

# **Ultimate Study Guide: Foundations Microsoft Project 2010**

Dale A. Howard  
Gary L. Chefetz

# Ultimate Study Guide: Foundations

Microsoft Project 2010

Copyright © 2010 Chefetz LLC dba MSProjectExperts

Publisher: Chefetz LLC dba MSProjectExperts  
Authors: Dale A. Howard and Gary L. Chefetz  
Cover Design: Emily Baker  
Copy Editor: Rodney L. Walker  
Cover Photo: Peter Hurley

ISBN: 978-1-934240-13-7

Library of Congress Control Number: 2010932705

All rights reserved. You may not reproduce or transmit any part of this work in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written consent of the copyright owner and the publisher.

We use trademarked names in this book in an editorial context and to the benefit of the trademark owner with no intention of infringement of the trademark.

Published and distributed by Chefetz LLC dba MSProjectExperts, 90 John Street, Suite 404, New York, NY 10038. (646) 736-1688 <http://www.msprojectexperts.com>

We provide the information contained in this book on an "as is" basis, without warranty. Although we make every effort to ensure the accuracy of information provided herein, neither the authors nor the publisher shall have any liability to any person or entity with respect to any loss or damage caused or allegedly caused directly or indirectly by the information contained in this work.

MSProjectExperts publishes a complete series of role-based training/reference manuals for Microsoft's Enterprise Project Management software including Microsoft Project and Microsoft Project Server. Use our books for self-study or for classroom learning delivered by professional trainers and corporate training programs. To learn more about our books and courseware series for Administrators, Implementers, Project Managers, Resource Managers, Executives, Team Members, and Developers, or to obtain instructor companion products and materials, contact MSProjectExperts by phone (646) 736-1688 or by email [info@msprojectexperts.com](mailto:info@msprojectexperts.com).

# Contents

- Introduction..... xi
- Download the Sample Files..... xi
- Module 01: Project Management Overview..... 1**
  - What is a Project?..... 3
  - Understanding the Project Management Process..... 3
    - Definition* ..... 3
    - Planning*..... 4
    - Execution*..... 4
    - Control* ..... 5
    - Closure* ..... 5
- Module 02: Microsoft Project 2010 Overview..... 7**
  - Introducing the Global.mpt File ..... 9
  - Understanding the User Interface ..... 9
  - Understanding the Ribbon..... 11
    - Using the Task Ribbon* ..... 11
    - Using the Resource Ribbon* ..... 13
    - Using the Project Ribbon* ..... 14
    - Using the View Ribbon*..... 15
    - Using the Format Ribbon* ..... 16
    - Collapsing the Ribbon* ..... 19
  - Using the Backstage (File Tab)..... 19
  - Using Navigation Features..... 32
    - Using Shortcut Menus*..... 32
    - Using Built-In Keyboard Shortcuts* ..... 34
    - Zooming the Timescale*..... 34
    - Tips for Using the Scroll Bars* ..... 37
    - Using the Scroll to Task button* ..... 37
    - Using Screen Tips and Tool Tips* ..... 37
  - Customizing the User Interface ..... 38
    - Customizing the Ribbon*..... 38
    - Customizing the Quick Access Toolbar*..... 44
    - Importing/Exporting a Custom Ribbon* ..... 49
  - Understanding the Planning Wizard..... 52
  - Understanding Gantt Chart Symbols ..... 53
    - Reading a Gantt Chart* ..... 54

Contents

*Understanding Gantt-Optimized Scheduling Benefits* ..... 55

Creating a Three-Tiered Timescale ..... 55

*Displaying Fiscal Year in a Three-Tiered Timescale* ..... 56

**Module 03: Inside Microsoft Project 2010** ..... **59**

Understanding the Microsoft Project Data Model ..... 61

Understanding Views ..... 61

*Using Single Views and Combination Views* ..... 65

Understanding Tables ..... 67

Understanding Filters ..... 72

*Applying a Standard Filter* ..... 72

*Applying a Highlight Filter* ..... 75

Understanding Groups ..... 77

*Applying a Group* ..... 78

**Module 04: Project Definition** ..... **85**

Creating a New Project from a Template ..... 87

*Creating a New Project Using a Template* ..... 88

*Creating a New Project from an Existing Project* ..... 91

*Creating a New Project from a SharePoint Task List* ..... 92

Defining a New Project ..... 96

Step #1 - Set the Project Start Date ..... 96

Step #2 - Enter the Project Properties ..... 98

Step #3 - Display the Project Summary Task ..... 102

Step #4 - Set the Project Working Schedule ..... 103

*Adding Nonworking Time to the Standard Calendar* ..... 103

*Setting the Working Schedule* ..... 109

*Creating a New Base Calendar* ..... 113

*Setting the Project Calendar* ..... 116

Step #5 - Set Options Unique to this Project ..... 118

*Setting the Task Mode Option* ..... 119

*Setting Options in the Project Options Dialog* ..... 120

*Setting General Options* ..... 121

*Setting Display Options* ..... 122

*Setting Schedule Options* ..... 123

*Setting Proofing Options* ..... 127

*Setting Save Options* ..... 128

*Setting Language Options* ..... 130

*Setting Advanced Options* ..... 130

*Setting Add-Ins Options* ..... 133

<i>Setting Trust Center Options</i> .....	133
Step #6 - Save the Project .....	139
<i>Saving a Project as an Alternate File Type</i> .....	141
<i>Saving a Project File as a PDF or XPS Document</i> .....	142
<i>Understanding Reduced Functionality with Older Project File Formats</i> .....	145
<i>Opening a Project Created in an Older Version of Microsoft Project</i> .....	146
Saving a Project to SharePoint .....	148
Sharing a Project via E-Mail .....	153
<b>Module 05: Project Task Planning</b> .....	<b>155</b>
Understanding the Task Planning Process .....	157
Auto-Wrapping Task Names .....	157
Understanding Change Highlighting .....	158
Understanding Manually Scheduled vs. Auto Scheduled Tasks .....	159
Using Basic Task Planning Skills .....	159
<i>Entering and Editing Tasks</i> .....	159
<i>Entering Manually Scheduled Tasks</i> .....	160
<i>Moving Tasks</i> .....	162
<i>Inserting Tasks</i> .....	163
<i>Deleting Tasks</i> .....	165
Creating the Work Breakdown Structure (WBS) .....	166
<i>Inserting Summary Tasks</i> .....	168
<i>Creating a Manually Scheduled Summary Task</i> .....	170
Creating Milestones .....	172
<i>Inserting a Milestone Task</i> .....	173
Using Task Notes and Cell Background Formatting .....	174
Using Task Dependencies .....	179
<i>Understanding Task Dependencies</i> .....	180
<i>Setting Task Dependencies</i> .....	181
<i>Linking Manually Scheduled Tasks</i> .....	182
<i>Removing a Task Dependency</i> .....	183
<i>Using Lag Time with Dependencies</i> .....	185
<i>Using Lead Time with Dependencies</i> .....	186
<i>Understanding Schedule Warnings and Suggestions</i> .....	188
<i>Using the Respect Links Feature</i> .....	190
<i>Using the Task Inspector</i> .....	190
<i>Using Alternate Methods to Set Dependencies</i> .....	193
Setting Task Constraints and Deadline Dates .....	198
<i>Setting Constraints</i> .....	199

## Contents

<i>Adding Notes on Tasks with Constraints</i> .....	200
<i>Understanding Flexible and Inflexible Constraints</i> .....	201
<i>Understanding Planning Wizard Messages about Constraints</i> .....	203
<i>Understanding Task Scheduling Changes</i> .....	204
<i>Using Deadline Dates</i> .....	206
<i>Viewing Missed Constraints and Deadline Dates</i> .....	207
Assigning Task Calendars .....	209
Understanding Duration-Based and Effort-Based Planning .....	211
<i>Estimating Task Durations</i> .....	212
Using the Task Inspector to Determine Task Drivers .....	213
Creating Recurring Tasks .....	216
Planning for Known Fixed Costs .....	221
<b>Module 06: Project Resource Planning</b> .....	<b>223</b>
Defining Project Resources .....	225
Creating Work Resources .....	226
Entering Custom Resource Information .....	229
<i>Entering General Information</i> .....	230
<i>Changing Working Time</i> .....	231
<i>Entering Cost Information</i> .....	239
<i>Entering Resource Notes</i> .....	241
<i>Using the Custom Fields Page</i> .....	242
Creating Generic Resources .....	243
Creating Material Resources .....	246
<i>Creating a Budget Cost Resource</i> .....	248
<i>Creating an Expense Cost Resource</i> .....	248
Sorting Resources in the Resource Sheet View .....	251
Inserting New Resources in the Resource Sheet View .....	252
<b>Module 07: Project Assignment Planning</b> .....	<b>255</b>
Understanding Assignments .....	257
<i>Using a Work Estimation Methodology</i> .....	257
<i>Assigning Resources Using a Best Practice</i> .....	257
Assigning Resources to Tasks .....	258
Using the Task Entry View .....	258
Using the Assign Resources Dialog .....	263
Understanding the Duration Equation .....	266
<i>Understanding Task Types</i> .....	268
<i>Understanding the Peak and Assignment Units Fields</i> .....	272
Setting the Cost Rate Table .....	277

Assigning Material Resources.....	283
Assigning Cost Resources .....	286
<i>Using Expense Cost Resources</i> .....	289
Using Effort Driven Scheduling .....	292
<i>Using Non-Effort Driven Scheduling</i> .....	295
Replacing Resources Assigned to Tasks.....	297
Using the Team Planner View .....	303
<i>Leveling an Overallocated Resource in the Team Planner View</i> .....	306
<i>Dragging Tasks in the Team Planner View</i> .....	308
<i>Changing Schedule Information in the Team Planner View</i> .....	309
Understanding Resource Overallocation .....	312
<i>Locating Resource Overallocations</i> .....	313
Leveling Overallocated Resources .....	314
<i>Using a Leveling Methodology</i> .....	315
<i>Setting Leveling Options</i> .....	315
<i>Leveling an Overallocated Resource</i> .....	316
<i>Viewing Leveling Results</i> .....	317
<i>Clearing Leveling Results</i> .....	319
<i>Setting Task Priority Numbers</i> .....	319
<i>Leveling Resource Overallocations in a Task View</i> .....	321
Understanding the Intricacies of Manually Scheduled Tasks .....	324
<i>Understanding Unsupported Task Features</i> .....	325
<i>Understanding Work Value Calculations for Calendar Exceptions</i> .....	325
<b>Module 08: Project Execution</b> .....	<b>335</b>
Understanding the Execution Process .....	337
Rescheduling an Unstarted Project .....	337
Viewing the Critical Path.....	340
Working with Project Baselines .....	344
<i>Saving a Project Baseline</i> .....	345
<i>Saving a “Rolling Baseline”</i> .....	346
<i>Saving Over a Previous Baseline</i> .....	347
<i>Viewing the Project Baseline</i> .....	348
<i>Clearing the Project Baseline</i> .....	349
<i>Using Additional Baselines</i> .....	350
Tracking Project Progress .....	352
<i>Entering Progress Using Percent Complete</i> .....	353
<i>Entering Progress Using Actual Work and Remaining Work</i> .....	354
<i>Entering Progress Using a Daily Timesheet</i> .....	357

Contents

*Entering Progress for an Expense Cost Resource* ..... 362

Rescheduling Uncompleted Work ..... 364

Rescheduling a Task..... 368

Setting Tasks to Inactive ..... 370

Synchronizing with a SharePoint Tasks List..... 375

*Adding Fields to the Task Synchronization Process* ..... 380

*Reporting Progress Using a SharePoint Tasks List*..... 386

**Module 09: Variance Analysis, Plan Revision, and Change Control** ..... **393**

Understanding Variance..... 395

*Understanding Variance Types*..... 395

*Calculating Variance*..... 395

*Understanding Actual vs. Estimated Variance*..... 396

Analyzing Project Variance ..... 396

*Analyzing Date Variance* ..... 397

*Analyzing Work Variance*..... 399

*Analyzing Cost Variance* ..... 400

Understanding Custom Views ..... 402

*What Is A View?* ..... 402

Creating a New Custom View Using a Four-Step Method..... 403

*Creating a Custom Table*..... 403

*Creating a Custom Filter*..... 408

*Creating a Custom Group*..... 412

*Creating a New Custom View*..... 418

Creating a Combination View ..... 422

Using the Organizer ..... 425

*Copying Custom Objects*..... 426

*Renaming and Deleting Custom Objects*..... 428

Revising a Project Plan..... 430

*Potential Problems with Revising a Plan*..... 430

Using a Change Control Process ..... 432

*Inserting New Tasks in a Project* ..... 432

Rebaselining Your Project ..... 434

*Backing Up an Original Baseline*..... 435

*Rebaselining the Entire Project*..... 437

*Baselining Only Selected Tasks*..... 437

*Rebaselining Only Unstarted Tasks*..... 439

*Rebaselining the Entire Project Using an Alternate Baseline*..... 442

Viewing Multiple Baselines..... 447

<b>Module 10: Project Reporting</b> .....	<b>449</b>
Reporting in Microsoft Project 2010.....	451
Using Enhanced Copy and Paste.....	451
Using the Timeline with the Gantt Chart View.....	455
<i>Adding a Task to the Timeline</i> .....	457
<i>Formatting the Timeline View</i> .....	459
<i>Adding Tasks Using the Contextual Format Ribbon</i> .....	462
<i>Exporting the Timeline View</i> .....	466
Creating a New Table by Customizing an Existing Table.....	468
<i>Customizing an Existing Table and Creating a New Table</i> .....	468
<i>Customizing a Table Using the Add New Column Feature</i> .....	470
Creating a New View by Customizing an Existing View.....	476
<i>Resetting a Default View and Table after Customization</i> .....	479
Formatting the Gantt Chart.....	481
<i>Using the Format Tools</i> .....	482
<i>Using the Columns Tools</i> .....	493
<i>Using the Bar Styles Tools</i> .....	495
<i>Using the Gantt Chart Style Tools</i> .....	501
<i>Using the Show/Hide Tools</i> .....	502
<i>Using the Drawing Tools</i> .....	504
Customizing the Team Planner View.....	507
Formatting Other Views.....	513
<b>Module 11: Printing Views, Reports, and Visual Reports</b> .....	<b>515</b>
More about Project Reporting.....	517
Printing Views.....	517
<i>Using Page Setup</i> .....	518
<i>Creating a Header or Footer</i> .....	525
<i>Setting Print Options</i> .....	527
Printing Reports.....	528
<i>Understanding Report and View Interaction</i> .....	534
Understanding Report Definition.....	536
Creating Custom Reports.....	541
<i>Creating Custom Monthly Calendar Reports</i> .....	544
<i>Creating Custom Crosstab Reports</i> .....	548
Using Visual Reports.....	552
<i>Viewing a Visual Report</i> .....	556
<i>Customizing a Microsoft Excel Visual Report</i> .....	562
<i>Customizing a Microsoft Visio Visual Report</i> .....	569

Contents

- Saving Local OLAP Cube Data* .....573
- Creating Visual Report Templates ..... 574
  - Editing Visual Report Templates* ..... 580
  - Managing Your Visual Report Templates* ..... 583
- Module 12: Project Closure** .....**585**
  - Using Project Closure Methodologies..... 587
  - Closing a Project ..... 587
    - Cancelling Unnecessary Tasks* ..... 588
    - Marking Milestones as Complete* ..... 593
  - Saving a Completed Project as a Template ..... 596
    - Creating a New Project from a Template* ..... 600
  - Using the Compare Project Versions Tool ..... 604
- Index**.....**609**

# Introduction

Welcome to the *Ultimate Study Guide: Foundations Microsoft Project 2010*. You picked up the right manual if you seek a complete learning experience and reference to managing projects using the Microsoft Project 2010 desktop application. Our goal in writing this book is to teach you how to use the software effectively.

We take a systematic approach to the topical ordering in this book, in which every module teaches you foundational skills by following the project life cycle. In these modules, you learn how to define a new project; plan your project with tasks, resources, and assignments, analyze the Critical Path, baseline your project, enter actual progress, analyze variance, revise your project, report about project progress, and then close the project.

Throughout each module, we provide a generous amount of information notes, warnings, and best practices. Information notes call your attention to important additional information about a subject. Warnings help you to avoid the most common problems experienced by others, while best practices provide tips for using the tool based on our field experience.

Microsoft Project 2010 introduces exciting new features representing profound changes to the software functionality, including the ability to manually schedule tasks, a feature added to ease the transition for people who use Excel to manage their projects. From the new ribbon-based user interface and backstage, to the incredibly handy new *Timeline* and *Team Planner* views, Microsoft Project 2010 is packed with new features and changes that you can use to enrich your scheduling experience.

Be sure to download the practice files and work your way through the hands-on lessons. You will be up to speed in no time. Enjoy!

Dale A. Howard, Microsoft Project MVP

Gary L. Chefetz, Microsoft Project MVP

MSProjectExperts

## Download the Sample Files

Before working on any of the Hands On Exercises in this book, you must download and unzip the sample files required for each exercise. You can download these sample files from the following URL:

