

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.

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 File9
 - Understanding the User Interface9
 - Understanding the Ribbon11
 - 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 Interface38
 - Customizing the Ribbon*.....38
 - Customizing the Quick Access Toolbar*.....44
 - Importing/Exporting a Custom Ribbon*49
 - Understanding the Planning Wizard.....52
 - Understanding Gantt Chart Symbols53
 - Reading a Gantt Chart*54

<i>Understanding Gantt-Optimized Scheduling Benefits</i>	55
Creating a Three-Tiered Timescale	55
<i>Displaying Fiscal Year in a Three-Tiered Timescale</i>	56
Module 03: Inside Microsoft Project 2010	59
Understanding the Microsoft Project Data Model	61
Understanding Views	61
<i>Using Single Views and Combination Views</i>	65
Understanding Tables	67
Understanding Filters	72
<i>Applying a Standard Filter</i>	72
<i>Applying a Highlight Filter</i>	75
Understanding Groups	77
<i>Applying a Group</i>	78
Module 04: Project Definition	85
Creating a New Project from a Template	87
<i>Creating a New Project Using a Template</i>	88
<i>Creating a New Project from an Existing Project</i>	91
<i>Creating a New Project from a SharePoint Task List</i>	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
<i>Adding Nonworking Time to the Standard Calendar</i>	103
<i>Setting the Working Schedule</i>	109
<i>Creating a New Base Calendar</i>	113
<i>Setting the Project Calendar</i>	116
Step #5 - Set Options Unique to this Project	118
<i>Setting the Task Mode Option</i>	119
<i>Setting Options in the Project Options Dialog</i>	120
<i>Setting General Options</i>	121
<i>Setting Display Options</i>	122
<i>Setting Schedule Options</i>	123
<i>Setting Proofing Options</i>	127
<i>Setting Save Options</i>	128
<i>Setting Language Options</i>	130
<i>Setting Advanced Options</i>	130
<i>Setting Add-Ins Options</i>	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
Module 05: Project Task Planning	155
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

<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
Module 06: Project Resource Planning	223
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
Module 07: Project Assignment Planning	255
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>	<i>289</i>
Using Effort Driven Scheduling	292
<i>Using Non-Effort Driven Scheduling.....</i>	<i>295</i>
Replacing Resources Assigned to Tasks.....	297
Using the Team Planner View	303
<i>Leveling an Overallocated Resource in the Team Planner View.....</i>	<i>306</i>
<i>Dragging Tasks in the Team Planner View</i>	<i>308</i>
<i>Changing Schedule Information in the Team Planner View.....</i>	<i>309</i>
Understanding Resource Overallocation	312
<i>Locating Resource Overallocations</i>	<i>313</i>
Leveling Overallocated Resources	314
<i>Using a Leveling Methodology.....</i>	<i>315</i>
<i>Setting Leveling Options</i>	<i>315</i>
<i>Leveling an Overallocated Resource.....</i>	<i>316</i>
<i>Viewing Leveling Results.....</i>	<i>317</i>
<i>Clearing Leveling Results</i>	<i>319</i>
<i>Setting Task Priority Numbers</i>	<i>319</i>
<i>Leveling Resource Overallocations in a Task View.....</i>	<i>321</i>
Understanding the Intricacies of Manually Scheduled Tasks	324
<i>Understanding Unsupported Task Features</i>	<i>325</i>
<i>Understanding Work Value Calculations for Calendar Exceptions.....</i>	<i>325</i>
Module 08: Project Execution	335
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>	<i>345</i>
<i>Saving a “Rolling Baseline”</i>	<i>346</i>
<i>Saving Over a Previous Baseline</i>	<i>347</i>
<i>Viewing the Project Baseline</i>	<i>348</i>
<i>Clearing the Project Baseline.....</i>	<i>349</i>
<i>Using Additional Baselines</i>	<i>350</i>
Tracking Project Progress	352
<i>Entering Progress Using Percent Complete</i>	<i>353</i>
<i>Entering Progress Using Actual Work and Remaining Work.....</i>	<i>354</i>
<i>Entering Progress Using a Daily Timesheet.....</i>	<i>357</i>

<i>Entering Progress for an Expense Cost Resource</i>	362
Rescheduling Uncompleted Work	364
Rescheduling a Task.....	368
Setting Tasks to Inactive	370
Synchronizing with a SharePoint Tasks List.....	375
<i>Adding Fields to the Task Synchronization Process</i>	380
<i>Reporting Progress Using a SharePoint Tasks List</i>	386
Module 09: Variance Analysis, Plan Revision, and Change Control	393
Understanding Variance.....	395
<i>Understanding Variance Types.....</i>	395
<i>Calculating Variance</i>	395
<i>Understanding Actual vs. Estimated Variance.....</i>	396
Analyzing Project Variance	396
<i>Analyzing Date Variance</i>	397
<i>Analyzing Work Variance.....</i>	399
<i>Analyzing Cost Variance</i>	400
Understanding Custom Views	402
<i>What Is A View?</i>	402
Creating a New Custom View Using a Four-Step Method.....	403
<i>Creating a Custom Table.....</i>	403
<i>Creating a Custom Filter.....</i>	408
<i>Creating a Custom Group.....</i>	412
<i>Creating a New Custom View.....</i>	418
Creating a Combination View	422
Using the Organizer	425
<i>Copying Custom Objects.....</i>	426
<i>Renaming and Deleting Custom Objects.....</i>	428
Revising a Project Plan.....	430
<i>Potential Problems with Revising a Plan.....</i>	430
Using a Change Control Process	432
<i>Inserting New Tasks in a Project</i>	432
Rebaselining Your Project	434
<i>Backing Up an Original Baseline.....</i>	435
<i>Rebaselining the Entire Project.....</i>	437
<i>Baselining Only Selected Tasks.....</i>	437
<i>Rebaselining Only Unstarted Tasks.....</i>	439
<i>Rebaselining the Entire Project Using an Alternate Baseline.....</i>	442
Viewing Multiple Baselines.....	447

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

Contents

Saving Local OLAP Cube Data573

Creating Visual Report Templates 574

Editing Visual Report Templates 580

Managing Your Visual Report Templates 583

Module 12: Project Closure585

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:

