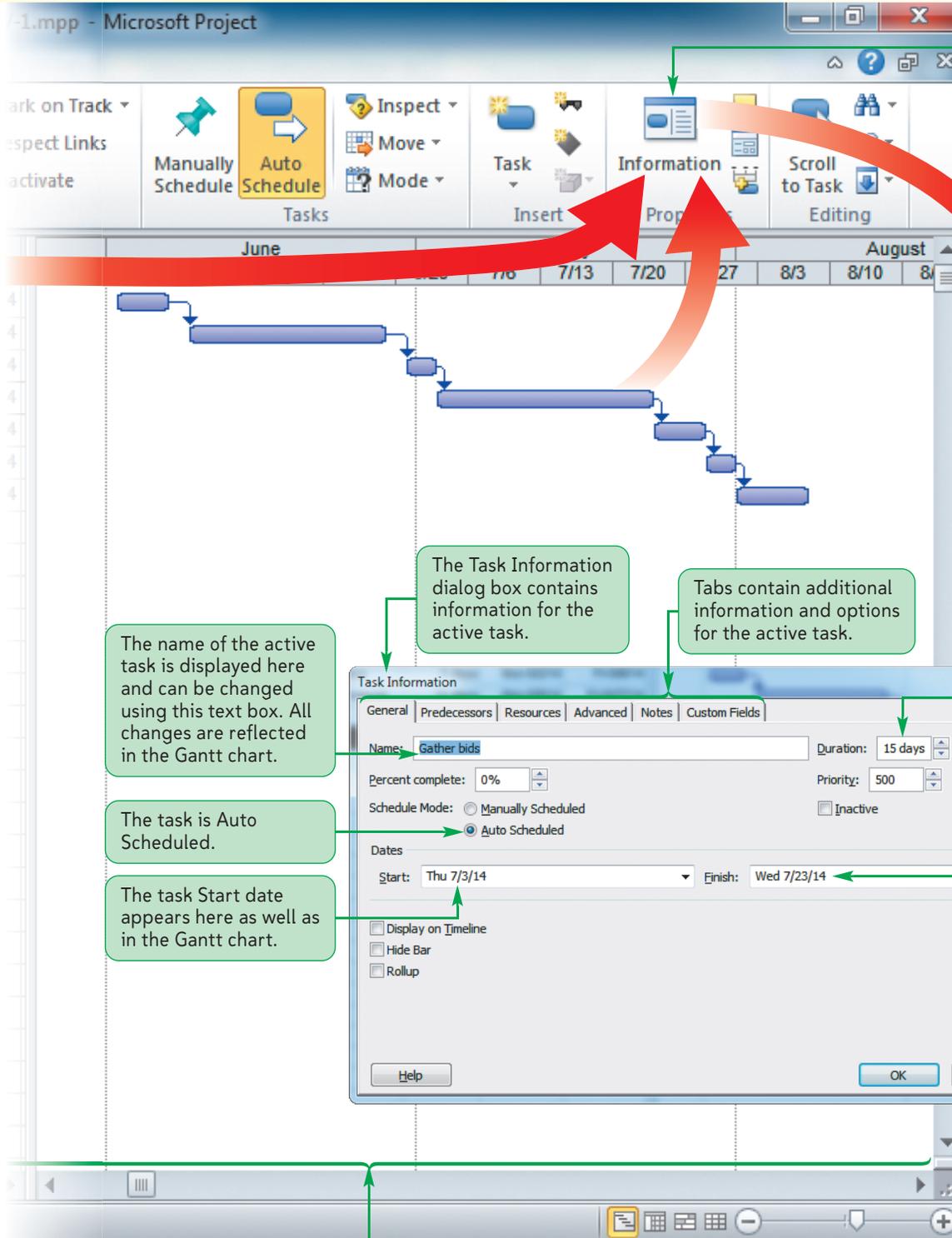
The **Duration column** displays the time allocated for a task.

The **Start column** displays the date the task starts.

The **Entry table** is used to enter and contains task information, such as task name, duration, Start date, and Finish date.

	Task Name	Duration	Start	Finish
1	Detail current status	5 days		Fri 6/6/14
2	Conduct needs analysis	15 days	Mon 6/9/14	Fri 6/27/14
3	Build RFP	3 days	Mon 6/30/14	Wed 7/2/14
4	Gather bids	15 days	Thu 7/3/14	Wed 7/23/14
5	Install hardware	3 days	Thu 7/24/14	Mon 7/28/14
6	Install software	3 days	Tue 7/29/14	Thu 7/31/14
7	Conduct training	5 days	Fri 8/1/14	Thu 8/7/14

TASK INFORMATION IN PROJECT



The **Information** button in the Properties group opens the Task Information dialog box as shown.

The Task Information dialog box contains information for the active task.

Tabs contain additional information and options for the active task.

The name of the active task is displayed here and can be changed using this text box. All changes are reflected in the Gantt chart.

The task is Auto Scheduled.

The task Start date appears here as well as in the Gantt chart.

The duration is how long the task is planned to take from start to finish.

The task Finish date appears here as well as in the Gantt chart.

The Gantt chart contains bars representing the task information shown in the Entry table.

Using Existing Projects

Often, you'll use the same project file over a period of several days, weeks, or months as you build, update, and track project progress. Therefore, it is essential that you are comfortable opening existing project files. Emily consulted various audiovisual professionals and met with other small business owners who recently installed media systems and AV presentation rooms for their company. Based on those meetings, she determined seven essential tasks and estimated durations for each task. She entered this information in the project file and saved her updated Project 2010 file with a new filename AV-1. You want to review the information Emily entered, so you'll open the updated project file to see the progress.

REFERENCE

Opening an Existing Project

- Click the File tab on the Ribbon, and then click the Open command on the navigation bar or click a file from the Recent files list.
- If necessary, navigate to the drive and folder containing the project file you want to open.
- In the list of files, click the filename of the project that you wish to open.
- Click the Open button (or press the Enter key or double-click the file that you wish to open).

Next, you'll open the updated Project file, which is named AV-1.mpp.

TIP

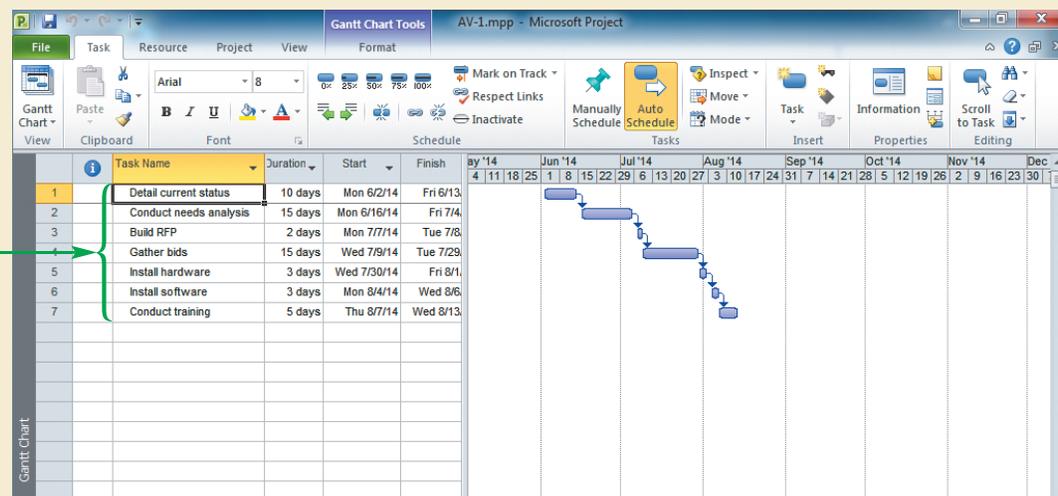
Use the Recent Projects list in Backstage view to open projects you worked on recently.

To open the project file:

1. If Project 2010 is not already running, start Project 2010.
2. Click the **File** tab on the Ribbon, and then click the **Open** button. The Open dialog box opens.
3. Navigate to the **Project1\Tutorial** folder if it is not the active folder.
4. Click **AV-1.mpp**, and then click the **Open** button. The project file AV-1 opens in the Project window. The project file opens in the view that was used last before the file was closed. Emily has customized the Project view for this project. She closed the Timeline and the View Bar. She also hid the Task Mode column. These changes provide more room on the screen to see relevant columns in the Entry table as well as the Gantt chart. In addition, she added tasks to the file. See Figure 1-20.

Figure 1-20

AV-1.mpp open in Project



Examine the tasks that Emily added to the project. Notice that she changed the two tasks you created, Document hardware and Document software, to the single task, Detail current status, and the Start date is June 2, 2014, instead of September 1. The most significant addition to the file is that now the tasks are linked. Notice that the Start date for each task is the next working day after the Finish date of the previous task.

You will learn about linking tasks, customizing views, and displaying and hiding columns as you work with Project 2010.

Saving a Project with a New Name

When changes are made to a project, you need to determine whether you want to save the updates to the existing project file or if you want to create a new project file with a new project name. Usually, updates to an existing project file are saved to the existing project name by clicking the Save button on the Quick Access toolbar. Throughout this book, however, you'll be asked to open a partially completed project file and then to save the changes that you made to the project with a new name. This keeps your Data Files in their original state in case you want to repeat a tutorial.

REFERENCE

Saving a Project with a New Name

- Click the File tab on the Ribbon, and then click Save As on the navigation bar.
- Navigate to the drive and folder where you want to save the file.
- In the File name box, type the filename.
- Click the Save button (or press the Enter key).

You'll save the AV-1 project file with the name NewAV-1.

TIP

Always check with your instructor regarding how to name files and how to submit files.

To save the project file with a new name:

1. Click the **File** tab on the Ribbon, and then click **Save As** on the navigation bar. The Save As dialog box opens.
2. Navigate to the **Project1\Tutorial** folder included with your Data Files, and then, in the File name box, type **NewAV-1**.
3. Click the **Save** button in the Save As dialog box. The dialog box closes and the file is saved with the new filename, as indicated in the title bar.

INSIGHT

Creating New Projects from Existing Projects

Many projects have similar characteristics. If you work in a business where others are using Project 2010, you might find that many of the tasks and resources are similar. Rather than always starting from scratch, you can use an existing file as the basis for your new project, and then save the project with a new name. In addition, you can use an existing template. Templates are project files that have been designed for a specific purpose, such as planning a trade show, that you can customize for your needs. Many Project templates are created by professionals for sale or distribution. Project template files have .mpt filename extensions. To access a template, click the File tab on the Ribbon, then click New on the navigation bar. The Available Templates pane offers many options. You can click New from existing project, New from Excel workbook, or New from SharePoint task list. You can also create a project based on a template from Microsoft Office Online, a Web site that provides templates for Microsoft Office products. To access these online templates, click one of the options in the Office.com Templates section. Templates are divided into Plans, Planners, Schedules, and More categories. After clicking a selection, a browser window opens, displaying the Available Templates page on Office.com. Type "project" in the Search box to the right of Office.com Templates, then click the Start searching button. A list of templates related to the word "project" appears. The list of results includes templates for other Microsoft Office applications in addition to Project 2010, but several for Project 2010 appear near the top of the list.

Working in Different Views

Project 2010 provides many different views of a project that support the informational needs of different users and purposes. Some views (such as the chart views) present a broad look at the entire project, others (such as the sheet views) present information in a grid of columns and rows, and still others (such as the form views) focus on specific pieces of information about each task. Three major categories of views are available.

- **Chart or Graphic**—A chart or graphical representation of data using bars, boxes, lines, and images.
- **Sheet or Table**—A spreadsheet-like representation of data in which each task is displayed as a new row and each piece of information (field) about the task is represented by a column. Various tables are applied to a sheet to display different fields.
- **Form**—A specific view of many pieces of information (fields) of *one task*. Forms are used to focus on the details of one task.

Views are further differentiated according to the type of data that they analyze (task or resource information). Because tasks and their corresponding durations are the first pieces of data entered into a project, you will focus on the task views now. Later, when resources and their corresponding costs are entered, you will explore resource views.

Figure 1-21 describes some of the views within each category that Project 2010 provides to help you display the task information that you need.

Figure 1-21 Common project views (views for tasks)

Category	View	Purpose
Chart or Graphic	Gantt Chart	Shows each task as a horizontal bar, the length and position of which correspond to a timescale at the top of the chart
	Network Diagram	Shows each task as a box, with linking lines drawn between related tasks to emphasize task sequence as well as the critical path
	Calendar	Shows the tasks as bars on a typical desk calendar in a month-at-a-time format
Task Sheet or Table	Entry Table	Columns are Task Mode, Task Name, Duration, Start (date), Finish (date), Predecessors, and Resource Names; the default Gantt Chart view displays the Task Sheet with the Entry Table on the left
	Cost Table	Contains task cost information, much of which is calculated when resources are assigned
	Schedule Table	Presents dates and whether the task is on the critical path
	Summary Table	Presents what percentage of the task's duration, costs, and assigned hours have been completed
	Tracking Table	Presents actual and remaining durations and costs
	Variance Table	Compares actual Start and Finish baseline dates to the dates that the tasks would be completed had the project been executed according to the original plan
	Work Table	Compares actual and remaining work to be completed to baseline measurements; baseline work is the amount of work (number of hours) required to finish a task if the task is executed according to the original plan
Form	Task Details Form	Provides all of the information about a single task in one window
	Task Name Form	Provides limited information about a single task: task name, resources, and predecessors
Combination	Gantt Chart (top) Task Name Form (bottom)	Provides an overview of many tasks of the project at the top of the screen, and displays the details of the current task at the bottom; usually a table or chart view on the top and a form view on the bottom of the screen; a common combination view places the Gantt Chart view on the top and the Task Name Form on the bottom

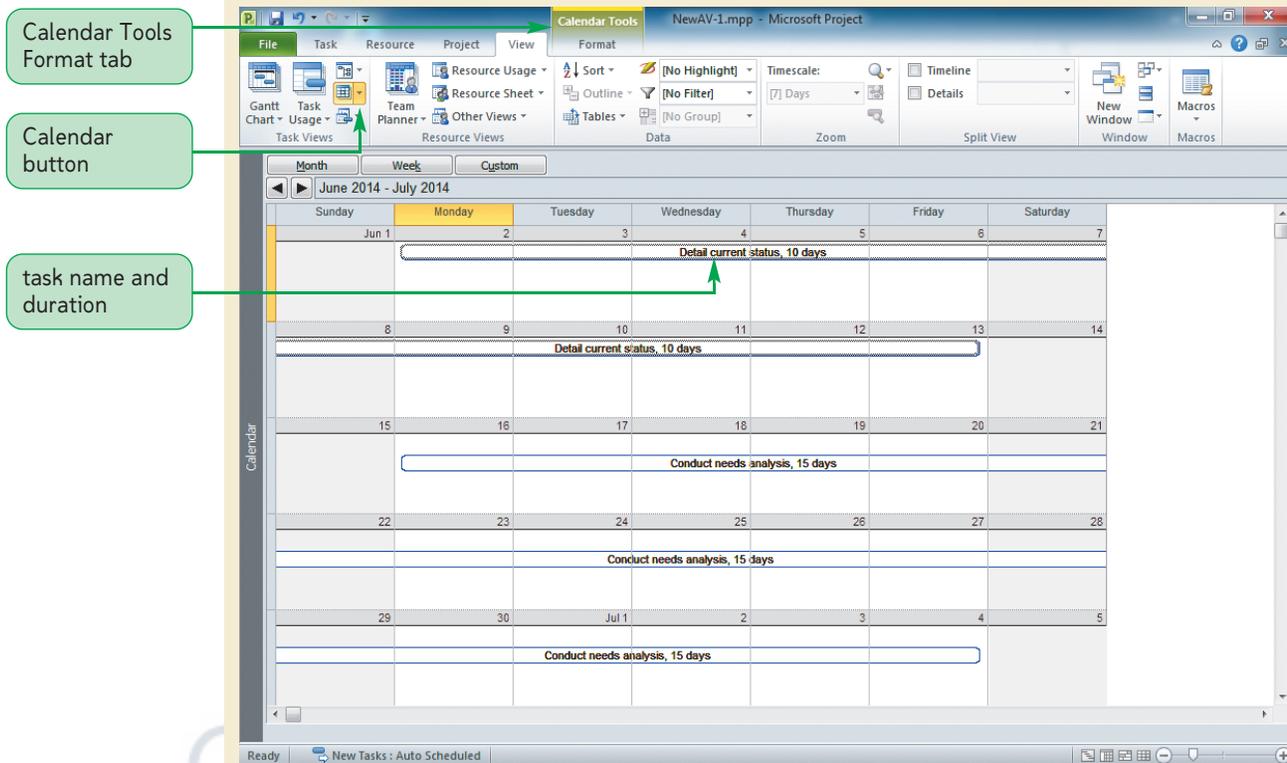
As you work with Project 2010, you will find that you need to see the information using different views. Don't become overwhelmed by trying to learn all of the project views now. As you build your project and your information needs grow, studying these views will be more natural and meaningful. Two key points to remember are that several views are available, and changes made in one view of the project are automatically updated and displayed in all other views. You can easily access common views by clicking their respective buttons in the View Bar or in the Task Views group on the View tab on the Ribbon.

To change the view and update task information:

1. Click the **View** tab on the Ribbon, and then, in the Task Views group, click the **Calendar** button . The project is now displayed as a desk calendar in a month-at-a-time format. See Figure 1-22.

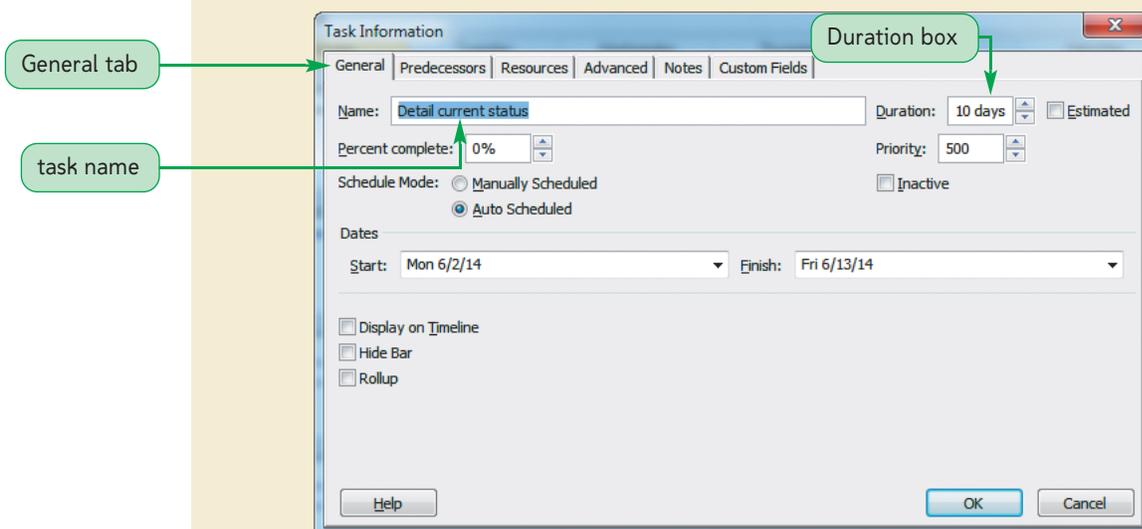
Each task is displayed on the calendar as a horizontal bar. The length of each bar represents the duration of the task, placed at the appropriate Start and Finish dates. The task name and duration appear within the bar. The Calendar Tools Format tab is available on the Ribbon. When you need to make changes to tasks in Calendar view, you open the Task Information dialog box for that task. Double-clicking the task to display the Task Information dialog box is one way to edit a task in almost any view.

Figure 1-22 Calendar view



- 2. Double-click the **Detail current status, 10 days** bar in either week to open the Task Information dialog box, and then click the **General** tab if it is not already selected. See Figure 1-23.

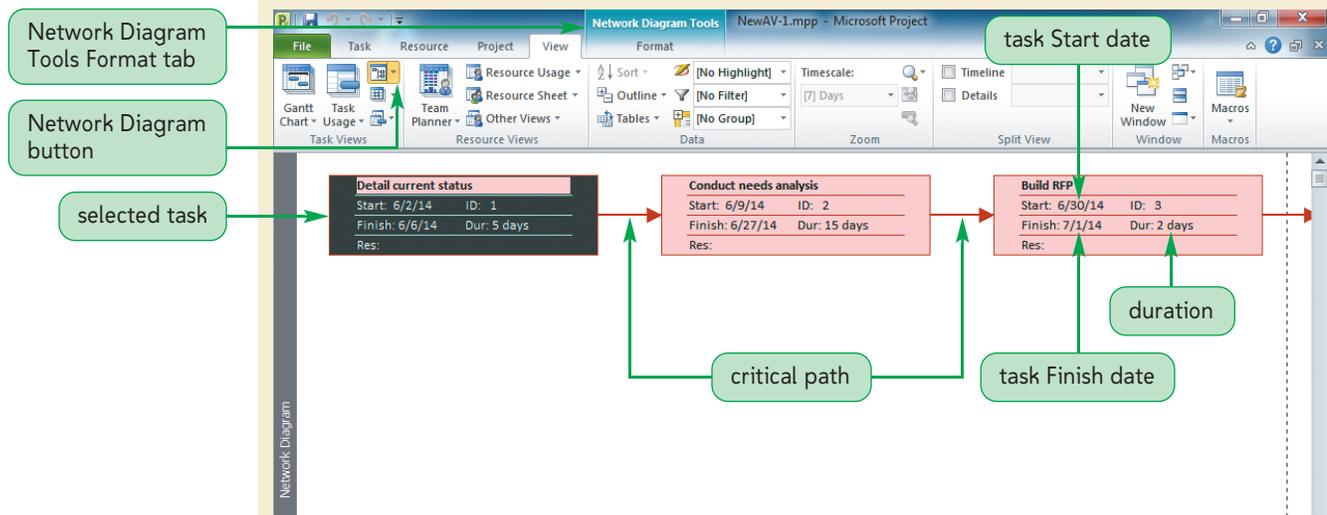
Figure 1-23 Task Information dialog box



- 3. In the Duration box, double-click **10**, type **5**, and then click the **OK** button. The change in duration from 10 days to 5 days is immediately updated in Calendar view (the current view) and in all other views.

4. In the Task Views group on the View tab, click the **Network Diagram** button . The project is now displayed as a series of boxes connected by lines, as shown in Figure 1-24.

Figure 1-24 Network Diagram view

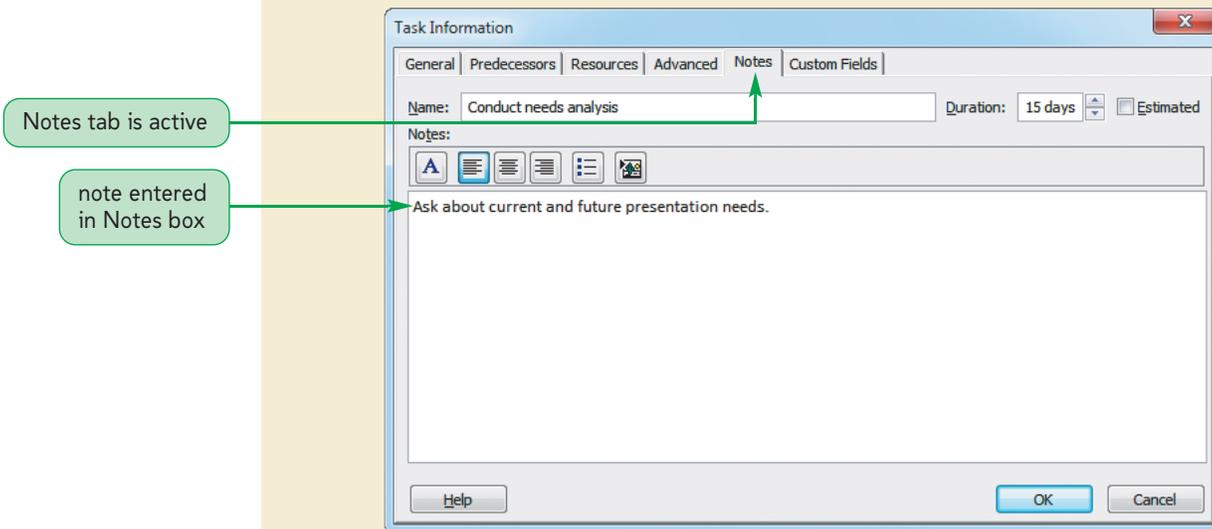


The Network Diagram Tools Format tab is available on the Ribbon. The lines between the boxes represent relationships between the tasks and the sequence of how the tasks must be completed. Each box displays the task name in the top line, the task number, duration, and scheduled Start and Finish dates. Each box in this project is part of the critical path, as indicated by the red color in the diagram. Later in this book, you will learn how to format network diagram boxes so the information appears in different places and the boxes take on different shapes and colors depending on task criteria.

Trouble? If the boxes on your screen look slightly different from those in this figure, you could easily change their format, but for now leave them in their default format.

5. Click to the right of the scroll box in the horizontal scroll bar to scroll the diagram to the left until you see the Conduct training task. When you scrolled, the rest of the network diagram appeared in the window.
6. Press the **Ctrl+Home** keys to view to the beginning of the network diagram, and then double-click **Conduct needs analysis** to open the Task Information dialog box for this task.
7. Click the **Notes** tab, click in the large **Notes** box at the bottom of the dialog box, and then type **Ask about current and future presentation needs.**, as shown in Figure 1-25.

Figure 1-25 Notes tab in Task Information dialog box

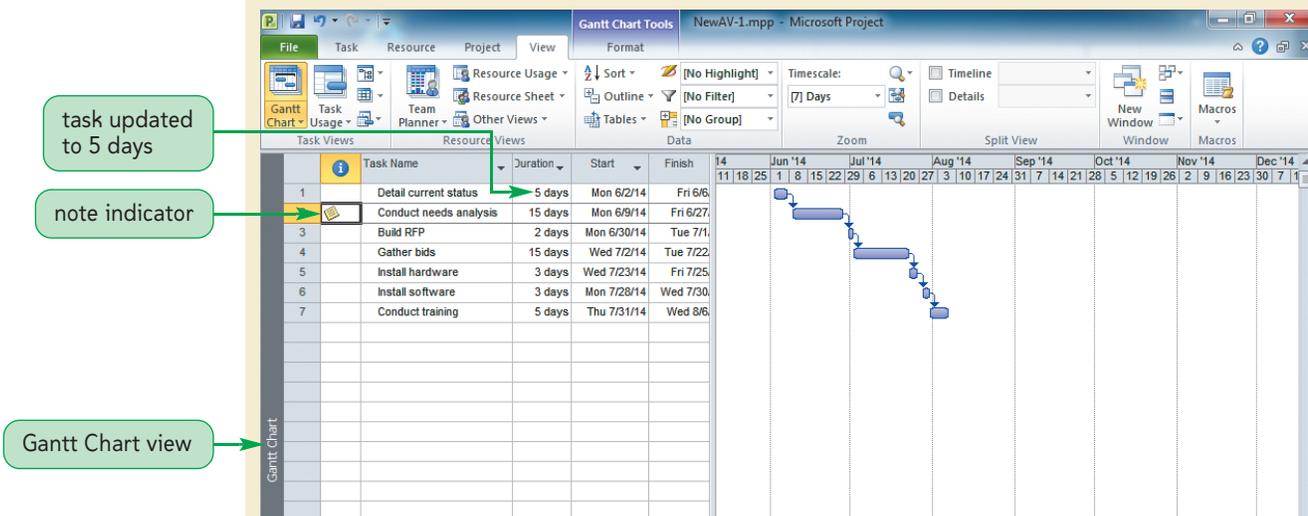


TIP

To display the note, you double-click the note indicator.

- 8. Click the **OK** button. The dialog box closes. The box for task 2 does not appear any different in the network diagram.
- 9. In the Task Views group on the Views tab, click the **Gantt Chart** button. In Gantt Chart view, a note indicator appears in the first column for task 2 in the Entry table, as shown in Figure 1-26, to indicate that a note is attached to this task. The first column in the Entry table is the Indicators column.

Figure 1-26 Note indicator in Indicators column



Most often, you'll enter data about the project into one of the table views, such as the Entry table that appears to the left of the Gantt chart in Gantt Chart view, but you can enter and edit tasks in any view.

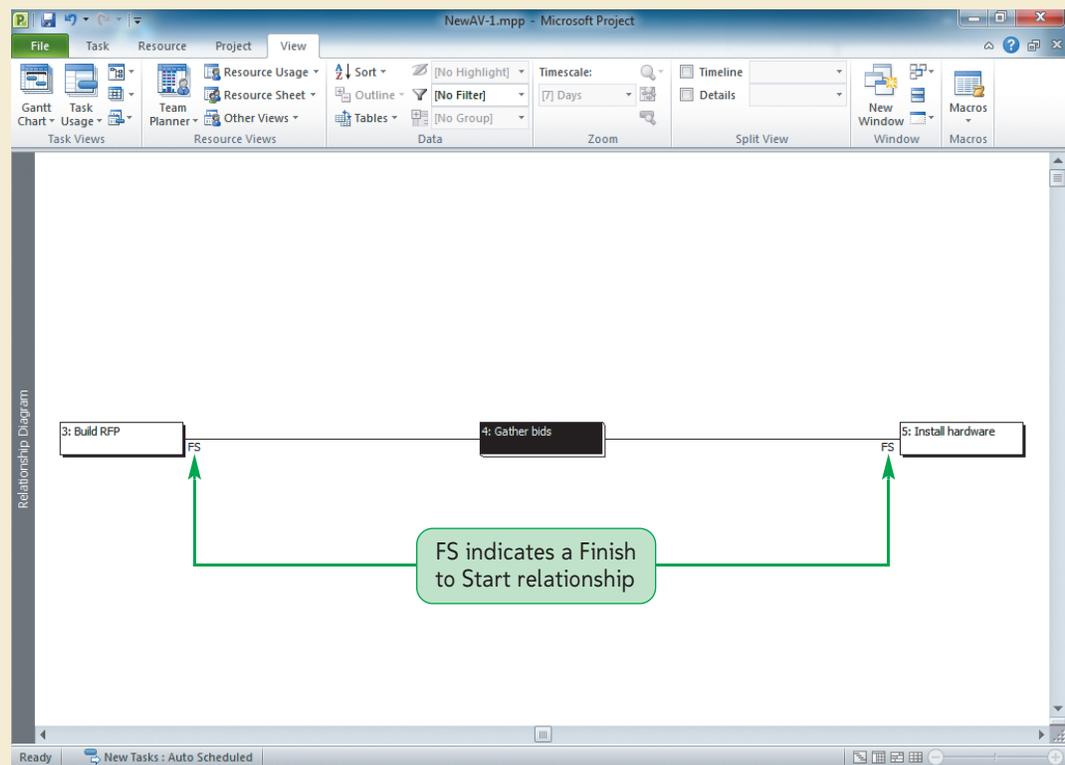
The other views are used to display information about task completion and resources and will be explored in later tutorials. The More Views option is available at the bottom of the View Bar as well as when you click a View button arrow on each View button in the Task View group on the View tab. Clicking the More Views command opens the More Views dialog box that lists all the views—the commonly used views with a corresponding button in the Task Views group on the View tab and on the View Bar as well as the less commonly used views. The current view is highlighted in the More Views dialog box.

To see additional views:

1. In the Entry table, click anywhere in **row 4** (the Gather bids task), and then, in the Task Views group on the View tab, click the **Gantt Chart** button arrow. When you click a task row, you make that task the current task. Clicking the Gantt Chart button arrow displays a menu of options.
2. Click **More Views** on the menu. The More Views dialog box opens, listing all of the available views, with Gantt Chart selected because that is the current view.
3. Scroll the list, and then double-click **Relationship Diagram**. The project appears in Relationship Diagram view. You use this view when you want to focus on the relationships between tasks. **Relationship Diagram** view shows the predecessor and successor for the selected task. Notice task 4 is selected and appears in the middle of the window. See Figure 1-27.

Figure 1-27

Relationship Diagram view

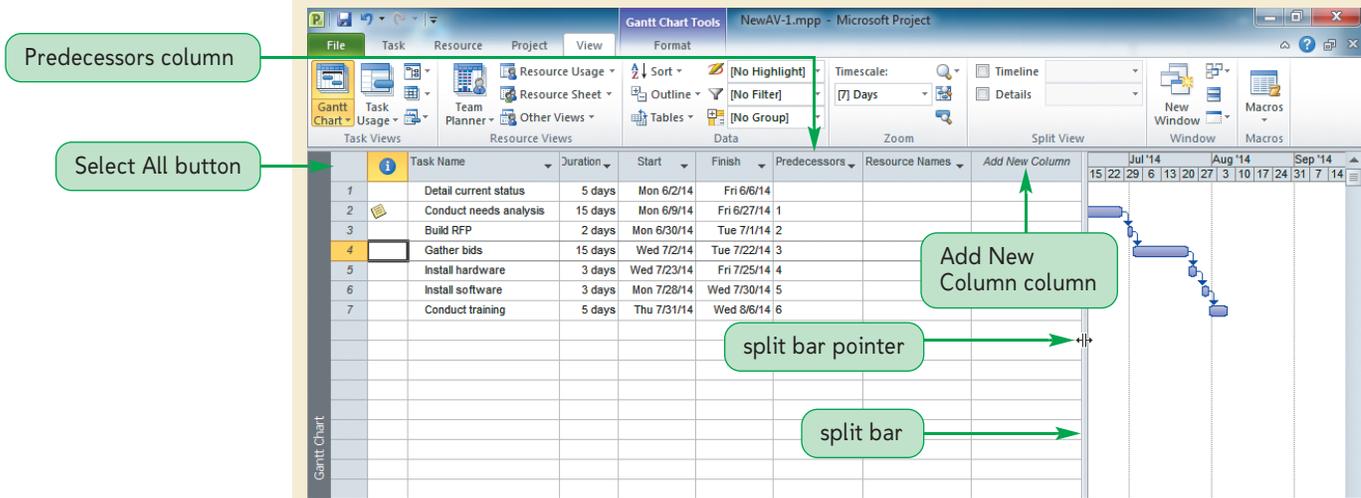


4. Click to the left of the scroll box in the horizontal scroll bar. The diagram scrolls to the previous task and task 3 is now selected in the center of the window.
5. Click to the right of the scroll box in the horizontal scroll bar to position the Relationship Diagram on the fourth task again, and then, in the Task Views group, click the **Gantt Chart** button. The project appears in Gantt Chart view with task 4 selected.

The default table in Gantt Chart view is the Entry table. You can change this to display additional columns.

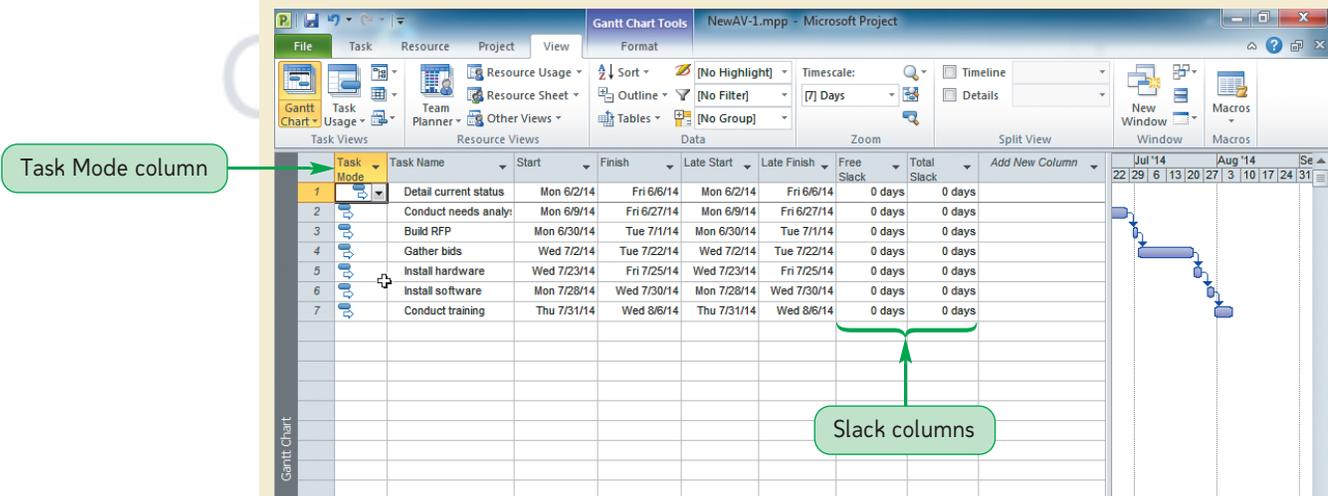
6. Drag the **split bar** to the right until you can see all of the columns through Resource Names in the Entry Table and including the *Add New Column* column, as shown in Figure 1-28. The square at the top left of the table (above the row numbers and to the left of the column names) is the Select All button.

Figure 1-28 Entry table



- 7. On the Entry table, right-click the **Select All** button, and then on the shortcut menu, click **Schedule**. The Schedule table appears. See Figure 1-29.

Figure 1-29 Schedule table



TIP

If you place the pointer on the Select All button, a ScreenTip appears that tells you the table name and the current view.

The Schedule table displays the Start and Finish dates, the Late Start and Late Finish dates, and any slack available. **Slack** is the amount of time that an activity may be delayed from its scheduled Start date without delaying a succeeding activity or the entire project. All of the tasks in this file are part of the critical path and are completed in sequence, so there is no slack. If there were slack, alternate dates would appear in the Late Start and Late Finish columns, indicating the latest that the task could start or finish if you used all of the slack. The Schedule table also includes the Task Mode column, showing if a task is automatically or manually scheduled. The Schedule table is important because it helps you see the relationship that exists between tasks, and how changing one date can impact all the other components in the project. It also provides you with information regarding what slack is available if a project task does slip.

- 8. On the Schedule table, right-click the **Select All** button, and then on the shortcut menu, click **Entry**. The Entry table appears again.

As you complete a project plan, assign resources, and start tracking an actual project, the rest of the tables will become more useful.

Splitting the Window

TIP

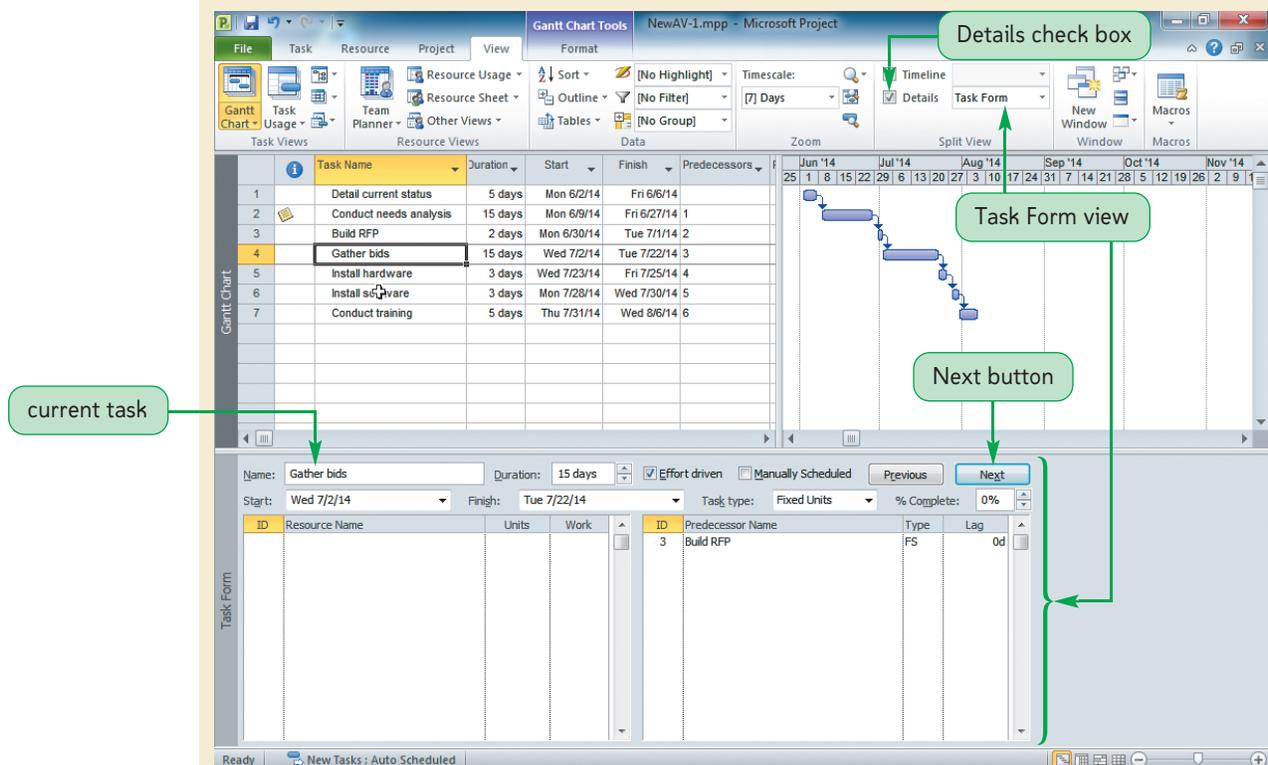
To change the view displayed in either half of the split window, click in the part of the window you want to change and then click the appropriate button in the Task Views group on the View tab.

Sometimes it is helpful to use more than one view at a time so that you can see information about many tasks in one area and details about the current task in another. This type of arrangement is called a **split window**. When you split the window, the default is to display the tasks in the current view in the top part of a split window, and the Task Form view in the bottom part. **Task Form view** is intended to display detailed information about one task at a time. You can add, delete, or edit information within the form just as you can in the Entry table or the Task Information dialog box. The Task Form consists of rows and columns where information, such as Task Resources and Task Predecessors, is displayed. In addition to the task form, many types of forms are available, each focusing on different details of the project. Changes made in the Task Form view, or any view, are simultaneously updated in all of the other views. When changes are made to a project, all affected task and resource fields are highlighted. This way, you can see how your change affects the dates of successor tasks.

To work with split views and Task Form view:

1. Drag the **split bar** so that Predecessors is the last visible column in the Entry table.
2. Make sure **task 4** is the current task, and then, in the Split View group on the View tab, click the **Details** check box. Your screen should look like Figure 1-30. The tasks are displayed in the Gantt Chart view on top, and the information for task 4 is displayed in Task Form view on the bottom. The form currently displays the resource information for the selected task on the left and the predecessor information for the selected task on the right.

Figure 1-30 Split view



- 3. In the form, click the **Next** button to move to the task form for task 5, and then click the **Next** button again to display task 6 in the form.

Notice that as you move from task to task in the form, the same task is selected in the Entry table and you are able to view the details for the selected task in the form.
- 4. Right-click anywhere on the form, and then on the shortcut menu, click **Predecessors & Successors**. Now the form displays the task that comes before the sixth task on the left and task that follows the sixth task on the right, as shown in Figure 1-31.

Figure 1-31 Task form displaying predecessor and successor information

The screenshot shows the Microsoft Project interface with the Task Form open for 'Install software'. The Gantt Chart on the right shows a project schedule from June to November. The Task Form on the left displays the following information:

Name: Install software | Duration: 3 days | Start: Mon 7/28/14 | Finish: Wed 7/30/14

ID	Predecessor Name	Type	Lag
5	Install hardware	FS	0d

ID	Successor Name	Type	Lag
7	Conduct training	FS	0d

Green callout boxes identify the 'current task' (Install software), the 'predecessor for current task' (Install hardware), and the 'successor for current task' (Conduct training).

- 5. Right-click the form, and then, on the shortcut menu, click **Resources & Predecessors**. The Resources & Predecessors information appears again.
- 6. In the form, click the **Previous** button three times to move to the task form for task 3.
- 7. In the form, click the **Duration** up arrow to increase the duration of the third task, Build RFP, to 3 days, and then press the **Enter** key.

Notice that the Duration cell in the Entry table for the Build RFP task is now 3 days. Notice also that the Finish date for task 3 changed because the duration for that task changed, and that the Start and Finish dates for tasks 4 through 7 also changed. This is because each of these tasks is a successor to the task preceding it. When Project 2010 is set to Auto Schedule tasks, it highlights all Start and Finish dates affected by changes you make to a task to help you see what effect changing the duration time of one task will have on the total project.

TIP

You can also remove the split window by placing the pointer on the horizontal split bar, and then double-clicking.

- 8. In the Split View group on the View tab, click the **Details** check box to remove the check mark. The form closes, and you return to Gantt Chart view.
- 9. Click the **Save** button  on the Quick Access toolbar to save your work.

Being able to move quickly from one view to the next is a critical Project 2010 skill. Over time, you'll learn many other views. For now, however, you need to know only that many views exist and how to move among them. The default Gantt Chart view with the Entry table on the left is the primary view in which you enter project information, so that's the one that you need to focus on as you begin to build a project.

Zooming the Timescale

As your project grows, it gets difficult to see all tasks in the chart views. You'll need to know how to change the timescale to magnify and reduce the size of the project on the screen. In Gantt Chart view, the timescale determines the length of the bar. Therefore, if the timescale is measured in hours, then the bar for a task that lasts 8 hours will be very long. If the timescale is measured in days, however, then the bar will be quite short.

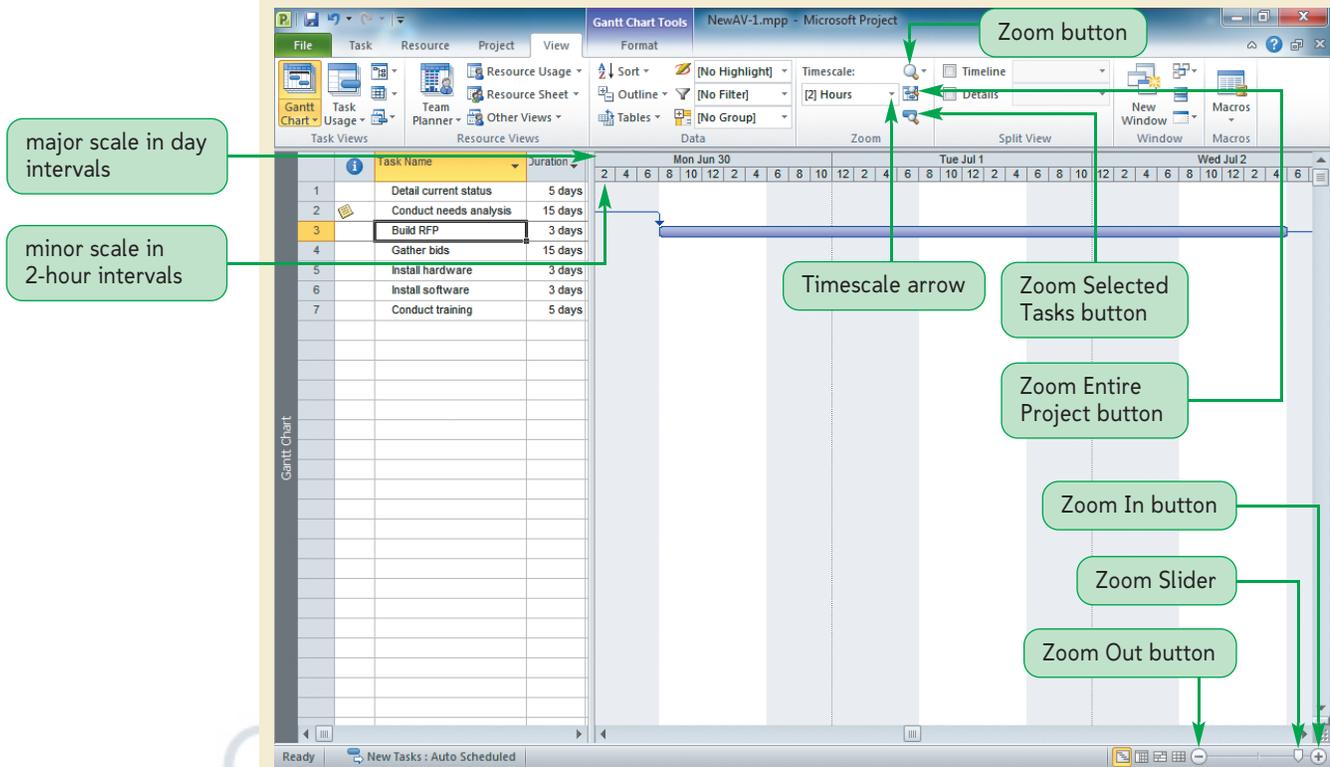
Zooming In and Zooming Out

Changing the magnification of a project is called **zooming in** and **zooming out**. The easiest way to adjust the Gantt chart timescale to see more or less of the project at one time is to use the Zoom In and Zoom Out buttons in the Zoom group on the View tab. Clicking the Zoom In button displays smaller units of measure on the Gantt chart timescale (such as days instead of weeks), which in turn expands the size of each bar. You can also use the Zoom Slider to dynamically change the zoom level, or you can click the Zoom Out and Zoom In buttons on the status bar.

To zoom in on the Gantt chart:

- 1. Drag the **split bar** to the left to position it to the right of the Duration column in the Entry table. Notice that the major timescale shows months and the minor timescale shows the first day of each week.
- 2. In the Zoom group on the View tab, click the **Zoom** button , and then click **Zoom In**. The Gantt chart zooms in so the bars in the chart are bigger, and the minor timescale changes to display many more days in the month. Notice also that the Timescale list box in the Zoom group changed from [7] days to [3] days.
- 3. On the status bar, click the **Zoom In** button  as many times as necessary until the scale does not change anymore, observing how the major and minor timescales change as you click. Each time you click the Zoom In button, the timescale shows smaller and smaller units of measure until it cannot zoom any more.
- 4. In the Zoom group on the View tab, click the **Timescale arrow**, and then click **Quarter Days**. The timescale displays days as the major scale and 6-hour intervals as the minor scale.
- 5. In the Zoom group, click the **Zoom Selected Tasks** button . You see the bar for Build RFP, task 4. The timescale displays days as the major scale and 2-hour intervals as the minor scale. Depending on the resolution of your screen, these values may be different. See Figure 1-32.

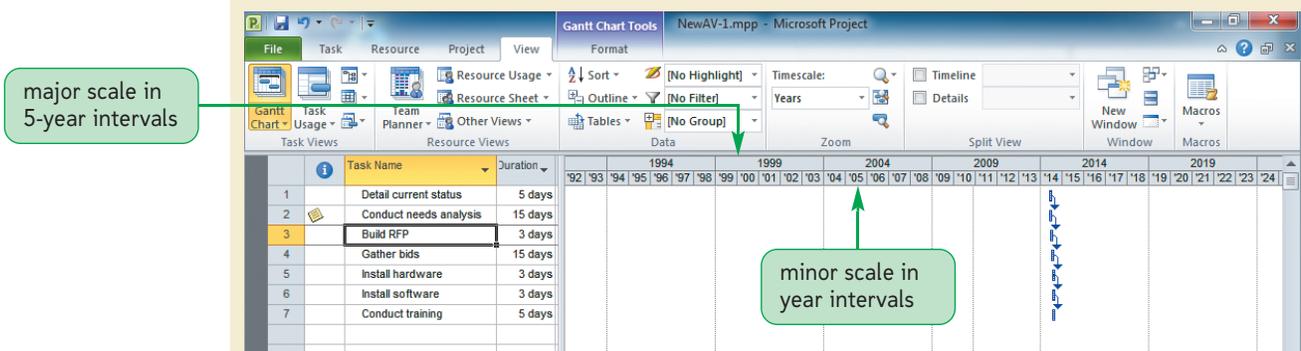
Figure 1-32 Zooming in on the Gantt chart view



Trouble? If your screen resolution is not 1024 × 768, you might see a different timescale. If your screen does not match Figure 1-32, use the Zoom buttons to adjust your timescale so you see days in the major scale and hours in the minor scale.

- 6. On the status bar, click the **Zoom Out** button (⊖) as many times as needed until the scale stops changing, again observing the changes in the major and minor scales as you click. Each time that you click the Zoom Out button, the timescale displays larger units of measure on the Gantt chart and the size of each bar shrinks.
- 7. In the Zoom group, click the **Timescale** arrow and then click **Years**. The largest timescale available displays 5 years as the major scale and years as the minor scale, as shown in Figure 1-33. Obviously, you would only use a scale of this magnitude for a project that spanned many years.

Figure 1-33 Zooming out on the Gantt Chart view



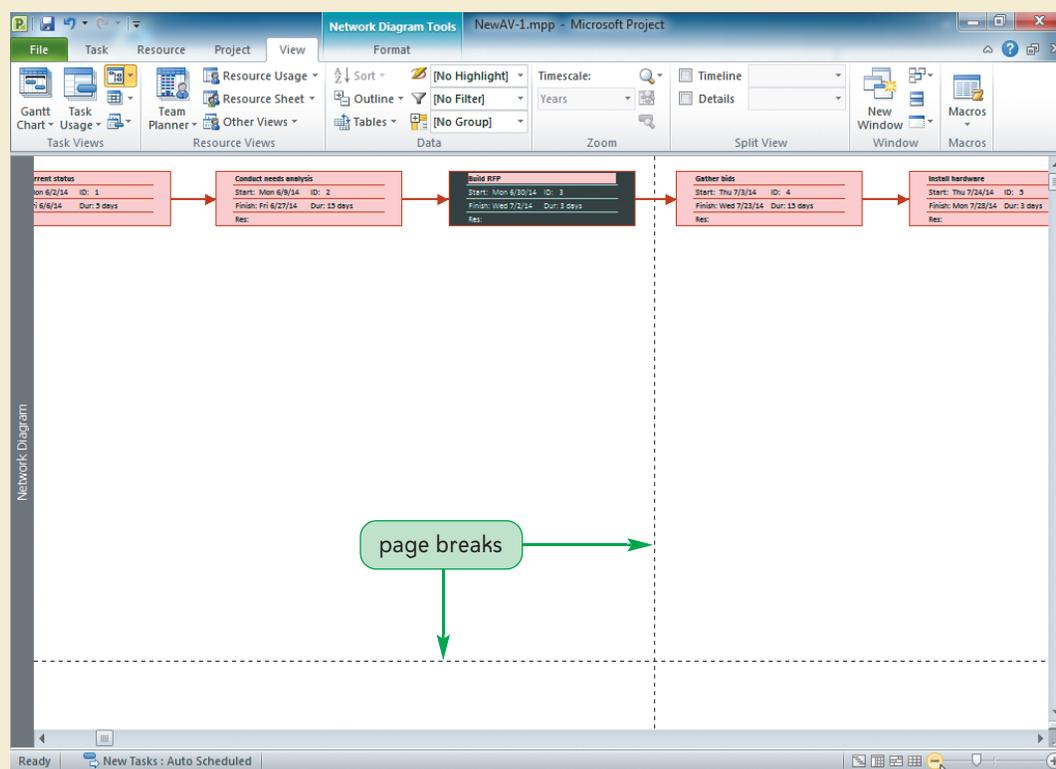
You can also zoom in and out of the Network Diagram and Calendar views. While neither of these views displays a timescale, the overall effect of zooming is the same. Zooming in shows fewer tasks or days, allowing you to see the details for what is displayed more clearly, and zooming out shows more tasks or days with fewer details.

To zoom in and out of the Network Diagram and Calendar views:

1. In the Task Views group on the View tab, click the **Network Diagram** button , and then, on the status bar, click the **Zoom In** button  three times. Zooming in on the Network Diagram view increases the size of the boxes, thereby making the text in each box easier to read.
2. On the status bar, click the **Zoom Out** button  as many times as needed to show dotted lines intersecting on the screen. The dotted lines indicate where page breaks will occur if the network diagram is printed.

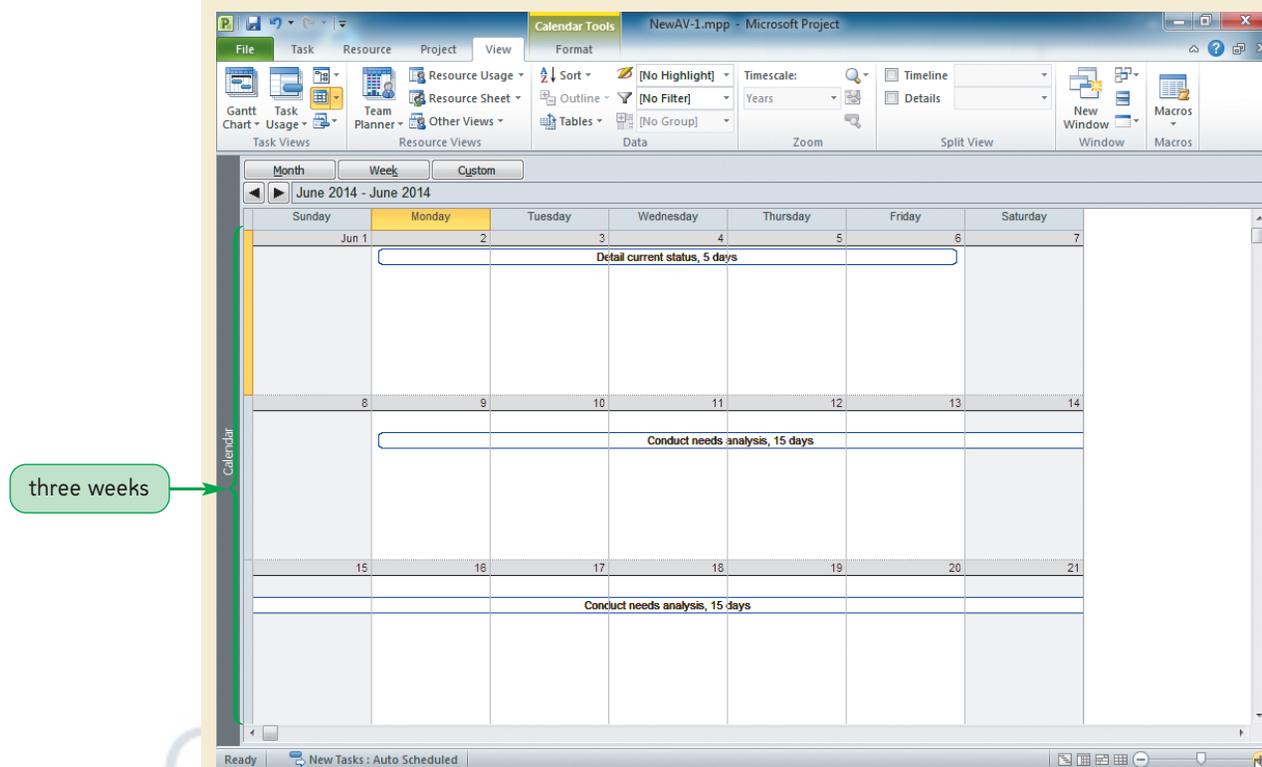
Your screen should look similar to Figure 1-34. Zooming out in Network Diagram view decreases the size of the boxes, thereby allowing more boxes to appear on the screen at one time.

Figure 1-34 Zooming out on the Network Diagram view



3. In the Task Views group on the View tab, click the **Calendar** button . You can see six weeks on the screen. (You might only see the top half of the last week.)
4. On the status bar, click the **Zoom In** button  as many times as necessary so your screen displays only three weeks, as shown in Figure 1-35. Zooming in on the Calendar view increases the size of the daily squares, thereby allowing you to see more information in each day.

Figure 1-35 Zooming in on the Calendar view

**TIP**

Select the number in the number of weeks box if it differs from 3, and type 6.

5. In the Zoom group on the View tab, click the **Zoom** button arrow , and then click **Zoom**. The Zoom dialog box opens.
6. Select **3** in the Number of weeks box, type **6**, and then click **OK**. Zooming out on the calendar decreases the size of the boxes, thereby allowing more days to be displayed on the screen at one time. You should see six weeks on your screen again.
7. In the Task Views group on the View tab, click the **Gantt Chart** button to return to Gantt Chart view.
8. Zoom in as necessary to display spelled-out months as the major scale and date numbers as the minor scale.

TIP

The Timescale dialog box also offers options to change the alignment, tick lines, and nonworking times. You will explore these later in the book.

Working in the Timescale Dialog Box

If the existing timescale does not meet your needs, you can modify it to represent a custom unit of time and custom label. For example, you might want one timescale to display a two-week increment and a second timescale to display a daily increment with the format 1/30/14, 1/31/14, 2/1/14, and so on. Or you might want to display a third time-scale. The Timescale dialog box allows you to customize the timescale in any timephased view. **Timephased** views are the Calendar, Gantt, or any view that shows information distributed over time. The ViewPoint Partners project will span several months. Emily wants to modify the timescale so that she can show Sidney tasks as they span the entire project, and then she wants to be able to show others working on the project tasks during specific weeks.

TIP

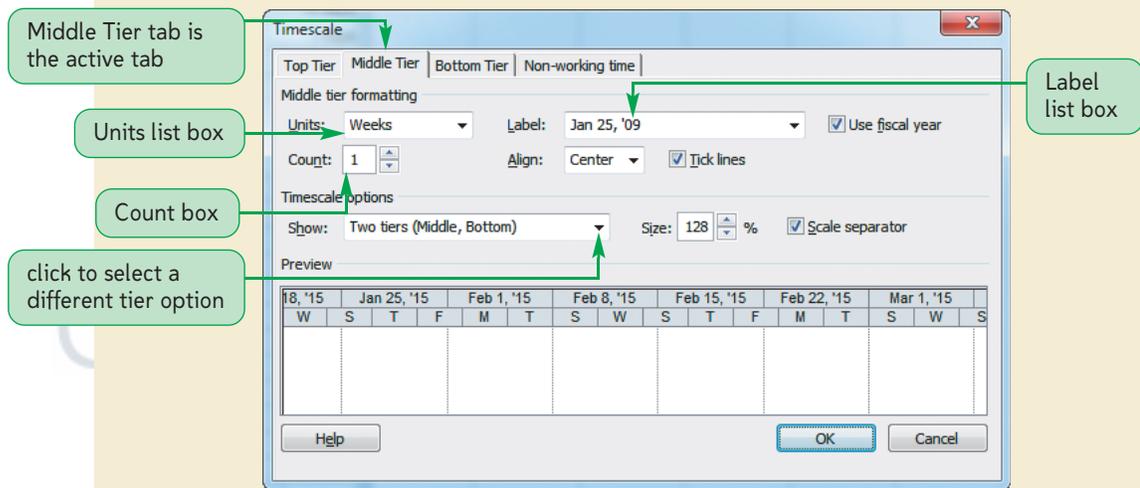
To quickly see a task in the Gantt chart, click the task you want to scroll to in the Entry table, click the Task tab on the Ribbon, and then, in the Editing group, click the Scroll to Task button.

To modify the timescale:

1. Click **Detail current status** (task 1), press **Alt+Home** to return to the beginning of the project, and then, on the status bar, drag the **Zoom slider** to show Weeks (May 25, '14; June 8, '14 and so forth) on the major scale of the timescale.
2. Double-click anywhere on the timescale to open the Timescale dialog box with the Middle Tier tab selected, as shown in Figure 1-36.

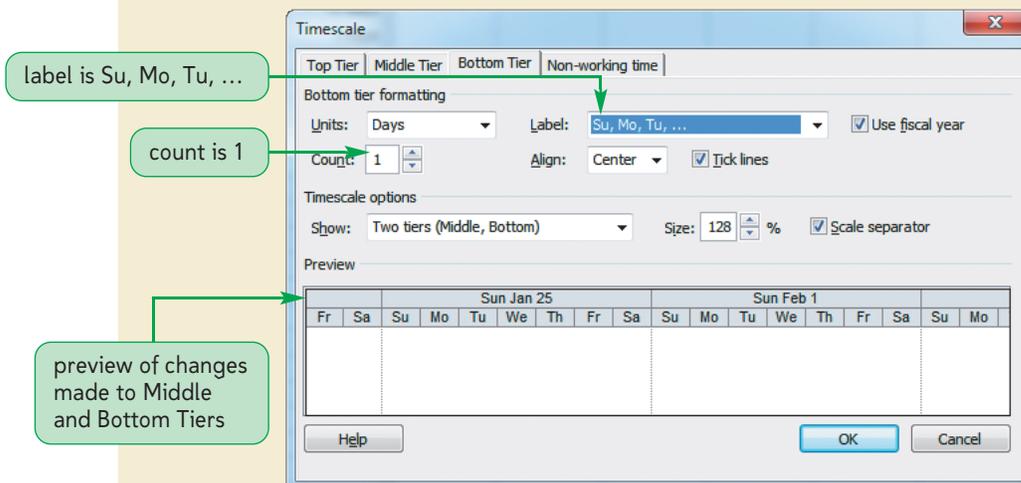
Units specify the time units, such as days, weeks, or months. Label specifies the display format to show the time unit. Count specifies the frequency of unit labels for the given units on the timescale tier. The default is to display only two timescales, or tiers. The Middle Tier tab corresponds to the top scale currently displayed in Gantt Chart view. You can also add a third tier, the Top Tier, if desired, but most users find that two tiers meet their needs.

Figure 1-36 Timescale dialog box – Middle Tier



3. Click the **Count** up arrow to change it to **7**, click the **Units** arrow, click **Days**, click the **Label** arrow, and then click **Wed Jan 28** if it is not already displayed. The changes are reflected in the Preview box at the bottom of the dialog box.
4. Click the **Bottom Tier** tab, click the **Count** down arrow as needed to change it to **1**, click the **Label** arrow, and then click **Su, Mo, Tu**. The change is shown in the Preview box. See Figure 1-37.

Figure 1-37 Changing the timescale – Bottom Tier



5. Click the **OK** button. You see the timescale changes in the Gantt chart.

Printing a View

TIP

You will see the Gantt chart, or any view in the Backstage Preview pane, in color, even if your computer is attached to a black and white printer.

Almost every view of a project can be printed. The chart views of a project can be quite large, so printing involves several extra considerations, the most important of which is to make sure that you preview the printout on the screen before you print it in order to check the magnification and total number of pages.

Printing is managed through Backstage view. When you view a Gantt chart in the Preview pane, you will notice a few elements. The **legend** appears in the bottom portion of each page to provide information about the bars. By default, the project title and today's date appear to the left of the legend. The default footer appears with the word "Page" and the current page number centered at the bottom of the page. The status bar indicates the number of pages that will print with the Gantt chart at the current level of magnification. You can click the Page Navigation buttons to move through the pages of the printout. If the buttons are dimmed, then there is only one page. You can click the Multiple Page button to see more than one page at a time. When the pointer is positioned on top of the page on the screen, you see the  pointer, which you can use to zoom out on the page. You can also access the  pointer to zoom in on the page.

INSIGHT

Following Good Printing Practices

Before printing in any view, it's a good idea to do some preparation to ensure your printed copy meets your expectations. Follow these guidelines before you click Print:

- Set an appropriate magnification level in the view you are printing. Consider zooming out on the timescale to reduce the size of the printout.
- If the view includes a table, make sure all the columns you want to see in the printout are visible.
- Use the Backstage view Preview feature to view each page layout and to check the total number of pages.
- Open the Page Setup dialog box to make changes to the orientation, margins, header, footer, legend, and other printing options.

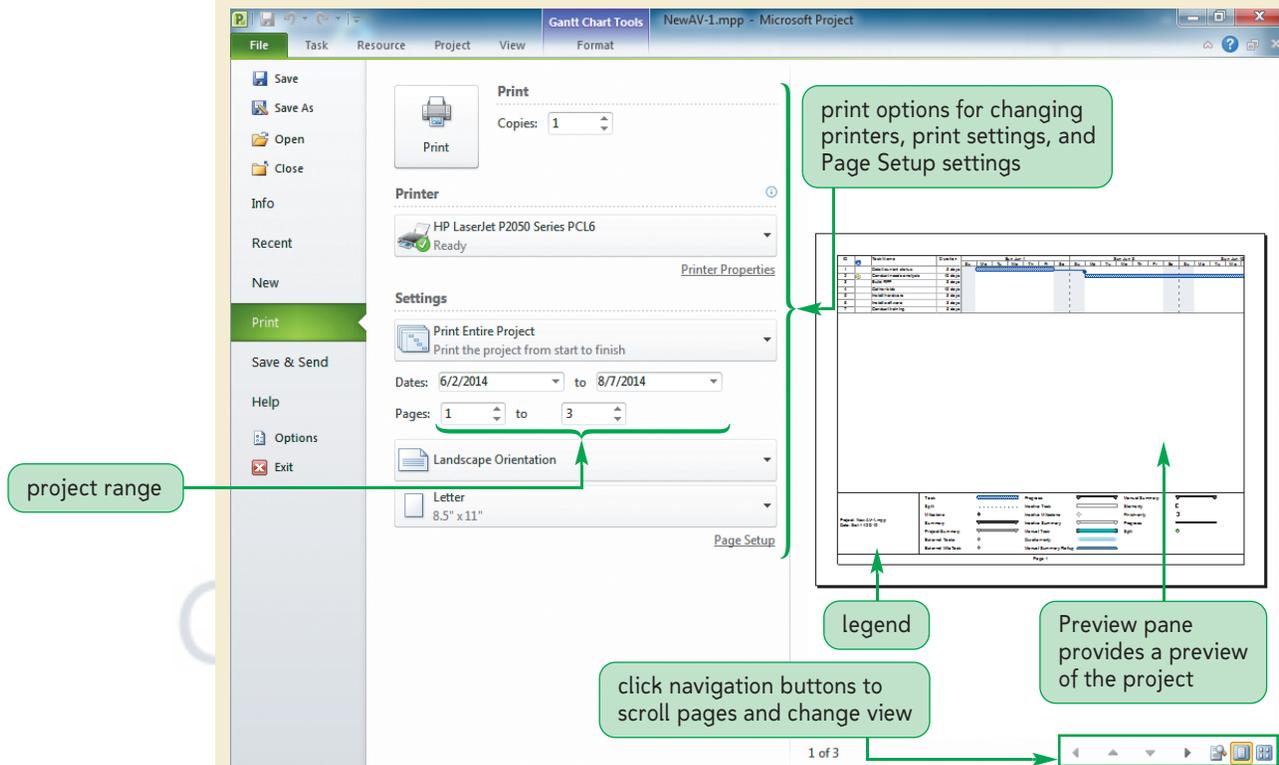
Emily knows that meetings take place out of the office and Sidney may want to show an overview of the project to contractors hired to work on the installation. Sidney does not travel with a laptop computer, therefore, in some meetings, it will be easier for Sidney to present printouts rather than to carry a copy of the file on a USB drive and ask to borrow a local computer. You help Emily set up the project for printing.

To print the project in Gantt Chart view:

1. Click the **File** tab, and then click **Print** on the navigation bar. The project appears in the Preview pane, as shown in Figure 1-38.

Figure 1-38

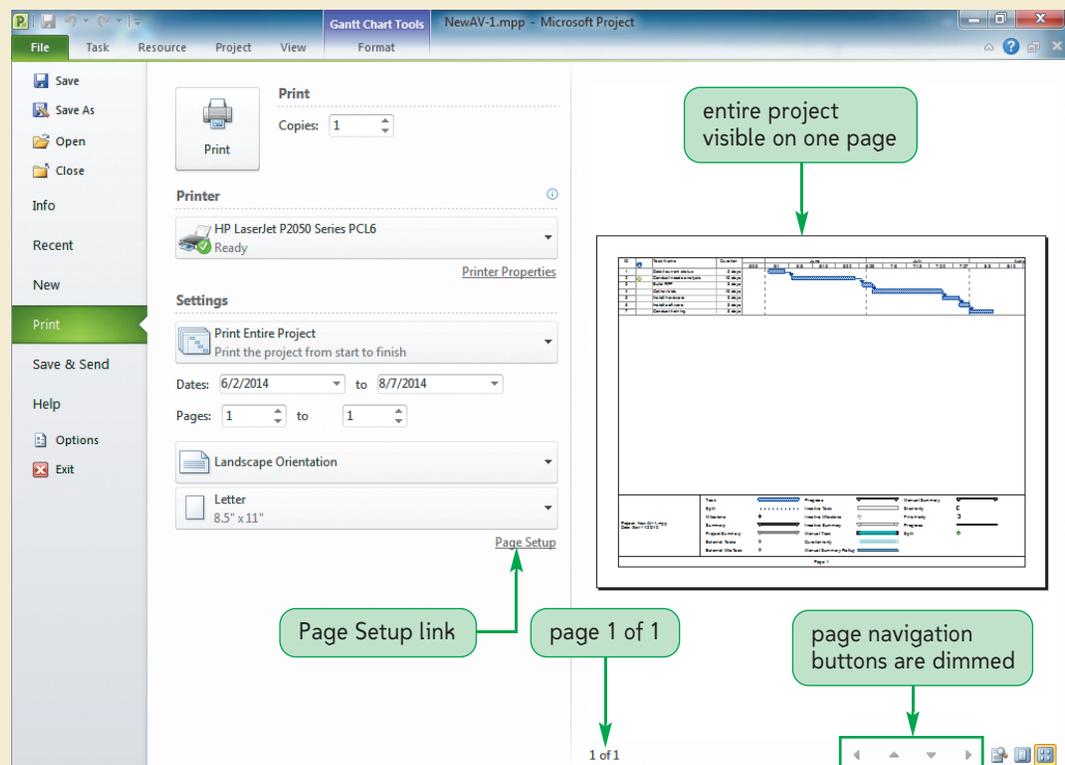
Gantt chart in Preview pane



2. Move the pointer on the Gantt chart, click the **task 2 bar** when the pointer is . The page zooms in so you can see more detail.
3. Move the pointer into the area above the page in the Preview pane. The pointer changes to . You use this pointer to zoom out.
4. Click as many times as needed to see three pages.
5. Click the **One Page** button on the status bar to return to one-page view, and then click the **Multiple Page** button on the status bar. You are in Multiple Pages view, and you now can see all pages of the Gantt chart on the screen at one time. You want the project to print on one page.
6. Click the **Task** tab on the Ribbon, and then, in the Editing group, click the **Scroll to Task** button.
7. Click the **View** tab, and then, in the Zoom group, click the **Timescale** arrow.
8. On the menu, click **Weeks** so you can see all the bars from June through August. The major timescale changes to show months, and the width of the Gantt chart decreases.
9. Click the **File** tab, and then click **Print** on the navigation bar. The printout of the entire project now fits on one page, as indicated by the status bar and as shown in Figure 1-39.

Figure 1-39

Gantt chart zoomed to print on one page



Using the Page Setup Dialog Box

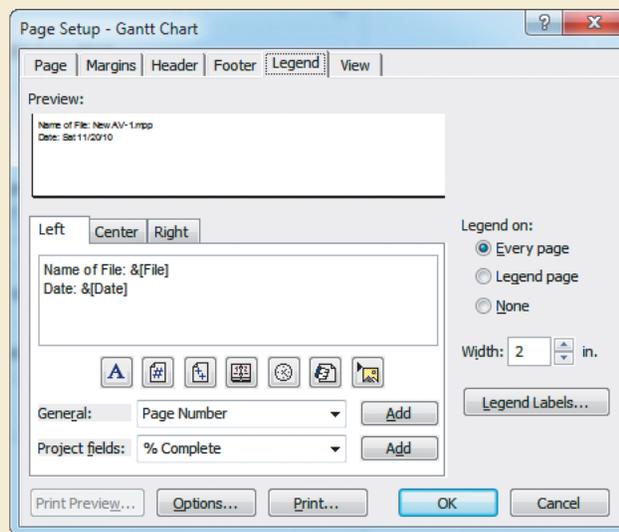
You can use the Page Setup dialog box to change many of the printout's characteristics, including orientation, margins, legend, header, and footer. Header and footer information can be placed in a left-aligned, centered, or right-aligned position. You access the Page Setup dialog box through Backstage view. Sidney insists that all paperwork coming out of ViewPoint Partners carry identifying information, such as names and dates in the headers and footers.

To set up the page:

1. On the Print tab in Backstage view, click the **Page Setup** link. The Page Setup – Gantt Chart dialog box opens.
2. Click the **Header** tab in the Page Setup dialog box. You use the options on this tab to set the header.
3. Click the **Left** tab below the Preview section, click in the text box on the Left tab, and then type your name. The Preview section at the top of the Page Setup dialog box displays a preview of how the information that you specified for the left, center, or right portions of the header will appear on the page.

- 4. Click the **Legend** tab in the Page Setup dialog box, and then, under the Preview section, click the **Left** tab. The Legend tab allows you to set the information that will appear to the left of the legend. The ampersand (&) indicates that the text that follows is a code. The &[File] code represents the actual filename as shown in the preview section of the Page Setup dialog box. If you change the filename, this code will automatically change the filename on the printout. The &[Date] code will display the current date. You can also click one of the buttons below the box where the text appears to insert a code automatically.
- 5. Double-click the word **Project** to select it, and then type **Name of File**. Your dialog box should look like Figure 1-40.

Figure 1-40 Page Setup – Gantt Chart dialog box



- 6. Click the **OK** button to accept the changes and close the dialog box. Notice your name appears left-aligned in the Header and the label Name of File appears to the left of the filename in the legend.
- 7. Save your file.
- 8. Submit the finished project to your instructor, either in printed or electronic form, as requested.

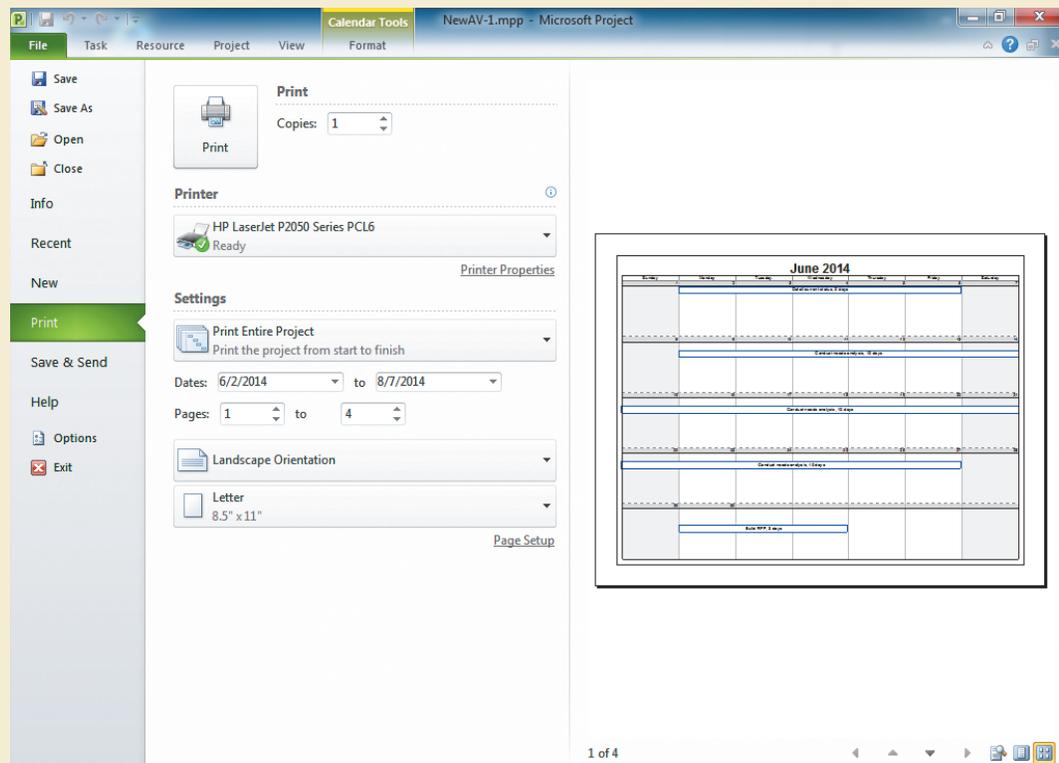
Next, you need to review how to print a page in Calendar and Network Diagram views. You have to set up the header, margins, footer, and legends for each view that you print.

To print a page in Calendar and Network Diagram views:

- 1. Click the **View** tab, click the **Calendar** button in the Task Views group, click the **File** tab, and then click **Print** on the navigation bar. The Calendar view of the project appears in the Preview pane of Backstage view. See Figure 1-41.

Figure 1-41

Printing the Calendar view



2. Click the **Page Setup** link, click the **Header** tab in the Page Setup dialog box, under the Preview section click the **Left** tab, click in the **text box** on the Left tab, type your name, and then click the **OK** button.
3. In the Page Navigation buttons group under the preview, click the **Page Down** button  four times. The calendar scrolls from June through August, and then to the fifth page titled "Overflow Tasks." In Calendar view, tasks that are successors to preceding tasks print a little lower in the block than their predecessors. To get these tasks to print properly, you need to adjust the row height in Calendar view by dragging the bottom border of the affected week down until the task appears in the block. For now, you'll leave the Calendar alone.
4. Click the **View** tab, and then, in the Task Views group, click the **Network Diagram** button . You can see the page breaks identified by the dashed lines. You will learn how to arrange the Network diagram boxes for optimal printing later in this book.
5. Click the **File** tab, and then click **Print** in the navigation bar. You see there are several pages currently ready for printing.
6. Click the **Page Setup** link, click the **Header** tab in the Page Setup dialog box, under the Preview section click the **Left** tab, click in the text box on the Left tab, type your name, and then click the **OK** button.

You can insert other codes into the header, footer, and legend by using the ampersand with specific words, or you can click the buttons in the Page Setup dialog box to insert the codes. Refer to Figure 1-42 for an explanation of each code.

Figure 1-42 Description of print code buttons

Button Name	Button	Code	Description
Format Text Font		(no code)	Allows you to format selected text by changing the font, font size, bold, italic, underline, and text color
Insert Page Number		& [Page]	Inserts the current page number
Insert Total Page Count		& [Pages]	Inserts the total number of pages for the entire printout
Insert Current Date		& [Date]	Inserts the current date as established by the computer's clock or network server
Insert Current Time		& [Time]	Inserts the current time as established by the computer's clock or network server
Insert File Name		& [File]	Inserts the project's filename
Insert Picture		(no code)	Inserts a picture (for example, clip art, scanned photo, or logo)

Page Setup options vary slightly when printing a Calendar, Network Diagram, or Table view. The key aspects of successful printing (zooming to an acceptable magnification level, previewing your work, and using the Page Setup dialog box to make changes) remain the same regardless of the view you are printing.

INSIGHT

Protecting Confidential Information

Often you share files with other people. What you may not know is that files created in Microsoft Office programs carry information about the people who created the file and work on the file in a Properties dialog box. Sometimes you do not want this information to travel with a shared file. To access and change these properties in Microsoft Project, open Backstage view, click Info on the navigation pane, and then click the Project Information arrow in the right pane. On the Project Information menu, click Advanced Properties. Review the information on the General and Summary tabs. You can make changes to the Summary tab as needed.

Exiting Microsoft Office Project 2010

After exploring many of the features and capabilities of this powerful program, you are now ready to **exit**, or quit, Project 2010. When you exit Project 2010, it is no longer running on your computer. To work on another Project 2010 file, you must start the program again.

To save the existing project with the same filename and exit Project 2010:

1. Click the **File** tab, and then click **Save** on the navigation bar. The changes to the project are saved. You should always save your work before exiting the program.
2. Click the **File** tab, and then click **Exit**. The project and the program close.

The next time you open this file, it will display the most recent view, in this case, the Network Diagram view.



PROSKILLS

Problem Solving: Getting Help

The Project 2010 Help system provides quick access to information about commands, features, and screen elements to help you find information and solve problems. In order to get the most benefit from the Help system, your computer must be connected to the Internet. To open the Help window, click the Help button. Project Help includes a Table of Contents that you can use to identify specific content. You can also type a keyword in the Search box and then click the Search button to find articles as well as videos. You can use Help to learn more about Project 2010 features and about how to perform specific tasks. Updates and documents are accessed by Project 2010 through the Microsoft Web site to provide you with the most accurate and up-to-date information as you request it. When working with a project team, you will find your colleagues often need information about how to use the program. You can always refer them to the Help system for immediate action.

Now that you have learned the vocabulary of project management, as well as how to view, navigate, and enter a task in Project 2010, you are ready to build the project for ViewPoint Partners. You will do this in the next tutorial. You report your progress to Emily. She is pleased that you have learned so much about Project 2010 in such a short time. She's confident that you are ready to tackle the AV Presentation Rooms Installation project for ViewPoint Partners.

REVIEW

Session 1.2 Quick Check

1. What categories of task views are available in Project 2010?
2. Name three types of tables listing tasks that are available in Project 2010.
3. What is the purpose of Form views?
4. What is one way to open the Task Information dialog box?
5. What is the purpose of the Task Information dialog box?
6. How does zooming out change the timescale on a Gantt chart?
7. How does zooming in change the bars on the Gantt chart?
8. How do you open the Timescale dialog box in Gantt Chart view?

Practice the skills you learned in the tutorial using the same case scenario.

PRACTICE

Review Assignments

Data File needed for the Review Assignments: Train-1.mpp

A very important component of the AV Presentation Rooms Installation project at ViewPoint Partners involves training the users. It will be your job to coordinate this effort. In this assignment, you will open a partially completed project file that documents training tasks. You will explore the project, add tasks, and print several views.

1. Start Project 2010, open the **Train-1** file located in the **Project1\Review** folder included with your Data Files, and then save the project file as **VPTrain-1** to the same folder.
2. Drag the **split bar** so that you can see the Finish column in the Entry table.
3. Open the Project Information dialog box. Change the Start date to 9/1/2014.
4. In row 8, add the task **Schedule classes**, and set the duration as 1 day.
5. In row 9, add the task **Conduct training**, and set the duration to 3 days.
6. Change the duration for the task 1, Identify existing skills, from 3 days to 2 days.
7. Add a note to task 4, Develop contract, that reads **Call legal team to confirm requirements**.
8. In Gantt Chart view, open the Print tab in Backstage view, and then open the Page Setup dialog box. Change the left section of the legend to display your name instead of the word Project in the first line. (*Note: Your name will be followed by the file-name when the project is printed.*)
9. Verify that the Gantt chart fits on one page. Submit the finished Gantt chart to your instructor, either in printed or electronic form, as requested.
10. Switch to Network Diagram view.
11. Zoom out until you can see all of the tasks on the screen. (There are nine total tasks.)
12. Open the Print tab to preview the Network Diagram view of this project, view it in Multiple Page view, and then open the Page Setup dialog box and change the left section of the header to display your name.
13. Submit the finished network diagram to your instructor, either in printed or electronic form, as requested.
14. Switch to Calendar view.
15. Open the Print tab to preview the Calendar view of this project, and then open the Page Setup dialog box and change the left section of the footer to display your name.
16. Submit the finished Calendar view to your instructor, either in printed or electronic form, as requested.
17. Use the Help system to search for the keyword phrase "Start date."
18. Click the topic: "Create and schedule a new project". Write a brief paragraph describing why you would use a Start date and why you would use a Finish date to schedule a project. (*Note: Check with your instructor regarding the format you should use for creating and submitting written responses.*)
19. Close the Help window, and then save your changes to the project.

Apply your skills to complete a project for building a new home.

APPLY

Case Problem 1

Data File needed for this Case Problem: Home-1.mpp

River Dell Development, Inc. You work for a general contractor, River Dell Development, Inc., which manages residential construction projects for group homes. The manager, Karen Reynolds, has asked you to use Project 2010 to enter and update some of the general tasks involved in building a new home. She wants to use this project file as a basis for future projects. *Note:* Throughout this assignment you will be asked to make notes and write short responses. Check with your instructor regarding the format you should use for creating and submitting written responses. Complete the following:

1. Start Project 2010, open the **Home-1** file located in the **Project1\Case1** folder included with your Data Files, and then save the project file as **NewHome-1** in the same folder.
2. Resize the Entry table pane so that you can see the Finish column.
3. Open the Project Information dialog box, and then write down the date that is displayed in the Finish date box. Close the Project Information dialog box without making any changes.
4. Enter the following tasks and corresponding durations in rows 12, 13, and 14: **Paint interior, 3 days; Lay carpet, 3 days; Install wood trim, 16 days**. Notice that all tasks start on the project Start date. You will learn in later tutorials how to change this.
5. Open the task form below the Gantt chart. View the Predecessors & Successors for tasks 6, 7, and 8. Close the Details view.
6. Change the duration for the first two tasks—Secure financing and Purchase lot—to 4 days each.
7. Display the Timescale dialog box. Change the Units, Label, and Count for the Middle tier to options of your choice. Close the dialog box.
8. Open the Print tab to preview the Gantt Chart view of this project, and then use the Page Setup dialog box to enter your name in the left portion of the header.
9. Use the Page Setup dialog box to change the Fit to settings so that the printout fits on one page, and then submit the finished Gantt chart to your instructor, either in printed or electronic form, as requested.
10. Switch to Calendar view of this project.
11. Do you notice anything different about this view from previous work in the Tutorial? Write down an explanation as to why you think this is useful. Open the Timescale dialog box for Calendar view and notice the check mark next to the Display month pane check box.
12. Open the Print tab to preview the Calendar view of this project, and then use the Page Setup dialog box to enter your name in the left portion of the header. Submit the finished calendar to your instructor, either in printed or electronic form, as requested.
13. Switch to the Network Diagram view, open the Print tab, and then use the Page Setup dialog box to print your name in the left portion of the header. Submit the finished network diagram to your instructor, either in printed or electronic form, as requested.
14. Use the Help system to search for the phrase “critical path,” and then read relevant articles. Write down at least two reasons why the critical path is so important to project managers.
15. Return to Gantt Chart view, save the project **NewHome-1**, and then close the project file.

EXPLORE

EXPLORE

Apply your skills to organize a job search.

APPLY

Case Problem 2

Data File needed for this Case Problem: Jobs-1.mpp

Community Works You work for Community Works, a growing grassroots organization that helps recent college graduates find employment, has hired you to work as a jobs counselor. You are assigned to help people who have technical degrees. You decide to use Project 2010 to help these recent graduates organize their job search efforts. *Note:* Throughout this assignment you will be asked to make notes and write short responses. Check with your instructor regarding the format you should use for creating and submitting written responses. Complete the following:

1. Start Project 2010, and then open the **Jobs-1** file in the **Project1\Case2** folder included with your Data Files.
2. Save the file as **MyJobs-1** in the same folder.
3. Open the Project Information dialog box. Change the Start date to 7/30/2014.
4. Enter the following new tasks and corresponding durations in rows 9 and 10: **Write cover letter, 1 day; Buy interview suit, 2 days.**
5. Display the Finish date column in the Gantt chart Entry table.
6. Change the duration of the second task, Edit resume, from 1 day to 3 days.
7. Change the timescale so that the Middle Tier scale is Thirds of Months with the label set to January Beginning 2009. Set the Bottom Tier scale as Days with the label set to Sun, Mon, Tue. Make sure the Count is at 1 for both tiers. View the Gantt chart after you make these changes.
8. Open the Print tab to preview the Gantt Chart view of this project. Add your name under the current date in the legend, and then submit the finished Gantt chart to your instructor, either in printed or electronic form, as requested.
9. Switch to Calendar view, and then zoom in so that you see only two weeks on the screen and all tasks are visible on the calendar. (*Hint:* You can use Ctrl + Home to move to the beginning of the project.)
10. Open the Print tab to preview the Calendar view of this project, and then add the text **Filename:** and the filename code in the left section of the header. Enter your name on the right side of the header, and then submit the first page of the Calendar view to your instructor, either in printed or electronic form, as requested.
11. Switch to Network Diagram view, and then open the Print tab to preview the Network Diagram view of this project.
12. Add the text **Filename:** and the filename code in the left side of the header, enter your name on the right side of the header, and then submit the first page of the network diagram to your instructor, either in printed or electronic form, as requested.
13. Return to Gantt Chart view, with the Duration column as the last visible column, and then save your changes to the project.
14. Submit the finished project file to your instructor, either in printed or electronic form, as requested.

EXPLORE

Expand your skills to work on the project file for planning a college reunion weekend.

CHALLENGE

Case Problem 3

Data File needed for this Case Problem: Reunion-1.mpp

Western College Reunion As a proud graduate of Western College, you have been asked to help organize the 20th reunion for the graduating class of 1994. The college looks to graduates to keep the endowment fund growing and enhance school pride for current and future students. In 2014, the reunion takes place on March 7, 8, and 9. You'll use Project 2010 to enter and track the many tasks that must be completed for a successful reunion to occur. (Note: Check with your instructor regarding the format you should use for creating and submitting written responses.) Complete the following:

1. Start Project, and then open **Reunion-1** located in the **Project1\Case3** folder included with your Data Files.
2. Save the file as **WReunion-1** to the same folder.
3. Set the project so the schedule is created based on the Finish date, and then change the Finish date to March 7, 2014.
4. Enter the following new tasks and corresponding durations in rows 9 and 10: **Create gift baskets, 5 days; Make college visit, 2 days.**
5. Open the Task Information dialog box for task 1, click the Advanced tab, and then write down the option for the Constraint type. Close the Task Information dialog box without making any changes.
6. Change the timescale so that the Middle Tier scale is weeks, the Count is 2, and the Label displays 1/25, 2/1, and then change the Bottom Tier scale to days, the Count to 1, and the Label displays to Sun, Mon, Tue.
7. Switch to Network Diagram view, and then zoom out to see all the tasks.
8. Open the Print tab to preview the Network Diagram view of this project, and then add your name as the first line of the left section of the header and the current date as the second line of the left section of the header. Submit the finished network diagram to your instructor, either in printed or electronic form, as requested.
9. View the Gantt chart, open the Task Form, view the Predecessors and Successors, and starting with the first task, click the Next button to view all the tasks. Write down why you don't see any predecessors or successors for this project. Close the Task Form.
10. Add a note to the Set budget task that says, **Meet with college president.**
11. Switch to Calendar view, open the Print tab to preview the Calendar view of this project, and then add your name as the first line of the left section of the header and the current date as the second line of the left section of the header. Submit the Calendar view to your instructor, either in printed or electronic form, as requested.
12. Return to Calendar view, and then right-click any bar to view the menu. Click Bar Styles and explore to see how this dialog box can work to change the appearance of the calendar. Use the Pattern arrow and Color arrow to change the bars on the calendar so they are filled with dark blue vertical stripes.
13. Make all tasks visible in Calendar view. (*Hint: Experiment with zooming and dragging the edges of the lines that separate the weeks.*)
14. Open the Print tab to preview the Calendar view of this project again.
15. Open the Page Setup dialog box, and then click the View tab. Click the Week height as on screen option button, and then click OK. Preview the calendar. Compare the results to the view you saw in Step 11. What are the differences?
16. Return to Gantt Chart view, with the Finish column as the last visible column, save your changes, and then close the project file.

Use your skills to create a new project for managing a fund-raising project for a park.

CREATE

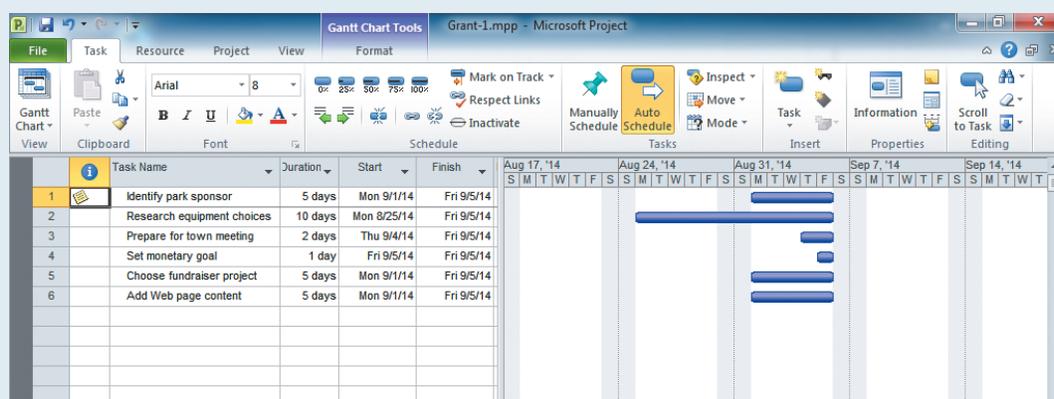
Case Problem 4

There are no Data Files needed for this Case Problem.

NatureSpace NatureSpace is a company that specializes in creating play structures for communities. They can also help in securing grants for the project. You are the project manager assigned to manage the fund-raising and building of the new play structure at a local neighborhood park. NatureSpace products and services are in high demand, and it is critical that they complete projects on time. Also, most towns do not have extra funds available and cannot afford any cost overruns. All of the equipment must be ready by September 6, 2014, before the end of the fiscal year. You need to create the project shown in Figure 1-43.

Figure 1-43

Tasks and durations for the NatureSpace project



Complete the following:

1. Start Project 2010, and then save the new project as **Grant-1** to the **Project1\Case4** folder included with your Data Files.
2. Set the project so the schedule is created based on the Finish date, and change the Finish date to September 6, 2014.
3. Make sure that the tasks are set to be Automatically Scheduled. Enter the following tasks and corresponding durations:
 - **Identify park sponsor, 5 days**
 - **Research equipment choices, 10 days**
 - **Prepare for town meeting, 2 days**
 - **Set monetary goal, 1 day**
 - **Choose fundraiser project, 5 days**
 - **Update Web page content, 5 days**
4. Add the following note to task 1, "Identify park sponsor": **Start with Mayor Brian Griffin.**
5. Open the Print tab to preview the Gantt Chart view of this project. Add the text **File Name:** followed by the filename code to the left portion of the header, and then add the text **Name:** followed by your name in the right portion of the header. Print the project in Gantt Chart view.
6. Switch to Calendar view, and then resize the rows of the calendar if necessary so that all of the tasks are visible for the weeks of August 25 and September 1.
7. Open the Print tab to preview the Calendar view of this project. Add the text **File Name:** followed by the filename code to the left portion of the header, and then add the text **Name:** followed by your name in the right portion of the header. Submit the Calendar view to your instructor, either in printed or electronic form as directed.

8. Switch to the Network Diagram view of this project, then open the Print tab.
9. Add the text **File Name:** followed by the filename code to the left portion of the header. Enter the text **Name:** followed by your name in the right portion of the header.
10. On the Legend tab in the Page Setup dialog box for the Network Diagram view, specify that the legend is to print on every page instead of the legend page, and then submit the first page of the Network Diagram view to your instructor, either in printed or electronic form as directed.
11. Return to Gantt Chart view, with the Finish column as the last visible column.
12. Save your changes, and then close the project file.

ENDING DATA FILES

