Tutorial 1: Planning a Project

Microsoft® Project 2010

In Tutorial Section 1.1 you will:

• Learn project management terminology
• Understand the benefits of project management
• Explore the Project 2010 window
• Check and change default settings
• Enter tasks and save a project
In Tutorial Section 1.2 you will:

• Open and explore an existing project
• Examine different project views
• Compare the Gantt Chart and Network Diagram views
• Use project time scale and calendar
• Use Backstage view and Page Setup dialog box

Introduction to Project Management

• Project Management: process of initiating, planning, executing, controlling, and closing a project
  • Project Goal is the desired outcome
    – Should be short and simple, yet clearly communicate scope, time frame, and budget.
Introduction to Project Management, Cont.

- **A Process Group** is a series of steps to complete in order move on to the next phase of a project.
- There are 5 Process Groups in Project Management

<table>
<thead>
<tr>
<th>Process Group</th>
<th>Typical Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>Identify project mockup</td>
</tr>
<tr>
<td></td>
<td>Identify potential project manager</td>
</tr>
<tr>
<td></td>
<td>Identify project budget and strategy considerations</td>
</tr>
<tr>
<td></td>
<td>Enter project tasks, durations, and relationships</td>
</tr>
<tr>
<td></td>
<td>Identify project milestones and milestones</td>
</tr>
<tr>
<td></td>
<td>Document available resources as well as their associated costs</td>
</tr>
<tr>
<td></td>
<td>Enter applicable resource or task restrictions such as intermediate due dates or not-to-exceed costs</td>
</tr>
<tr>
<td></td>
<td>Assigning resources to tasks</td>
</tr>
<tr>
<td>Executing</td>
<td>Produce work resources, including the products or services required to meet project goals</td>
</tr>
<tr>
<td></td>
<td>Request changes to the project</td>
</tr>
<tr>
<td></td>
<td>Recommend quality and performance improvements</td>
</tr>
<tr>
<td></td>
<td>Create project records, reports, or presentations</td>
</tr>
<tr>
<td>Controlling</td>
<td>Update project status, finish, and resource usage to complete or partially completed tasks</td>
</tr>
<tr>
<td></td>
<td>Manage resource and task conflict</td>
</tr>
<tr>
<td></td>
<td>Work with the project to meet management timing, resource, and cost objectives</td>
</tr>
<tr>
<td></td>
<td>Change the project to meet new or unexpected demands</td>
</tr>
<tr>
<td>Closing</td>
<td>Enter the final status of the finished project, including task data, resource, and cost information</td>
</tr>
<tr>
<td></td>
<td>Print the final report used to analyze the performance of the project</td>
</tr>
</tbody>
</table>
Initiating

- Setting the project goal
- Identifying start or finish dates
- Identifying the project manager
- Identifying project budget and quality considerations

Planning

- Entering project information
- Identifying project subdivisions and milestones
- Documenting resources
- Entering restrictions
- Assigning Resources to tasks
**Executing**

- Producing work results
- Requesting changes
- Recommending improvements
- Creating project records, reports, and presentations

**Controlling**

- Updating project
- Managing resources and tasks
- Meet management timing, resource, and cost objectives
- Changing project
Closing

- Entering final status of finished project
- Printing final reports
- Review and analyze performance of the project

Project Management Terminology

- Understanding key project terminology is fundamental to your success as a project manager:
  - Task
  - Duration
  - Start and Finish Dates
  - Predecessor and Successor
  - Resources
  - Project Manager
  - Scope
  - Quality
  - Risk
Benefits of Project Management

• Better understanding of overall project goals
• Better understanding of alignment with business objectives
• More organized and streamlined way to manage a project
• More accurate and reliable project status information
• More efficient use of project resources

Benefits of Project Management, Cont.

• Better communication
• Faster response to conflicting project goals
• Greater awareness of project progress
• Faster project completion
• Lower project costs
• Fewer project failures
How Project 2010 Supports Successful Project Management

• MS Project 2010

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

Chart and Diagram Tools

• The Gantt Chart and Network Diagram are two important project management tools within Project 2010.

• The Gantt Chart provides a graphical visualization of the project.
  – Tasks are shown as horizontal bars
  – Illustrates task dependencies
Basic Gantt Chart

Figure 1-5  Example of a Gantt chart

The Network Diagram’s primary purpose is to show the critical path of the project.

- Tasks are displayed as boxes, called nodes.
- Dependent tasks are linked together via link lines.
- The critical path is the series of tasks that dictates the earliest calculated project finish date.
Basic Network Diagram

Getting Started with Project 2010

- Starting Project 2010
- View Bar
- Entry Table
- Gantt Chart
- Timeline
- Timescale
  - A major scale (the upper scale)
  - A minor scale (the lower scale)
Entry Table

Gantt Chart and Split Bar
The Timeline

New Perspectives on Microsoft Project 2010

The Timescale

New Perspectives on Microsoft Project 2010
Getting Started with Project 2010, Cont.

- Current Date
- Working Days and Nonworking Days
- Setting Automatic Scheduling
- Setting Project Start and Finish Dates
- Entering Tasks
- Saving a Project
- Closing a Project
- Opening an Existing Project
- Saving a Project with a new name

Setting the Scheduling Mode

**Figure 1-13** Setting the scheduling mode

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

Click to open menu with options for scheduling tasks

Mode button
Setting Project Start and Finish Dates

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

- Default start date is same as current date
- Finish date is dimmed
- Schedule will be calculated based on the Start date
- These options are not available in Project Standard 2010

Changing the Current Date

Figure 1-15  Changing the current date

- Click to view previous month
- Click to select September 1
- Click to view next month
Entering Tasks

Figure 1-16  Adding a task

Two Tasks Entered

Figure 1-18  Two tasks entered
Saving a Project

Working in Different Views

- **Chart or Graphic:** representation of data using bars, boxes, lines, and images
- **Sheet:** A spreadsheet-like representation of data in rows and columns
- **Form:** view of many pieces of information to focus on the details of one task
- **Combination:** view of many tasks at the top of the screen, view of task details below.
Common Project Views (Task Views)

Table 1.21: Common project views (views for tasks)

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

Common Views

- Gantt Chart View
- Network Diagram View
- Calendar View
- Task Information Dialog Box
- Notes Tab, Notes Indicator
- Relationship View
Network Diagram View

![Network Diagram View](image)

Calendar view

![Calendar view](image)
Task Information Dialog Box

Figure 1-23  Task Information dialog box

Notes Tab

Figure 1-25  Notes tab in Task Information dialog box
Notes Indicators

Figure 1-26  Note indicator in Indicators column

Relationship Diagram View

Figure 1-27  Relationship Diagram view
Common Views, Cont.

- Entry Table
- Schedule Table
- Split View
- Zooming in and Out
- Timescale Dialog Box
- Changing the timescale

Entry Table
Schedule Table

Figure 1-29 Schedule Table

Split View

Figure 1-30 Split view
Zooming In and Out

Timescale Dialog Box
Changing the Timescale

Successful Printing

- The key aspects of successful printing:
  - Zooming to an acceptable magnification level
  - Print previewing your work
  - Using the page setup dialog box to make changes
Gantt Chart in Print Preview

Figure 1-38 Gantt chart in Preview pane

- Print options for changing printers, print settings, and Page Setup settings.
- Click navigation buttons to scroll pages and change view.
- Project range.
- Legend.
- Preview pane provides a preview of the project.

Page Setup

Figure 1-40 Page Setup - Gantt Chart dialog box

Figure 1-42 Description of print code buttons

<table>
<thead>
<tr>
<th>Button Name</th>
<th>Button Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format Text Font</td>
<td>(no code)</td>
<td>Allows you to format selected text by changing the font, font size, bold, italic, underline, and text color.</td>
</tr>
<tr>
<td>Current Date</td>
<td>&amp; [Date]</td>
<td>Inserts the current date as established by the computer's clock or network server.</td>
</tr>
<tr>
<td>Current Time</td>
<td>&amp; [Time]</td>
<td>Inserts the current time as established by the computer's clock or network server.</td>
</tr>
<tr>
<td>File Name</td>
<td>&amp; [File]</td>
<td>Inserts the project's filename.</td>
</tr>
<tr>
<td>Picture</td>
<td>(no code)</td>
<td>Inserts a picture (for example, clip art, scanned photo, or graphic).</td>
</tr>
</tbody>
</table>