Chapter 1

Project 2002 Basics

IF YOU'RE BROWSING THIS book, you probably have more than a casual interest in projects and project management. You may have substantial experience with scores of projects, or you may be starting on your very first project as a team member or project manager. Perhaps you already use Microsoft Project or similar project management software, and you want to know about Project 2002's new features. Whether you're launching your first or fifty-first project, Microsoft Project 2002—the most widely used project management software—can improve the probability that your project will be a success. Before we begin our examination of Project 2002, however, we'll spend a few pages on a quick but pragmatic review of project fundamentals. Here's what's covered in this chapter:

- Defining a project
- Working with scope, resources, performance, and costs
- Understanding the project cycle
- Understanding the different versions of Microsoft Project 2002
- Discovering what's new in Project 2002

Understanding Project Management

It's estimated that half of our work life is spent on routine, repetitive tasks: processing time cards, filling out sales orders, picking up passengers, and delivering parcels. The other half of our work life is spent working on *projects* of various shapes and sizes—from simple single-day tasks to complex long-term assignments.

Here are some types of projects you might encounter in a typical business or organization. Understanding how to manage projects such as these is key to your business success.

- Moving your company's offices to a new location
- Developing a new software application
- Creating a policy manual

- Remodeling a room in your home or business
- Developing an intranet
- Preparing for accreditation or certification
- Revamping a training program
- Starting a new business
- Auditing your organization's software or accounting systems

What Is a Project?

As defined by the Project Management Institute, a project is "a temporary endeavor undertaken to achieve a particular aim." More precisely, a project is a job that has a beginning and an end (time), a specified outcome (scope) at a stated level of quality (performance), and a budget (costs). The deliberate attempt to control these parameters is called *project management*.

NOTE The Project Management Institute (www.pmi.org) is the leading professional association devoted to the field of project management.

The four project parameters—time, scope, performance, and costs—are related; controlling one parameter affects the other parameters, and the project outcome. The relationship between the parameters is often expressed as a formula: [C=f(P,T,S)], which indicates that a project's cost (C) is a function of a project's performance (P), time (T), and scope (S). One definition of project management is expressed as "the efficient use of resources to complete a project as designed, on time, at the desired level of performance and within budget."

NOTE The Project Management Institute uses the following definition of project management: "The application of knowledge, skills, tools, and techniques to a broad range of activities in order to meet the requirements of the particular project."

The project parameters are also called *constraints*. At any point in time, you can control only three of the four parameters; when one of the project parameters changes, at least one other parameter must change in response. Imagine, for example, that you're adding a deck to your home. The planned deck is an incredibly tasteful 200-square-foot redwood add-on with built-in benches and a small yet attractive planter. A few months ago, your contractor said that she could build the deck for a total cost of \$2,500 with three weeks' notice. There's only one problem: The deck needs to be completed in the next ten days. You already sent out the invitations for your inaugural deck barbeque, but you neglected to contact the contractor. The project time has changed, and so performance, scope, and/or costs must also change.

To meet your demands, the contractor's options are limited, as follows:

- Performance: "We have an additional crew that hasn't built a deck before, but they've got some extra time on their hands, so we can assign them to help."
- Scope: "We can't build the benches in time, and the deck won't be stained or treated."
- Costs: "We can build the deck as planned, but it will cost an extra \$750. I'll have to pay overtime and rush ship the redwood."

It's usually easy to keep track of changes to a project's time criteria. The project manager (in our example, the contractor) is typically notified that work must be completed sooner, or could finish later. Changes in scope, on the other hand, can sneak into a project as its managers, customers, and team members request seemingly minor enhancements. *Scope creep*—unplanned changes in project scope—is understandable. The project manager and team members want to create a product that people use. Fulfilling requests for minor changes is relatively easy and will certainly please the requestor. The cumulative effect of these small changes, though, can significantly extend the project timeline and costs. Experienced project managers have a formal process for reviewing and approving changes to the project. The process is communicated to everyone involved with the project to stave off scope creep.

Understanding the Project Cycle

The *project cycle* broadly describes the stages that a project typically goes through from beginning to completion. There are as many descriptions of the project cycle as there are project management experts. Here are the stages of a six-stage project cycle that are used in a number of disciplines:

- Problem identification
- Definition
- Project design
- Development
- Implementation
- Evaluation

Whether a project cycle has six, four, or ten stages, the sequence is the same. Each stage has different activities that may require particular skills. Some projects are short-lived, lasting for a matter of months. Other projects span years; team members leave, and new members are added, but the scope and budget for the project remain unchanged.

PROBLEM IDENTIFICATION

In the problem identification stage, also referred to as the *concept stage* or *needs stage*, the project is just a thought. Someone realizes there is a problem in search of a solution, or sees an opportunity that the organization can take advantage of. For example, the Customer Service department reports that half of their calls about software X are user questions about installation. The urge, of course, is to immediately search for a solution. One solution is to rewrite the installation section of the user guide, but is it the best solution or even an appropriate solution? To answer this question, you need to have a better understanding of the problem.

DEFINITION

In the definition stage, a person or group accurately describes the problem (or, in more positive terms, the challenge or opportunity) that the project is attempting to solve. In our Customer Service example, there are a number of possible problem definitions:

- The Customer Service department gets too many calls about installation.
- The installation program is too difficult for customers to use.

- The installation program doesn't work well on all computers.
- The instructions for the installation routine are incorrect or hard to follow.
- Customers often purchase the wrong software for their computer because the software packages aren't labeled clearly.

Each of these problems has one or more solutions, but the solutions are different.

The problem definition stage is often neglected, which helps explain why some projects fail. When you define the problem, you determine the solutions that the project team will examine and eventually choose to implement. An often-heard complaint during the project definition stage is, "We all know what the problem is, so why are we wasting time talking about it? Let's get to work!" But if you're focused on rewriting the installation program, you won't spend a lot of time looking at the product packaging. The challenge of the definition stage is to take the time to thoroughly describe the problem, beginning with the naïve question: What is the problem we're trying to solve?

When the problem definition is complete, check it out with people outside the project team. This is a good time to talk to the person or department who initially identified the problem. When a problem involves customers, some organizations survey customers to help gauge the accuracy of the definition.

NOTE In the past decade, the trend in project management has been to study and define the problem and its solution from the customer's point of view. For example: "Customers should be able to easily install and use the correct version of software X."

When the definition is accurate, the team can begin identifying potential solutions. Brainstorming possible strategies that address the problem is a good way to begin. Each strategy then needs to be quickly assessed to estimate the time and resources involved.

As you'll see in later chapters, you can use Microsoft Project 2002 to assess strategies. You'll eliminate some strategies in this analysis because they're cost-prohibitive, require resources your organization can't hire or contract, or would take too long to complete. For the remaining strategies, you'll complete a risk assessment. Ask what can go wrong and how your team could respond if the worst happened. Use the risk assessment to eliminate high-risk strategies and identify dicey aspects of acceptable strategies; then choose the best strategy with a level of risk that's acceptable in your organization. Make one more check of whether the selected strategy will solve the problem you defined, and begin designing a project to implement the strategy.

PROJECT DESIGN

In the design stage, it's finally time to put the pedal to the metal and complete a number of tasks, such as:

- Define the project's objectives
- Finalize the project scope
- Identify project activities
- Break each activity into logical components
- Assign resources
- Create estimates for time and costs

This is the "go/no go" point of the project. The outcome of the design stage is a project budget and timeline. If costs are prohibitive, the timeline can't be met, or the outcome is not desirable, a decision may be made to scrap the project. On the other hand, if a realistic solution can be attained in a cost-effective and timely manner, the project may very well get the "go ahead."

Design serves two purposes: It provides a clear vision for the members of the project team, and it helps fend off scope creep as the project progresses. Project design is critical because the parameters you set or accept during design determine what victory—the successful completion of the project—will look like. Project objectives should be well-defined products or services, often called *deliverables*, with completion dates.

DEATH MARCHES

In some organizations, the design stage includes pressure to trim the timeline or budget in ways that potentially compromise the project. In the book *Death March: Managing "Mission Impossible" Projects*, software project manager Edward Yourdon defines a *death march* as a project in which at least one of the four parameters exceeds the norm by at least 50%. Perhaps a two-year project is optimistically scheduled for completion in 12 months or less, the staff or budget for a project is cut in half, or the features and performance requirements are twice what can reasonably be completed during the life of the project.

When one of the parameters is off by 50% or more, the likelihood of project failure is at least 50%. As the project deadline approaches, members of the project team do triage by lowering performance standards, abandoning project objectives, or spending more money to complete the project within at least one of the specified parameters—activities—that should have occurred in the design stage.

Near the end of the design stage, circulate a project proposal that describes the project in detail so that project team members and managers are all aware of the project's scope, costs, performance standards, and timelines. You can print some of the reports you need for the project proposal from within Project 2002. Other parts of the document may be created in Word, PowerPoint, Excel, or other applications.

You should also have the project's customers and other stakeholders sign a letter of agreement or project charter that indicates their approval for the project design, budget, and timeline. In most organizations, this is done for internal customers (the department or people the project is being done for) as well as external clients. Use the final budget and timeline information to update your project information in Project 2002 before moving into the next stage of the project.

DEVELOPMENT

In the development stage, you expend resources according to the project plan to complete the activities specified in the project design. If the project outcome is a new product, the manufacturing unit tools up and the product begins rolling off the assembly line. In the software industry, interface specialists begin designing the interface and then programmers start writing code. In publishing, authors write, editors edit, and page layout technicians lay out pages. In an organization that creates new curricula, trainers design and write the curricular modules.

Quality assurance and communication skills are vital to measuring performance and communicating the status of the project tasks in the development stage. As tasks are partially or wholly completed or revised, you update your project file in Microsoft Project. Project 2002 helps you manage development by providing accurate comparisons of actual performance and resource use against the project plan, budget, and timeline.

IMPLEMENTATION

Implementation involves field testing and measurement. Products are used by focus groups, software is sent to beta testers, and new courses are tested on a limited basis. Based on feedback, products might be modified or re-engineered, and services or service delivery might be redesigned.

NOTE There is a tendency to rip through the implementation stage with great speed, particularly if the project involves a product. Especially in the computer industry, the conventional wisdom is that it's better to release an adequate software version or microcomputer processor on time than to release a drastically improved version of the same product six months late.

EVALUATION

In the final stage of a project, members of the project team review the project. Using project reports plus the team members' own personal experiences with the project, decisions can be made about what worked well, and areas for improvement can be identified. Even when a project has been extraordinarily successful, conducting a good evaluation can be difficult—the project is over, you already held the victory party, and team members have been assigned to their next projects. Do it anyway. Solid, thoughtful project evaluations can provide a foundation for the organization's success in future projects.

NOTE If you want more information on project management strategies and practices, we recommend The Project Manager's Desk Reference, by James P. Lewis (McGraw Hill, 1999, ISBN 0-07-13-4750-X) and Project Management for the 21st Century, by Bennet P. Lientz and Kathryn P. Rea (Academic Pr., 1998, ISBN 0-12-449966-X). For insight on project management in high-tech industries, see Edward Yourdon's Death March (Prentice Hall, 1999, ISBN 0-13-748310-4), mentioned earlier in this chapter.

Project Management Tools

Modern project management was first recognized as a discrete discipline in the late 1950s when large and complex projects began to require more than a simple flow chart to keep on track. The phrase "project management" was first used in the engineering and construction industries, but soon migrated into general corporate vernacular.

At the heart of every project is a project manager, the person responsible for ensuring that a project is completed on time, within budget, and at the specified level of quality. The project manager is a highly skilled professional who uses every tool at his or her disposal to plan and manage all aspects of a company's most important projects.

Today, one of the project manager's most important tools is a computer program. Project management software is a set of computer-based utilities that support the core tasks of project management: planning, scheduling, and control. The first project management programs were developed in the late 1960s for mainframe computers. Early packages focused on scheduling people and equipment, as well as managing costs. In the 1970s and 1980s, new microcomputer project management packages were released in a continual stream. By the early 1990s, there were more than 100 project management packages on the market.

NOTE For a list of modern project management tools and resources, turn to Appendix B.

A number of project management software packages still exist, but only a handful are widely used in the corporate environment. The one that is most often used is Microsoft Project; Project 2002 is the latest version of this market-dominating software. As you'll see in the following chapters, Project 2002 supports many aspects of project management, including scheduling, budgeting, tracking, analysis, reporting, and communication. With Microsoft Project 2002, you can manage multiple projects, share resources among projects, import and export project data, and create reports to analyze and communicate project objectives and progress.

You schedule a project with Microsoft Project by entering basic information about the overall project, individual tasks within the project, and the resources necessary to complete these tasks. When describing a task, you enter the duration of the task, the task's dependencies, and any constraints. Microsoft Project then calculates the start and finish date for each task, and combines all the tasks together into a master project. You can enter additional information, such as lead time, lag time, and so on, as available, and update tasks and resources as the project gets underway. Project will adjust the schedule automatically.

Project 2002 Editions and Architecture

There are two different versions of Microsoft Project 2002, as well as an accompanying program that enables enterprise-wide project collaboration. The version of Project you choose will depend on your own specific project management needs.

The basic version of the program is Microsoft Project 2002 Standard. Project Standard is the best choice for individual and small businesses and their project managers. It's the logical upgrade from the previous version, Microsoft Project 2000, and runs on any standalone PC.

If you're managing projects for a medium- or large-sized business, you should consider using Microsoft Project 2002 Professional. Project Professional is new to Microsoft's project management lineup, and enables a team of individuals from across an enterprise to collaborate on their project management activities.

Table 1.1 details the differences between the Standard and Professional products.

TABLE 1.1: DIFFERENCES BETWEEN PROJECT STANDARD AND PROFESSIONAL				
FEATURE	PROJECT STANDARD	PROJECT PROFESSIONAL		
Intuitive Planning Tools				
Dynamic task scheduling	Yes	Yes		
Gantt charts, calendars, and task sheets	Yes	Yes		
Project Guide	Yes	Yes		

TABLE 1.1: DIFFERENCES BETWEEN PROJECT STANDARD AND PROFESSIONAL (continued)				
FEATURE	PROJECT STANDARD	PROJECT PROFESSIONAL		
INTUITIVE PLANNING TOOLS				
Microsoft Office XP interface	Yes	Yes		
Smart Tags	Yes	Yes		
Integration with Microsoft Excel and Outlook	Yes	Yes		
Resource Management				
Resource pooling	Yes	Yes		
Resource leveling	Yes	Yes		
Resource availability graphs	Yes	Yes		
Generic resources		Yes		
Enterprise resource pool		Yes		
Skill-based resource assignment and replacement		Yes		
Collaboration				
Access to Project 2002 Server	Yes	Yes		
E-mail notifications		Yes		
Web-based timesheets and reports		Yes		
Document library		Yes		
Issue tracking		Yes		
WEB-BASED ANALYSIS AND REPORTING TOOLS				
Project portfolio views		Yes		
Modeling and scenario analysis tools		Yes		
Real-time reporting		Yes		
CUSTOMIZATION				
Macros	Yes	Yes		
Visual Basic for Applications	Yes	Yes		
Enterprise codes and custom fields		Yes		
Project data security layer		Yes		

TABLE 1.1: DIFFERENCES BETWEEN PROJECT STANDARD AND PROFESSIONAL (continued)				
FEATURE	PROJECT STANDARD	PROJECT PROFESSIONAL		
STORAGE				
XML save and load	Yes	Yes		
Database save and load	Yes	Yes		
OLE DB provider	Yes	Yes		
Enterprise portfolio		Yes		
Enterprise templates		Yes		
Microsoft Project Server accounts		Yes		

NOTE There is an additional member in the Project 2002 family: Microsoft Project 2002 Server. This is a server-based product that enables you to implement project management across an entire corporation. Installation of Project Server is necessary to take advantage of all the enterprise collaboration features of Project Professional.

The versions of Project 2002 are discussed in more depth in the following sections.

Project 2002 Standard

Microsoft Project 2002 Standard is a stand-alone project management software package designed for individuals and small businesses. It can also be used in larger organizations if your collaboration needs are simple and can be accomplished via e-mail.

Project Standard includes everything you need to manage both simple and complex projects, including task scheduling, resource management, tracking, and reporting. The 2002 version uses the familiar Office XP interface—complete with adaptive pull-down menus and task panes—and a series of wizards to guide you step by step through a project's creation and management.

Project Standard is recommended for individual users who manage projects from their own PCs.

Project 2002 Professional

Microsoft Project 2002 Professional is part of Microsoft's Enterprise Project Management solution. The program is designed for users in mid-sized and large organizations who want to collaborate on projects over the company's network.

The key difference between Project Standard and Project Professional is that Professional enables sophisticated multiple-user collaboration over the company's network. With Professional (running on Project 2002 Server), an entire team can access and collaborate on a single project across the network. This type of collaboration is enabled by the use of Project 2002 Server (discussed next), and facilitated by the use of Project Web Access that enables access to a project from any web browser.

Project Professional is recommended for organizations utilizing team-based project management.

Project 2002 Server



Microsoft Project 2002 Server is the necessary component to enable the enterprise-wide collaboration features of Project Professional. Project Server can be installed on any network running Microsoft Windows 2000 Server, and serves as the platform for team project management across the enterprise.



Project 2002 Server replaces Project Central, a similar component in Microsoft Project 2000, and includes many new features such as enhanced security and the integration of Microsoft SharePoint Team Services.

To fully implement all the features of Project 2002 Professional, an organization must be running Project 2002 Server.

What's New in Project 2002

If you're a current or former Project user, you will be pleased with a number of new and improved features in this version. The team that created Project 2002 focused on improving the program's ease of use and enhancing the collaboration and enterprise functionality. They also added software features that users of prior versions of Project requested, and made Project more compatible with Microsoft Office XP applications.

Table 1.2 shows some of the key differences between Project 2000 and Project 2002. Additional details are discussed in the following sections.

TABLE 1.2: COMPARISON OF PROJECT 2000 AND PROJECT 2002			
FEATURE	PROJECT 2000	PROJECT 2002	
USABILITY			
Microsoft Office XP interface		Yes	
Integration with Microsoft Excel and Outlook	Yes	Improved	
Project Guide		Yes	
Smart Tags		Yes	
New Project Wizard		Yes	
Calendar Wizard		Yes	
Tracking Setup Wizard		Yes	
Import/Export Mapping Wizard		Yes	
Safe Mode		Yes	
Office Watson		Yes	
PROJECT MANAGEMENT			
Project templates	Yes	Improved	
Print view totals		Yes	
Network Diagram view	Yes	Improved	
Usage views	Yes	Improved	

TABLE 1.2: COMPARISON OF PROJECT 2000 AND PROJECT 2002 (continued)			
FEATURE	PROJECT 2000	PROJECT 2002	
Project Management			
Timescales	Yes	Improved	
Flexible tracking methods	Yes	Improved	
Uncompleted work rescheduling	Yes	Improved	
Earned value calculations	Yes	Improved	
Cross-project critical path	Yes	Improved	
Work Breakdown Structure (WBS)	Yes	Improved	
Baseline rollup	Yes	Improved	
Multiple baselines		Yes	
Multiple managers		Yes	
Safe Mode		Yes	
Resource Management			
Resource leveling	Yes	Improved	
Resource assignment	Yes	Improved	
Resource import	Yes	Improved	
Material resources	Yes	Improved	
Generic resources		Yes	
Enterprise resources		Yes (Pro)	
Enterprise resource pool		Yes (Pro)	
Enterprise Global template		Yes (Pro)	
Enterprise custom fields		Yes (Pro)	
Resource Substitution Wizard		Yes (Pro)	
Built Team from Enterprise		Yes (Pro)	
Portfolio modeling		Yes (Pro)	
Portfolio Analyzer view		Yes (Pro)	
Resource Center view		Yes (Pro)	
Resource availability graph		Yes (Pro)	
Server version	Project Central	Project Server	

TABLE 1.2: COMPARISON OF PROJECT 2000 AND PROJECT 2002 (continued)			
FEATURE	Project 2000	Project 2002	
PROGRAMMABILITY			
Visual Basic for Applications	Yes	Improved	
OLE DB provider	Yes	Improved	
Data access pages	Yes	Improved	
XML file format		Yes	
Project Guide customization		Yes	

Ease of Use

One of the most important improvements Microsoft made to Project 2002 was to make it easier to use by adding new, improved components. These new components include:

• Use of the Office XP interface, including adaptive, task-specific task panes.

& Microsoft Project - Brochure 01

• Project Guide, shown in Figure 1.1, which is a new view that includes options for Tasks, Resources, Track, and Report. When an option is selected from the new Project Guide toolbar, a sidebar pane is displayed (on the left side of the window) with a list of Help topics for the selected option.

FIGURE 1.1

Project 2002's new Project Guide makes the software easier to use.

¢ Tasks x		0	Task Name	Duration	Start	Finish	Jan 12, 103 Jan 19, 103 Jan 26, 103 Fe
Plan and schedule your	1		Spec project	3 days	Mon 1/13/03	Wed 1/15/03	SMTWTFSSMTWTFSSMTWTFSS
project's tasks by dicking an tem below. Clicking an item	2	100	Management approval	1 dav	Thu 1/16/03	Thu 1/16/03	Jacobia Contraction of the second sec
displays tools and instructions	3	-	Notify accounts	2 days	Fri 1/17/03	Mon 1/20/03	Toursen in the second
for completing that step.	4	-	Contact writer	5 days	Thu 1/16/03	Wed 1/22/03	Accession
Define the project	5	-	Approve contract	3 days	Thu 1/23/03	Mon 1/27/03	žosototosop,
	6	-	First draft	14 days	Tue 1/25/03	Fri 2/14/03	
Define general working times List the tasks in the project	7		Initial comments	7 days	Mon 2/17/03	Tue 2/25/03	
List the tasks in the project Organize tasks into phases	8		Second draft	7 days	Wed 2/26/03	Thu 3/6/03	
urganize tasks into phases Schedule tasks	9	-	Copy edit	5 days	Fri 3/7/03	Thu 3/13/03	
ink to or attach more task	10	-	Technical edit	5 days	Fri 3/7/03	Thu 3/13/03	10 0.50 0.50 0.50 0.5
Ink to or attach more task	11	-	Incorporate edits	1 day	Fri 3/14/03	Fri 3/14/03	
Add columns of custom	12	-	Author review	2 days	Mon 3/17/03		10 0.50 0.50 0.50 0.50
nformation	13	-	Page layout	2 days	Wed 3/19/03	Fri 3/21/03	
Set deadlines and constrain	+ 14	-	Galey edit	2 days	Mon 3/24/03	Tue 3/25/03	10 0.50 0.50 0.50 0.50
tasks	15	-	Proofreading	1 day	Wed 3/26/03	Wed 3/26/03	
Add documents to the project	18	-	Printing	5 days	Thu 3/27/03	Wed 3(26/03	10 (050) (050) (050)
Publish project information to he Web	9 17	-	Ship to accounts	5 days	Thu 4/3/03	Wed 4/9/03	
The PERSON	• 11	-	Ship to accounts	5 days	100 4/3/03	WE0 4(5)03	IN 1050 (150) (15
Affer oplanning your tasks, you can go to the keepuroos area to build your project's team and assign people to tasks.	-						

- BX

- Smart Tags, which are pop-up help-type boxes that provide more detailed information or alternative operations for the task at hand.
- New Project Wizard, used to create new projects in step-by-step fashion.
- Calendar Wizard, used to create new project calendars.
- Tracking Setup Wizard, used to track the progress of existing projects.
- Import/Export Mapping Wizard, which replaces the old Import/Export Mapping dialog box, and is used to open and save projects from and to non-Project file formats.
- Safe Mode, which activates when you run into problems when launching the program. It lets you start a stripped-down version of Project so you can continue to work on your projects while troubleshooting problems with the software.

There were several other minor usability improvements made to Project 2002, including the addition of drag-and-drop functionality for Project's columns; adding recently used files and templates to the File Open/Save dialog boxes; changing the Del key to clear only the selected cell; providing the ability to group projects on assignment fields; and including the Office Watson utility to help you troubleshoot any problems with the program.

Collaboration and Enterprise Functionality

Ease of use aside, the most important changes from Project 2000 to Project 2002 involve workgroup and enterprise project management. Previous versions of Project were standalone applications—that is, they didn't allow for project management across the organization. With Project 2002, Microsoft creates a complete enterprise-wide project management solution. This enterprise functionality is accomplished via new features in Project Professional, and enabled by the installation of Project Server—which replaces Project 2000's Project Central component.

The following lists the new collaboration and enterprise features of Project Professional and Project Server:

- Web Access, which enables all team members to access and update project data over the Web (or the company's intranet), using a standard web browser.
- New generic resources that support skill-based resource assignment and replacement.
- Additional enterprise resources, stored in the new enterprise resource pool. This provides a single repository for all company-wide resources used with Project Server.
- The enterprise global template that stores standardized data for the entire organization. You can also create enterprise custom fields within this template.
- The Resource Substitution Wizard, used to assign and replace resources based on the demands of tasks in multiple projects.
- Build Team from Enterprise, a wizardlike function used for selecting resources from the Enterprise Resource Pool either before or after a project plan is built.
- Portfolio modeling, used to interactively model changes to projects or resource staffing, and then view the impact of the changes on a project portfolio.
- The Portfolio Analyzer which provides easy access to detailed information about projects and resources to higher-level management and other stakeholders.



- The Resource Center which provides a view of the enterprise resource pool available in Project Server.
- A resource availability graph that helps you choose one or more resources and view their availability.
- Multiple manager support that eliminates the dependency on the project manager name to identify
 a project, and enables you to assign more than one manager in a number of different scenarios.

In addition to these enhancements, Project 2002 includes a new Collaborate menu, shown in Figure 1.2, that replaces Project 2000's Workgroup submenu which was located on the Tools menu. This menu features new commands that facilitate use of Project Server's team-based features.

FIGURE 1.2	Collaborate
Project 2002's new Collaborate menu	Publish Cig Request Progress Information Cig Update Project Progress
	Project Center
	Portfolio <u>A</u> nalyzer Portfolio <u>M</u> odeler
	Issues Collaboration Options



Probably the most important improvement in enterprise-wide functionality comes with Web Access, which is part and parcel of Project 2002 Server. Web Access replaces the old Project Central component and provides a number of additional features and functions. There's a non-project to-do list, document library, issues tracking, and integration with Microsoft SharePoint Team Services. In addition, Web Access has a simplified, better-organized look and feel from the Project Central interface. As you can see in Figure 1.3, Web Access looks much like other Microsoft web-based applications.

FIGURE 1.	3
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The new look and feel of Web Access

	- localhost - Microsolt Internet Explorer	_ <u>_</u> _ ×
File Edit View Favorites Tr	cols Help	12
4= Back = ⇒ - 🙆 🛃 🖓	@Search ③ Favorites ③ History 🔤 🖃 📃	
Address 🖉 http://localnost/Project!	Server/home/homepage.asp7_old=-18/oading=1	▼ @Go Unis*
		4
Microsoft Project	Home	
Activities in Home: Home Page	Welcome to Microsoft Project Web Access, Gene Crow	
Change password	Tasks	
Set my e-mail notifications and reminders	$\widehat{{\mathbb G}}_{0}^{*},$ You have no new tasks assigned to you.	
Go offline	Issues	
	You have no active issues assigned to you. Use the tabs across the top and the links on the laft to navigate through Nicrosoft Project Web Access.	Subscribe to receive e- mail notifications when thems changes. The Display Nitrosell Proyect Web Access in Microselt Outbook Or display a digital dashboard in Outlaok
	Copyright @ 1990-2002 Microsoft Corporation. All rights reserved. L	icense Agreement.
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NOTE Learn more about Project Server in Chapter 21—and more about Web Access in Chapter 22.

CHANGES TO VBA

Microsoft has also made numerous changes to Visual Basic for Applications (VBA), the built-in programming language you can use to develop custom Project applications. Project 2002's VBA editing environment includes an improved code editor, new event handling functions, and increased security levels. There's also a CommandBars object model for a menu and toolbar interface that is consistent with other Microsoft Office programs. In addition, Project 2002's VBA replaces the previous OLE custom controls with more versatile ActiveX controls.

NOTE Learn more about Visual Basic for Applications in Chapter 26.

What's Next

In the next chapter, we'll walk through the design stage of a project to learn about Project 2002 components, such as activities and resources, in more detail. Chapter 3 will focus on the project management tasks of the development stage.