

Microsoft Project 2019

Step

by

Step

Cindy Lewis
Carl Chatfield
Timothy Johnson



PRACTICE FILES

FREE SAMPLE CHAPTER

SHARE WITH OTHERS





Microsoft Project 2019 Step by Step

Cindy Lewis
Carl Chatfield
Timothy Johnson

Microsoft Project 2019 Step by Step

Published with the authorization of Microsoft Corporation by:
Pearson Education, Inc.

Copyright © 2019 by Pearson Education, Inc.

All rights reserved. This publication is protected by copyright, and permission must be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. For information regarding permissions, request forms, and the appropriate contacts within the Pearson Education Global Rights & Permissions Department, please visit www.pearsoned.com/permissions/. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

ISBN-13: 978-1-5093-0742-5

ISBN-10: 1-5093-0742-7

Library of Congress Control Number: 2019930824

01 19

Trademarks

Microsoft and the trademarks listed at <http://www.microsoft.com> on the “Trademarks” webpage are trademarks of the Microsoft group of companies. All other marks are property of their respective owners.

Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an “as is” basis. The authors, the publisher, and Microsoft Corporation shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book or from the programs accompanying it.

Special Sales

For information about buying this title in bulk quantities, or for special sales opportunities (which may include electronic versions; custom cover designs; and content particular to your business, training goals, marketing focus, or branding interests), please contact our corporate sales department at corpsales@pearsoned.com or (800) 382-3419.

For government sales inquiries, please contact governmentsales@pearsoned.com. For questions about sales outside the U.S., please contact intlcs@pearson.com.

Publisher

Mark Taub

Acquisitions Editor

Loretta Yates

Assistant Sponsoring Editor

Charvi Arora

Development Editor

Songlin Qiu

Managing Editor

Sandra Schroeder

Senior Project Editor

Tonya Simpson

Copy Editor

Krista Hansing

Indexer

Ken Johnson

Proofreader

Abigail Manheim

Technical Editor

Christine Flora

Editorial Assistant

Cindy Teeters

Cover Designer

Twist Creative, Seattle

Composer

codeMantra


Contents at a Glance

Part 1: Get started with Microsoft Project	1
1: Project, project management, and you	3
2: Take a guided tour	11
Part 2: Simple scheduling basics	35
3: Start a new plan	37
4: Build a task list	49
5: Set up resources	79
6: Assign resources to tasks	99
7: Format and share your plan	125
8: Track progress: Basic techniques	153
Part 3: Advanced scheduling techniques	173
9: Fine-tune task scheduling	175
10: Fine-tune task details	209
11: Fine-tune resource and assignment details	227
12: Fine-tune the Project plan	255
13: Organize plan details	279
14: Track progress: Detailed techniques	311
15: View and report project status	333
Part 4: In-depth and special subjects	355
16: Format and print views: In-depth techniques	357
17: Format reports: In-depth techniques	387
18: Customize Project	403
19: Share information with other programs	423
20: Consolidate projects and resources	447
21: Use Agile project management with Project	469


Part 5: Appendixes	503
A: A short course in project management	505
B: Develop your project management skills	515
C: Collaborate: Project, SharePoint, and PWA	519
D: Use this book in a classroom	535
Glossary	539
Index	547
About the authors	567

Contents

Author Acknowledgments xvii

	Introduction xix
	Who this book is for xix
	The <i>Step by Step</i> approach xix
	Download the practice files xx
	E-book edition xxii
	Adapt procedure steps xxii
	How to get support & provide feedback xxiii
	Errata & book support xxiii
Stay in touch xxiv	

Part 1: Get started with Microsoft Project

	Project, project management, and you 3
	Practice files 3
	Meet the Project program 3
	Meet the Project family 4
	See the new features in Project 2019 5
	Review features in earlier versions 6
	New in Project 2016 6
	New in Project 2013 7
	New in Project 2010 8
	Take a project manager’s perspective 9
Let’s get started! 10	

2

Take a guided tour	11
Practice files	11
Explore the Project user interface	11
Manage files and set options in the Backstage view	18
Work with schedule details in views	22
Use reports to check a plan's status	28
Skills review	31
Practice tasks	32
Explore the Project user interface	32
Manage files and set options in the Backstage view	32
Work with schedule details in views	33
Use reports to check a plan's status	34

Part 2: Simple scheduling basics

3

Start a new plan	37
Practice files	37
Create a new plan and set its start date	37
Set nonworking days in the project calendar	39
Enter the plan title and other properties	43
Skills review	44
Practice tasks	45
Create a new plan and set its start date	45
Set nonworking days in the project calendar	45
Enter the plan title and other properties	46

4

Build a task list	49
Practice files	49
Create tasks	49
Switch task scheduling from manual to automatic	51

Enter task durations and estimates	53
Enter milestone tasks	58
Create summary tasks to outline the plan	59
Link tasks to create dependencies	61
Check a plan's duration and finish date	66
Document task information	68
Skills review	70
Practice tasks	71
Create tasks	71
Switch task scheduling from manual to automatic	72
Enter task durations and estimates	73
Enter milestone tasks	74
Create summary tasks to outline the plan	74
Link tasks to create dependencies	75
Check a plan's duration and finish date	76
Document task information	77

5

Set up resources	79
Practice files	79
Set up work resources	80
Enter the maximum capacity for work resources	82
Enter work resource pay rates	83
Adjust working time in a resource calendar	86
Set up cost resources	90
Document resources by using notes	91
Skills review	93
Practice tasks	94
Set up work resources	94
Enter the maximum capacity for work resources	95
Enter work resource pay rates	95
Adjust working time in a resource calendar	96
Set up cost resources	97
Document resources by using notes	98

6

Assign resources to tasks	99
Practice files	99
Assign work resources to tasks	100
Control work when adding or removing resource assignments	105
Assign cost resources to tasks	111
Check the plan after assigning resources	112
Skills review	116
Practice tasks	117
Assign work resources to tasks	117
Control work when adding or removing resource assignments	120
Assign cost resources to tasks	121
Check the plan after assigning resources	122

7

Format and share your plan	125
Practice files	125
Customize a Gantt chart view	126
Add tasks to a Timeline view	133
Customize reports	137
Copy views and reports	140
Print views and reports	142
Skills review	145
Practice tasks	146
Customize a Gantt chart view	146
Add tasks to a Timeline view	148
Customize reports	149
Copy views and reports	150
Print views and reports	151

8

Track progress: Basic techniques	153
Practice files	153
Understand progress tracking	154

Save a baseline of your plan.....	155
Track a plan as scheduled.....	158
Enter a task's completion percentage.....	160
Enter actual values for tasks.....	163
Skills review.....	167
Practice tasks.....	168
Save a baseline of your plan.....	168
Track a plan as scheduled.....	169
Enter a task's completion percentage.....	169
Enter actual values for tasks.....	170

Part 3: Advanced scheduling techniques

9

Fine-tune task scheduling.....	175
Practice files.....	175
See task relationships by using Task Path.....	176
Adjust task link relationships.....	179
Control task scheduling by using constraints.....	182
Interrupt work on a task.....	188
Adjust working time for individual tasks.....	190
Control task scheduling by using task types.....	193
See task schedule details by using the Task Inspector.....	199
Skills review.....	201
Practice tasks.....	202
See task relationships by using Task Path.....	202
Adjust task link relationships.....	203
Control task scheduling by using constraints.....	204
Interrupt work on a task.....	204
Adjust working time for individual tasks.....	205
Control task scheduling by using task types.....	206
See task schedule details by using the Task Inspector.....	207

10

Fine-tune task details	209
Practice files	209
Enter deadline dates	209
Enter fixed costs	212
Create a recurring task	213
View the plan's critical path	217
Schedule summary tasks manually	219
Skills review	222
Practice tasks	223
Enter deadline dates	223
Enter fixed costs	223
Create a recurring task	224
View the plan's critical path	225
Schedule summary tasks manually	226

11

Fine-tune resource and assignment details	227
Practice files	227
Change resource availability over multiple date ranges	228
Work with multiple resource pay rates	230
Change resource pay rates over different date ranges	233
Delay the start of assignments	235
Apply contours to assignments	236
Create and assign material resources	239
View resource capacity	242
Adjust assignments in the Team Planner view (Project Professional only)	244
Skills review	247
Practice tasks	248
Change resource availability over multiple date ranges	248
Work with multiple resource pay rates	249
Change resource pay rates over different date ranges	250
Delay the start of assignments	251

Apply contours to assignments	251
Create and assign material resources	252
View resource capacity	253
Adjust assignments in the Team Planner view (Project Professional only)	254

12	Fine-tune the Project plan	255
	Practice files	255
	Examine resource allocations over time	255
	Resolve resource overallocations manually	260
	Level overallocated resources	262
	Check the plan's cost and finish date	268
	Inactivate tasks (Project Professional only)	272
	Skills review	273
	Practice tasks	274
	Examine resource allocations over time	274
	Resolve resource overallocations manually	275
	Level overallocated resources	275
	Check the plan's cost and finish date	276
Inactivate tasks (Project Professional only)	278	

13	Organize plan details	279
	Practice files	279
	Sort plan details	280
	Group plan details	284
	Filter plan details	289
	Create new tables	295
	Create new views	299
	Skills review	303
	Practice tasks	304
	Sort plan details	304
	Group plan details	305

Filter plan details	306
Create new tables	307
Create new views	308

14

Track progress: Detailed techniques	311
Practice files	311
Update a baseline	312
Track actual and remaining work for tasks and assignments	315
Track timephased actual work for tasks and assignments	321
Reschedule incomplete work	327
Skills review	328
Practice tasks	329
Update a baseline	329
Track actual and remaining work for tasks and assignments	330
Track timephased actual work for tasks and assignments	331
Reschedule incomplete work	332

15

View and report project status	333
Practice files	333
Examine a plan's variance	334
Identify tasks that have slipped	338
Examine task costs	342
Examine resource costs	346
Skills review	349
Practice tasks	350
Examine a plan's variance	350
Identify tasks that have slipped	351
Examine task costs	352
Examine resource costs	353

Part 4: In-depth and special subjects

16

Format and print views: In-depth techniques	357
Practice files	357
Format a Gantt chart view	358
Format a Timeline view	364
Format a Network Diagram view	368
Format a Calendar view	372
Print and export views	374
Skills review	378
Practice tasks	379
Format a Gantt chart view	379
Format a Timeline view	381
Format a Network Diagram view	382
Format a Calendar view	383
Print and export views	384

17

Format reports: In-depth techniques	387
Practice files	387
Create a custom report	387
Customize charts in a report	392
Customize tables in a report	396
Skills review	398
Practice tasks	399
Create a custom report	399
Customize charts in a report	400
Customize tables in a report	401

18

Customize Project	403
Practice files	403
Share custom elements between plans	403

Record and run macros	407
Edit macros	410
Customize the ribbon and Quick Access Toolbar	413
Skills review	417
Practice tasks	418
Share custom elements between plans	418
Record and run macros	419
Edit macros	420
Customize the ribbon and Quick Access Toolbar	421

19

Share information with other programs	423
Practice files	423
Copy Project data to and from other programs	424
Open files in other formats in Project	428
Save to other file formats from Project	431
Generate reports with Excel and Visio	435
Skills review	439
Practice tasks	440
Copy Project data to and from other programs	440
Open files in other formats in Project	441
Save to other file formats from Project	443
Generate reports with Excel and Visio	444

20

Consolidate projects and resources	447
Practice files	447
Share a resource pool across multiple plans	448
Consolidate plans	456
Create dependencies between plans	460
Skills review	464

Practice tasks	465
Share a resource pool across multiple plans	465
Consolidate plans	466
Create dependencies between plans	466

21

Use Agile project management with Project	469
Practice files	469
Navigate the Agile project management template	470
Reset the Agile project management template	472
Create the product backlog	476
Create the Agile team	478
Plan a sprint	479
Record progress from daily scrum meetings	483
Generate reports for sprint reviews	486
Sources for more information	488
Skills review	489
Practice tasks	490
Navigate the Agile project management template	490
Reset the Agile project management template	491
Create the product backlog	493
Create the Agile team	494
Plan a sprint	495
Record progress from daily scrum meetings	498
Generate reports for sprint reviews	500

Part 5: Appendixes

A

A short course in project management	505
Understand what defines a project	505
The project triangle: View projects in terms of time, cost, and scope	507
Time	507

Cost	508
Scope	509
Time, cost, and scope: Manage project constraints	509
You have less time	510
You have fewer resources	511
You have more work	512
Manage your projects with Project	513

B

Develop your project management skills 515

Join a Project learning community	515
Join a project-management learning community	516

C

Collaborate: Project, SharePoint, and PWA 519

Set the Project desktop client to Computer mode	519
Sources for more information	521
Share your plan by using SharePoint	522
Sources for more information	525
Team collaboration with Project Web App	525
Sources for more information	531
Project portfolio management	531
Sources for more information	533

D

Use this book in a classroom 535

Match content to instructional needs	535
Teach project management with Project	538

Glossary	539
Index	547
About the authors	567

Author Acknowledgments

Thank you to the many people who supported me while writing this book. I thank my technical editor, Christine Flora, for her insightful thoughts and technical expertise. I thank James Mills, Jr., for his expertise as a co-author of Chapter 21 and his great collaboration. A special thank you to my husband, my family, and my friends who supported me during this process. Thank you also out to the amazing editorial team who ensured the book's quality.

—*Cindy Lewis*

This page intentionally left blank

Introduction



Welcome! This *Step by Step* book has been designed so that you can read it from the beginning to learn about Microsoft Project 2019 and then build your skills as you learn to perform increasingly specialized procedures. Alternatively, if you prefer, you can jump in wherever you need ready guidance for performing tasks. The how-to steps are delivered crisply and concisely—just the facts. You'll also find informative, full-color graphics that support the instructional content.

Who this book is for

Microsoft Project 2019 Step by Step is designed for use as a learning and reference resource by home and business users of Microsoft programs who want to use Project to create and manage projects more efficiently. The content of the book is designed to be useful both for people who have previously used earlier versions of Project and for people who are discovering Project for the first time.

The *Step by Step* approach

The book's coverage is divided into chapters representing general Project skill sets. Each part is divided into chapters representing skill set areas, and each chapter is divided into topics that group related skills. Each topic includes expository information followed by generic procedures. At the end of each chapter is a series of practice tasks you can complete on your own by using the skills taught in the chapter. You can use the practice files that are available from this book's website to work through the practice tasks, or you can use your own files.

Chapter	Folder	Files
Part 3: Advanced scheduling techniques		
9: Fine-tune task scheduling	Ch09	ScheduleTasksAdvanced.mpp ViewTaskPath.mpp
10: Fine-tune task details	Ch10	FineTuneTasks.mpp
11: Fine-tune resource and assignment details	Ch11	FineTuneAssignments.mpp FineTuneResources.mpp
12: Fine-tune the Project plan	Ch12	FineTunePlan.mpp
13: Organize plan details	Ch13	OrganizeDetails.mpp
14: Track progress: Detailed techniques	Ch14	RescheduleIncompleteWork.mpp TrackTimephasedWork.mpp TrackWork.mpp UpdateBaseline.mpp
15: View and report project status	Ch15	ReportStatus.mpp
Part 4: In-depth and special subjects		
16: Format and print views: In-depth techniques	Ch16	FormatInDepth.mpp
17: Format reports: In-depth techniques	Ch17	FormatReportsInDepth.mpp
18: Customize Project	Ch18	CustomizeProjectA.mpp CustomizeProjectB.mpp
19: Share information with other programs	Ch19	SampleTaskList.xlsx ShareInformation.mpp
20: Consolidate projects and resources	Ch20	ConsolidatePlansA.mpp ConsolidatePlansB.mpp ShareResourcesA.mpp ShareResourcesB.mpp
21: Use Agile Project Management with Project	Ch21	AgileTeam.mpp GenerateReports.mpp ProductBacklog.mpp RecordProgress.mpp TemplateReset.mpp WorkingSprint.mpp

Ebook edition

If you're reading the ebook edition of this book, you can do the following:

- Search the full text
- Print
- Copy and paste

You can purchase and download the ebook edition from the Microsoft Press Store at <https://www.microsoftpressstore.com/store/microsoft-project-2019-step-by-step-9781509307425>.

Adapt procedure steps

This book contains many images of the Project user interface elements (such as the ribbon and the program window) that you'll work with while performing tasks in Project on a Windows computer. Depending on your screen resolution or window width, the Project ribbon on your screen might look different from the one shown in this book. (If you turn on Touch mode, the ribbon might display some commands in a different layout.) As a result, procedural instructions that involve the ribbon might require a little adaptation.

Simple procedural instructions use this format:

1. On the **Task** tab, in the **View** group, click the **Gantt Chart** button.

If the command is in a list, our instructions use this format:

1. On the **View** tab, in the **Data** group, click the **Filter** arrow and then, in the **Filter** list, click **Summary Tasks**.

If differences between your display settings and ours cause a button to appear differently on your screen than it does in this book, you can easily adapt the steps to locate the command. First click the specified tab and then locate the specified group. If a group has been collapsed into a group list or under a group button, click the list or button to display the group's commands. If you can't immediately identify the button you want, point to likely candidates to display their names in ScreenTips.

Multistep procedural instructions use this format:

1. On the **View** tab, in the **Resource Views** group, click the **Resource Sheet** button to display the Resource Sheet view.
2. On the **View** tab, in the **Data** group, click the **Tables** button and then click **Cost**.

The instructions in this book assume that you're interacting with onscreen elements on your computer by clicking (with a mouse, touchpad, or other hardware device). If you're using a different method—for example, if your computer has a touchscreen interface and you're tapping the screen (with your finger or a stylus)—substitute the applicable tapping action when you interact with a user interface element.

Instructions in this book refer to Project user interface elements that you click or tap on the screen as *buttons* and refer to physical buttons that you press on a keyboard as *keys*, to conform to the standard terminology used in documentation for these products.

When the instructions tell you to enter information, you can do so by typing on a connected external keyboard, tapping an onscreen keyboard, or even speaking aloud, depending on your computer setup and your personal preferences.

How to get support & provide feedback

The following sections provide information on errata, book support, feedback, and contact information.

Errata & book support

We've made every effort to ensure the accuracy of this book and its companion content. You can access updates to this book—in the form of a list of submitted errata and their related corrections—at <https://www.microsoftpressstore.com/store/microsoft-project-2019-step-by-step-9781509307425>.

If you discover an error that is not already listed, please submit it to us at the same page.

If you need additional support, email Microsoft Press Book Support at microsoftpresscs@pearson.com.

Please note that product support for Microsoft software and hardware is not offered through the previous addresses. For help with Microsoft software or hardware, go to <http://support.microsoft.com>.

Stay in touch

Let's keep the conversation going! We're on Twitter: <http://twitter.com/MicrosoftPress>.

Part 2

Simple scheduling basics

CHAPTER 3

Start a new plan 37

CHAPTER 4

Build a task list 49

CHAPTER 5

Set up resources 79

CHAPTER 6

Assign resources to tasks 99

CHAPTER 7

Format and share your plan125

CHAPTER 8

Track progress: Basic techniques153

This page intentionally left blank

Start a new plan

3

Practice files

No practice files are necessary to complete the practice tasks in this chapter.

A project's schedule or plan is essentially a model that you construct for some project aspects that you are anticipating—what you expect will happen, or what you want to happen. This model focuses on certain key aspects of a project, such as tasks, resources, time frames, and possible associated costs. Note that this book refers to the types of documents that Project 2019 works with as *plans*, not documents or schedules.

This chapter guides you through procedures related to creating a new plan and setting its start date, setting nonworking days in a project calendar, and entering a plan's title and other properties.

Create a new plan and set its start date

As you might expect, Project focuses primarily on time. Sometimes you might know the expected start date of a project, the expected finish date, or both. However, when working with Project, you specify only one date, not both—either the plan's start date or its finish date.

In this chapter

- Create a new plan and set its start date
- Set nonworking days in the project calendar
- Enter the plan title and other properties

After you enter the plan’s start date or finish date and any additional details, Project calculates the other date for you. Remember that Project is not merely a static repository of your schedule information or a Gantt chart drawing tool—it is an active scheduling engine.

Most plans should be scheduled from a start date, even if you know that the plan should finish by a certain deadline date. Scheduling from a start date sets all tasks to begin as soon as possible and gives you the greatest scheduling flexibility. In this chapter and later chapters, you will see this flexibility in action as you work with a plan that is scheduled from a start date.

To create a new plan

1. In Project, if the **File** tab is displayed, click it and then click **New**.
2. In the list of templates, click **Blank Project** or any other template you want.

Or

1. If you already have a list of available templates on the Start screen, click **Blank Project** or any other template you want.

When you create a new plan, Project sets the plan’s start date to the current date. As Figure 3-1 shows, Project draws a thin green vertical line in the chart portion of the Gantt Chart view at the current date.



TIP Line formatting can be changed to accommodate color blindness. See Chapter 16, “Format and print views: In-depth techniques,” and its discussion on gridlines.

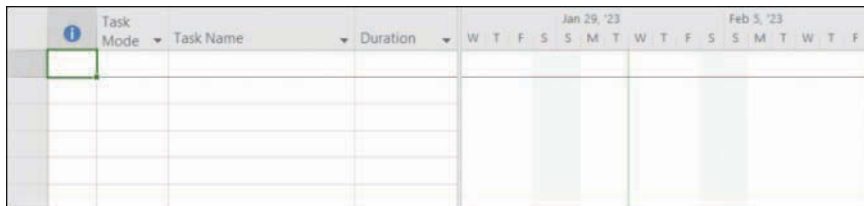


FIGURE 3-1 The current date is shown in the Gantt Chart view; look for the green vertical line (your current date likely differs).



TIP The current date line is drawn at the start of the day.

To set (or change) the plan's start date

1. On the **Project** tab, in the **Properties** group, click **Project Information**.
2. In the **Project Information** dialog box, in the **Start Date** box, either enter the start date you want or click the arrow to select one from the calendar.



TIP In the calendar, you can use the left and right arrows to navigate to any month and then click the date you want, or you can click Today to quickly choose the current date.

3. Click **OK** to accept the start date and close the **Project Information** dialog box.

To save the new plan

1. Click the **File** tab, and then click **Save As**.
2. On the **Save As** page, navigate to the location where you want to save the plan.



TIP You can adjust Project settings related to files. For example, you can set Project to automatically display the Project Information dialog box each time you create a new plan. To make this change, click the File tab and then click Options. In the Project Options dialog box, click Advanced, and then, under General, select the check box titled Prompt for Project Info for New Projects. You can also instruct Project to automatically save the active plan at predefined intervals, such as every 10 minutes. In the Project Options dialog box, click Save, select the Auto Save Every check box, and then specify the time interval you want.

Set nonworking days in the project calendar

Calendars are the primary means by which you control when each task and resource can be scheduled for work in Project. In later chapters, you will work with other types of calendars; in this chapter, we focus on the project calendar.

The project calendar defines the general working and nonworking days and times for tasks for the entire plan. Project includes multiple calendars, called base calendars, and any one of those calendars can serve as the project calendar for a plan. As Figure 3-2 shows, you select the base calendar to be used as the project calendar in the Project Information dialog box.

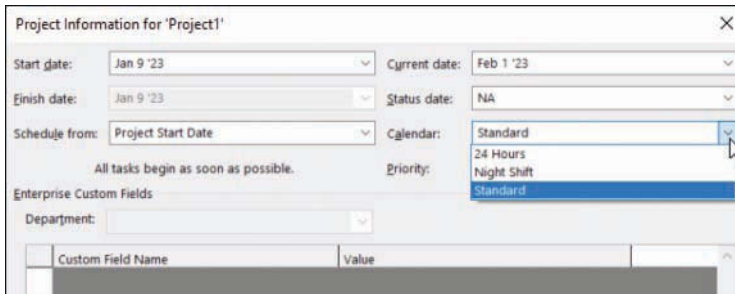


FIGURE 3-2 Set the plan's start date, project calendar, and other essential schedule settings in the Project Information dialog box.



IMPORTANT If you are using Project Professional instead of Project Standard, be aware that the Project Information dialog box and some other dialog boxes may contain additional options related to Project Online or Project Server. For more information, see Appendix C, "Collaborate: Project, SharePoint, and PWA."

The Calendar list contains the three base calendars that are included with Project:

- **24 Hours** Has no nonworking time; all time is working time.
- **Night Shift** Covers a night shift schedule of Monday night through Saturday morning, 11:00 P.M. to 8:00 A.M. (23:00 to 08:00), with a 1-hour break each day.
- **Standard** The traditional working day and week, Monday through Friday from 8:00 A.M. to 5:00 P.M. (08:00 to 17:00), with a 1-hour break each day.

Only one of the base calendars serves as the project calendar; the Standard calendar is the default.

Think of the project calendar as your organization's normal working days and hours. For example, this might be Monday through Friday, 8:00 A.M. through 5:00 P.M. (08:00 to 17:00), with a 1-hour lunch break each day. Your organization or specific resources might have exceptions to this normal working time, such as public holidays or vacation days (personal holidays). You'll address resource vacations in Chapter 5, "Set up resources."

You customize calendars as shown in Figure 3-3 in the Change Working Time dialog box, which opens when you click the Change Working Time button on the Project tab.

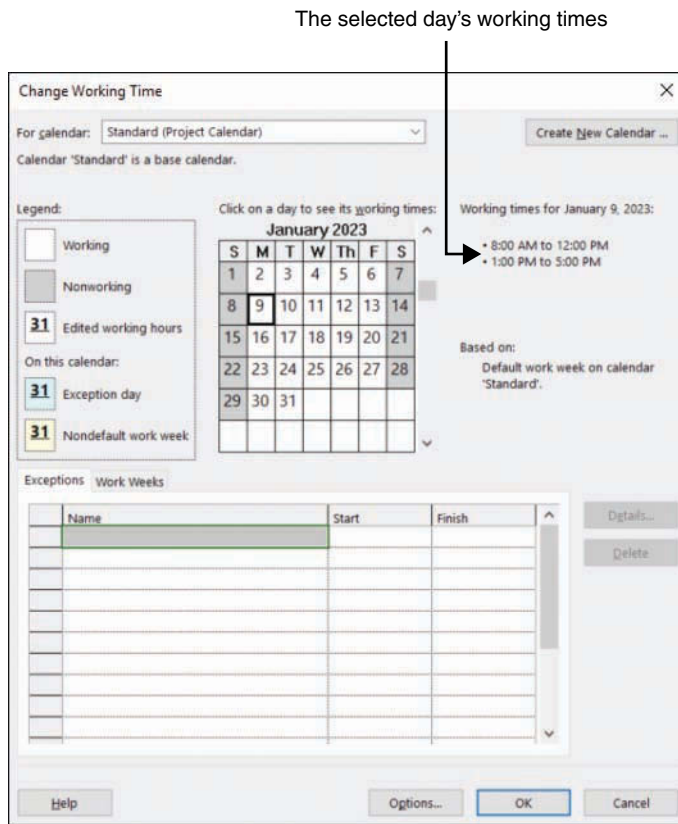


FIGURE 3-3 You customize a calendar's working time in the Change Working Time dialog box.

Use this dialog box to set normal working schedules and working time exceptions for individual resources or the entire plan. Other common examples of working time adjustments include the following:

- Recurring holidays or other times off that follow a known pattern, such as weekly, monthly, or annually.
- Variable working times per week—for example, to address seasonal changes in working times.
- Unique working hours for a resource. You'll adjust such settings in Chapter 5.

To select the project calendar

1. On the **Project** tab, in the **Properties** group, click the **Project Information** button.
2. In the **Project Information** dialog box, in the **Calendar** box, click the arrow and then click the calendar you want to use as the project calendar.

To set a specific date as nonworking

1. On the **Project** tab, in the **Properties** group, click the **Change Working Time** button.
2. On the **Exceptions** tab in the lower portion of the **Change Working Time** dialog box, in the **Name** field, enter a description of the exception.



TIP You don't need to name calendar exceptions, but it's a good practice for you or others to identify the reason for the exception.

3. In the **Start** and **Finish** fields, enter or select the dates you want.
4. Click **OK**.

To set up a recurring nonworking time

1. On the **Project** tab, in the **Properties** group, click the **Change Working Time** button.
2. On the **Exceptions** tab of the **Change Working Time** dialog box, in the **Name** field, enter a description of the recurring exception.
3. Click in the **Start** field, and then click **Details**.
4. In the **Details** dialog box, under **Recurrence Patterns**, select the recurrence values you want, and then click **OK**.
5. Click **OK** to close the **Change Working Time** dialog box.

To set up a custom work week

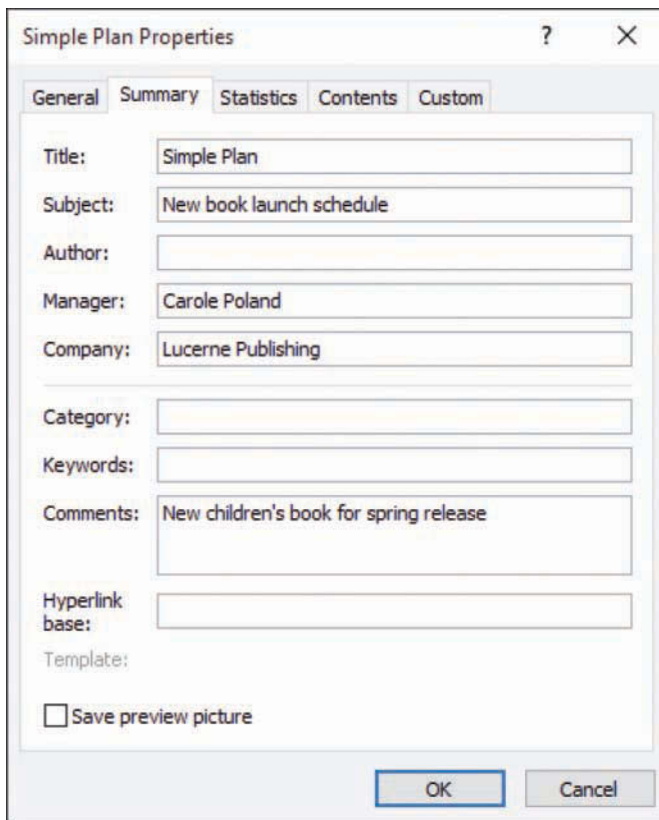
1. On the **Project** tab, in the **Properties** group, click the **Change Working Time** button.
2. Click the **Work Weeks** tab in the lower portion of the **Change Working Time** dialog box.
3. Click a row below the [Default] value.
4. Enter a description and the date range you want to apply to the custom work week.
5. In the **Start** and **Finish** fields, enter or select the date range you want to apply to the custom work week.
6. Click **Details**.

7. In the **Details** dialog box, select the day and time values you want, and then click **OK**.
8. Click **OK** to close the **Change Working Time** dialog box.

Enter the plan title and other properties

3

As with other Microsoft Office apps, Project keeps track of several document properties. Some of these properties are statistics, such as how many times the document has been revised. Other properties include information that you might want to record about a plan, such as the project title, the project manager's name, or keywords to support a file search. Some of these properties are used in views, reports, and page headers and footers when printing. You can view and record these properties in the Properties dialog box shown in Figure 3-4.



The screenshot shows the 'Simple Plan Properties' dialog box with the 'Summary' tab selected. The fields are filled with the following information:

Field	Value
Title:	Simple Plan
Subject:	New book launch schedule
Author:	
Manager:	Carole Poland
Company:	Lucerne Publishing
Category:	
Keywords:	
Comments:	New children's book for spring release
Hyperlink base:	
Template:	

The 'Save preview picture' checkbox is unchecked. The 'OK' and 'Cancel' buttons are located at the bottom right of the dialog box.

FIGURE 3-4 Record useful summary information about a plan in the Properties dialog box.



TIP The project title and comments automatically appear on the Project Summary Task. For more information, see Chapter 4, “Build a task list.”

To enter a plan’s properties

1. Click the **File** tab, and then click **Info**.
2. On the right side of the **Info** screen, click **Project Information**. In the menu that appears, click **Advanced Properties**.
3. Enter the properties you want to record (all are optional), and then click **OK**.

Project management focus: Project is part of a larger picture

Depending on your needs and the information to which you have access, the plans that you develop in Project might not deal with other important aspects of your projects. For example, many large projects take place in organizations that have a formal change-management process. Before a major change to the scope of a project is allowed, the people managing and implementing the project must evaluate and approve the change. Even though this is an important project-management activity, it is not done directly within Project.

Skills review

In this chapter, you learned how to

- Create a new plan and set its start date
- Set nonworking days in the project calendar
- Enter the plan title and other properties

Practice tasks

No practice files are necessary to complete the practice tasks in this chapter.



IMPORTANT If you are running Project Professional, Project Online Professional, or Project Online Premium, make sure your Project desktop client is not connected to Project Web App but is instead set to Computer mode. For more information, see Appendix C.

Create a new plan and set its start date

The scenario: Throughout this book, you play the role of a project manager at Lucerne Publishing, a book publisher that specializes in children's books. Lucerne is about to publish a major new book, and you've been asked to develop a plan for the book launch. Start Project and perform the following tasks:

1. Create a new plan based on the **Blank Project** template.
2. Set the new plan's start date to January 9, 2023.
3. Save the new plan as **Simple Plan**.

Set nonworking days in the project calendar

The scenario: At Lucerne Publishing, you need to account for an upcoming date on which the entire Lucerne staff will be unavailable to work on the book launch project. Continuing in the Simple Plan plan, perform the following task:

1. In the project calendar, create a nonworking day calendar exception named **Staff at morale event** for January 25, 2023, which is illustrated in Figure 3-5.

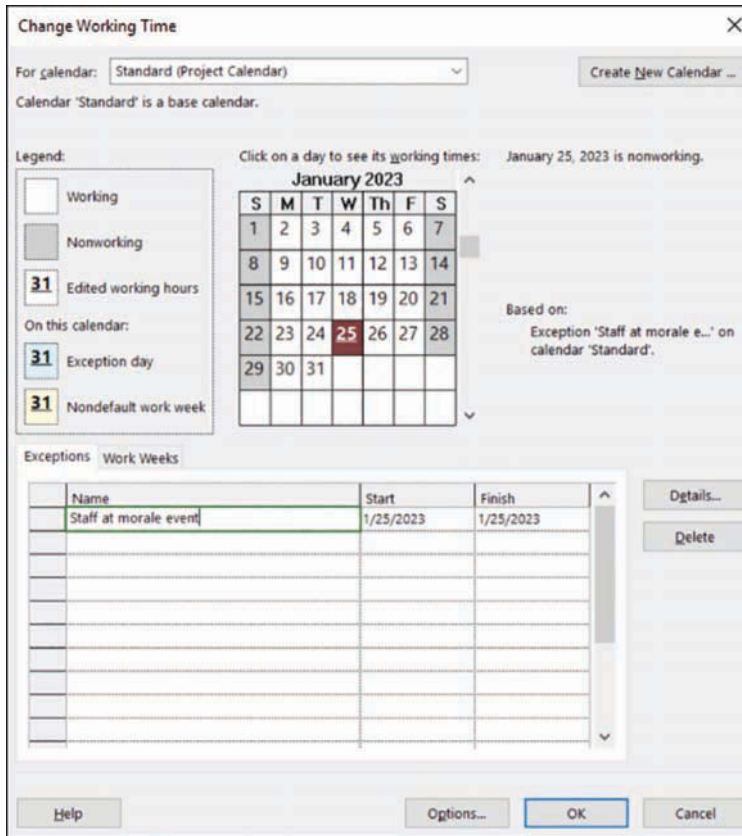


FIGURE 3-5 The calendar exception you created should look like this in the *Change Working Time* dialog box.

Enter the plan title and other properties

The scenario: You want to record top-level information about the new book launch plan. These details don't affect the overall schedule, but they relate to important supplemental information you want to keep in the plan. Continuing in the Simple Plan plan, perform the following task:

1. Give the Simple Plan the following properties:
 - Subject: **New book launch schedule**
 - Manager: **Carole Poland**
 - Company: **Lucerne Publishing**
 - Comments: **New children's book for spring release**

2. Review the Gantt Chart view for this plan and, in the timescale, locate the vertical current date line and the date for the morale event you created in the previous section.

Notice that the morale event is shaded the same way as other nonworking time in the timescale.



TIP If you do not see the shading for nonworking time, check to make sure you are viewing the timescale by days instead of by weeks or months.

Index

Symbols

% Complete column (tables), progress tracking, 162

Numbers

8/80 rule, accuracy in durations (tasks), 56–57
24 Hour calendars (plans), 40

A

accessibility, 6
Account page (Backstage view), 19
accuracy in durations (tasks), 56–57
active view (report), 14
activities. *See* tasks
actual costs, 268, 319–320
actual values
 collecting from resources, 325–326
 manually entering, 326
actual/remaining work in tasks/assignments, tracking, 315–320
 Lucerne Publishing practice example, 330–331
 timephased work, 321–327, 331–332
actuals and progress tracking, 153
Agile project management, 469–470, 488
 Agile teams, creating, 478–479, 494–495
 childhood behavior and, 476
 product backlogs
 assigning/unassigning work items, 481–482
 creating, 476–477, 493–494
 updating, 483
 resources, 488–489
 scrum meetings, recording progress from, 483–485, 498–500
 sprints, 478
 generating reports, 486–488, 500–501
 planning, 479–483, 495–498
 Team Planner view, 480, 484
 templates
 navigating, 470–472, 490–491
 resetting, 472–475, 490–491
ALAP (As Late As Possible) constraint, 183
allocations (resources), 256–257
 evaluating, 258, 274
 example of, 257
 fully allocated resources, 256

 graphing against a timescale, 260
 overallocated resources, 256, 258
 editing assignment-level work, 261
 finding, 259–260
 leveling resources, 262–268, 275–276
 manually adding level delays, 261–262
 resolving manually, 260–262, 275
 Resource Allocation view, 257, 258, 259–260
 Resource Usage view, 257, 258–259, 260–261
 underallocated resources, 256, 258
ASAP (As Soon As Possible) constraint, 183, 184–185
assigning resources to tasks
 checking plans after resource assignments, 112–116, 122–123
 cost resources, 111–112, 121–122
 effort-driven scheduling, 105–111
 changing schedule results when removing resources from tasks, 111, 120–121
 managing for specific tasks, 111
 Lucerne Publishing practice example, 117–119
 material resources, 240–241, 242
 work items to product backlogs, 481–482
 work resources, 100–105, 117–119
assignment units, 196
assignments (resources)
 actual/remaining work, tracking, 315–320, 330–331
 contours, applying to assignments (resources), 236–239, 251–252
 incomplete work, rescheduling, 327–328, 332
 manually editing work per time period, 239
 start dates, delaying, 235–236, 251
 tasks and, breaking relationships, 326
 Team Planner view, adjusting in, 244–247, 254
 timephased work, progress tracking, 321–327, 331–332
AutoFilter, 8
automatically scheduled tasks, 50
 durations, 55, 57–58
 rescheduling, 63
 switching to manually scheduled tasks, 51–53, 72
availability (work resources), 80, 228–230, 248

B

backlogs (product)
 assigning/unassigning work items, 481–482
 creating, 476–477, 493–494
 updating, 483

- Backstage view, 8, 16, 18
 - Account page, 19
 - exiting, 20
 - Export page, 19
 - Info page, 18–19
 - New page, 19
 - creating plans as blank projects, 21
 - creating plans from templates/
other plans, 21
 - pinning templates to, 19–20
 - Open page
 - pinning folders to, 19
 - pinning plans to, 19
 - options, 18
 - plans
 - creating as blank projects, 21
 - creating from templates/other plans, 21
 - opening, 21
 - saving, 21
 - Print page, 19
 - Project integration, 7
 - Project Options dialog, 19
 - Share page, 19
 - templates, creating from existing plans, 21–22
 - baselines (plans)
 - clearing previously saved baselines, 158
 - comparing, 312–313, 314
 - costs, 268
 - displaying
 - Gantt bar baselines in Gantt Chart view, 158
 - values with Variance tables, 158
 - removing, 315
 - saving, 155–158, 168
 - updating, 312–315, 326–330
 - variance, 334–337, 350
 - blank projects, creating plans as, 21
 - bottom-up planning, 60
 - Budget Cost visual reports, 344–345, 346
 - Burndown reports and variance, 336–337
- C**
- Calendar view, formatting, 372–374, 383–384
 - calendars (plans)
 - 24 Hour calendars, 40
 - customizing, 404
 - new base calendars, creating/applying in tasks,
191–193
 - Night Shift calendars, 40
 - nonworking days, setting, 39–40
 - Lucerne Publishing practice example, 45–46
 - recurring nonworking days, 42
 - specific dates, 42
 - resource calendars, 86–87
 - assigning a different base calendar to a
resource, 90
 - modifying work days/times, 89–90, 96
 - specifying exceptions for work
resources, 87–88
 - selecting, 41
 - standard base calendars, 190–191
 - Standard calendars, 40
 - work resources, specifying for, 87–88
 - work weeks, customizing, 42–43
 - callouts, switching task bars to callouts in Timeline
view, 135–136
 - capacity (maximum), work resources, 82–83
 - Lucerne Publishing practice example, 95
 - viewing, 242–244, 253–254
 - Cash Flow reports, 344, 345
 - change highlighting, task scheduling, 175
 - charts
 - adding to reports, 391
 - customizing in reports, 392–396, 400–401
 - in reports, 28–29
 - childhood behavior and Agile project management,
476
 - collapsing/expanding ribbon interface, 16
 - collecting actual values from resources, 325–326
 - columns (tables), adding, 298–299
 - combination (split) view, 22
 - displaying, 28
 - primary/secondary views, 26
 - reports, 30–31
 - Task Form, 26
 - commands, 14
 - ribbon interface, 17
 - Task tab (ribbon interface), 17
 - touch input and, 17
 - comparing baselines (plans), 312–313, 314
 - completion percentages, tasks, 160–163,
169–170
 - consolidated plans, 456–457, 466
 - creating, 459
 - displaying project summary tasks, 460
 - insert plans, 457–458, 459
 - simplicity of, 459
 - uses of, 457
 - constraints, scheduling tasks with, 182, 204
 - applying constraints, 186–188
 - flexible constraints, 182
 - ALAP constraint, 183
 - ASAP constraint, 183, 184–185
 - inflexible constraints, 183
 - MFO constraint, 184
 - MSO constraint, 184, 185–186

- removing constraints, 188
 - semi-flexible constraints, 182–183
 - FNET constraint, 184
 - FNLT constraint, 184
 - SNET constraint, 183, 185, 190
 - SNLT constraint, 183
 - consumption rates and material resources
 - fixed consumption rates, 241
 - variable consumption rates, 241
 - context menus. *See* shortcut menus
 - contours, applying to assignments (resources), 236–239, 251–252
 - copying/pasting
 - data from other programs and pasting into Project, 426, 427
 - to Excel, 8
 - Gantt charts, 140
 - global template elements, 404–405, 406–407
 - images from other programs and pasting into Project, 427
 - Project data and pasting into other programs, 424–427, 440
 - reports, 140, 142, 150–151
 - Timeline view, 140, 141–142
 - views, 140–142, 150–151
 - to Word, 8
 - Cost Overview reports and variance, 336
 - cost resources, 90–91
 - assigning to tasks, 111–112, 121–122
 - defined, 79
 - Lucerne Publishing practice example, 97
 - costs, 268–269
 - actual costs, 268
 - actual costs (tasks), entering manually, 319–320
 - baseline costs, 268
 - Cost tables
 - displaying, 270, 345
 - reporting resource costs, 347–348, 349
 - current (scheduled) costs, 268
 - fixed costs in plans, 212–213, 223–224
 - Lucerne Publishing practice example, 276–277
 - remaining costs, 268
 - reports, 269–270, 271
 - resource costs, reporting, 346–348, 349, 353
 - task costs, reporting, 342–343, 352
 - Budget Cost visual reports, 344–345, 346
 - Cash Flow reports, 344, 345
 - Resource Cost Overview reports, 348, 349
 - Task Cost Overview reports, 343, 345
 - viewing essential cost/schedule values, 269
 - work resources, 80, 86
 - critical paths
 - crashing, 217
 - defined, 217
 - free slack, 217–218
 - slack/float, 217–218
 - changing slack threshold, 219
 - displaying slack for noncritical tasks, 219
 - viewing, 217–219, 225
 - cross-plan links, creating, 460–464, 466–467
 - current (scheduled) costs, 268
 - current date lines (plans), 38
 - custom fields, 8
 - custom reports, creating, 387–390, 391
 - charts
 - adding to reports, 391
 - customizing in reports, 392–396, 400–401
 - images, adding to reports, 392
 - Lucerne Publishing practice example, 399–400
 - shapes, adding to reports, 392
 - tables
 - adding to reports, 392
 - customizing in reports, 396–398, 401–402
 - text boxes, adding to reports, 392
 - customizing
 - calendars (plans), 40–41, 404
 - charts in reports, 392–396, 400–401
 - fields (tables), creating, 296–297
 - filters, 294
 - Gantt Chart view, 126–129, 146–148
 - global templates, 404, 406–407, 418–419
 - groups, editing, 286–288
 - plans, formatting changes, 38
 - Quick Access Toolbar, 413–414, 415–416, 421–422
 - reports, 137–139
 - charts, 392–396, 400–401
 - Lucerne Publishing practice example, 149–150
 - page setup options, 145
 - tables, 396–398, 401–402
 - ribbon interface, 8, 414, 416–417, 421–422
 - tables in reports, 396–398, 401–402
 - views, 377, 384
- ## D
- data maps, opening files in other formats in Project, 428–431, 441–443
 - date ranges, changing
 - pay rates over different date ranges, 233–234, 250
 - resource availability over multiple date ranges, 228–230, 248

deadline dates (tasks)

- deadline dates (tasks), 209–211
 - removing, 211
 - setting, 211, 223
- dedicated resource pools, creating, 451
- delaying
 - overallocated resources, manually adding level delays, 261–262
 - resource assignment start dates, 235–236, 251
- deleting
 - constraints from tasks, 188
 - deadline dates (tasks), 211
 - macros, 410
 - resources, 81
 - tasks, 51
 - work resources, 81
- deliverables, developing task lists, 51
- demoting tasks (outlining plans), 61
- dependencies (tasks), 61–62, 64–65
 - cross-plan links, 460–464, 466–467
 - finish-to-finish relationships (FF), 63
 - finish-to-start relationships (FS), 62, 63
 - linking tasks, 75–76, 179–182, 203
 - start-to-finish relationships (SF), 63
 - start-to-start relationships (SS), 62
 - summary tasks, 66
 - unlinking tasks, 66
- Design tab (ribbon interface), 16
- displaying
 - Budget Cost visual reports, 346
 - Cash Flow reports, 345
 - Cost tables, 270, 345, 349
 - insert plans, details of, 459
 - Late Tasks reports, 341
 - project summary tasks in consolidated plans, 460
 - reports, 139
 - Resource Cost Overview reports, 349
 - scheduled/baselines values with Variance tables, 158
 - Scrum Template Instructions view, 472
 - slack for noncritical tasks, 219
 - Slipping Tasks reports, 341
 - Task Cost Overview reports, 345
 - Tracking Gantt view, 341
 - Variance tables, 341
- documenting
 - resources, 91–92, 98
 - tasks, 68–70
 - adding hyperlinks to tasks, 69
 - adding notes to tasks, 69
 - Lucerne Publishing practice example, 77–78
 - removing formatting from tasks, 70
 - removing hyperlinks from tasks, 70
 - removing notes from tasks, 70
- drawing on Gantt charts, 129–130

- durations (tasks), 53–54, 58
 - 8/80 rule, 56–57
 - abbreviations, 55
 - accuracy in, 56–57
 - automatically scheduled tasks, 55, 57–58
 - checking, 66–68, 76–77
 - elapsed durations, 56
 - example of, 54
 - fixed duration task type, 194, 197
 - Lucerne Publishing practice example, 73
 - manually scheduled tasks, 55, 57–58, 63
 - milestones, 58–59
 - nonworking days, 55, 58

E

- editing macros, 410–412, 420–421
- effort-driven scheduling, 105–111
 - changing schedule results when removing resources from tasks, 111, 120–121
 - managing for specific tasks, 111
 - task types and, 198–199
- elapsed durations (tasks), 56
- equipment resources, 81–82
- estimates. *See* durations
- Excel
 - copying/pasting to, 8
 - generating reports in, 435–438, 444–445
- exceptions (calendar), specifying for work resources, 87–88
- expanding/collapsing ribbon interface, 16
- Export page (Backstage view), 19
- exporting views as PDF or XPS file, 377–378, 384

F

- Feedback smiley button, 13
- Field List pane (reports), 28–29
- fields (custom), creating, 296–297
- File tab (ribbon interface), 16, 18
- files in other formats
 - changing formatting, 431
 - opening in Project, 428–431, 441–443
 - saving to other formats in Project, 431–435, 443–444
- filtering
 - built-in filters, 294
 - creating/editing filters, 292–294
 - custom filters, 294
 - plan details, 289–295, 306
 - resources
 - by built-in/custom filters, 294
 - by column headings, 292

- highlight filters, 294–295
- Lucerne Publishing practice example, 306
- tasks
 - by built-in/custom filters, 294
 - by column headings, 292
 - highlight filters, 294–295
 - Lucerne Publishing practice example, 306
- finish dates (plans), 270–271
 - checking, 66–68, 76–77
 - Lucerne Publishing practice example, 276–277
- finish-to-finish relationships (FF), 63, 179
- finish-to-start relationships (FS), 62, 63, 179, 180
- fixed consumption rates, material resources, 241
- fixed costs in plans, 212–213, 223–224
- fixed duration task type, 194, 197
- fixed unit task type, 194, 197
- fixed work task type, 194
- flexible constraints, 182
 - ALAP constraint, 183
 - ASAP constraint, 183, 184–185
- float/slack, 217–218
 - changing slack threshold, 219
 - displaying slack for noncritical tasks, 219
- FNET (Finish No Earlier Than) constraint, 184
- FNLT (Finish No Later Than) constraint, 184
- folders, pinning to Open page (Backstage view), 19
- Format tab (ribbon interface), 16
- formatting
 - Calendar view, 372–374, 383–384
 - files in other formats
 - changing formatting, 431
 - opening in Project, 428–431, 441–443
 - saving to other formats in Project, 431–435, 443–444
 - Gantt Chart view, 358–364, 379–380
 - Network Diagram view, 368–371, 382–383
 - plans, customizing formatting, 38
 - reports, 138
 - Task Path, 178
 - tasks
 - removing formatting from tasks, 70
 - in Timeline view, 135–136
 - text, Gantt Chart view, 131–133
 - Timeline view, 24, 364–367, 381
- forms, Task Form, 26
- free slack, 217–218
- fully allocated resources, 256

G

- Gantt bar, 15, 16
- Gantt Chart view, 22–23

- assigning resources to tasks, 101, 102, 103–104, 118, 119, 121
- copying, 150
- customizing, 126–129, 146–148
- drawing on Gantt charts, 129–130
- elements of, 126–127
- finish dates (plans), checking, 67–68
- formatting, 131–133, 358–364, 379–380
- Gantt bar
 - customizing, 128, 130
 - displaying baselines in Gantt Chart view, 158
 - overallocated resources, resolving manually, 261
 - Presentation Styles, 128
 - printing, 143–144, 151
 - progress tracking with Gantt bar, 162–163
 - relationships, appearances of, 64
 - Scheduling Styles, 128
 - scrolling in, 136
 - timescale adjustments, 133, 137
- Gantt charts, 16, 17
 - copying, 140
 - drawing on Gantt charts, 129–130
 - panning/zooming in Timeline view, 136–137
- Gantt with Timeline view, 22, 23, 126
- generating reports
 - in Excel, 435–438, 444–445
 - sprint reports (Agile project management), generating, 486–488, 500–501
 - in Visio, 435–438, 444–445
- global templates, 403–404
 - copying, 404–405, 406–407
 - customizing, 404, 406–407, 418–419
 - elements of, 404
- grouping, 14
 - custom groups
 - editing, 286–288
 - grouping tasks/resources, 288–289
 - plan details, 284–289
 - resources, 286, 288–289, 305
 - tasks, 286, 288–289, 305

H

- highlighting
 - change highlighting, task scheduling, 175
 - filtering tasks/resources, 292, 294–295
- hyperlinks
 - adding hyperlinks to tasks, 69
 - Lucerne Publishing practice example, 77–78
 - removing hyperlinks from tasks, 70

I

- ID numbers, tasks, 49
- images
 - copying/pasting from another program into Project, 427
 - in reports, 28–29, 392
- importing files, opening files in other formats in Project, 428–431, 441–443
- inactive tasks, 272–273, 278
- incomplete work, rescheduling, 327–328, 332
- inflexible constraints, 183
 - MFO constraint, 184
 - MSO constraint, 184, 185–186
- Info page (Backstage view), 18–19
- insert plans, 457–458, 459
- interactive tasks, 9
- interim plans, 313–314, 315
- interrupting work on tasks, 188–189, 204–205

L

- lag time, relationships (tasks), 180, 181, 182
- Late Tasks reports and variance, 340, 341
- Layout tab (ribbon interface), 16
- lead time, relationships (tasks), 180–181, 182
- leveling overallocated resources, 261–262, 275–276
- Levelling Gantt view
 - overallocated resources, 266–268
 - resource allocation, 258
- linking
 - plans to resource pools, 454
 - tasks (dependencies), 61–62, 64–65, 179–182, 460–464
 - finish-to-finish relationships (FF), 63
 - finish-to-start relationships (FS), 62, 63
 - Lucerne Publishing practice example, 75–76, 203, 466–467
 - start-to-finish relationships (SF), 63
 - start-to-start relationships (SS), 62
 - summary tasks, 66
 - unlinking tasks, 66
- Lucerne Publishing practice example
 - Agile project management
 - Agile teams, 494–495
 - navigating templates, 490–491
 - product backlogs, 493–494
 - recording progress from scrum meetings, 498–500
 - resetting templates, 491–493
 - sprints, generating, 500–501
 - sprints, planning, 495–498
 - assigning resources to tasks

- checking plans after resource assignments, 122–123
- cost resources, 121–122
- effort-driven scheduling, 120–121
- work resources, 117–119
- assignments (resources), tracking actual/remaining work in tasks/assignments, 330–331
- availability
 - changing over multiple date ranges, 248
 - customizing, 248
- baselines
 - saving, 168
 - updating, 326–330
- consolidated plans, 466
- contours, applying to assignments (resources), 251–252
- copying /pasting data, pasting Project data into other programs, 440
- costs, fixed costs in plans, 223–224
- critical paths, viewing, 225
- cross-plan links, 466–467
- custom reports, creating, 399–400
 - charts, customizing in reports, 400–401
 - tables, customizing in reports, 401–402
- durations (tasks), checking, 76–77
- files in other formats, saving to other formats in Project, 443–444
- fixed costs in plans, 223–224
- Gantt Chart view, customizing, 146–148
- global templates, customizing, 418–419
- incomplete work, rescheduling, 332
- macros
 - editing, 420–421
 - recording/running, 419–420
- material resources
 - assigning, 252–253
 - creating, 252–253
- milestones, 74
- opening files in other formats in Project, 441–443
- organizing plan details
 - creating tables, 307–308
 - creating views, 308–310
 - filtering details, 306
 - grouping details, 305
 - sorting details, 304–305
- pay rates
 - changing pay rates over different date ranges, 250
 - multiple resource pay rates, 249–250
- plans
 - checking durations, 76–77
 - checking finish dates, 76–77
 - consolidated plans, 466
 - costs, 276–277

- creating, 45
- customizing templates, 418–419
- finish dates, 276–277
- fixed costs in plans, 223–224
- scheduling start dates, 45
- progress tracking
 - actual values, 170–172
 - completion percentages, 169–170
 - saving baselines, 168
 - tracking plans as scheduled, 169
- Quick Access Toolbar, customizing, 421–422
- recurring tasks, 224–225
- reports
 - copying, 150–151
 - customizing, 149–150
 - printing, 151–152
- reports, generating in Excel or Visio, 444–445
- resource assignments
 - adjusting in Team Planner view, 254
 - applying contours to assignments (resources), 251–252
 - delaying start dates, 251
- resource pools, sharing across plans, 465
- resources
 - configuring work resources, 94
 - cost resources, 97
 - documenting, 98
 - evaluating allocations, 274
 - leveling overallocated resources, 275–276
 - Max. Units field, 95
 - maximum capacity, 95
 - modifying work days/times, 96
 - pay rates, 95–96
 - resolving overallocated resources
 - manually, 275
 - viewing maximum capacity, 253–254
- ribbon interface, customizing, 421–422
- summary tasks, scheduling manually, 226
- tasks
 - adding to Timeline view, 148–149
 - constraints, scheduling tasks with, 204
 - creating, 71
 - documenting, 77–78
 - durations, 73
 - inactive tasks, 278
 - interrupting work on tasks, 204–205
 - linking tasks (dependencies), 75–76, 203
 - milestones, 74
 - outlining plans with summary tasks, 74–75
 - scheduling, 72
 - seeing task relationships with
 - Task Path, 202
 - setting deadline dates, 223
 - summary tasks, scheduling manually, 226

- switching automatically scheduled tasks/
 - manually scheduled tasks, 72
- task types, 206–207
- tracking actual/remaining work in tasks/
 - assignments, 330–331
- viewing task details with Task Inspector, 207–208
- working time for individual tasks, adjusting, 205
- Timeline view, adding tasks to, 148–149
- timephased work, progress tracking, 331–332
- variance, reporting, 349
- views
 - copying, 150–151
 - exporting as PDF or XPS file, 384
 - formatting, 379–384
 - printing, 151–152, 384

M

- macros
 - deleting, 410
 - editing, 410–412, 420–421
 - recording, 407–409, 419–420
 - running, 410, 419–420
 - security, 409
- managing
 - projects. *See also* Agile project management
 - changing scope of projects, 44
 - perspective of, 9–10
 - sharer plans in resource pools, 455–456
- manually scheduled tasks, 8, 50, 194
 - durations, 55, 57–58
 - rescheduling, 63
 - switching to automatic scheduled tasks, 51–53, 72
- maps (data), opening files in other formats in Project, 428–431, 441–443
- material resources, 239–240
 - assigning, Lucerne Publishing practice example, 252–253
 - assigning to tasks, 240–241, 242
 - creating, 241, 252–253
 - defined, 79
 - fixed consumption rates, 241
 - variable consumption rates, 241
- Max. Units field (work resources), 82–83, 95
- maximum capacity, work resources, 82–83
 - Lucerne Publishing practice example, 95
 - viewing, 242–244, 253–254
- MFO (Must Finish On) constraint, 184
- milestones, 58–59, 74
- Mini Toolbars, 15
- MSO (Must Start On) constraint, 184, 185–186

N

- naming
 - plans, 43–44, 46–47
 - tasks, 50
 - work resources, 80–81
- navigating Agile project management templates, 470–472
- Network Diagram view, formatting, 368–371, 382–383
- new features
 - Project 2010, 8–9
 - Project 2013, 7
 - Project 2016, 6–7
 - Project 2019, 5–6
- New page (Backstage view), 19
 - pinning templates to, 19–20
 - plans, creating as blank projects, 21
- Night Shift calendars (plans), 40
- nonworking days
 - durations, 55, 58
 - setting in calendars, 39–40
 - Lucerne Publishing practice example, 45–46
 - recurring nonworking days, 42
 - specific dates, 42
- notes
 - resources, documenting, 91–92, 98
 - tasks, documenting
 - adding notes to tasks, 69
 - Lucerne Publishing practice example, 77–78
 - removing notes from tasks, 70

O

- Office, Project support, 7
- OneDrive, Project integration, 7
- Open page (Backstage view), pinning
 - folders to, 19
 - plans to, 19
- opening files in other formats in Project, 428–431, 441–443
- Organizer, 18–19
 - copying elements of global templates, 404–405, 406–407
 - customizing global templates, 406–407
- organizing plan details
 - filtering details, 289–295, 306
 - grouping details, 284–289, 305
 - sorting details, 280–284, 304–305
 - tables, creating, 295–299, 307–308
 - views, creating, 299–303, 308–310
- outlining plans with summary tasks, 59–60
 - demoting tasks, 61
 - Lucerne Publishing practice example, 74–75

- promoting tasks, 60–61
 - overallocated resources, 256, 258
 - editing assignment-level work, 261
 - finding, 259–260
 - leveling resources, 262–268, 275–276
 - manually adding level delays, 261–262
 - resolving manually, 260–262, 275

P

- page setup options (reports), 145
- panning/zooming Gantt charts in Timeline view, 136–137
- pasting
 - data from other programs into
 - Project, 426, 427
 - images from other programs into Project, 427
 - Paste Special feature, 425
 - Project data into other programs, 424–427, 440
- paths (critical)
 - crashing, 217
 - defined, 217
 - free slack, 217–218
 - slack/float, 217–218
 - changing slack threshold, 219
 - displaying slack for noncritical tasks, 219
 - viewing, 217–219, 225
- pay rates, work resources, 83–85
 - changing pay rates over different date ranges, 233–234, 250
 - Lucerne Publishing practice example, 95–96
 - multiple resource pay rates, 230–232, 249–250
- PDF files
 - exporting views as, 377–378, 384
 - saving as PDF, 9
- Peak, 196, 198
- people resources, 81–82
- pinning to Open page (Backstage view)
 - folders, 19
 - plans, 19
 - templates, 19–20
- plans, 37–38
 - Backstage view
 - opening plans in, 21
 - saving in, 21
 - baselines
 - clearing previously saved baselines, 158
 - comparing, 312–313, 314
 - displaying Gantt bar baselines in Gantt Chart view, 158
 - displaying values with Variance tables, 158
 - removing, 315

- saving, 155–158, 168
 - updating, 312–315, 326–330
 - variance, 312–315, 334–337
- bottom-up planning, 60
- calendars
 - 24 Hour calendars, 40
 - changing start dates, 39
 - customizing, 404
 - customizing work weeks, 42–43
 - Night Shift calendars, 40
 - resource calendars, 86–90
 - scheduling start dates, 39
 - selecting, 41
 - setting nonworking days, 39, 42–43, 45–46
 - Standard calendars, 40
- checking after resource assignments, 112–116, 122–123
- consolidated plans, 456–457, 466
 - creating, 459
 - displaying project summary tasks, 460
 - insert plans, 457–458, 459
 - simplicity of, 459
 - uses of, 457
- costs, 268–269
 - actual costs, 268
 - baseline costs, 268
 - cost tables, 270
 - current (scheduled) costs, 268
 - fixed costs in plans, 212–213, 223–224
 - Lucerne Publishing practice example, 276–277
 - remaining costs, 268
 - reports, 269–270, 271
 - viewing essential cost/schedule values, 269
- creating, 11–13, 38
 - as blank projects, 21
 - Lucerne Publishing practice example, 45
 - sensitive material, 20
 - templates from existing plans, 21–22
 - from templates/other plans, 20, 21
- critical paths
 - crashing, 217
 - defined, 217
 - free slack, 217–218
 - slack/float, 217–218, 219
 - viewing, 217–219, 225
- current date lines, 38
- dependencies, creating, 460–464, 466–467
- durations (tasks), checking, 76–77
- filtering details, 289–295, 306
- finish dates, 270–271
 - checking, 66–68, 76–77
 - Lucerne Publishing practice example, 276–277
- fixed costs in plans, 212–213, 223–224
- formatting, customizing, 38
- global templates
 - copying elements of, 404–405, 406–407
 - customizing, 404, 406–407, 418–419
 - elements of, 404
- grouping plan details, 284–289
- insert plans, 457–458, 459
- interim plans, 313–314, 315
- naming, 43–44, 46–47
- organizing plan details
 - creating tables, 295–299, 307–308
 - creating views, 299–303, 308–310
 - filtering details, 289–295, 306
 - grouping details, 284–289, 305
 - sorting details, 280–284, 304–305
- outlining with summary tasks, 59–60, 74–75
 - demoting tasks, 61
 - promoting tasks, 60–61
- pinning to Open page (Backstage view), 19
- progress tracking, tracking plans as scheduled, 158–160, 169
- Project Information dialog, automatically displaying in plans, 39
- properties of, entering, 43–44, 46–47
- resource pools
 - dedicated resource pools, creating, 451
 - linking plans to, 454
 - sharing across plans, 448–451, 452–456, 465
- saving, 21, 39
- sharer plans
 - managing linked plans in resource pools, 455–456
 - unlinking from resource pools, 455
 - updating working times in resource pools, 456
- sorting plan details, 280–284, 304–305
- start dates
 - changing, 39
 - scheduling, 38, 39, 45
- tasks, linking tasks (dependencies), 460–464, 466–467
- top-down planning, 60
- predecessor tasks, 62–64, 65–66
 - lag time, 180, 181, 182
 - lead time, 180–181, 182
- Presentation Styles (Gantt Chart view), 128
- Print page (Backstage view), 19
- printing
 - reports, 142, 145, 151–152
 - views, 142–144, 374–377, 384–385
- product backlogs
 - assigning/unassigning work items, 481–482
 - creating, 476–477, 493–494
 - updating, 483

product scope

- product scope, 51
- progress tracking, 154
 - actual/remaining work in tasks/assignments, tracking, 315–320, 330–331
 - actuals and, 153
 - baselines
 - clearing previously saved baselines, 158
 - comparing, 312–313, 314
 - displaying Gantt bar baselines in Gantt Chart view, 158
 - displaying values with Variance tables, 158
 - removing, 315
 - saving, 155–158
 - updating, 312–315, 326–330
 - incomplete work, rescheduling, 327–328
 - interim plans, 313–314, 315
 - plans, tracking plans as scheduled, 158–160, 169
 - resource costs, reporting, 346–348, 349, 353
 - task costs, reporting, 352
 - Budget Cost visual reports, 344–345, 346
 - Cash Flow reports, 344, 345
 - Resource Cost Overview reports, 348, 349
 - Task Cost Overview reports, 343, 345
 - tasks
 - actual values, 163–165, 166, 170–172
 - completion percentages, 160–163, 169–170
 - timephased work, 321–327, 331–332
 - variance, 334
 - defined, 311
 - displaying Variance tables, 341
 - Late Tasks reports, 340, 341
 - reporting, 334–337, 350
 - slipping tasks, 338–341, 351
 - Slipping Tasks reports, 340–341
- Project
 - copying /pasting data
 - into other programs, 424–427, 440
 - pasting data from other programs into Project, 426, 427
 - pasting images from other programs into Project, 427
 - selecting data, 426
 - Project 2010, new features, 8–9
 - Project 2013, new features, 7
 - Project 2016, new features, 6–7
 - Project 2019
 - new features, 5–6
 - uses of, 3–4
 - project calendars
 - 24 Hour calendars, 40
 - Night Shift calendars, 40
 - nonworking days, setting, 39–40
 - Lucerne Publishing practice example, 45–46
 - recurring nonworking days, 42
 - specific dates, 42
 - selecting, 41
 - Standard calendars, 40
 - work weeks, customizing, 42–43
 - Project Dashboard reports and variance, 335–337
 - Project Information dialog
 - automatically displaying in plans, 39
 - options, 40
 - Projecting interface
 - active view (report), 14
 - changing file formatting, 431
 - commands, 14
 - Feedback smiley button, 13
 - Groups, 14
 - opening files in other formats, 428–431, 441–443
 - Quick Access Toolbar, 13
 - ribbon interface, 14
 - commands, 17
 - expanding/collapsing, 16
 - split buttons, 17
 - tabs, 16–17
 - saving files to other formats, 431–435, 443–444
 - ScreenTips, 14
 - shortcut menus (context/right-click menus), 15
 - Start screen, creating plans, 11–13
 - status bar, 14
 - Tell Me, 13
 - view label (report label), 14
 - view shortcuts, 15
 - Zoom Slider, 15
 - project management
 - Agile project management, 469–470, 488
 - Agile teams, 478–479, 494–495
 - assigning/unassigning work items from
 - product backups, 481–482
 - childhood behavior and, 476
 - navigating templates, 470–472, 490–491
 - recording progress from scrum meetings, 483–485, 498–500
 - resetting templates, 472–475, 490–491
 - resources, 488–489
 - sprints, 478, 479–483, 486–488, 495–498, 500–501
 - Team Planner view, 480, 484
 - updating product backups, 483
 - perspective of, 9–10
 - product backlogs, creating, 476–477, 493–494
 - progress tracking, 165–166
 - scope of projects, changing, 44
 - status reports, 337–338

- variance
 - benefits of, 341
 - status reports, 337–338
- Project Online, 5
- Project Online Premium, 4–5
- Project Online Professional, 4–5
- Project Options dialog (Backstage view), 19
- Project Professional, 4
 - inactive tasks, 272–273
 - interactive tasks, 9
 - SharePoint Task Lists, 9
 - Skype, 7
 - Team Planner view, 9
- project scope, 44, 51
- Project Server, 5
- Project Standard, 4
- Project Statistics dialog and variance, 334–335
- project summary tasks, displaying in consolidated plans, 460
- Project tab (ribbon interface), 16
- projects (blank), creating plans as, 21
- promoting tasks (outlining plans), 60–61
- PWA (Project Web App), 5

Q - R

- Quick Access Toolbar, 13, 413–414, 415–416, 421–422
- read-only resource pools, updating, 455
- recording macros, 407–409, 419–420
- recurring tasks, 213–216
 - assigning resources to tasks, 216–217
 - creating, 216
 - Lucerne Publishing practice example, 224–225
- rejoining split tasks, 190
- relationships (tasks), 61–62, 64–65
 - appearances of, 64
 - changing type of, 181
 - finish-to-finish relationships (FF), 63, 179
 - finish-to-start relationships (FS), 62, 63, 179, 180
 - lag time, 180, 181, 182
 - lead time, 180–181, 182
 - linking tasks (dependencies), 179–182, 203
 - seeing task relationships with Task Path, 176–178, 202
 - start-to-finish relationships (SF), 63, 179
 - start-to-start relationships (SS), 62, 179
 - summary tasks, 66
 - unlinking tasks, 66
- remaining costs, 268
- remaining/actual work in tasks/assignments, tracking, 315–320, 330–331
- removing
 - baselines (plans), 315
 - constraints from tasks, 188
 - deadline dates (tasks), 211
- report (active view), 14
- report label (view label), 14
- Report tab (ribbon interface), 16
- reports, 7
 - Budget Cost visual reports, 344–345, 346
 - Cash Flow reports, 344, 345
 - charts in, 28–29
 - copying, 140, 142, 150–151
 - cost reports, 269–270, 271
 - custom reports, creating, 387–390, 391
 - charts, adding to reports, 391
 - charts, customizing in reports, 392–396, 400–401
 - images, adding to reports, 392
 - Lucerne Publishing practice example, 399–400
 - shapes, adding to reports, 392
 - tables, adding to reports, 392
 - tables, customizing in reports, 396–398, 401–402
 - text boxes, adding to reports, 392
 - customizing, 137–139
 - Lucerne Publishing practice example, 149–150
 - page setup options, 145
 - displaying, 139
 - Field List pane, 28–29
 - formatting, 138
 - generating in Excel or Visio, 435–438, 444–445
 - images in, 28–29
 - page setup options, 145
 - printing, 142, 145, 151–152
 - Report Tools Design tab, 29–30
 - Resource Cost Overview reports, 138, 149–150, 151, 152, 348, 349
 - Resource Overview report, 28
 - split (combination) view, 30–31
 - sprint reports (Agile project management),
 - generating, 486–488, 500–501
 - status reports and project management, 337–338
 - Table Tools Design tab, 30
 - Table Tools Layout tab, 30
 - tables in, 28–29, 139
 - Task Cost Overview reports, 343, 345
 - task costs, 342–343
 - variance, examining
 - Burndown reports, 336–337
 - Cost Overview reports, 336
 - Late Tasks reports, 340, 341
 - Project Dashboard reports, 335–337
 - Project Statistics dialog, 334–335
 - Slipping Tasks reports, 340–341
 - “status-at-a-glance” snapshots, 334–335

reports

- views versus reports, 390–391
- visual reports, generating in Excel or Visio, 435–438, 444–445
- rescheduling
 - incomplete work, 327–328, 332
- tasks, 63–64, 190
- Resource Allocation view, 257, 258, 259–260
- Resource Cost Overview reports, 138, 149–150, 151, 152, 348, 349
- Resource Overview report, 28
- resource pools
 - dedicated resource pools, creating, 451
 - linking plans to, 454
 - sharer plans
 - managing linked plans in resource pools, 455–456
 - unlinking from resource pools, 455
 - updating working times in resource pools, 456
 - sharing across plans, 448–451, 452–456, 465
 - updating read-only resource pools, 455
 - viewing usage details, 455
- Resource sheet view, 24–25
- Resource tab (ribbon interface), 16
- Resource Usage view, 25, 257, 258–259
 - assignments, applying contours to assignments (resources), 236–239
 - overallocated resources, resolving manually, 260–261
 - resource costs, reporting, 347–348
 - timephased work, progress tracking, 327
 - timescale adjustments, 25
- resources, 79–80
 - actual values
 - collecting from resources, 325–326
 - manually entering, 326
 - allocations, 256–257
 - evaluating, 258, 274
 - example of, 257
 - fully allocated resources, 256
 - graphing against a timescale, 260
 - overallocated resources, 256, 258, 259–268, 275–276
 - Resource Allocation view, 257, 258, 259–260
 - Resource Usage view, 257, 258–259, 260–261
 - underallocated resources, 256, 258
 - assigning to tasks
 - checking plans after resource assignments, 112–116, 122–123
 - cost resources, 111–112, 121–122
 - effort-driven scheduling, 105–111
 - recurring tasks, 216–217
 - work resources, 100–105, 117–119
 - assignments
 - adjusting in Team Planner view, 244–247, 254
 - applying contours to assignments (resources), 236–239, 251–252
 - breaking relationships, 326
 - delaying start dates, 235–236, 251
 - manually editing work per time period, 239
 - rescheduling incomplete work, 327–328, 332
 - tracking actual/remaining work in tasks/ assignments, 315–320, 330–331
 - tracking timephased work, 321–327, 331–332
 - cost resources, 90–91
 - assigning to tasks, 111–112, 121–122
 - defined, 79
 - Lucerne Publishing practice example, 97
 - costs, reporting, 346–348, 349, 353
 - documenting, 91–92, 98
 - equipment resources, 81–82
 - filtering
 - by built-in/custom filters, 294
 - by column headings, 292
 - highlight filters, 294–295
 - Lucerne Publishing practice example, 306
 - grouping, 286, 288–289, 305
 - leveling overallocated resources, 262–268, 275–276
 - Lucerne Publishing practice example, configuring work resources, 94
 - material resources, 239–240
 - assigning to tasks, 240–241, 242
 - creating, 241
 - defined, 79
 - fixed consumption rates, 241
 - Lucerne Publishing practice example, 252–253
 - variable consumption rates, 241
 - maximum capacity, viewing, 242–244, 253–254
 - notes, documenting with, 91–92, 98
 - people resources, 81–82
 - resource calendars, 86–87
 - assigning a different base calendar to a resource, 90
 - modifying work days/times, 89–90, 96
 - specifying exceptions for work resources, 87–88
 - resource lists, inserting work resources into, 81
 - sorting, 283, 304–305
 - work resources
 - assigning to tasks, 100–105, 117–119
 - availability, 80, 228–230, 248
 - configuring, 94
 - costs, 80, 86
 - customizing availability, 228–230, 248
 - defined, 79
 - deleting, 81
 - equipment resources, 81–82

- inserting into resource lists, 81
- Lucerne Publishing practice example, 94–98
- Max. Units field, 82–83, 95
- maximum capacity, 82–83, 95
- naming, 80–81
- pay rates, 83–85, 95–96, 230–232, 233–234, 249–250
- people resources, 81–82
- resource calendars, 86–90
- ribbon interface, 8, 14
 - commands, 17
 - Task tab, 17
 - touch input and, 17
- customizing, 8, 414, 416–417, 421–422
- Design tab, 16
- expanding/collapsing, 16
- File tab, 16, 18
- Format tab, 16
- Layout tab, 16
- Project tab, 16
- Report tab, 16
- Resource tab, 16
- split buttons, 17
- tabs, 16
 - Task tab, 16, 17
- tool tabs, 16
- View tab, 16
- right-click menus. *See* shortcut menus

S

- saving
 - baselines (plans), 155–158
 - clearing previously saved baselines, 158
 - Lucerne Publishing practice example, 168
 - files in other formats in Project, 431–435, 443–444
 - as PDF, 9
 - plans, 21, 39
 - as XPS, 9
- scheduled (current) costs, 268
- scheduled tasks (manually), 8
- scheduling
 - effort-driven scheduling, 105–111
 - changing schedule results when removing resources from tasks, 111, 120–121
 - managing for specific tasks, 111
 - incomplete work, rescheduling, 327–328, 332
 - interrupting work on tasks, Lucerne Publishing practice example, 204–205
 - start dates (plans), 38, 39, 45
 - tasks
 - assignment units, 196
 - change highlighting, 175
 - constraints, 182–188, 204
 - creating/applying new base calendars, 191–193
 - effort-driven scheduling, 198–199
 - interrupting work on tasks, 188–189
 - linking tasks (dependencies), 179–182, 203
 - Lucerne Publishing practice example, 72
 - manually scheduled tasks, 194
 - Peak, 196, 198
 - rescheduling tasks, 63–64
 - seeing task relationships with Task Path, 176–178, 202
 - standard base calendars, 190–191
 - summary tasks manually, 219–222, 226
 - switching manual/automatic scheduling, 51–53
 - task types, 193–196, 197–198, 199, 206–207
 - viewing task details with Task Inspector, 199–200, 207–208
 - working time for individual tasks, adjusting, 190–193, 205
 - variance and, 338–341
- Scheduling Styles (Gantt Chart view), 128
- scope of product, 51
- scope of projects, 44, 51
- ScreenTips, 14
- scrolling in, Gantt Chart view, 136
- scrum meetings (Agile project management), recording progress from, 483–485, 498–500
- Scrum templates
 - displaying Scrum Template Instructions view, 472
 - switching between views, 472
- security, macros, 409
- segments, splitting tasks into, 190
 - rejoining split tasks, 190
 - rescheduling second half of a task, 190
- selecting Project data, 426
- semi-flexible constraints, 182–183
 - FNET (Finish No Earlier Than) constraint, 184
 - FNLT (Finish No Later Than) constraint, 184
 - SNET (Start No Earlier Than) constraint, 183, 185, 190
 - SNLT (Start No Later Than) constraint, 183
- sensitive material in plans, 20
- shapes, adding to reports, 392
- Share page (Backstage view), 19
- SharePoint Task Lists, 9
- sharer plans
 - managing linked plans in resource pools, 455–456
 - unlinking from resource pools, 455
 - updating working times in resource pools, 456
- sharing resource pools across plans, 448–451, 452–456, 465
- sheet views, 24–25
- shortcut menus (context/right-click menus), 15

shortcuts (views)

- shortcuts (views), 15
- Skype, Project integration, 7
- slack/float, 217–218
 - changing slack threshold, 219
 - displaying slack for noncritical tasks, 219
- slipping tasks and variance, 338–341, 351
- Slipping Tasks reports and variance, 340–341
- SNET (Start No Earlier Than) constraint, 183, 185, 190
- SNLT (Start No Later Than) constraint, 183
- sorting
 - plan details, 280–284, 304–305
 - resetting sorted lists, 284
 - resources, 283, 304–305
 - tasks, 283, 304–305
- split (combination) view, 22
 - displaying, 28
 - primary/secondary views, 26
 - reports, 30–31
 - Task Form, 26
- split buttons, ribbon interface, 17
- splitting tasks into segments, 190
 - rejoining split tasks, 190
 - rescheduling second half of a task, 190
- sprints (Agile project management), 478
 - generating reports, 486–488, 500–501
 - planning, 479–483, 495–498
- standard base calendars, 190–191
- Standard calendars (plans), 40
- start dates
 - plans
 - changing, 39
 - scheduling, 38, 39, 45
 - resource assignment start dates, delaying, 235–236, 251
- Start screen, creating plans, 11–13
- start-to-finish relationships (SF), 63, 179
- start-to-start relationships (SS), 62, 179
- Statistics dialog, checking finish dates (plans), 67–68
- status bar, 14
- status reports and project management, 337–338
- “status-at-a-glance” snapshots and variance, 334–335
- successor tasks, 62–64, 65–66
 - lag time, 180, 181, 182
 - predecessor tasks, 180–181, 182
- summary tasks, 59–60
 - demoting tasks, 61
 - linking, 66
 - outlining plans with summary tasks, 74–75
 - promoting tasks, 60–61
 - scheduling manually, 219–222, 226
 - task lists, inserting summary tasks into, 61

- switching
 - tables in views, 27
 - tasks, switching automatically
 - scheduled tasks/manually scheduled tasks, 72
 - views, 27, 472

T

- Table Tools Design tab (reports), 30
- Table Tools Layout tab (reports), 30
- tables
 - % Complete column, progress tracking, 162
 - columns, adding, 298–299
 - Cost tables
 - displaying, 270, 345
 - reporting resource costs, 347–348, 349
 - creating, 295–299, 307–308
 - custom fields, creating, 296–297
 - reports, 28–29
 - adding tables to reports, 392
 - applying styles to tables, 139
 - customizing tables in reports, 396–398
 - switching, in views, 27
 - Variance tables
 - displaying, 341
 - displaying scheduled/baselines values, 158
- tabular data, copying/pasting
 - from another program into Project, 427
 - Paste Special feature, 425
 - from Project to another program, 424–427, 440
- Task Cost Overview reports, 343, 345
- Task Form view, 26
 - assigning resources to tasks, 102–104, 105, 118
 - effort-driven scheduling, 106–107
- Task Inspector, viewing task details, 199–200, 207–208
- Task Mapping, opening files in other formats in Project, 429–431, 441–443
- Task Path, 7
 - formatting, 178
 - seeing task relationships with Task Path, 176–178, 202
- Task Sheet view, displaying Cost tables, 345
- Task Summary Name field, 6
- Task tab (ribbon interface), 16, 17
- Task Usage view, 25
 - actual/remaining work in tasks/assignments, tracking, 317, 330–331
 - assignments, applying contours to assignments (resources), 236–239
 - timephased work, progress tracking, 326

- tasks, 49
 - actual/remaining work, tracking, 315–320, 330–331
 - assigning resources to tasks
 - checking plans after resource assignments, 112–116, 122–123
 - cost resources, 111–112, 121–122
 - effort-driven scheduling, 105–111
 - work resources, 100–105, 117–119
 - assignments (resources), breaking relationships, 326
 - automatically scheduled tasks, 50
 - durations, 55, 57–58
 - rescheduling, 63
 - switching to manually scheduled tasks, 51–53, 72
 - constraints, scheduling tasks with, 182, 204
 - ALAP constraint, 183
 - applying constraints, 186–188
 - ASAP constraint, 183, 184–185
 - flexible constraints, 182, 183, 184–185
 - FNET constraint, 184
 - FNLT constraint, 184
 - inflexible constraints, 183, 184
 - MFO constraint, 184
 - MSO constraint, 184, 185–186
 - removing constraints, 188
 - semi-flexible constraints, 182–184
 - SNET constraint, 183, 185, 190
 - SNLT constraint, 183
 - costs
 - manually entering actual costs, 319–320
 - reports, 342–349, 352
 - creating, Lucerne Publishing practice example, 71
 - deadline dates, 209–211
 - Lucerne Publishing practice example, 223
 - removing, 211
 - setting, 211, 223
 - deleting, 51
 - dependencies, 61–62, 64–65
 - cross-plan links, 460–464, 466–467
 - finish-to-finish relationships (FF), 63
 - finish-to-start relationships (FS), 62, 63
 - linking tasks, 75–76
 - start-to-finish relationships (SF), 63
 - start-to-start relationships (SS), 62
 - summary tasks, 66
 - unlinking tasks, 66
 - documenting, 68–70
 - adding hyperlinks to tasks, 69
 - adding notes to tasks, 69
 - Lucerne Publishing practice example, 77–78
 - removing formatting from tasks, 70
 - removing hyperlinks from tasks, 70
 - removing notes from tasks, 70
 - durations, 53–54, 58
 - 8/80 rule, 56–57
 - abbreviations, 55
 - accuracy in, 56–57
 - automatically scheduled tasks, 55, 57–58
 - checking, 66–68, 76–77
 - elapsed durations, 56
 - example of, 54
 - Lucerne Publishing practice example, 73
 - manually scheduled tasks, 55, 57–58, 63
 - milestones, 58–59
 - nonworking days, 55, 58
 - filtering
 - by built-in/custom filters, 294
 - by column headings, 292
 - highlight filters, 294–295
 - Lucerne Publishing practice example, 306
 - formatting
 - removing formatting from tasks, 70
 - in Timeline view, 135–136
 - free slack, 217–218
 - grouping, 286, 288–289, 305
 - hyperlinks
 - adding hyperlinks to tasks, 69
 - Lucerne Publishing practice example, 77–78
 - removing hyperlinks from tasks, 70
 - ID numbers, 49
 - inactive tasks, 272–273, 278
 - incomplete work, rescheduling, 327–328, 332
 - interrupting work on tasks, 188–189, 204–205
 - Late Tasks reports, variance, examining, 340, 341
 - linking tasks (dependencies), 5, 61–62, 64–65, 179–182, 460–464
 - finish-to-finish relationships (FF), 63
 - finish-to-start relationships (FS), 62, 63
 - Lucerne Publishing practice example, 75–76, 203, 466–467
 - start-to-finish relationships (SF), 63
 - start-to-start relationships (SS), 62
 - summary tasks, 66
 - unlinking tasks, 66
 - manually scheduled tasks, 50
 - durations, 55
 - switching to automatically scheduled tasks, 51–53, 72
 - material resources, assigning to tasks, 240–241, 242
 - milestones, 58–59, 74
 - naming, 50
 - notes
 - adding notes to tasks, 69

- Lucerne Publishing practice example, 77–78
 - removing notes from tasks, 70
- predecessor tasks, 62–64, 65–66
 - lag time, 180, 181, 182
 - lead time, 180–181, 182
- progress tracking
 - actual values, 163–165, 166, 170–172
 - completion percentages, 160–163, 169–170
- project summary tasks, displaying in consolidated plans, 460
- promoting tasks (outlining plans), 60–61
- recurring tasks, 213–216
 - assigning resources to tasks, 216–217
 - creating, 216
 - Lucerne Publishing practice example, 224–225
- relationships, 61–62, 64–65
 - appearances of, 64
 - changing type of, 181
 - finish-to-finish relationships (FF), 63, 179
 - finish-to-start relationships (FS), 62, 63, 179, 180
 - lag time, 180, 181, 182
 - lead time, 180–181, 182
 - linking tasks (dependencies), 179–182, 203
 - seeing task relationships with Task Path, 176–178, 202
 - start-to-finish relationships (SF), 63, 179
 - start-to-start relationships (SS), 62, 179
 - summary tasks, 66
 - unlinking tasks, 66
- rescheduling tasks, 63–64, 190
- resources
 - assigning to recurring tasks, 216–217
 - material resources, 239–242
- scheduling
 - assignment units, 196
 - change highlighting, 175
 - constraints, 182–188, 204
 - creating/applying new base calendars, 191–193
 - effort-driven scheduling, 198–199
 - interrupting work on tasks, 188–189, 204–205
 - linking tasks (dependencies), 179–182, 203
 - Lucerne Publishing practice example, 72
 - manually scheduled tasks, 194
 - Peak, 196, 198
 - rescheduling tasks, 63–64
 - seeing task relationships with Task Path, 176–178, 202
 - standard base calendars, 190–191
 - summary tasks manually, 219–222, 226
 - switching manual/automatic scheduling, 51–53
 - task types, 193–196, 197–198, 199, 206–207
 - viewing task details with Task Inspector, 199–200, 207–208
- working time for individual tasks, adjusting, 190–193, 205
- slack/float
 - changing slack threshold, 219
 - displaying slack for noncritical tasks, 219
- slipping tasks and variance, 338–341, 351
- Slipping Tasks reports and variance, 340–341
- sorting tasks, 283, 304–305
- splitting into segments, 190
 - rejoining split tasks, 190
 - rescheduling second half of a task, 190
- standard base calendars, 190–191
- successor tasks, 62–64, 65–66
 - lag time, 180, 181, 182
 - lead time, 180–181, 182
- summary tasks, 59–60
 - demoting tasks, 61
 - inserting summary tasks into, 61
 - linking, 66
 - outlining plans with summary tasks, 74–75
 - promoting tasks, 60–61
 - scheduling manually, 219–222, 226
- task lists
 - developing, 51
 - inserting summary tasks into, 61
 - inserting tasks into, 50
- task types
 - changing, 194–196, 199
 - effort-driven scheduling, 198–199
 - fixed duration task type, 194, 197
 - fixed unit task type, 194, 197
 - fixed work task type, 194
 - Lucerne Publishing practice example, 206–207
- Timeline view
 - adding tasks to, 133–135, 148–149
 - formatting tasks, 135–136
 - switching task bars to callouts, 135–136
- timephased work, progress tracking, 321–327, 331–332
- unlinking tasks, 66
- viewing task details with Task Inspector, 199–200, 207–208
- working time for individual tasks, adjusting, 190–193, 205
- Team Planner view, 9
 - Agile project management, 480, 484
 - resource assignments, adjusting, 244–247, 254
- Tell Me, 7, 13
- templates
 - Agile project management templates
 - childhood behavior and, 476
 - navigating, 470–472, 490–491
 - resetting, 472–475, 490–491
 - creating, from existing plans, 21–22

- global templates, 403–404
 - copying elements of, 404–405, 406–407
 - customizing, 404, 406–407, 418–419
 - elements of, 404
 - pinning to New page (Backstage view), 19–20
 - plans
 - creating from templates, 21
 - creating from templates/other plans, 20
 - product backlogs
 - assigning/unassigning work items, 481–482
 - updating, 483
 - Scrum templates
 - displaying Scrum Template Instructions view, 472
 - switching between views, 472
 - sensitive material, 20
 - sources of, 20
 - viewing offline, 20
 - text, formatting in Gantt Chart view, 131–133
 - text boxes, adding to reports, 392
 - themes, 7
 - Timeline view, 5, 6, 8, 22–23
 - callouts, switching task bars to, 135–136
 - copying, 140, 141–142
 - displaying/hiding, 28
 - finish dates (plans), checking, 67
 - formatting, 24, 364–367, 381
 - Gantt charts, panning/zooming, 136–137
 - multiple timeline bars in, 23
 - task bars, switching to callouts, 135–136
 - tasks
 - adding to Timeline view, 133–135, 148–149
 - formatting tasks, 135–136
 - timephased work, progress tracking, 321–327, 331–332
 - timescale adjustments
 - Gantt Chart view, 133, 137
 - resource allocation, graphing against a timescale, 260
 - in views, 25, 27
 - tool tabs (ribbon interface), 16
 - top-down planning, 60
 - touch input, commands and, 17
 - Tracking Gantt view
 - baselines (plans), comparing, 312–313, 314
 - displaying, 341
 - schedule variance, 338–341
 - tracking progress, 154
 - actual/remaining work in tasks/assignments, tracking, 315–320, 330–331
 - actuals and, 153
 - baselines
 - clearing previously saved baselines, 158
 - comparing, 312–313, 314
 - displaying Gantt bar baselines in Gantt Chart view, 158
 - displaying values with Variance tables, 158
 - removing, 315
 - saving, 155–158
 - updating, 312–315, 326–330
 - incomplete work, rescheduling, 327–328
 - interim plans, 313–314, 315
 - plans, tracking plans as scheduled, 158–160, 169
 - resource costs, reporting, 346–348, 349, 353
 - task costs, reporting, 352
 - Budget Cost visual reports, 344–345, 346
 - Cash Flow reports, 344, 345
 - Resource Cost Overview reports, 348, 349
 - Task Cost Overview reports, 343, 345
 - tasks
 - actual values, 163–165, 166, 170–172
 - completion percentages, 160–163, 169–170
 - timephased work, 321–327, 331–332
 - variance, 334
 - defined, 311
 - displaying Variance tables, 341
 - Late Tasks reports, 340, 341
 - reporting, 334–337, 350
 - slipping tasks, 338–341, 351
 - Slipping Tasks reports, 340–341
- ## U
- underallocated resources, 256, 258
 - unlinking tasks, 66
 - updating
 - baselines (plans), 312–315, 326–330
 - product backlogs, Agile project management, 483
 - read-only resource pools, 455
 - sharer plans, updating working times in resource pools, 456
 - usage views
 - Resource usage view, 25
 - Task Usage view, 25
 - user interface
 - active view (report), 14
 - commands, 14
 - Feedback smiley button, 13
 - Groups, 14
 - Quick Access Toolbar, 13
 - ribbon interface, 14
 - commands, 17
 - expanding/collapsing, 16
 - split buttons, 17
 - tabs, 16–17

- ScreenTips, 14
- shortcut menus (context/right-click menus), 15
- Start screen, creating plans, 11–13
- status bar, 14
- Tell Me, 13
- view label (report label), 14
- view shortcuts, 15
- Zoom Slider, 15

V

- variable consumption rates, material resources, 241
- variance, 334
 - defined, 311
 - reporting
 - Burndown reports, 336–337
 - Cost Overview reports, 336
 - Late Tasks reports, 340, 341
 - Lucerne Publishing practice example, 350
 - Project Dashboard reports, 335–337
 - Project Statistics dialog, 334–335
 - Slipping Tasks reports, 340–341
 - status reports, 337–338
 - “status-at-a-glance” snapshots, 334–335
 - schedule variance, 338–341
 - slipping tasks, 338–341, 351
 - Variance tables
 - displaying, 341
 - displaying scheduled/baselines values, 158
- VBA macros
 - deleting, 410
 - editing, 410–412, 420–421
 - recording, 407–409, 419–420
 - running, 410, 419–420
 - security, 409
- view label (report label), 14
- view shortcuts, 15
- View tab (ribbon interface), 16
- viewing
 - critical paths, 217–219, 225
 - essential cost/schedule values, 269
 - maximum capacity of resources, 242–244, 253–254
 - resource pool usage details, 455
 - task details with Task Inspector, 199–200, 207–208
- views, 22
 - active view (report), 14
 - Backstage view, 8, 16, 18
 - Account page, 19
 - creating plans as blank projects, 21
 - creating plans from templates/other plans, 21
 - creating templates from existing plans, 21–22
 - exiting, 20
 - Export page, 19
 - Info page, 18–19
 - New page, 19, 21
 - Open page, 19
 - opening plans, 21
 - options, 18
 - Print page, 19
 - Project integration, 7
 - Project Options dialog, 19
 - saving plans, 21
 - Share page, 19
 - Calendar view, formatting, 372–374, 383–384
 - copying, 140–142, 150–151
 - creating, 299–303, 308–310
 - customizing, 377, 384
 - exporting as PDF or XPS file, 377–378, 384
 - Gantt Chart view, 22–23
 - assigning resources to tasks, 101, 102, 103–104, 118, 119, 121
 - checking finish dates (plans), 67–68
 - copying, 150
 - customizing, 126–129, 130, 146–148
 - displaying Gantt bar baselines in Gantt Chart view, 158
 - drawing on Gantt charts, 129–130
 - elements of, 126–127
 - formatting, 131–133, 358–364, 379–380
 - Presentation Styles, 128
 - printing, 143–144, 151
 - progress tracking with Gantt bar, 162–163
 - relationships, 64–65
 - resolving overallocated resources manually, 261
 - Scheduling Styles, 128
 - scrolling in, 136
 - timescale adjustments, 133, 137
 - Gantt with Timeline view, 22, 23, 126
 - Levelling Gantt view
 - overallocated resources, 266–268
 - resource allocation, 258
 - Network Diagram view, formatting, 368–371, 382–383
 - printing, 142–144, 151–152, 374–377, 384
 - reports versus views, 390–391
 - Resource Allocation view, 257, 258, 259–260
 - Resource sheet view, 24–25
 - Resource Usage view, 25, 257, 258–259
 - applying contours to assignments, 236–239
 - overallocated resources, 260–261
 - resource costs, reporting, 347–348
 - timephased work, tracking, 327
 - timescale adjustments, 25
- Scrum templates

- displaying Scrum Template Instructions view, 472
- switching between views, 472
- sheet views, Resource sheet view, 24–25
- split (combination) view, 22
- switching, 27
- Task Form view, 26
 - assigning resources to tasks, 102–104, 105, 118
 - effort-driven scheduling, 106–107
- Task Sheet view, displaying Cost tables, 345
- Task Usage view, 25
 - applying contours to assignments, 236–239
 - timephased work, tracking, 326
 - tracking actual/remaining work in tasks/ assignments, 317, 330–331
- Team Planner view, 9
 - adjusting resource assignments, 244–247, 254
 - Agile project management, 480, 484
- Timeline view, 5, 6, 8, 22–23
 - adding tasks to, 133–135, 148–149
 - checking finish dates (plans), 67
 - copying, 140, 141–142
 - displaying/hiding, 28
 - formatting, 24, 364–367, 381
 - formatting tasks, 135–136
 - multiple timeline bars in, 23
 - panning/zooming Gantt charts, 136–137
 - switching task bars to callouts, 135–136
- timescale adjustments, 27
- Tracking Gantt view
 - comparing baselines (plans), 312–313
 - displaying, 341
- usage views
 - Resource usage view, 25
 - Task Usage view, 25
- Visio, generating reports in, 435–438, 444–445
- visual reports, generating in Excel or Visio, 435–438, 444–445

W

- Word, copying/pasting to, 8
- work packages. *See* tasks
- work resources
 - assigning to tasks, 100–105, 117–119
 - availability, 80, 228–230, 248
 - configuring, 94
 - costs, 80, 86
 - defined, 79
 - deleting, 81
 - equipment resources, 81–82
 - Max. Units field, 82–83, 95
 - maximum capacity, 82–83, 95
 - naming, 80–81
 - pay rates, 83–85
 - changing pay rates over different date ranges, 233–234, 250
 - Lucerne Publishing practice example, 95–96
 - multiple resource pay rates, 230–232, 249–250
 - people resources, 81–82
 - resource calendars, 86–87
 - assigning a different base calendar to a resource, 90
 - modifying work days/times, 89–90, 96
 - specifying exceptions for work resources, 87–88
 - resource lists, inserting into, 81
 - work weeks, customizing in calendars, 42–43
- working times
 - individual tasks, adjusting in, 190–193, 205
 - sharer plans, updating in resource pools, 456

X-Y-Z

- XPS files
 - exporting views as, 377–378, 384
 - saving files as XPS, 9
- Zoom Slider, 15, 25, 27
- zooming/panning, Gantt charts in Timeline view, 136–137