

TurboProject[®] Express

User Guide



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1

Introduction to TurboProject Express

TurboProject Express is a project management application for planning and managing simple and complex projects. The extensive range of features available in TurboProject Express help you manage your project in three ways:

Planning—Break a large project into small pieces, schedule deadlines, and assign resources.

Tracking—Track the progress of your project, dealing with problems as they arise.

Communicating—Share the project in a team environment. The full project, or portions of the project, can be distributed and reviewed or updated by others.

Collaborating—TurboProject Express now integrates with the new web-enabled project management application GigaPlan, which extends the power and flexibility of TurboProject Express to the web. GigaPlan users can manage entire distributed teams through the browser, and even upload existing TurboProject Express files to the web. For more information about GigaPlan, or how it integrates with TurboProject Express, visit www.gigaplan.com or send email to info@gigaplan.com.

Novices and experienced project management professionals can use TurboProject Express. Set the User Level to Normal and create schedules quickly and without fuss. Reset the User Level to Advanced and access more features and functionality.

Introduction to Project Management

A project is anything that requires a well-defined sequence of activities to achieve a specific goal. It has a start date and a finish date, and can include events or milestones at strategic intervals.

When you manage a project, you need to successfully undertake and complete activities on time and within budget. A successful project plan provides a checklist and sequence of activities, and identifies the roles and responsibilities of the project team and the assigned resources.

A typical project includes the following components:

- Project Goal
- Events
- Schedule

- Activities
- Progress Reporting
- Resource Management
- Project Evaluation on Completion

The Role of the Project Manager

As the Project Manager, you play a role similar to that of an orchestra conductor. Like the conductor who relies on a series of steps to achieve a successful musical performance, a project manager plans the project, providing a structure with a common goal, and leads a team to successful completion of the project.

In order for a plan to be useful, the manager must be able to answer some critical questions:

- What progress have we made?
- Do we have enough resources?
- Are the resources allocated effectively?
- How will the end date be affected if materials are not delivered on time?

TurboProject Express can help you answer these questions.

Project Modeling

After you have defined the goals and milestones for a project, the next logical step is to model your project. The objective of modeling is to produce a project blueprint based on the characteristics and needs of the project. Modeling occurs at two levels:

- Structuring a project into phases
- Structuring a phase into activities

There are two basic approaches used when modeling a project:

Top-down—Start by listing the major phases of the plan, then fill in the details for each phase. This process provides an organizational structure, making it easier to understand the scope of the entire project.

Bottom-up—Start by listing all the activities that must occur. For complex projects, you may want to organize the list into an outline, summarizing similar or related activities. The activities are connected, creating a schedule with a start date and an end date.

Project Tracking

In order to assess the progress of your project at any point in time, you must be able to compare actual

work done to the original plan or baseline.

Project tracking should be performed regularly to identify potential conflicts and problems before they occur. By periodically updating your project, you will be able to answer questions about the status, resource usage, work done, and work remaining.

Before your project begins, take the time to determine how progress should be tracked and how to capture the information you need to effectively monitor performance. Consider the following:

- How often do you want to measure progress: weekly, bi-weekly, monthly?
- How will you gather progress information?
- How many reporting levels do you require?
- What level of detail does each reporting level require?
- What information do you require to make rescheduling decisions?
- Do you have to report progress for both internal and external organizations?
- What must you report, and to whom?

Wrapping Up the Project

When your project is finished, you must assess the outcomes. Was it successful? Was it on time and on budget? Your answers to these questions will help you plan new projects. You will be able to identify any mistakes made, or gaps in information, and correct these situations in future planning projects. This evaluation process helps you to improve your project management skills.

TurboProject Express helps you to stay organized. It lets you prepare professional closeout reports and use previous projects as templates for new ones. You can review information on how budgets were spent, where resources did not work as efficiently as estimated, or where a change of tactics allowed the schedule to be improved.

About GigaPlan

GigaPlan is a web-based project management solution from the developers of TurboProject Express that gives managers, stakeholders, and team members the ability to manage and interactively update project information in real time, from anywhere in the world—simply using a browser and Internet connection.

GigaPlan features:

- Create teams and invite new members
- Add tasks and assign resources
- Interactively update and manipulate progress concurrently
- GigaGantt—the only full-featured interactive Gantt

TurboProject Express

- LooseLayout™ Planning—the ability to move entire projects in the Gantt
- GigaSpreadsheet™—automatically update progress
- Milestones and Summary creation on the fly
- Real-time integration of updates and changes
- GigaMerge™—seamless conversion and integration of TurboProject Express and Microsoft Project files

For more information about GigaPlan, or how it integrates with TurboProject Express, visit www.gigaplan.com or send email to info@gigaplan.com.

2

Getting Started

This chapter provides you with information about installing and registering TurboProject Express, as well as sources of help and technical support.

System Requirements

Your computer must meet these minimum requirements before you can install and run TurboProject Express. However, we recommend that your computer exceed these requirements for optimum performance.

Minimum	Recommended
Windows 95, Windows 98, Windows 2000, or Windows NT 4.0	Windows 95, Windows 98, Windows 2000, or Windows NT 4.0
486 PC	Pentium 200 or greater
32 MB RAM for Windows 95 or 98 64 MB RAM for Windows 2000 or NT	64 MB RAM
SVGA monitor, 640 x 480, 256 colors	SVGA monitor, 800 x 600, 256 colors
20 MB hard drive space	26 MB hard drive space
CD-ROM drive	CD-ROM drive
Any Internet Browser	Internet Explorer 5.0 Netscape Navigator 5.0

For information about GigaPlan system requirements, visit www.gigaplan.com/advantage/index.html.

Installing TurboProject Express

Before installing TurboProject Express, close any programs that run automatically, including anti-virus programs, screen savers, and third-party memory managers. Also, remove any floppy disks from your floppy drives.

To install TurboProject Express:

1. Insert the TurboProject Express CD in your CD-ROM drive.
If the installation begins automatically, follow the instructions on the screen.
2. When prompted, indicate which options you want installed.
3. When you are through making your selections, click **Next** to move to the next step, **Back** to return to the previous step, or **Cancel** to cancel the installation.

If the installation program does not start automatically, follow these steps:

1. On the Windows taskbar, click **Start**.
2. Select **Run**.
3. Click **Browse**.
4. Navigate to your CD-ROM drive and double-click on setup (or setup.exe).
5. Click **OK** and follow the instructions on the screen.

Installing Adobe Acrobat Reader

In order to open and view the Onscreen User Guide for TurboProject Express, you must have Adobe Acrobat Reader installed on your system. Before installing Acrobat Reader, close any programs that run automatically, including screen savers and third party memory managers. Also, remove any floppy disks from your floppy drives.

To install Acrobat Reader:

1. Insert the TurboProject Express CD into your CD-ROM drive.
2. If the TurboProject Express installation starts automatically, cancel it.
3. On the Windows taskbar, click **Start**.
4. Select **Run**.
5. Type **D:\Acroread.exe** (where D is the letter of your CD-ROM drive).
6. Click **Next** and follow the instructions on the screen.

Registering Your Software

When you install TurboProject Express, you'll be asked to register your software. Registering your software couldn't be faster or easier. You can fill out an online form and send it in via your Internet connection, print the form and fax it to GigaPlan at (208) 567-8324, or you can call IMSI to register by phone. Once you have registered, you can take full advantage of the many available support options. It also assures that IMSI will be able to notify you of any future upgrades to TurboProject Express.

To register your software:

1. Start TurboProject Express.
The initial screen opens.
2. Choose one of the following methods:
 - Quick Registration
 - Full Registration
 - Telephone Registration
3. Complete and submit the corresponding form.



You can also register your software by visiting www.gigaplan.com/tpreg.

Removing TurboProject Express

To remove TurboProject Express from your computer:

1. On the Windows taskbar, click **Start**.
2. Select **Settings|Control Panel**.
3. Double-click **Add/Remove Programs**.
4. Select TurboProject Express from the list of software in the Add/Remove Program Properties dialog box.
5. Click **Add/Remove**.
6. When you are prompted, click **Yes** to continue.
7. After the program has been removed, click **OK**.
8. Click **OK**, and then close the Control Panel dialog box.

Starting and Exiting TurboProject Express

To start TurboProject Express:

- Select Start|Programs|TurboProject Express|TurboProject Express v.4.

To start TurboProject Express:

- Select Start|Programs|TurboProject|TurboProject v.4.

To exit TurboProject Express:

- Select File|Exit.

Getting Help in TurboProject Express

Searchable Help

Searchable onscreen help is always available as your guide while you use TurboProject Express.

To access the onscreen help:

- Select Help|Contents to open the TurboProject Express Help Menu.

The Help menu provides you with the following search options:

Contents—Click this tab to browse through topics organized by category.

Index—Click this tab to see a list of index entries; either type the word you're looking for or scroll through the list.

Find—Click this tab to search for words or phrases that may be contained in a Help topic.

Search for Words or Phrases

The first time you click the Find tab in Help, follow the instructions on your screen to compile a word list. Once the list has been created you can search for specific words or phrases.

To search for words or phrases:

1. In the first text box, type the words you want to find.
Matching words appear in the list below it.
2. In the list of matching words, click the words you want to look for.
3. In the bottom list box, double-click a title to display a topic.
Note that the text of each topic found contains the words you searched for, even if the words are not in the topic title.



TIP:

If you want to look for more than one word, separate them with spaces in the first text box. When you look for hyphenated words, be sure to type the hyphen. You can define a search criteria by clicking Options when you are in the Find tab.

Printing a Help Topic

Once you locate the information you're looking for, you can print a copy of it.

To print a Help topic:

- In the Help topic you want to print, click **Print**, right-click and select **Print Topic**, or click **Options** and select **Print Topic**.



TIP:

You can print a group of related topics by clicking a book in the Help Contents, then clicking Print.

Changing the Font Size in a Help Topic

If you want, you can change the font size used in TurboProject Express Help. The setting you choose will affect all of the topics in the current Help file.

To change the font size:


1. In the Help window, right-click and select **Font**, or click **Options** and select **Font**.
2. Select **Small**, **Normal**, or **Large** to adjust the size of the font.

Context-Sensitive Help

The status bar at the bottom of the main window displays information about the function you are performing, the dialog or table that is displayed, or the selected menu item.

When you have a question about a specific tool, command, or other item in TurboProject Express, you can use context-sensitive Help.

To access context-sensitive Help:

- Select Help|Context Help, or click  on the Standard toolbar.
A question mark is added to the cursor, and when you click on the item, context-sensitive help will appear.

Other Help and Information Resources

In addition to the TurboProject Express Help, there are additional resources available to answer your questions, or provide more information.

Onscreen User Guide

The Onscreen User Guide for TurboProject Express is in Portable Document Format (PDF). It is located on the TurboProject Express CD-ROM. Acrobat Reader must be installed on your computer to read the Onscreen User Guide PDF file.

The Onscreen User Guide contains the same information as this printed User Guide, but you can take advantage of the interactive features of the PDF. When you click on these hyperlinks, Acrobat Reader will take you directly to the information you are seeking:

- Bookmarks for chapters and topic headings
- Table of Contents topics
- Cross-references to other sections of the User Guide
- Hyperlinks to Web site URLs
- Index page numbers



NOTE:

If you try to print the PDF and find that the images are blurry, it may be due to a problem with printing PDFs to non-PostScript printers. Try installing Acrobat Reader from the TurboProject Express CD-ROM.

Readme

The Readme file contains last-minute information that was not included in this User Guide. You can view the Readme by double-clicking on the Readme file in the folder C:\ProgramFiles\MSN\TurboProject Express (where C is the letter of your hard disk drive).

You may want to print the Readme file and save it for future reference. If you do not have access to a printer, make sure that you at least become familiar with the contents of the Readme file.

Tutorial

The Tutorial provides step-by-step instructions on how to create and view a project.

To start the tutorial:

- Select Help|Tutorial.

GigaPlan Technical Support Services

GigaPlan Inc., developers of TurboProject Express, will provide free technical support via email for the product for 120 days. In order to receive free email support, you must first register your copy of TurboProject Express. To register, visit www.gigaplan.com/tpreg. By registering, you are also eligible

to receive free product updates, when available.

Upon registration, you will receive an email that explains the technical support process. Remember, free email support is only available for 120 days following product registration. After 120 days, support will be charged on a per-incident basis. Telephone technical support is not available at this time.

GigaPlan Technical Support will work closely with you to solve any problems related to our software. Please give our support technicians as much information as possible about your system and the problem that has occurred. We have provided a Technical Support Checklist to help you prepare your request for support. We will do our best to respond to your support issues promptly.

On occasion, a problem can be traced to hardware, or to another software application. Our technicians will supply as much support as possible in these cases, but they are not authorized to support products manufactured or published by another company.

In addition to email support, you have access to no-charge support services on the TurboProject website: www.turboproject.com. Several product support options are available, including user forums, Frequently Asked Questions, and product downloads or patches when available.

Technical Support Checklist

To receive the fastest response to your technical questions, please complete the following checklist before you send e-mail:

- You may already have the information you are looking for. Before requesting technical support, check your documentation thoroughly. Refer to the online Help and the Readme file. Let the technician know what you've tried
- Record the exact sequence of events that created the problem. Make sure that you can reproduce the problem by following the same series of steps
- In your email, provide the name and version number of the application. To get the exact version number, select Help|About TurboProject
- Know the type of computer and Windows version you are using
- Record the exact wording of any error messages
- Be sure that your return email address is valid

3

TurboProject Express Desktop

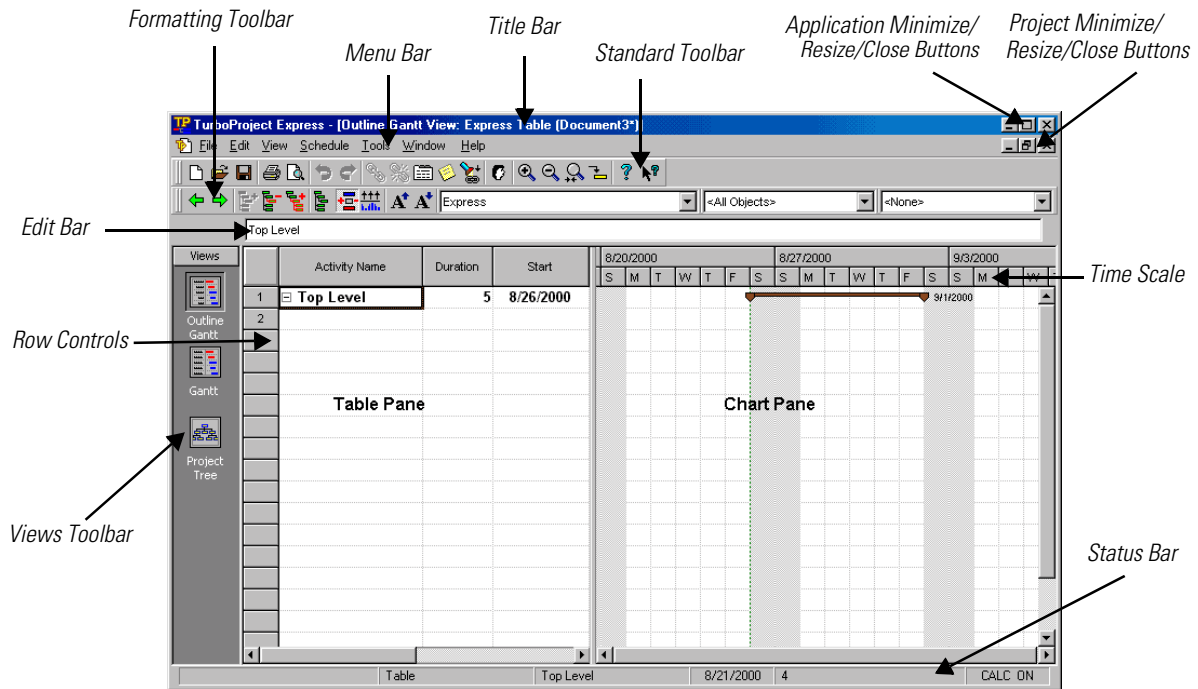
TurboProject Express makes full use of the Windows graphical user interface. With TurboProject Express's full-featured, easy-to-use approach to project planning and management you can create schedules in just minutes. If you can use a mouse, you can manage a project. In fact it's never been easier to plan, manage, and communicate every stage of any kind of project.

TurboProject Express Main Window and Its Elements

To work with TurboProject Express, you need to be familiar with all the elements of the TurboProject Express main window and how they are used.

The main window is a standard Windows MDI (Multiple Document Interface) window, which supports having a number of child windows open simultaneously to display project information.

Element	Function
Title Bar	The title bar displays the application, current view name, and current project name. If the open project file has not been saved since changes were made, an asterisk (*) appears to the right of the file name.
Menu Bar	The menu bar provides access to all the commands for the functions you use in managing your project. When you select a menu, you will see the list of commands available from that menu.
Toolbars	The toolbar buttons and list boxes provide fast access to the most frequently used commands. Toolbars can be moved to suit your taste by clicking on the border surrounding the tool palette and dragging it to the desired location.
Application Minimize/Resize/Close Buttons	These buttons reduce the Main Window to an icon bar on the Windows taskbar, resize the Main Window, or exit the application.
Project Minimize/Resize/Close Buttons	These buttons reduce the active project to an icon bar in the Main Window, resize the active project, or close it.



TurboProject Express User Interface

Element	Function
Edit Bar	For ease of editing, all editable text entered into a tabular field can be viewed and edited using the Edit bar.
Window Client Area	<p>The open area in the main window is referred to as the window client area. This is the main working environment in TurboProject Express. Child windows can be arranged within the window client area using the Window menu, but cannot be displayed outside of the client area.</p> <p>The TurboProject Express windows that can be opened in this area include the Project View, Table View, and Project Tree View.</p> <p>This area is an infinitely scrolling time-scaled “drawing board” on which you place tasks (activities) and establish the workflow for your project plan. As you move the cursor around in the pane, its horizontal location is measured in “time” and its vertical location is measured in “rows.” The cursor location is displayed on the status bar.</p>
Row Controls	The gray, numbered cells to the left of the Activity Name column in a table are markers for planning objects created in the Project View. By clicking on a row control, you select the entire row.
Project View	The Project View is the portion of the Window Client Area that contains the Project Tree pane and/or View Pane

Element	Function
View Pane	The View Pane is the portion of the Project View that contains the Table pane and/or Chart pane. If the Project Tree is hidden, the View Pane takes up the entire Project View.
Local Menu	Local menus are displayed by right-clicking on a project pane (Project Tree, Gantt view, table, etc.)
Status Bar	The status bar is a tool used to communicate context-dependent information. The information displayed on the status bar changes according to the current position of the cursor. When the cursor is placed over a toolbar icon, the status bar displays helpful explanatory text about the function of that button. When the cursor is placed within an active Outline Gantt or Gantt view, the status bar displays coordinate information and editing mode information pertinent to the set of operations possible within that view. The name of the current network (subproject node currently selected on the Project Tree) is also displayed in the status bar.
Time Scale	The time scale appears at the top of the time scale pane. The cursor position represents a certain place in time in the View Pane, and the exact date of the cursor location is indicated on the status bar. You can expand and contract the time scale to display a time unit of one day to as much as 20 years. This is a useful feature when you are switching from a management summary to a detail view of your project or schedule.




SEE ALSO:

For a full description of TurboProject Express's menu choices and toolbar buttons, refer to the TurboProject Express online Help.

Project View Window

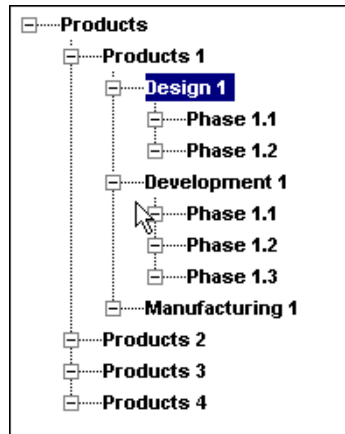
The Project View window provides a convenient interface for inspecting and modifying project information in a number of different graphical and tabular formats. The Outline Gantt view is a typical example of the Project View window.

The Project View window has two key components: the Project Tree pane and the View Pane. The Project Tree pane, presenting a file manager-like representation of the project structure, can be displayed or hidden by clicking  on the Formatting toolbar. When the Project Tree pane is in view, it occupies the left side of the window.

The View Pane display area supports several different display formats for inspecting and modifying project data. (In case of the Outline Gantt view as well as the Gantt view, the View Pane contains both tabular and graphic presentations of your project.) TurboProject Express provides you with a set of commands (Add Planning Object, Sort, Filter, Trace, Select, etc.) which allows you to perform all necessary operations on planning objects in TurboProject Express views.

The Project Tree

The Project Tree is a graphical outline which displays the main topics and subtopics of your project. It serves as a road map of all the activities and subprojects in your project and how they relate to each other. Displayed on the left side of the Project View, you can use the Project Tree pane as a tool for building your project structure as a “tree” with “nodes” (project phases/ subprojects) and “branches” (connections between a parent subproject and its “children” i.e. subordinate subprojects).



Project Tree Pane

For example, the parent subproject Product 1 has three “child” subprojects: Design 1, Development 1, and Manufacturing 1. Subproject Design 1 in turn has two child subprojects: Phase 1.1 and Phase 1.2. If you double-click on any branch of the Project Tree in the Project Tree pane, the subproject information form for that subproject appears.



TIP:

A similar information form is available for every planning object of your project. For more information, refer to the online Help.



Project Tree View

The Project Tree view, which displays only the Project Tree in the Project View, is accessible by selecting View|Change Active View|Project Tree View or by clicking  on the Views toolbar.

The View Pane

The View pane can be occupied by a table, a chart, or both. The display in the View pane depends on the view type:

Panes Displayed in the View Pane	Example
Table	Object table view
Chart	Profile chart
Table + Chart	Outline Gantt view, Gantt view
Table + Chart + Chart	Gantt/Profile view

At the top of the chart pane, TurboProject Express displays a timeline for the different portions of the project. This time scale can be changed by clicking  and  on the Standard toolbar.

When the top level of your Project Tree is selected, you can view the highest level of your project plan. As you move along the Project Tree by selecting specific subproject branches, or nodes, the View pane provides a time-scaled display of the corresponding project information.

A variety of options are available for customizing the contents of the View pane. These options can be accessed by selecting View|Layout, or by right-clicking and selecting Layout from the local menu.

4

Starting a Project

In TurboProject Express, you can create a new project or work on an existing one. For each project, you can define the project information or parameters, including Start Date, Name, and Description.

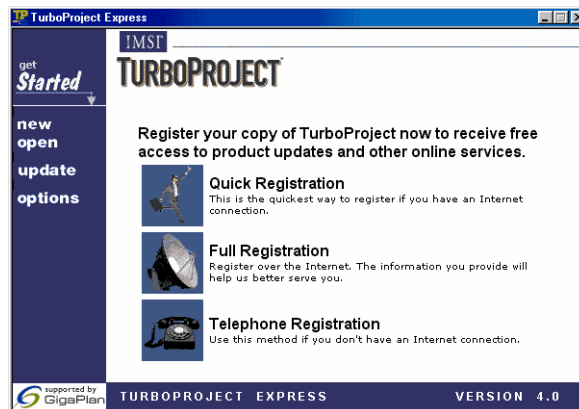
Creating a New Project

There are several ways to create a new project, depending on the Startup Options you chose.

- Creating a New Project from the Initial Screen
- Creating a New Project from the Welcome Screen
- Creating a New Project from the File Menu
- Creating a Project from a Template

Creating a New Project from the Initial Screen

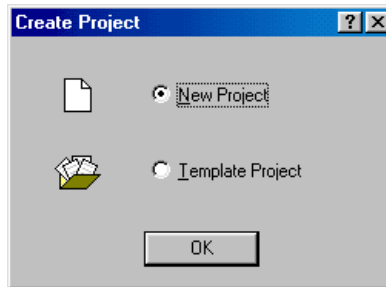
The Initial screen provides a button for starting a new project.



TurboProject Express Initial Screen

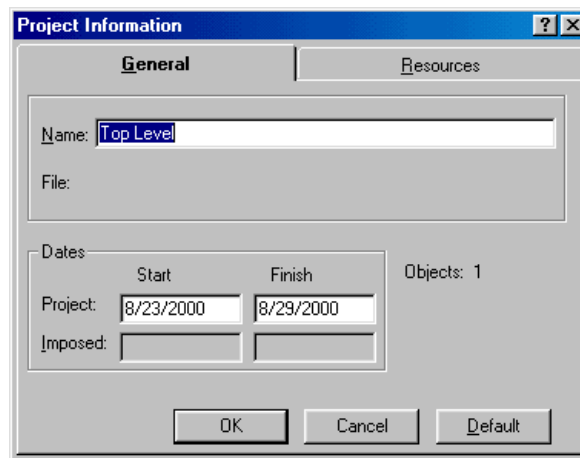
To create a new project:

1. On the initial screen, click New.
The Create Project dialog box opens.



Create Project Dialog Box

2. Click OK to create a new project without using a template.
The Project Information dialog box opens to the General tab.



Project Information Dialog Box

3. Enter a name and description for the new project.

Creating a New Project from the Welcome Screen

In TurboProject Express you have the option of enabling or disabling the Initial Screen. If the Initial Screen is disabled, the Welcome screen will open when you launch TurboProject Express.

To create a new project:

1. On the Welcome screen, click **Create a New Project**.
The Create Project dialog box opens.
2. Click **OK** to create a new project without using a template.
The Project Information dialog box opens to the General tab.
3. Enter a name and description for the new project.

Creating a New Project from the File Menu

If TurboProject Express is already open, you can start a new project by selecting the New command from the File menu.

To create a new project:

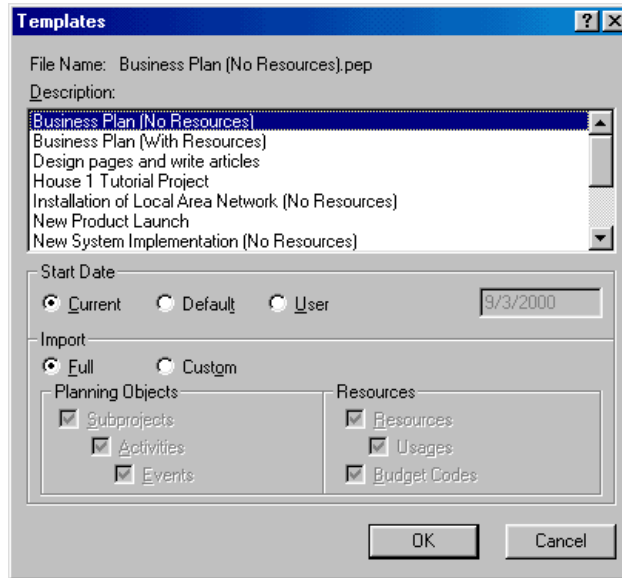
1. Select File|New.
The Project Information dialog box opens to the General tab.
2. Enter a name and description for the new project.

Creating a Project from a Template

TurboProject Express comes with a set of sample project templates. Choose a template and create a new project with properties inherited from the template.

To create a new project using a template:

1. Do one of the following:
 - On the Initial Screen, click **New**, select **Template Project**, and then click **OK**.
 - If TurboProject Express is already open, select File|Open Template.
2. In the Templates dialog box, choose a template from the list.
3. Choose a Start Date for the project and specify which elements in the template will be imported to the new project file.
If you choose **Full**, then all planning objects and resources will be imported.



TurboProject Express Templates Dialog Box

Opening an Existing Project

There are several ways to open a project, depending on the Startup Options you chose.

- Opening a Project from the Initial Screen
- Creating a New Project from the File Menu
- Opening a Microsoft Project File

Opening a Project from the Initial Screen

In TurboProject Express you have the option of enabling or disabling the Initial Screen. The Initial screen provides a quick access to existing projects.

To open a project:

1. On the initial screen, click **Open**.
2. In the Open dialog box, select the project file you want to open. TurboProject Express files have the extension PEP.
3. Click **Open**.

Opening a Project from the File Menu

If TurboProject Express is already running, you can open a new project from the File menu.

To open a project:

1. Select File|Open.
2. In the Open dialog box, select the project file you want to open.
3. Click **Open**.

Opening a Microsoft Project File

In TurboProject Express you can open files created in Microsoft Project. These files must have been exported from Microsoft Project in MPX format.

To open a Microsoft Project file:

1. Select File|Open.
2. In the Files of Type box, select MSProject Exchange files (*.mpx).
3. Select the project file you want to open.
4. Click **Open**.

Saving a Project

You can save a project file under a current name, or with a new file name. Each project file must have a unique file name. You can also save a file in Microsoft Project formats, HTML formats, or various database formats.

The first time you save a file, the Save As dialog box opens, with the TurboProject Express file extension PEP displayed in the File name box.

If you have a file open and have made changes since the last time you saved it, TurboProject Express prompts you to save the changes before closing it. You can open an additional file, but you will not be prompted to save your changes until you exit from TurboProject Express.

To save a file:

1. Select File|Save.
The Save dialog box opens.
2. Click **Save**.

To save a file with a different name:

1. Select File|Save As.

The Save As dialog box opens.

2. Enter the new name you want to call your saved project file.
3. Select a directory from the list, or click **New Folder** and create a new directory.
4. In the **Save as type** box, select the desired file type.
5. Click **Save**.

To save a file in MS Project 98 format:

1. Select File|Save As.
2. Enter the new name you want to call your saved project file.
3. Select a directory from the list, or click **New Folder** and create a new directory.
4. In the **Save as type** box, choose MS Project Exchange files (*.mpx).
5. Click **Save**.

Specifying Project Information

For every project you create, you will specify a name and start date. The Project Information dialog box allows you to specify this information and select other options that you want applied to your project.

Using the Project Information dialog box, you can:

- Define the project; give it a Name
- Define start and finish dates
- Select a default calendar
- Define a currency symbol and Resource Rate
- Define an Expense Rate

Project Information - General

General information about your project can be entered on this tab of the Project Information dialog box.

Dates		Objects: 1
Start	Finish	
Project:	8/23/2000	8/29/2000
Imposed:		

General Tab

Name—Enter or edit the name of the top level in your project.

File—Once you save the file, the path and file name is displayed here.

Dates—Enter the start and finish dates for your project.

Project Start Date—Enter the preferred start date of your project.

Once a project has been saved, this date is not editable from this box. The start date is determined by the start of the first activity or event in the project.

Project Finish Date—Enter the preferred finish date, or deadline, of your project.

Once a project has been saved, this date is not editable from this box. The finish date is determined by the end date of the last activity or event in the project.

Imposed Start Date—Enter a date before which no activity or event may take place.

Entering an imposed start will cause every activity to behave like it has a Start After constraint.

Imposed Finish Date—Enter a date after which no activity or event may take place.

Entering an imposed finish date will cause every activity to behave like it has a Finish Before constraint.



TIP:

You can type a date, or double-click on the field to open the Choose Date dialog box. If you do not want to specify a deadline for your project, enter the start date only.

Objects—Displays the number of planning objects in the current project. (Duplicate interface events are counted as a single object).

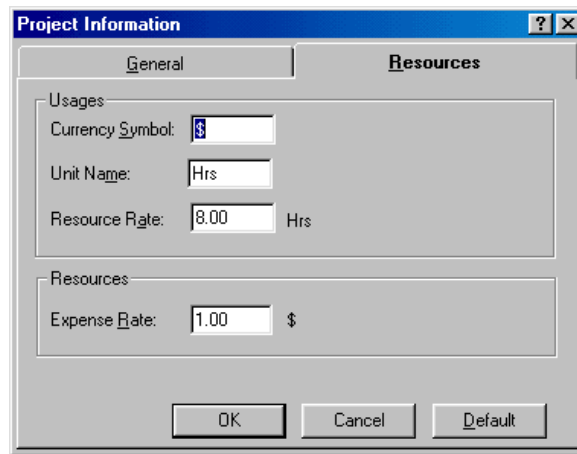
Project Information - Resources

When you assign a resource to an activity, the Resource Usage type will default to the option selected here. You can change the type by clicking the corresponding radio button.

Usages

Currency Symbol—Enter a different currency symbol in this field. The symbol can be up to two characters long. By default, this box displays a dollar sign (\$).

Unit Name—Define a unit for the resource usage rate. When a resource is given a planned quantity and a commitment rate, this unit of measure defines the values. The unit of measure can be up to 4 characters long. By default, this field shows "Hrs" (hours).

The image shows a screenshot of the 'Project Information' dialog box, specifically the 'Resources' tab. The dialog has a title bar with a question mark and a close button. It features two tabs: 'General' and 'Resources', with 'Resources' being the active tab. The 'Usages' section contains three input fields: 'Currency Symbol' with '\$', 'Unit Name' with 'Hrs', and 'Resource Rate' with '8.00' and 'Hrs' to its right. The 'Resources' section contains one input field: 'Expense Rate' with '1.00' and '\$' to its right. At the bottom, there are three buttons: 'OK', 'Cancel', and 'Default'.

Resources Tab

Resource Rate—Specifies the default value for the resource usage rate. By default this is 8.00 hours. When you add a new entity to your project's resource list, TurboProject Express uses this value in the Expense Rate column, although you can change it for a particular resource.

Resources

Expense Rate—Enter a default value for the billing rate for a resource. The billing rate currency is defined in the Formats tab of the Preferences dialog box. The billing rate is used to compute the expense associated with the resource usage.

5

Laying out a Project

Laying out your projects involves adding planning objects—the activities, events, and phases that make up your project—and adjusting their locations and durations.

Once you have created a new project file, you will define the activities necessary to achieve your project goal. You will list the activities that will take place, and the amount of time required to complete each one.

If there are deadlines or milestones that must be met during the course of your project, these should be added as events.


If your project is large, it is often easier to manage if you break it into phases, or subprojects.


Outlining Your Project

An outline is a hierarchical structure that shows how the activities and events are grouped within subprojects. Using outlining, you can create up to 64 indented levels of planning objects in your project.

With the demoting and promoting controls in the Outline Gantt View, you can organize the activities into phases or logical groups. You create a subproject summary by demoting the planning objects directly following it in the Gantt table.

The Outline Gantt View allows you to demote or promote planning objects easily.

Demoting—Select the planning object you wish to indent and click  on the Formatting toolbar. When you demote a planning object, it becomes a "subordinate" of the planning object directly above it. The object directly above will automatically be converted into a subproject.

Promoting—Select the planning object you wish to outdent and click  on the Formatting toolbar. When you promote a planning object to the left-most position in the column, it is no longer a "subordinate" of the object directly above it.

Reasons to Outline

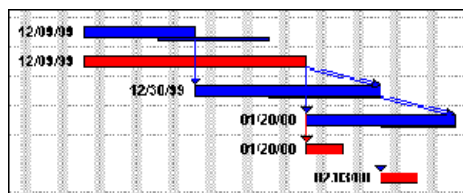
You can benefit when you make a project outline if:

- The project has 20 or more activities
- The project needs a hierarchical structure
- You need to manage the workflow in phases
- You want reports that show summarized and detailed views of your project
- You need to distribute individual subprojects to the people responsible for them, so they can update and return them
- You need quick access to every phase of the project (The Project Tree gives you this type of access)

Adding Activities and Their Durations

An activity is the basic planning unit of your project. It is a distinct, nameable block of work to be performed over a specific period of time. Each activity has a start date and a finish date, and can be assigned resources and expenses. By defining and connecting activities, you build the structure of your project.

Activities are shown as bars in the Gantt and Outline Gantt views. The default color of a critical activity is red; the default color of a non-critical activity is blue. Activities are the only planning objects to which you can assign resources.



Activities - Gantt View

Adding an Activity

You can enter the activities in your project in the order in which they will occur, or in any order you want. They can be rearranged, sorted, or deleted at any time.

To add an activity to your project:

1. Select a row in the Table pane of your Outline Gantt view.
2. Select Edit|Insert.
An activity with the default name "Activity" is added to your project.

3. Select the Activity name and enter a new name for the activity.
4. Press Enter.

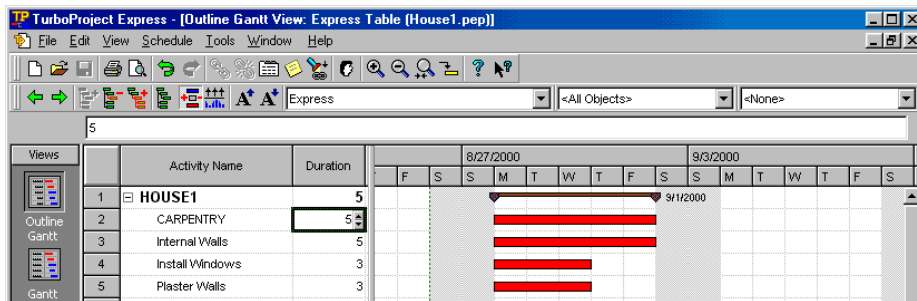
Setting the Duration of an Activity

Duration is the amount of time required to complete an activity. The duration is displayed in the Duration column of the Table pane of the Gantt and Outline Gantt views. It is also represented graphically in the Gantt or Outline Gantt views by the length of the bar for an activity.

When you create a new activity, the default duration is assigned to that activity. You can change the duration by changing the value in the table, by dragging the bar, or by opening the Activity Information dialog box for the activity and changing the duration value.

To set the duration of an activity using the Table pane:

1. In the Table pane of the Gantt or Outline Gantt view, click the duration value for the Activity.



Duration Value for an Activity

2. Enter a value for the duration of the activity.
3. Press Enter.



NOTE:

The default duration for a new activity is defined in the General tab of the Preferences dialog box.

Assigning Dates to an Activity

When you add an activity to a subproject, the start date defaults to the start date for that subproject. When you add an activity that is not within a subproject, the start date defaults to the date on which the project starts. The default end date is determined by the value for the Duration that is specified in the General tab of the Preferences dialog box.

You can change the end date for an activity by changing the values in either the end date or Duration box in the Activity Information dialog box.


You can also assign start and end dates in the Outline Gantt or Gantt view by clicking and dragging

the bar for an activity.

To assign start and end dates by using the Activity Information dialog box:

1. Right-click on an activity.
2. From the local menu, select **Edit General** to display the General tab of the Activity Information dialog box.
3. In the **Schedule** group, double-click in the first **Early Date** box to display a calendar and select a start date.
4. Double-click in the second date box to display a calendar and select an end date.

To assign start and end dates by clicking and dragging:

1. In Outline Gantt or Gantt view, move your pointer over the bar for the activity.
2. When the pointer changes to , click and drag the bar to a new location. The duration remains the same and the start and end date change to reflect the new position of the bar.



TIP:

You can also change the end date, by changing the duration. For more information, see [Setting the Duration of an Activity](#) on page 5-3.

Deleting Activities

You can delete any activity in your project.

To delete an Activity:

1. Select any field in the row of the activity.
2. Select **Edit|Delete**, or press **Delete**.



TIP:

*If you would like to undo this action, select **Edit|Undo**. TurboProject Express has a multiple Undo feature, which lets you undo your previous steps. To restore any steps you have just undone, select **Edit|Redo** once for each step. You can also use the hotkeys **<Ctrl> + <Z>** to Undo and **<Ctrl> + <Y>** to Redo.*

Viewing Activity Information

Each activity contains unique information that can be viewed using the Activity Information dialog box. In TurboProject Express, there are a number tabs that provide a variety of information about the selected activity. In certain situations, this information can be edited.

There are a number of ways to display the Activity Information dialog box, including:

- In the chart pane of the Outline Gantt or Gantt view, double-click on the activity bar
- In the table pane of the Outline Gantt or Gantt view, double-click on the activity row number
- In the Project view, select an activity, and then select Edit|Edit General

General Information

The General Tab displays a variety of information about the selected activity; some information is partly duplicated in other tabs of the activity information dialog box.

The screenshot shows the 'Activity Information [Install Windows]' dialog box with the 'General' tab selected. The 'Desc:' field is empty. There are two checkboxes: 'In-Progress' (unchecked) and 'Complete' (unchecked). The 'Priority:' field contains the value '50'. The 'Schedule' group contains two date fields: 'Early:' with '8/28/2000' and '9/1/2000'. The 'Duration' group contains two fields: 'Original:' with '5' and 'Actual % Complete:' with '0'. At the bottom are 'OK' and 'Cancel' buttons.

Activity Information - General Tab

Desc

By default, TurboProject Express assigns every activity the same name, Activity. You can customize the activity name by typing a preferable name in the Desc field. In the chart pane of the Outline Gantt or Gantt view, the activity name may appear as the bar label, depending on the view layout.

In-Progress—Select this check box to set the actual start date of the activity to equal the scheduled start date.

Complete—Select this check box if work on the selected activity is finished.

Priority—Enter a priority code, which will be used when constraining activities. The default priority is 50. Enter a value less than 50 for higher priority activities; enter a value greater than 50 for lower priority activities.

Schedule Group

The date fields in this group contain the start and finish dates for the selected activity. When you create an activity, you can specify start and finish dates.

When you specify a start date, TurboProject Express will derive the finish from the duration of the

activity. If you specify both a start and finish dates, TurboProject Express calculates the activity duration for you.

Duration Group

Original—Enter the original or planned duration of the activity.

Actual %—Enter the amount of work done as a percent.



TIP: You can enter the specified date manually, or double-click on a date entry field to summon the Choose Date dialog box.

Viewing Schedule Information

The Schedule tab displays information about the schedule of the selected activity.

Activity Information - Schedule Tab

Desc

By default, TurboProject Express assigns every activity the same name, Activity. You can customize the activity name by typing a preferable name in the Desc field. In the chart pane of the Outline Gantt or Gantt view, the activity name may appear as its bar label, depending on the view layout.

Percent Group

Actual % Complete—The amount of work that has been completed on the selected activity, as a percentage.

Actual Dur—The amount of work that has been completed on the selected activity.

Remaining Dur—The amount of work remaining.

Schedule Group

The date fields in this group contain the start and finish dates for the selected activity. When you

create an activity, you can specify start and finish dates.

When you specify a start date, TurboProject Express will derive the finish from the duration of the activity. If you specify both a start and finish dates, TurboProject Express calculates the activity duration for you.

Progress Group

The date fields in this group contain the actual start and finish dates for the selected activity.

In-Progress—Select this check box to set the actual start date of the activity to equal the scheduled start date.

Complete—Select this check box if work on the selected activity is finished.

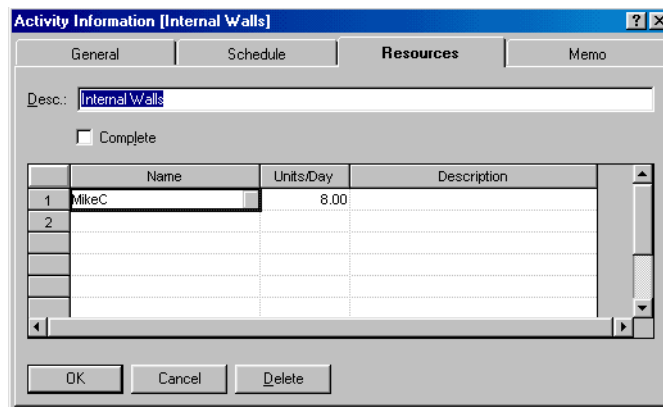


Note:

You can enter the specified date, or double-click in the field to open the Choose Date dialog box.

Viewing Resource Information

The Resources tab displays information about the resources assigned to the selected activity.



Activity Information - Resources Tab

Desc

By default, TurboProject Express assigns every activity the same name, Activity. You can customize the activity name by typing a preferable name in the Desc field. In the chart pane of the Outline Gantt or Gantt view, the activity name may appear as its bar label, depending on the view layout.

Complete—Select this check box if the activity is finished.

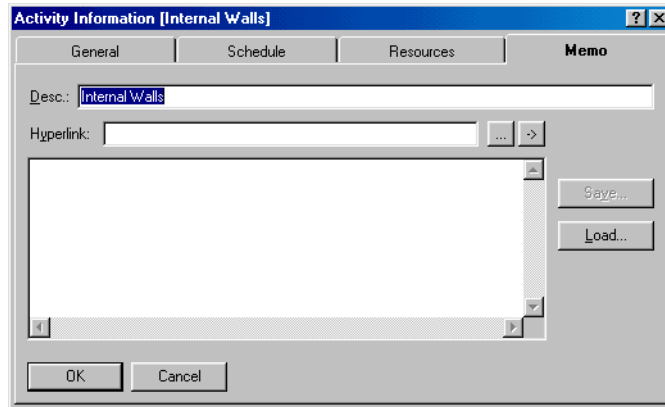
Resource Table

The resource usage table displays information about the resources assigned to the selected activity.

Using this table, you can add, edit, or delete resource information.

Viewing Memo Information

The Memo tab allows you to add a memo that will be stored with the activity information.



Activity Information - Memo Tab

You can create a memo document, then save it as a text file by clicking **Save**.

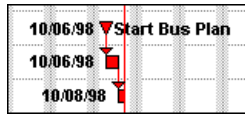
If you need file (document or application) documents as references for creating an activity's memo, use the Hyperlink controls. The Hyperlink entry field lets you locate and open any file accessible from your computer. Once the file is opened in the application, you can not only read the document but drop some parts of the document into your memo using the standard Windows Copy and Paste commands.

You can also load a text document from a file directly into the memo field by clicking **Load**. You can also send this memo via your E-mail by clicking **Send E-mail**. The memo text will automatically appear in a new message window. Note that TurboProject Express lets you send an entire project as a file attached to the outgoing E-mail message.

Adding Events

Events are objects that have no duration and require no resources. They are points that represent milestones. Events are specified as either AM or PM events, representing the open or close of business on a given date.

In the Outline Gantt and Gantt views, events are shown as inverted triangles. The default color of an event is red, although both the color and font can be changed using the Views Option dialog box.



Event - Gantt View

Adding an Event

Events are added to a project in the same way that activities are added. You can add an Event, or add an Activity and then change it to an event.

To add an event to your project:

1. Select a row in the Table pane of your Outline Gantt view.
2. Select Schedule|Add Planning Object|Event.
An event with the default name "Event" is added to your project.
3. Select the Event name and type a new name for the event.
4. Press **Enter**.

To change an activity to an event:

1. Select an activity.
2. Select Schedule|Change Type.
3. In the Change Type dialog box, use the **Type** box to select Event.
4. Click **OK**.



TIP:

You can also change an activity to an event by right-clicking an activity and selecting Change to Event.

Assigning a Date to an Event

When you add an event to a subproject, the date of the event defaults to the start date for that subproject. When you add an event that is not within a subproject, the date defaults to the date on which the project starts.

You can also assign a date to an event by clicking and dragging the event in the Outline Gantt or Gantt view.


To assign a date by using the Event Information dialog box:

1. Right-click on an event.
2. From the local menu, select **Edit General** to display the General tab of the Event Information

dialog box.

3. In the Schedule group, double-click in the **Early date** box to display a calendar, and select a date.
4. Use the radio buttons beside the Early box to specify a start-of-business (am), or end-of-business (pm) time for the Event.
5. Click OK.

To assign a date by clicking and dragging:

1. In Outline Gantt or Gantt, move your pointer over the event.
2. When the pointer changes to , click and drag the event icon to a new location.

Deleting Events

You can delete any event in your project.

To delete an event:

1. Select any field in the row of the event.
2. Select Edit|Delete, or press **Delete**.



TIP:

If you would like to undo this action, select Edit|Undo. TurboProject Express has a multiple Undo feature, which lets you undo your previous steps. To restore any steps you have just undone, select Edit|Redo once for each step. You can also use the hotkeys <Ctrl> + <Z> to Undo and <Ctrl> + <Y> to Redo.

Viewing Event Information

Each event contains unique information that can be viewed using the Event Information dialog box. In TurboProject Express, there are two tabs that provide information about the selected event. In certain situations, this information can be edited.

There are a number of ways to display the Event Information dialog box, including:

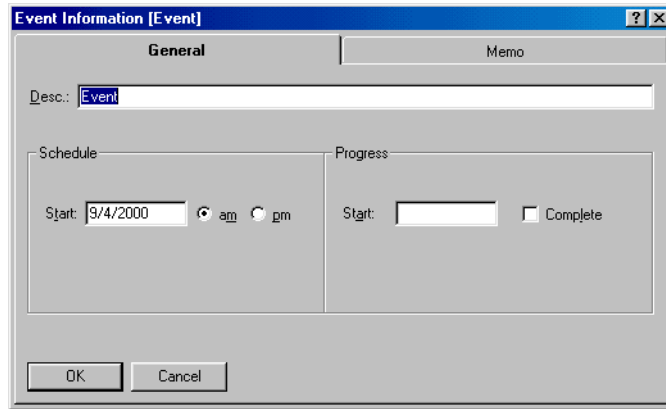
- In the chart pane of the Outline Gantt or Gantt view, double-click on the activity bar
- In the table pane of the Outline Gantt or Gantt view, double-click on the activity row number
- In the Project view, select an activity, and then select Edit|Edit General

General Information

The General first tab of the Event Information dialog box contains some key information on the selected event.

Desc—Enter an event name in this text field. This name will appear in the Desc field of the TurboProject Express database tables containing information on the event. In the chart pane of the

Outline Gantt or Gantt view, the event name appears as its label to the left or right of the symbol.



Event Information - General Tab

Schedule Group

Start—Specify a start date for the event, and then select AM or PM.

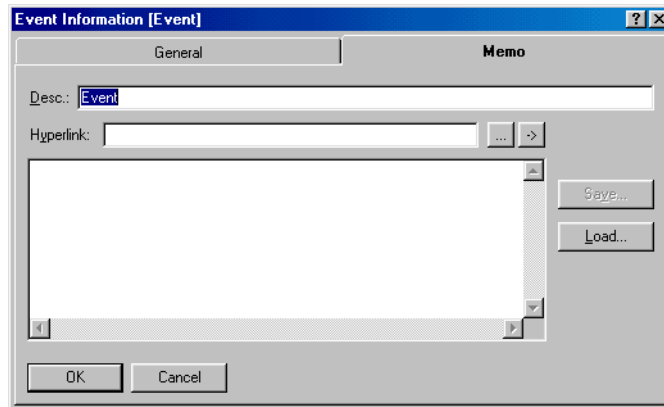
Progress Group

Start—Enter the actual start date for the event

Complete—Select this check box if the event is complete.

Memo Information

The Memo tab of the Event Information dialog box allows you to add a memo that will be stored with the event information.



Event Information - Memo Tab

If you need file (document or application) documents as references for creating a planning object's memo, use the Hyperlink controls. The Hyperlink entry field lets you locate and open any file accessible from your computer. Once the file is opened in the application, you can not only read the document but drop some parts of the document into your memo using the standard Windows Copy and Paste commands.

You can also load a text document from a file directly into the memo field by clicking **Load**. You can also send this memo via your E-mail by clicking **Send E-mail**. The memo text will automatically appear in a new message window. Note that TurboProject Express lets you send an entire project as a file attached to the outgoing E-mail message.

Creating Subprojects

TurboProject Express recognizes a planning object as a subproject when there are other activities directly below it that are indented. It shows the subproject as a bar that summarizes the start and finish of all the indented activities. Any changes made to the activities will automatically be reflected in the subproject bar.


As soon as TurboProject Express encounters an activity or event name that has the same alignment as the last subproject, or is out-dented, it recognizes that it has reached the end of that subproject.

There are two ways to create a subproject. You can add the subproject as a planning object, or you can indent other planning objects below an activity or event and it will become a subproject.

To add a subproject planning object:

1. Select the row on which you want to add the subproject.
2. Select **Schedule|Add Planning Object|Subproject**.

To create a subproject from an activity:

1. Select one or more rows directly below the activity that you want to convert to a subproject.
2. Click  on the Formatting toolbar.

The activity directly above any indented activities or events, becomes a subproject.


Adding Planning Objects to a Subproject

You can add activities, events, subprojects, and other planning objects to a subproject by creating them within the subproject, or by indenting them directly below another activity.

To include activities or other planning objects in a subproject by indenting them:

1. Select one or more activities, events, or other planning objects that you want to include in the subproject.

These planning objects must be directly below the subproject name, or directly below the name of the activity that you want to convert to a subproject. Do not select the subproject name.

2. Click  on the Formatting toolbar.
3. If prompted, click **Yes** to change the links.
The activities you selected move to the right and are summarized by the subproject.

To add new planning objects to a subproject:

1. Open a subproject.
When a subproject is open, it has a minus sign (-) to the left of it. If there is a plus sign (+) to the left of the subproject, click it to open the project.
2. Select a row below the subproject and add an event or other planning object.
This object is automatically included within the subproject.

Deleting a Subproject

When you delete a subproject, all activities, events, and other planning objects within the subproject are also deleted.

To delete a subproject:

1. Select the subproject.
2. Click Edit|Delete, or press DELETE.

Hiding the Subproject Bars

If you prefer to work on a project with no subprojects displayed, you can hide the subproject bars. The planning objects included in each subproject are displayed, retaining the groupings you created.

To hide the subproject bars in the current project:

- Select View|Show Subproject Bars, or click  on the Formatting toolbar.
You can also configure TurboProject Express so that the subproject bars are always hidden.

To hide the subproject bars in all projects:

1. Select Tools|Preferences.
2. Select the View tab of the Preferences dialog box.
3. In the **Subprojects in View** group, clear the **Show Subproject Bars in Gantt Charts** check box.

Viewing Subproject Information

Each subproject contains unique information that can be viewed using the Subproject Information dialog box. In TurboProject Express, there are a number of tabs that provide a variety of information about the selected activity. In certain situations, this information can be edited.

There are a number of ways to display the Subproject Information dialog box, including:

- In the chart pane of the Outline Gantt or Gantt view, double-click on the activity bar
- In the table pane of the Outline Gantt or Gantt view, double-click on the activity row number
- In the Project view, select an activity, and then select Edit|Edit General

General Information

The General tab contains some key information on the selected subproject.

The screenshot shows the 'Subproject Information [CARPENTRY]' dialog box with the 'General' tab selected. The 'Desc' field contains 'CARPENTRY'. The 'In-Progress' checkbox is checked, and 'Complete' is unchecked. Under the 'Schedule' section, the 'Early' dates are 9/4/2000 and 9/27/2000. Under the 'Duration' section, 'Original' is 18 and 'Actual % Complete' is 0. The 'OK' and 'Cancel' buttons are at the bottom.

Subproject Information - General Tab

Desc

By default, TurboProject Express assigns every subproject the same name, Subproject. You can customize the subproject name by typing a preferable name in the Desc field. In the chart pane of the Outline Gantt or Gantt view, the subproject name may appear as its bar label, depending on the view layout.

In-Progress—Select this check box to set the actual start date of the subproject to equal the scheduled start date.

Complete—Select this check box if work on the selected subproject is finished.

Schedule Group

Early—These date fields contain the ES (early start) and EF (early finish).

Duration Group

The options in this group show the status of the subproject once the project has been started and progress is being posted. When the subproject is summarizing a group of activities and events, TurboProject Express automatically calculates and updates the fields in this box as progress is posted. You cannot edit any of the fields in this group.

Original—This field allows you to enter a Duration when you first create the subproject. Once you have grouped planning objects (activities, events, etc.) in the subproject, the duration can no longer be edited.

Actual % Complete—The amount of work that has been completed on the selected activity, as a percentage.

Schedule Information

The Schedule tab of the Subproject Information dialog box contains a number of control groups with the subproject schedule information.

The screenshot shows the 'Subproject Information [CARPENTRY]' dialog box with the 'Schedule' tab selected. The 'Desc' field contains 'CARPENTRY'. Below it, the 'Percent' group contains three fields: 'Actual % Complete' (0), 'Actual Dur.' (0), and 'Remaining Dur.' (18). The 'Schedule' group contains two date fields: 'Early' (9/4/2000) and (9/27/2000). The 'Progress' group contains an 'Actual' field (9/4/2000) and an empty date field, with 'InProgress' checked and 'Complete' unchecked. At the bottom are 'OK' and 'Cancel' buttons.

Subproject Information - Schedule Tab

Desc

By default, TurboProject Express assigns every subproject the same name, Subproject. You can customize the subproject name by typing a preferable name in the Desc field. In the chart pane of the Outline Gantt or Gantt view, the subproject name may appear as its bar label, depending on the view layout.

Percent Group

Actual % Complete—The amount of work that has been completed on the selected subproject, as a percentage.

Actual Dur—The amount of work that has been completed on the selected subproject.

Remaining Dur—The amount of work remaining.

Schedule Group

The date fields in this group contain the start and finish dates for the selected subproject. When you create a subproject, you can specify start and finish dates.

When you specify a start date, TurboProject Express will derive the finish from the duration of the subproject. If you specify both a start and finish dates, TurboProject Express calculates the subproject duration.

Progress Group

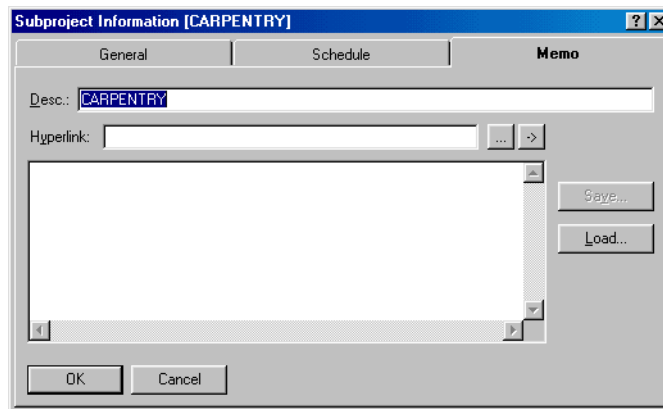
The date fields in this group contain the actual start and finish dates for the selected subproject.

In-Progress—Select this check box to set the actual start date of the subproject to equal the scheduled start date.

Complete—Select this check box if work on the selected subproject is finished.

Memo Information

The Memo tab of the Subproject Information dialog box allows you to add a memo that will be stored with the subproject information.



Subproject Information - Memo Tab

If you need file (document or application) documents as references for creating a planning object's memo, use the Hyperlink controls. The Hyperlink entry field lets you locate and open any file accessible from your computer. Once the file is opened in the application, you can not only read the document but drop some parts of the document into your memo using the standard Windows Copy and Paste commands.

You can also load a text document from a file directly into the memo field by clicking **Load**. You can also send this memo via your E-mail by clicking **Send E-mail**. The memo text will automatically

appear in a new message window. Note that TurboProject Express lets you send an entire project as a file attached to the outgoing E-mail message.

Changing a Planning Object Type

This dialog box is used to make a planning object type conversion as defined General Rules of Converting Planning Object Types.

To change the type of a planning object:

1. Select a planning object.
2. Select Schedule|Change Type.
The Change Type dialog box opens.
3. In the Type box, select the type of planning object you wish to convert to.
4. Click OK.

General Rules for Converting Planning Objects

TurboProject Express allows you to change a selected activity or event into another planning object type. The following table describes the general rules of such conversion.

From	To	Consequences
Activity	Event	Name, codes, description, workflow connections retained; duration, resource/expense assignments lost.
Activity	Subproject	Creates a subproject with the same name as the activity; also creates a network on the Project Tree.
Event	Activity	Name, codes, description, workflow connections retained; constraints assignments lost.

Finding Planning Objects

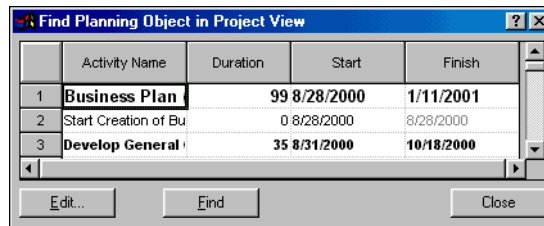
The Find command allows you to find specific planning objects in the Project View.

Finding a Planning Object in the Project View

TurboProject Express allows you to find a specific activity or other planning object when the Project View window is displaying Outline Gantt or Gantt view.

To find a planning object:

1. Select View|Find, and then select All or the type of planning object you want to find. The Find <Planning Object> in Project View dialog box opens.



Finding an Event in the Project View

2. Select the Activity Name cell of the planning object.
3. Click Find. The planning object is highlighted in the table pane of the Project view.

Moving Planning Objects

TurboProject Express allows you to reposition planning objects within the Outline Gantt or Gantt views.

You can move unconstrained objects forward and backward within a row of the Chart pane. In the Table pane, you can move a selected record up or down the list. When you move a record to another location (row) in the table, the corresponding bar in the Chart pane moves to the same row.

Using the Pointer to Move Planning Objects

In Gantt and Outline Gantt views, you can move planning objects by clicking and dragging when the pointer displays the appropriate icon. When you place the pointer over the lower half of a planning object, the pointer changes to one of the following icons:

- ✚ The planning object can be moved from side to side or up and down.
- ⬆ The planning object can be moved up or down, but not from side to side.
- ✚ The planning object can be moved from side to side, but not up or down.
- ∅ You cannot move this planning object.

To move a planning object:


1. In Outline Gantt or Gantt view, move the pointer over the lower have of the bar or symbol for

- the planning object you want to move.
- When the pointer changes to one of the move symbols, shown above, click and drag the planning object to a new location, then release the mouse button.

Moving Planning Objects Forward or Back in Time

In Gantt or Outline Gantt views you can change the start and end dates for a planning object by clicking and dragging.

To move a planning object forward or back:

- Move the pointer over the lower part of the bar or symbol for the planning object you want to move.
- When the pointer changes to , click and drag the object horizontally and release the mouse button to place it in a new location.



NOTE:

TurboProject Express does not allow objects to overwrite or lie on top of each other. If you drag a planning object onto another object, the moved object moves the original activity down to the next row.

Changing the Order of Planning Objects

You can change the order of planning objects by clicking and dragging them in the table pane of Gantt or Outline Gantt view. When you move a subproject, all planning objects within the subproject move as well.

To change the order of planning objects:

- Make sure that a Gantt or Outline Gantt view is displayed.
- Press SHIFT while you select any field in the row of the activity that you want to move. A grayed box appears in the activity row. Drag the grayed box to the row where you want to place it.
- Release the mouse button first, then release SHIFT. The activity is in its new row.

Methods of Adding Planning Objects

There are several methods for adding planning objects to a project. You can also copy and paste planning objects within a project, or from one project to another. When you copy a subproject, all rows within that subproject are also copied.

Adding Planning Objects by Typing

You can add a planning object by typing in a cell of a table pane in Project View, or in a table in Table View.

To add a planning object by entering text:

1. In the table pane of Gantt or Outline Gantt view, or in a table, click a blank row in the **Activity Name** column.
2. Type a name for the planning object, and then press **Enter**.
3. The planning object is added as an activity.
If you want to change it to an event or subproject, right-click the activity and select **Change to Subproject**, or **Change to Event**.

Using a Menu Command to Add a Planning Object

You can use the Add Planning Object command to add a planning object of the type you select. This command is available from the Schedule menu. It is also available from a local menu when you right-click a row in the table pane of your project or in an open area of the chart pane.

To add a planning object using the main menu:

1. In the table pane, click a blank row.
2. Select **Schedule|Add Planning Object**, then select the type of planning object you want to add. A new activity with default parameter values is added to the end of the table. The corresponding bar appears on the same row in the Chart pane.
3. To modify the parameters for the planning object, double-click on its row number in the Table pane, or on the corresponding bar in the Chart pane to display a dialog box.

To add a planning object using the right mouse button:

1. In a blank row of the table pane, or in an empty area of the Chart pane, right-click to display a local menu.
2. Select **Schedule|Add Planning Object**, and then select the type of planning object you want to add. A new activity with default parameter values is added to the end of the table. The corresponding bar appears on the same row in the Chart pane.
3. To modify the parameters for the planning object, double-click on its row number in the Table pane, or on the corresponding bar in the Chart pane to display a dialog box.

Using the Insert Key to Add a Planning Object

You can add an activity to your project by pressing the Insert key. An activity is added using the default parameters. You can then change it to another type of planning object. When you are in

Project Tree view, the planning object is added as a subproject.

To add a planning object using the Insert key:

1. Place the pointer in a row of your project.
2. Press INSERT.
3. In most views, the planning object is added as an activity.
If you want to change it to an event or subproject, right-click the activity and select **Change to Subproject**, or **Change to Event**.

Using Copy and Paste to Add Planning Objects

You can use the Copy and Paste commands to copy one or more planning objects from one row to another in the current project, or from another project. When you copy a row, the planning object and all its attributes is copied. When you copy a subproject, all planning objects within the subproject are copied.

To copy planning objects:

1. In the Table pane of Outline Gantt or Gantt view, select the row that you want to copy.
If you want to copy multiple rows, hold CTRL while you select the rows.
2. Select Edit|Copy.
3. Select the row in which you want to copy the planning object, and select Edit|Paste.
The object is pasted into the position you selected. If you want to change the location of planning object, hold SHIFT and drag it up or down.



NOTE:

When you copy and paste a subproject, any connections between the planning objects in the subproject are also copied.

6

Making Connections

Once you have added planning objects to your project plan, you can establish workflow connections between these objects. The key to making workflow connections is to remember the sequence of the work. For example, you must connect the first task (predecessor) that needs to be completed to the second task (successor).

TurboProject Express has three types of connections, so you can use the one that best suits your project. You can make connections between activities, connect activities to events and interface events, and connect events and interface events to each other. You can also connect activities to subprojects, but not to activities within those subprojects.

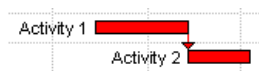
As you make connections between activities, TurboProject Express moves the activities on the planning screen to correspond with the schedule it is calculating. In a Project View window, some activities will turn blue, indicating they have float, and some will remain red. Red activities are critical, based on the workflow logic you have introduced.

You can connect a planning object with more than one other planning object. You can also apply more than one connection between two planning objects.

Types of Connections

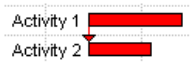
There are three types of workflow connections that you can make between planning objects.

Finish-to-start (FS)



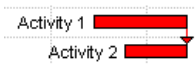
Finish-to-start connects the finish of one planning object to the start of another. A finish-to-start connection from Activity A to Activity B means that Activity A must finish before Activity B can start. In the User Level tab of the Preferences dialog box, Finish-to-start can be specified as the default connection type.

Start-to-start (SS)



Start-to-start connects the start of one planning object to the start of another. This connection is used to show that the start of the second planning object is constrained by the start of the first activity. In other words, the second activity cannot start until the first activity has started.

Finish-to-finish (FF)



Finish-to-finish connects the finish of one planning object to the finish of another. This connection is used to show that the finish of the second activity is constrained by the finish of the first task. In other words, the second task cannot finish until the first task has finished.





NOTE:

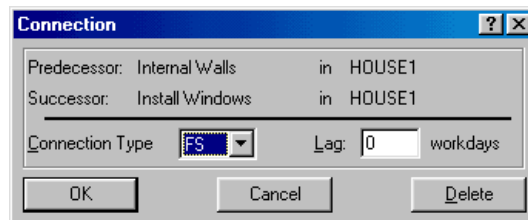
If you attempt to make an illogical connection that would result in a loop, TurboProject Express displays the Connection Loop dialog box which allows you to remove one of the connections that is creating the loop.

Making One-to-one Connections

The easiest way to make a one-to-one connection is with the mouse.

To connect two planning objects:

1. In Gantt or Outline Gantt view, move the pointer over the top part of the bar or icon for the predecessor object—the planning object that must occur first in the sequence.
2. When the pointer changes to , click on the activity bar. A message box indicates that you have selected the predecessor.
3. Move the pointer over the successor object and when it changes to , click on the activity bar. The Connection dialog box opens.



Connection Dialog Box


4. In the Connection dialog box, select a connection type. You can also enter a Lag.
5. Click OK to complete the connection.

Making One-to-many Connections

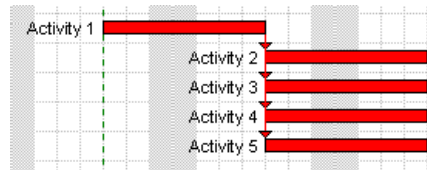
With TurboProject Express, you can simultaneously create finish-to-start connections between one predecessor and several successors, or between one successor and several predecessors.

This feature allows you to make only finish-to-start workflow connections. One-to-many start-to-start or finish-to-finish connections must be made one at a time.

To connect several successors to a single predecessor:


1. Press CTRL and select the row number for each of the planning objects that you want to specify as successors.
2. Select Schedule|Add Predecessor. The pointer changes to .
3. Select a predecessor planning object.

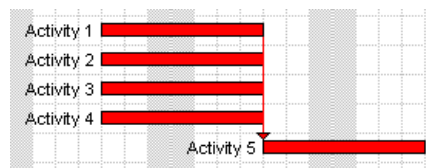
The finish-to-start connections appear in the chart pane of a Gantt or Outline Gantt view.



One-to-Many Connection

To connect several predecessors to a single successor:

1. Press CTRL and select the row number for each of the planning objects that you want to specify as predecessors.
2. Select Schedule|Add Successor. The pointer changes to .
3. Select a successor planning object. The finish-to-start connections will appear in the chart pane of a Gantt or Outline Gantt view.




Many-to-One Connection

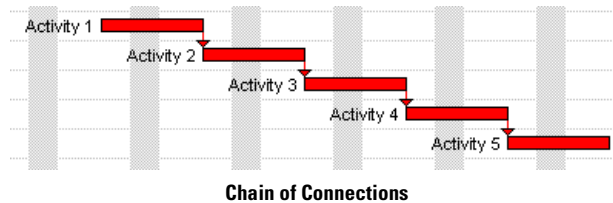
Creating a Chain of Connections

Finish-to-start connections between several planning objects in a series can be created using the


Chain command available from the Schedule menu or the Standard toolbar.

To chain planning objects:

1. Select the planning objects to be chained.
2. Select Schedule|Chain or click  on the Standard toolbar.
The selected planning objects are automatically connected with a series of finish-to-start connections.




To unchain connections using the Standard toolbar:

1. Select the planning objects to be unchained.
2. Select Schedule|Unchain or click  on the Standard toolbar.
The selected planning objects are disconnected.


Breaking Connections

There are several ways to remove connections from planning objects.

To delete a connection using the unchain command:

1. Two or more planning objects that are connected.
2. Select Schedule|Unchain, or click  on the Standard toolbar.

To delete a connection using the Connection dialog box:

1. Move the pointer over the connection you want to delete until it changes to .
2. Double-click on the connection you want to remove.
The Connection dialog box opens.
3. Click Delete.

Creating Lags

Lag is a time delay set up between two planning objects. The purpose of the lag differs, depending on



the type of connection you have set up.

For finish-to-start connections, lag is the number of workdays that must pass after the completion of the first task before the second task can begin.

For start-to-start connections, a lag time is often used to specify that part of the work on the first activity must be completed before the second activity can start.

For finish-to-finish connections, a lag time is used to specify that a certain amount of work on the second activity must occur after the first activity has finished.

To create a lag:

1. In Gantt or Outline Gantt view, move the pointer over the top part of the bar or icon for the predecessor object—the planning object that must occur first in the sequence.
2. When the pointer changes to , click on the activity bar.
A message box indicates that you have selected the predecessor.
3. Move the pointer over the successor object and when the pointer changes to , click on the activity bar.
The Connection dialog box opens.
4. Enter a lag value.



NOTE:

You can enter a negative lag by specifying a negative number in the Lag box.

Handling Connection Loops

The Connection Loop dialog box allows you to correct a connection loop. A loop is an illogical series of connections. For example, if you specify that Activity A must finish before Activity B can start, then if you try to specify that Activity B must finish before Activity A can start, you would be creating a loop.

When you try to create a connection that will result in a loop, TurboProject Express displays the Connection Loop dialog. This dialog lists the connections which contribute to the loop and allows you to delete the one you want, or undo the last connection.

To undo the last connection which has created the loop:

- Select Edit|Undo.

To delete a connection in the connection loop:

1. Highlight the connection you wish to delete.
2. Click **Delete**.

7

Assigning Resources

After you add an activity to your project, you can assign resources to it. You can also specify expenses for the resources that you assign.

It is not necessary to assign resources to your project but there are advantages to doing so. When you assign resources to your project, TurboProject Express can do the following:

- Schedule activities when necessary resources are available
- Locate overallocated resources and correct these situations

What are Resources?

Resources are the people, facilities, equipment, and materials used to complete the activities in your project.

To add resources to your project:

- First you must add the resource to the Resource List
- You then assign any resource from the Resource List to an activity

Creating a Resource List

You must define resources or expenses before assigning them to activities. You enter resources using either the Resource List or the Resource Table. Both the list and the table refer to the same fields in the TurboProject Express database. Any change you make in one is reflected in the other. If you create a resource list for the first time, it is recommended that you use the Resource Table because you will get a broader view of the table elements.

Adding a Resource to the Resource List

Before you can assign a resource to an activity, you must define the resource using either the Resource List or the Resource Table.

To create a resource list:

1. Select View|Open Resource List.
2. Select a cell in the Name column, then type a name for the resource.
3. Press **Enter**.
The pointer moves to the name for the next resource and you can continue to add resource names in the same way.

You can add or edit information in the other columns of the Resource List. For a description of each column in the Resource List dialog box, see “Assigning a Resource using the Resource List” on page -2.

Assigning Resources to Activities

You assign resources to activities by choosing them from a list defined in the Resources table. The easiest way to assign resources to activities is through the Resource List dialog box, or the Activity Information dialog box.




NOTE: Resources can only be assigned to activities, not to subprojects or other types of planning objects.

Assigning a Resource using the Resource List

Using the Resource List dialog box, you can assign resources to activities in the current view.

To assign a resource:

1. Select one or more activities to which you want to assign a resource.
2. Select View|Open Resource List or click  on the Standard toolbar.
3. In the Resource List dialog box, select the resource you want to assign.
4. Click **Assign**.

Your chart is updated, and the name of the resource you have assigned appears to the right of the activity bar.

Assigning a Resource using the Activity Information dialog box

You can access the Resource List from the Activity Information dialog box and then select and assign a resource.

To assign resources using the Activity Information dialog box:

1. Select one or more activities to which you want to assign a resource.
2. Select Edit|Edit Resources, or right-click the activity and from the shortcut menu select **Resources** to open the Resources tab of the Activity Information dialog box.
3. Click in the Res. Name column to display a button, and then click the button to display the Resource List.
4. Use the Resource List to create and assign a new resource, or select and assign an existing resource.



NOTE:

When you assign a resource to an activity, you specify how many units of the resource you need to do the job. You can assign one or many resources to any activity or selected group of activities. For example, you might assign a carpenter to several activities. A painter may be assigned to the same or different activities as the carpenter.

Replacing a Resource

You can replace the resource you have assigned to an activity with another resource using the Resource List dialog box.

To replace a resource:

1. Select the activity to which you want to replace the resource.
2. Select View|Open Resource List or click  on the toolbar.
3. In the Resource List dialog box, select another resource you want to assign.
4. Click **Replace**.

8

The Project Schedule

While it is not necessary to understand the details of how TurboProject Express calculates a schedule, if you understand the basic concepts, you will be able to use TurboProject Express more effectively.

In order for TurboProject Express to calculate a useful schedule for your project, the raw data or activity information must be as accurate as possible. In the initial planning stage, this usually requires a lot of guesswork, but the more time you spend putting together this information, the more accurate the schedule will be.

TurboProject Express uses this information about the planning objects, resource allocations, and project calendars to calculate the schedule.

How TurboProject Express Calculates the Schedule

TurboProject Express uses the critical path method (CPM) to calculate your project's schedule. This method calculates the overall duration of the project by summing the durations of the activities in the workflow. CPM determines the sequences of work that are essential to meeting project goals.

TurboProject Express begins calculating the schedule when you enter the first activity. Each additional detail that you add causes the schedule to be recalculated.

TurboProject Express displays the critical activities in red, and the non-critical activities in blue.

Once activities and events have been connected, TurboProject Express calculates the critical path in two steps:

- Forward pass, which determines the early schedule
- Backward pass, which determines the late schedule

During the calculation, the early schedule is giving priority.

Why Should I Care About the Critical Path?

The critical path provides valuable feedback to the project manager. Being able to quickly identify the critical activities will save time in managing your project.

Suppose you need to shorten the overall duration of the project. Rather than spending time examining every planning object, you can identify those critical activities whose durations can be shortened to achieve an earlier finish date. Time spent trying to shorten noncritical activities would be wasted since they have no effect on the finish date. This knowledge will save you time trying to find ways to shorten the project schedule.

Forward Pass - Early Schedule

The forward pass establishes the earliest start and finish dates for each activity. During the forward pass, TurboProject Express goes from left to right through the project, determining the earliest date each activity can start, and the earliest date it can finish, given the activity's duration and predecessors. The early start and early finish dates are affected by the work that comes before a given activity or event.

These dates show the earliest possible schedule for the project. The early finish date for the last activity or event in the project is the earliest date the project can finish.

The early schedule of an activity is also affected by the presence of some constraints. These constraints behave like a connection from the constraint date to the corresponding end of the activity. For example, an activity with a Start After 07/14/97 constraint will have an early start on or after 07/14/97. When scheduling progress, the status date behaves like a Start After constraint affecting all activities. If an imposed start date is specified for the project in the Project Information dialog box (the Tools|Project Information menu), it also behaves like a Start After constraint affecting all activities.



NOTE:

If an actual start or finish date is specified for an activity, and TurboProject Express is scheduling progress, the early schedule is equal to the actual schedule.

Early Schedule Example

Assume that Activity B follows Activity A. If Activity A starts Monday morning and takes five workdays, then the earliest it can finish is Friday evening (five workdays later). Because Activity B can start only after Activity A is finished, the earliest Activity B can start is the next Monday morning, assuming everyone takes Saturday and Sunday off. If Activity B takes ten workdays, the earliest it can finish is Friday evening, two weeks later (ten workdays after its early start).

Backward Pass - Late Schedule

After the forward pass, TurboProject Express calculates the backward pass. In the backward pass, TurboProject Express takes the finish date for the project. If you have indicated a required finish date by targeting the project finish event, TurboProject Express uses this. Otherwise, the earliest possible finish (as calculated in the forward pass) will be used.

Starting with that finish date, TurboProject Express works backwards through the project, from right to left, determining the latest allowable finish and start dates for each activity, given each activity duration and connections to activities and events that must follow it. The late start and late finish dates are therefore affected by work to be done after a given activity or event up to a required finish date.

The late start and late finish dates for the activities are collectively called the late schedule for the project because they show the latest the activities can be completed, given the latest allowable finish date for the project.

The late schedule of an activity is also affected by the presence of some constraints (Start Before, Finish Before, Start On, and Finish On). These constraints behave like a connection from the corresponding end of the activity to the constraint date. For example, an activity with a Start Before 07/14/97 constraint will have a late finish on or before 07/14/97. If an imposed finish date is specified for the project in the Project Information dialog box, it also behaves like a Finish Before constraint affecting all activities.



NOTE:

If an actual start or finish is specified for an activity, and TurboProject Express is scheduling progress, the late schedule is equal to the actual schedule.

Late Schedule Example

Assume Activity Y precedes Activity Z. If Activity Z must finish by Friday evening, and takes five workdays, then the latest it can start is Monday morning (five workdays earlier). Because Activity Y must finish before Activity Z can begin, the latest Activity Y can finish is the previous Friday evening, assuming everyone takes Saturday and Sunday off. If Activity Y takes ten workdays, the latest it can start is Monday morning two weeks earlier (ten workdays before its latest finish).

Activity Schedules and Critical Path

Once the forward pass and backward pass are completed, each activity will have two sets of dates associated with it—early schedule dates which are its earliest possible start and finish, and late schedule dates which are its latest allowable start and finish.

Because events have no duration, their start and finish dates are the same. Therefore, an event will have only an early schedule date and a late schedule date.

After the forward and backward passes are done, TurboProject Express is able to determine the critical paths. Critical activities can now easily be identified because their early schedule is on or after their late schedule. An activity is critical when it can start no earlier than the latest it must start in order to meet the project finish date.

This is precisely what makes the activity critical. It must be done on schedule or it will directly or indirectly delay the project completion. Critical activities have no leeway as to when they can start

and finish.

No Critical Path

It also possible to have a project without a critical path, meaning that all activities have float. This would be the case if you specified an explicit finish date for the project that was actually later than the time required to finish all the activities in the project. In that case, all activities in the project would have float. You can only have a project with no critical path with a targeted finish event.

How Resource Assignments Affect the Schedule

Your project schedule can change significantly once you assign resources to the activities in your project. Assigning resources to an activity makes that activity either duration-driven or resource-driven.

Duration-Driven Activities

These are activities that have been assigned resources of the non-fixed resource usage type. The duration of the activity does not change, regardless of the number of resources assigned.

In the case of uniform resource usage, you define the resource rate that will stay unchanged and TurboProject Express calculates the total amount required, depending on the duration of the activity. Uniform resource usages simplify the planning process, as well as project management.

For elastic resource usage, you simply commit the resources to work a total amount of time and TurboProject Express calculates the rate required, given this total amount and the duration of the activity. Elastic resource usages can be important to a planner who wants to control the duration of an activity and still manage the resources needed to meet the schedule. This type of project management is typical when planning bids for contract work or when trying to meet a schedule regardless of the resources originally planned (i.e. you can hire more people to meet schedule needs).

When you are dealing with duration-driven resources (uniform or elastic) you can change the activity duration in TurboProject Express by placing the cursor onto the end of the activity bar in the project view and dragging the bar's end.

Resource-Driven Activities

Activities that have been assigned resources of a fixed resource usage type are resource-driven. In other words, their duration depends on the rate, total amount, or total duration that the resource is able to commit to the project. If you increase the number of resources assigned to an activity, the duration of that activity will decrease accordingly.

When you use fixed resources, you must post progress individually for each resource usage, either in

the Resource tab of the Activity Information dialog box or in a usage table.

Effort-Driven Activities

You can enter an activity whose duration is dependent on the number of resources that have been assigned to perform a specific amount of work. If the amount of work required to complete the activity is 40 hours, it will take one resource five workdays to complete. However, if additional resources are assigned, the duration of the activity will be reduced.

You can choose whether each activity in a project is effort driven or not using the Effort Driven check box on the General tab of the Activity Information dialog box.

The effort driven status of an activity only affects scheduling when you change the number of resources assigned to that activity.

If an activity is effort driven, the amount of work required to complete the activity remains the same after you change the number of resources assigned to it. When you assign an additional resource to an effort driven activity, less work is assigned to each resource and the duration is shortened. When you remove a resource, the duration of the activity will increase.

If an activity is not effort driven, then the amount of work changes when you add another resource. The duration does not change when you add or remove resources.

By default, all new activities are effort driven.

To change the effort driven status of an activity:

1. Select the activity for which you want to change the effort driven status.
2. Select Edit|Edit General.
3. In the General tab of the Activity Information dialog box, select or clear the Effort Driven check box.

Managing Your Schedule

Once you have added the required planning objects to your project, made the necessary connections and resource allocations, you must review the schedule, looking for errors, inconsistencies, and areas that can be improved.

Ideally, you should analyze your schedule and make the necessary changes early in the planning process, before progress begins. However, as you enter actual work performed, you can periodically check your schedule and adjust it accordingly.

Analyze the Schedule

When you review your schedule, whether you do before work begins, or as work progresses, you

must examine the schedule's use of time, resources, and expenses. The elements to be reviewed may include:

- Critical path
- Project finish date
- How the planning objects are connected
- Any planning objects that are not connected in the workflow, and start at the beginning of the project
- Any planning objects that are not in logical order
- Incorrect resource assignments
- Activities that have no resources assigned to them
- Total cost of the project
- Resource overallocations

Strategies for Shortening the Schedule

You may find, once you've analyzed your schedule, that it will not meet the project deadline. There are a number of ways you can decrease the total duration of the project. The methods you choose will depend on such aspects as resource availability, budget, and flexibility in the activities that make up the schedule.

The most efficient way to shorten the schedule is to revise the activities, and their connections that make up the critical path of the schedule. Changing activities that are not within the critical path will not shorten the schedule.

You can shorten your schedule by:

- Breaking up activities in the critical path into smaller activities that can be done simultaneously
- Shortening the duration of activities in the critical path
- Overlapping activities in the critical path, so they can be done at the same time
- Assigning extra resources to activities in the critical path
- Decreasing the amount of work assigned to activities in the critical path
- Changing the work schedule for the resources assigned to activities in the critical path
- Assigning overtime work for specific resources assigned to activities in the critical path

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Updating Your Progress

As work progresses on your project, you will continually change activity and resource usage information to reflect work that has been completed, and work that remains. This process of updating the project status is called "posting progress."

By entering actual performance information, on a regular basis, you can identify potential problems and take corrective measures. You can also use the project schedule to test various "what if" scenarios, and to measure the effects of alternatives.

Since updating your schedule can be time-consuming, you must determine the amount of detail to be tracked in your project. You must establish how much information you will need, and how much time you have to do the progress tracking.

There are several views, menus, and tools available for updating the progress of planning objects.

- Automatic Update or Reschedule using the Update Progress dialog box
- Record the changes in each object's information dialog box

Posting Progress with the Update Progress Dialog Box

Although Update Progress is not the only tool available for posting progress, it is good practice to use this dialog box as it automatically ensures consistency in your working plan.

Once your project is underway, you can post or update the progress at regular intervals. Using Update Progress, you can set a proposed status date, impose progress on selected planning objects, and reschedule planning objects.

Using the Update Progress dialog box, you can do the following:

- Set a proposed status date
- Post progress in the entire project, or specific planning objects
- Reschedule the entire project, or specific planning objects

To open the Update Progress dialog box:

- Select Schedule|Update Progress, or right-click in the chart view and select Update Progress from the local menu.

Update Period

You can set the date to which you are going to post the progress of your project. This is called the "proposed date." If you want to discard this date, select the Remove Proposed Date check box.

When you set a proposed status date, there are no changes made to the scheduling of the activities. It is simply a marker that identifies the next status date once you have posted progress to activities.

To set a proposed date:

- Enter a date in the Proposed Date box, or enter a value for the number of days in the Update Period box.



TIP:

Use the Proposed Date field to enter a desirable date manually, or double-click on the field to open the Choose Date dialog box.

Entire Project

Using the Entire Project tab of the Update Progress dialog box, you can post progress to your project, or reschedule activities.

As in the Update Period tab, you can set a proposed date for your project. Once you have defined a proposed date, you have two choices:

- Auto Progress Project to Proposed Status Date-Post progress for all planning objects "covered" by the update period
- Reschedule Project to Proposed Status Date-Reschedule the part of the project which still has to be completed

Selected Objects

As in the Update Period and Entire Project tabs, you can set a proposed date for your project, and either post progress to planning objects or reschedule portions of your project that are not complete.

In addition to these functions, you can select the planning objects to which progress is to be posted, or planning objects that must be rescheduled.

Posting Progress in the Object Information Dialog Box

While it is recommended that you post progress to your project with the Update Progress dialog box, you can update the progress of each planning object individually, using the object's information dialog box.

An activity is the only planning object for which you can quantitatively post progress in the information dialog box. In addition, once resources have been assigned to an activity, the Resource tab of the activity information dialog box provides direct access to the resource usage table, which in turn can be used to update the activity's progress.

To post progress to an activity:

1. Select the activity in the table or chart pane.
2. Right-click and select Edit Schedule from the local menu.
The Activity Information dialog box opens.
3. Enter Actual start and finish dates in the Progress group, enter a value in the **Actual Duration** box, or enter a value in the **Actual %** box.
4. Click OK.

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Analyzing Your Project

Establishing the Baseline

The baseline is a snapshot of your project. You can capture and store the current schedule of planning objects in your plan for a particular date. Once you set a baseline, the plan dates will appear in the object information dialog box. The baseline schedule is also displayed in the planning view.

When you update the status of your project, you will see the difference between the baseline schedule (planned performance) and the current status (actual performance).



NOTE:

You must select Show Baseline in the Gantt Chart View Options dialog boxes in order for the baseline bar to appear in the planning screen.

Setting a Baseline

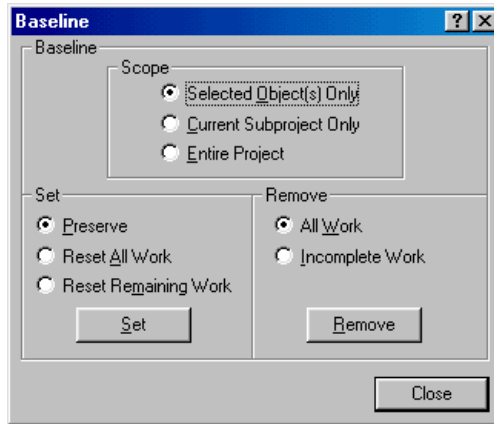
You can set a baseline for your project at any point—before work begins, or as the work progresses.

A baseline can be set for the following:

- The entire project
- Planning objects located in the current subproject
- Selected planning objects only

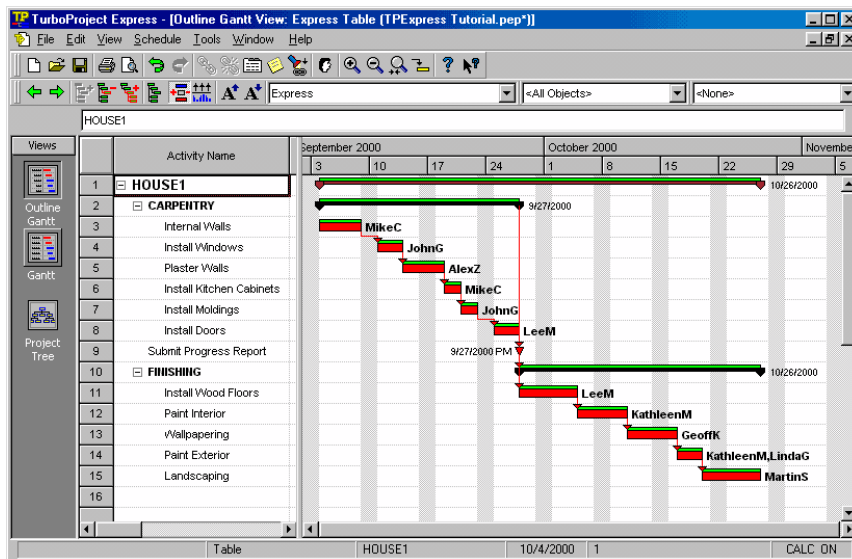
To set a baseline for the entire project:

1. Select the top level in the table view.
2. Select Schedule|Baseline.
The Baseline dialog box opens.



Baseline Dialog Box

3. In the Scope control group, select **Entire Project**.
4. In the Set control group, select the desired option.
5. Click **Set**.
A message box appears, confirming that the baselining has taken place.
6. Click **OK**.
The baseline schedule is displayed in the Project View.



Baseline Entire Project

To set a baseline for a specific planning object, or group of planning objects:

1. Select the planning objects for which you want to set a baseline.
2. Select Schedule|Baseline.
The Baseline dialog box opens.
3. In the Scope control group, select **Selected Object(s) Only** or **Current Subproject Only**.
4. In the Set control group, select the desired option.
5. Click **Set**.
A message box appears, confirming that the baselining has taken place.
6. Click **OK**.

TurboProject Express stores only one baseline schedule for each planning object. When you set a new baseline for a planning object, the previous baseline schedule is overwritten. If you want to store multiple baseline schedules, you can use the export function to store the data to an external file.

Analyzing Your Progress

You can compare the baseline plan to the actual progress to identify variances in your project. These variances identify the areas of the project that are not progressing as planned. Using the baseline, you can identify variances in activities, and their related resources and expenses.

Variances in your schedule can be good, or bad, depending on the type and severity of the variance. For example, an activity starting or finishing ahead of schedule may be good news, but may also indicate that your resources are not allocated effectively.

By comparing the actual performance of your project to the planned performance or baseline, you can determine the following:

- Are activities starting and finishing according to plan?
- Are activities using more or less work than planned?
- Are the expenses more or less than budgeted?

Using the Profile Information Panel

The Profile Information panel is handy for getting key information on a project currently displayed. Some tabs of the panel also provide controls over the view options.

Filter Tab of the Profile Information Panel


The Filter tab allows you to define a scope of the profile display and filter the resource/expense usage profile currently selected.

Show Profile

The Show Profile control group lets you define the scope of the profile information that TurboProject Express will display in the Profile pane. You can choose among the entire project, the current subproject, of the current planning object.

Select Resource

The Select Resource control allows you to filter the profile the profile by selecting a resource from the list. When you select a planning object in the table pane of your project, then select a resource, the profile displays the usages for the selected resource.

Note that there is the spin button control  in the upper left corner of the Filter tab. Using this control, you can bring into focus any planning object currently displayed in the Outline Gantt/Profile view. When the Current Subproject option is selected in the Show Profile control group, moving from one subproject to another changes the profile displayed in the Profile pane.

Legend Tab of the Profile Information Panel

The Legend tab shows a set of the Profile view's parameters; legends for non-cumulative usage profiles as well as the usage values "under the mouse cursor". You can customize this set, using the Profile View Options dialog box or the Profiles tab of the Information panel.

The information displayed in the Legend tab is context-dependent; it depends on the position of the pointer in the Profile view, as well as the mouse control option selected.

Profile Tab of the Profile Information Panel

The Profiles tab allows you to specify the type of information to be displayed in the Profile view. There are three groups for which you can set options - Usage Type, Resource Units, and Show Profiles.

Usage Type

This group includes two options: Resource and Expense; however, in TurboProject Express, only resource usage information is displayed in the profile.

Resource Units

The Hours and Days options are enabled when the Resource radio button is selected in the Usage Type control group. You can choose to display resource usage information in units of Hours or Days.

Show Profiles

The check boxes in this group permit you to simultaneous display several resource usages. By selecting a particular check box, you enable a display of the corresponding profile type. These types are Original, Actual + Remaining, Actual, Baseline, and Late. The Original, Actual and Remaining usages are self-explanatory. The Late profile type makes TurboProject Express draw profile histograms/curves based on the late start (LS) and late finish (LF) dates of the activities of your project. By default the Late option is disabled, and TurboProject Express draws the profiles based on the early start (ES) and early finish (EF) dates of the project activities.

Using the Task Information Panel

When you select a planning object in the table pane of the Outline Gantt view, TurboProject Express displays the General, Resources, and Memo information in the Task Information Panel. You can review this information, and make decisions about the schedule and resource assignments for the selected planning object.

General Tab of the Task Information Panel

The General tab allows you to get most often demanded information on the schedule of any planning object of your project. For a planning object currently in focus, the General tab displays the corresponding information.

Name

The Name field shows a name of the planning object currently in focus in the table pane or chart pane. Using the spin button control of the Name field, you can select any other planning object in the Gantt table.

Start and Finish Dates

The original Start and Finish dates are displayed in this group.

Duration

The Duration field stores the original duration of a planning object in working days.

Percent

The Percent field shows a percent of work that has been completed and that remains to be done.


Resource Tab of the Task Information Panel

For the activity in focus, the Resource tab provides you with access to resource usage information.

- View how your project's resources are used by the activity
- Assign resources to the activity

Memo Tab of the Task Information Panel

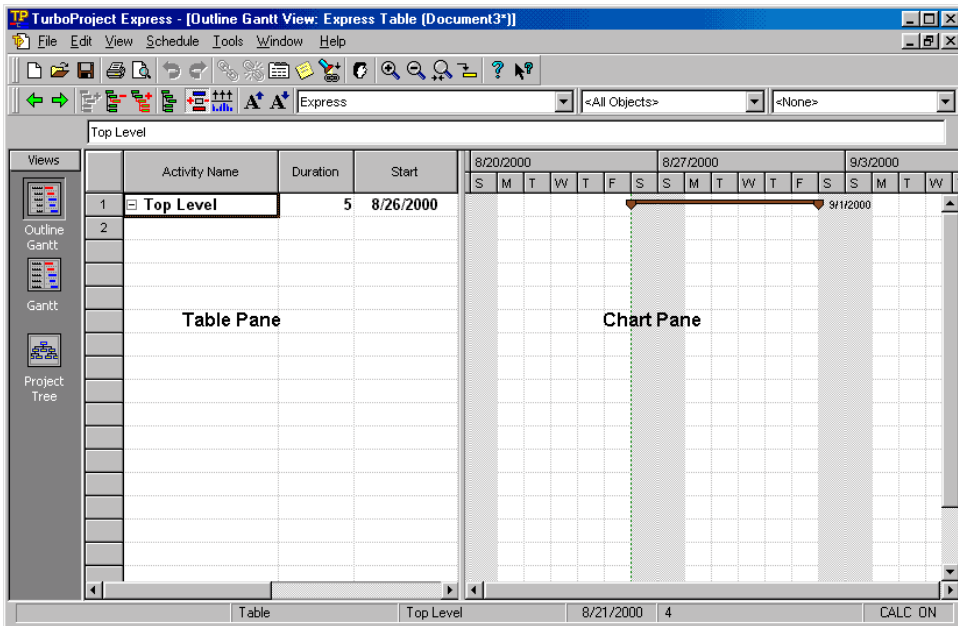
For a planning object currently in focus, the Memo tab displays the corresponding information. You can select portions of the text, and paste it to another document.

Note that using the spin button control  of the Name field, you can select any other planning object currently displayed in the Outline Gantt/Profile view.

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Viewing Your Project

TurboProject Express provides a number of options for viewing your project, as well as a set of commands that allow you to perform all the necessary operations on planning objects in the views. When you launch TurboProject Express, your project will open in the main window, or Project View. This is the default view for TurboProject Express; it can be changed at any time.



TurboProject Express Default View

Project View

The Project View window allows you to view and modify project information in a variety of formats. It has two main components: the Project Tree pane and the View Pane.


- The Project Tree pane displays a file manager-like representation of the project structure. When in view, it occupies the left side of the window.
- The View Pane, on the right, supports several different display formats for inspecting and modifying project data. These include the Gantt and Outline Gantt.

Project Tree View

The Project Tree is a graphical outline that displays the main topics and subtopics of your project. It serves as a road map of all the activities and subprojects.

Located on the left side of the Project View, you can use the Project Tree to add subprojects or navigate your project the structure.

To display the Project Tree:

- Click  on the Views toolbar.



NOTE:

By default, the Project Tree is not visible. You can change this setting in the Preferences dialog box by selecting Tools|Preference, then selecting the Show Tree check box.

If you double-click on one of the subprojects, a Subproject Information dialog box will open, allowing you to review the information specific to that subproject.

Expanding and Collapsing the Project Tree

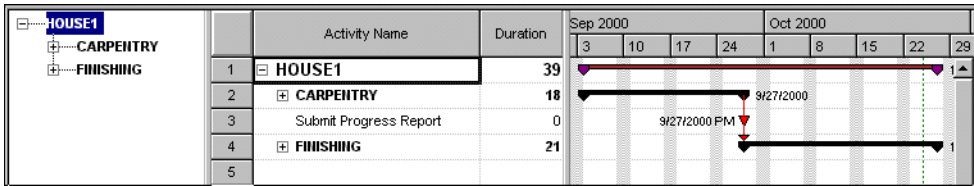
Using the Project Tree, you can expand and collapse the view of your project. When you collapse the Project Tree, you will see only the project bar.

When you expand the Project Tree, you will see all the planning objects in the various levels of your project's structure.

To expand your project and show all planning objects:

1. Select the project bar in row 1 of the Table pane.
2. Select View|Project Tree|Expand All.

The project view expands to show the entire project and the Project Tree expands to show all the phases in your project.



Expanded Project Tree

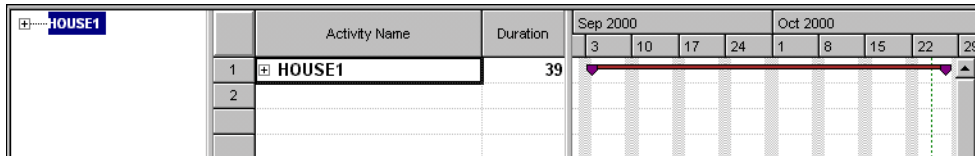
With the Project Tree visible, you can move quickly through different parts of your project.

To view subprojects or phases, click on the name of the desired phase in the Project Tree. The subproject is displayed as the first item in the project view. To return to the top of your project, click on the project name at the top of the Project Tree. The project view displays the main project bar as the first item.

To collapse the project:

- Click (-) on the left side of the project name in the Project Tree.

The Project Tree now displays (+) next to the project name. The project view on the right collapses to display only the project bar.



Collapsed Project Tree

Navigating in the Project Tree View

As your project grows in size and complexity, you may need to add phases and subprojects. You can use the Project Tree for viewing the project hierarchy, and navigating quickly through your project.

By moving from one node to another in the Project Tree, you can access individual subprojects within the structure. The project information displayed in the View pane will change, depending on which view you have selected.

- In the Gantt view, when you select a subproject on the Project Tree, only the corresponding information will be visible in the Chart pane
- In the Outline Gantt view, the information for the entire project is visible in the Project View. The Project Tree helps you quickly single out a particular part of your project and view the details

Adding Subprojects in the Project Tree View

You can add subprojects to your project structure directly in the Project Tree.

To add a subproject:



1. Click on a subproject to highlight it in the tree.
2. Select Edit|Insert.

A new "child" subproject will appear, indented directly below the one you selected.

If you double-click on the new subproject, the Subproject Information dialog box opens, allowing you to enter information for this subproject.

The View Pane

The View Pane can consist of a table, a chart, or both.

At the top of the Chart pane, on the right, TurboProject Express displays a time line for the project. This time scale can be changed by clicking  or  on the Standard toolbar.

When the top level of your Project Tree is selected, you can view the highest level of your project plan in the View pane. As you move along the Project Tree, selecting subproject branches, the View Pane provides a time-scaled display of the corresponding project information.


TurboProject Express's flexibility lets you switch from one view to another with a click of the mouse. Select a different view from the Views menu, display or hide the Project Tree, or add additional views to the window.

Outline Gantt View

The Outline Gantt View is one of the three planning views in TurboProject Express. It combines tabular and graphical representations of your project information.

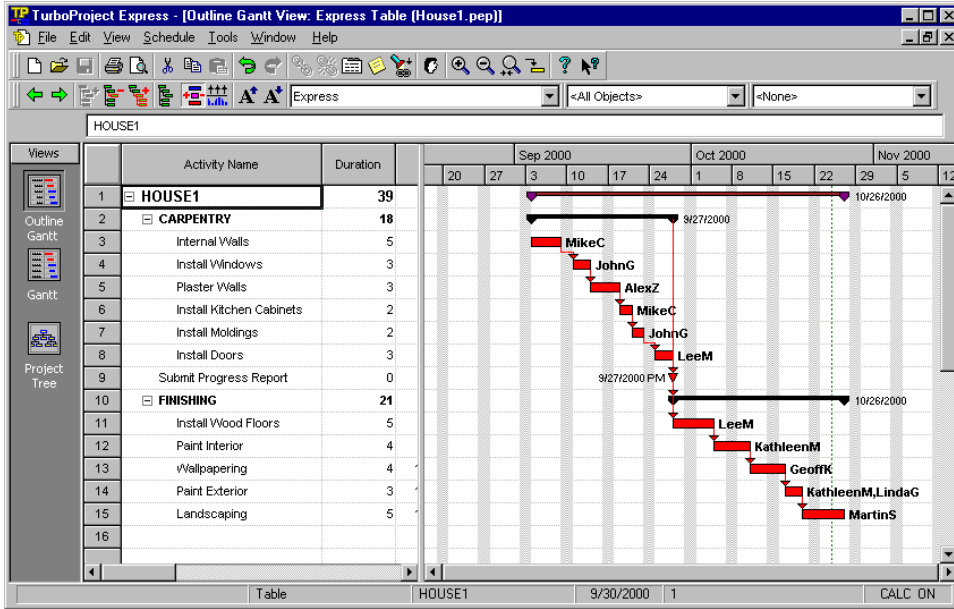
You can enter planning objects, then organize them to reflect the layout that best suits your needs.

To display the Outline Gantt View:

- Click  on the Views toolbar.

The Gantt table, on the left, lists the planning objects; the Gantt bar chart, on the right, displays these objects along a time scale.

The length of each activity bar indicates the duration of the activity. The relative position of each bar shows you the sequence of tasks. You can see which activities come before and after others, and which ones overlap.



Outline Gantt View

The event symbols indicate the milestones of your working plan. The vertical split line between the Gantt table and Gantt chart can be moved by dragging it to the left or right.

**NOTE:**

The Outline Gantt View can be combined with the Profile View or Usage View, allowing you to review planning object information and resource and usage profiles at the same time.

Navigating in the Outline Gantt View

Row 1 of the table pane contains information about the entire project. The corresponding row in the time-scaled Gantt chart pane shows the project bar. The bar's position and length indicate the project duration, with start and finish dates.

When you select a subproject in the table pane on the right, you will see the corresponding information in the Gantt chart on the left. Each table row containing subproject information has a (+) or (-) control. You can display or hide the contents of each subproject by clicking on this control. With the contents of the subprojects hidden, you can view the core structure of your project.

With one click on (+) beside a subproject name, you expand the details of that particular branch of your project. With another click on (-), you collapse to the previous level of summarization.

If your project is very large, you can use the Project Tree pane to navigate through your project.

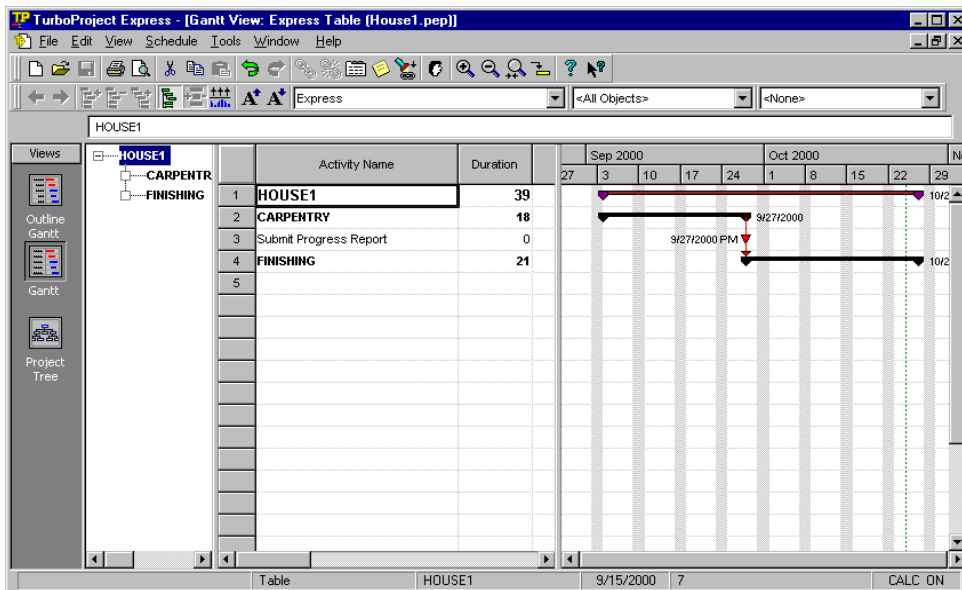
Advantages of the Outline Gantt View

Using the Outline Gantt View, you can:

- Group your project's planning objects in a hierarchical structure of subprojects
- Identify the major phases of your project and graphically represent them as subproject bars
- Arrange your project as a multilevel structure, indenting planning objects to represent different levels of the project hierarchy
- Use either a Top-Down (enter subproject first) or Bottom-Up (enter activities first) method of building your schedule
- Display only the subproject summaries that you need to see

Gantt View

Like the Outline Gantt View, the Gantt View combines tabular and graphical representations of your project information. However, in the Gantt View, the Project Tree must be used to navigate your project; the Show/Hide controls are not available.




Gantt View

To display the details of a subproject, you must first select it in the Project Tree. The planning objects contained in the subproject will be displayed in the Gantt chart. As you select different subprojects

on the Project Tree, the information displayed in the Gantt View will change accordingly.

You are not able to expand or collapse subproject information within the Gantt View.

To display the Gantt View:

- Click  on the Views toolbar.




NOTE:

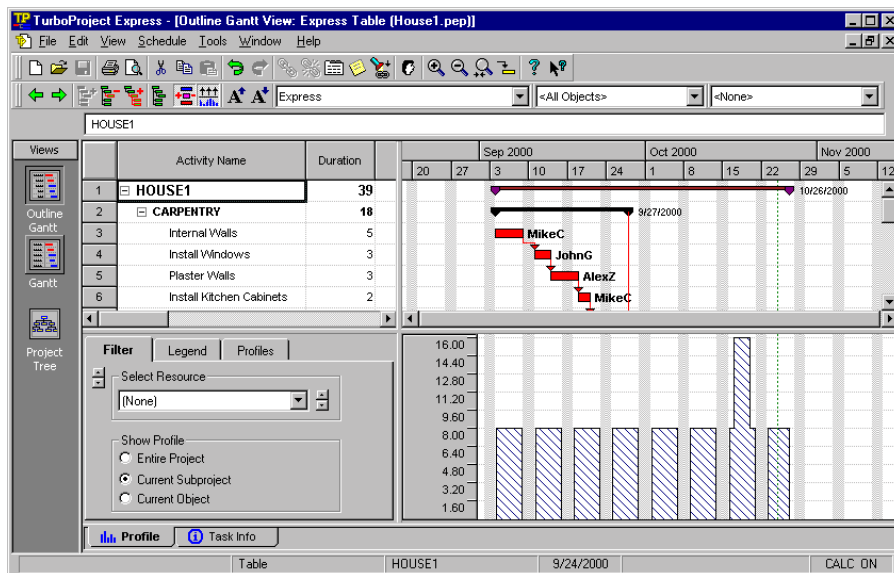
The Gantt View can be combined with the Profile View or Usage View, allowing you to review planning object information and resource and usage profiles at the same time.

Working with Combined Views

In TurboProject Express, it is possible to combine the Outline Gantt or Gantt views with the Profile or Usage views. By combining views in this way, you can see planning objects and resource usage on one screen. This flexibility is useful when analyzing and managing your project.

To create a combined view:

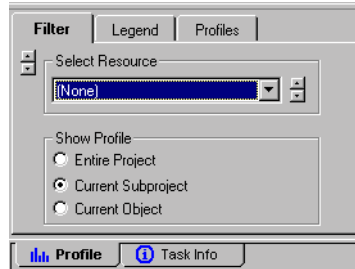
1. Open a Gantt or Outline Gantt view of your project.
2. Add the corresponding Profile or Usage view by clicking  on the Formatting toolbar. The information is displayed in a number of panes, depending on the views you have chosen.



Outline Gantt/Profile View

Profile Information Panel

The Profile Information Panel is a handy tool that allows you to quickly review information about the project displayed.



Profile Information Panel

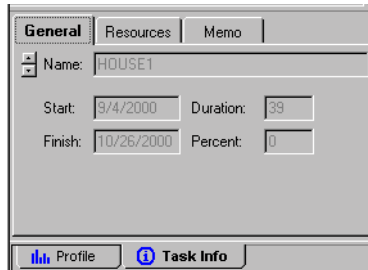
Filter—Define a scope of the profile display and filter the resource/expense usage profile currently selected.

Legend—Display a set of the Profile view's parameters - legends for non-cumulative usage profiles as well as the usage values "under the mouse cursor".

Profiles—Specify the type of information, or curves, to be displayed in the Profile view.

Task Information Panel

The Task Information Panel is a handy tool that allows you to quickly review information about the project displayed.



Task Information Panel

General—Display the schedule information for the selected planning object.

Resource—Display key information about the resource usages for a selected activity.

Memo—Display the contents of a memo document created for a planning object in your project.

Working with Multiple Windows

TurboProject Express allows you to open multiple windows for the same project, or for different projects.

You can easily switch between these windows by pressing <Ctrl> + <F6>. By clicking on the buttons in the upper right-hand corner, you can resize the window, reduce it to an icon, or close it. If the icons for the minimized windows are not visible, you can access them through the Window menu. You can also manually size windows by clicking on the border of the window and dragging the window pane.

Multiple windows can be viewed by tiling or cascading them, choosing one of the three options available from the Window menu in the menu bar.

To open an additional View:

- Select View|Open New View.

The screenshot displays the TurboProject Express interface with two overlapping Gantt chart windows. The top window, titled 'Gantt View: Express Table (House1.pep):2', shows a task list with columns for activity name, duration, and start date. The bottom window, titled 'Outline Gantt View: Express Table (House1.pep):1', shows a more detailed task list with resource assignments like 'MikeC', 'JohnG', and 'AlexZ'.

Activity Name	Duration	Start
HOUSE1	39	9/4/2000
CARPENTRY	18	9/4/2000
Submit Progress Report	0	9/27/2000
FINISHING	21	9/28/2000

Activity Name	Duration	Start	End	Resource
HOUSE1	39	9/4/2000	10/26/2000	
CARPENTRY	18	9/4/2000	9/27/2000	MikeC
Internal Walls	5			JohnG
Install Windows	3			AlexZ
Plaster Walls	3			MikeC
Install Kitchen Cabinets	2			MikeC

Multiple Views open in one Screen

12

Filtering and Sorting Project Information

In TurboProject Express, you can filter and sort your project information in a variety of views, using a number of tools.

Using the filter and sort commands, you can focus on specific information within your project and display it in a way that meets your requirements.

Filtering Project Information

You can filter the information in your project to include a specific subset of your project data. Filters determine which planning objects and resources are displayed, based on the criteria specified.

A filter helps you identify and display only the planning objects and resources that match the criteria. Those that do not match are temporarily hidden.

By using a filter, whether in a view, a table, or a report, you can focus on specific project information.

When Would I Use a Filter?

Filtering is available for the following functions:

Resource Profiles

You can select a specific set of usages to display in a resource profile.

Assigning Resources using the Resource List

When you assign resources to your project using the Resource List, you can filter the current resource list using the Filter button in the dialog box.

Finding Planning Objects in the Chart pane of a View

You can use the FIND function to locate and view all planning objects in your project that meets specific filter criteria.

Reports

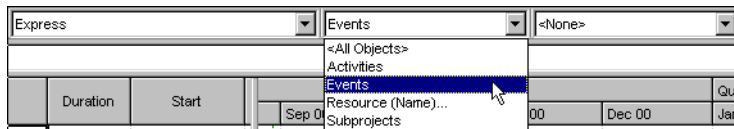
You can filter report data to include a specific subset of the project data. For example, you might print an activity report that only includes behind-schedule activities.

Using Standard Filters

There are a number of standard filters available in TurboProject Express. These provide standard selection criteria that will be useful in many situations. You can select them using the Filter list box of the Formatting toolbar.

Using the Filter List Box

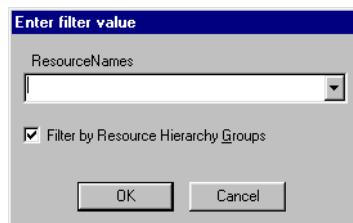
You can use the Filter list box on the Formatting toolbar to filter the project information in a number of views and tables. The contents of the Filter list box are controlled by the type of table that is displayed.



Filter List

To select a filter condition:

1. In the Filter list, select the desired criteria.
If the criteria you selected requires a filter value, the Enter filter value dialog box opens.



Filter Value Dialog Box

2. Enter a value in the data field, or select a value from the list.
3. Click OK.

Filtering a View

In TurboProject Express, you can apply a filter to the Outline Gantt or Gantt views, allowing you to focus on specific project information.

When you apply the selected filter to a view, all planning object and resource information that satisfies the criteria will be displayed. Information that does not match the criteria is temporarily hidden.

To apply a filter to a view:

- In the Formatting toolbar, choose a filter from the center drop list.



NOTE:

The filter operation does not exclude from the view any nodes contained by any open node.

Filtering Resource Profiles

When you are filtering a resource profile, your location in the Project Tree affects the scope of information on which the Filter command is performed. When you are in a network that contains no networks below it, the project information in other networks will not be included, even if it meets the filter criteria.

When you are in a subproject network that contains subordinate networks, all information in those networks will be included. When you are in the top level of the Project Tree, all information in the project will be included.

Sorting Project Information

Sorting project information allows you to arrange data in a certain order. Sorting allows you to isolate and order project data in a meaningful way. You can sort on any data field, and specify ascending or descending order.

For example, you may want to sort a resource table by the Group field, so that all resources belonging to a particular group appear together. Or you could export planning objects by early start so that those that start first are listed first.

Using the Sort list box

You can sort the display of the table contents using the Sort list box in the Formatting toolbar. The contents of the Sort list box are controlled by the type of table that is displayed.



Sort List

To select a sort condition:


1. Click on the down-arrow to the right of the entry field. The drop-down list opens.
2. Click on a sort condition.
The project information in the table is sorted according to the condition you selected.

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Printing Project Information

After you've finished planning your project, you need to communicate the project information to different people. TurboProject Express allows you to print both views and reports of your project.

TurboProject Express provides you with the following options for printing your project information:

- Print the project views by clicking 
- Send project information by e-mail to a particular person or group

Printing Views of a Project

TurboProject Express has a wide range of printing features, which enable you to create a hard copy of an output report and to print the contents of any TurboProject Express window on multiple tiled sheets of paper.

To open the Print dialog box:

- Select File|Print.

The Range control group permits you to choose whether to print all pages, or a particular range (From...To...). Similarly, the Time scale control group lets you choose to print the entire time scale of the selected view, or limit it to a particular range (From...To...).


The Keep Manual Dates check box permits you to keep manually set dates for the current session of TurboProject Express; otherwise each project sets its own date range (From...To...). Using the Copies entry field, you can set the number of hard copies to be printed.

To set other printing options, click the Setup button to open the Print Setup dialog box. If you wish to change the page setup, click the Page Setup button to display the Page Setup dialog box. Click the Preview button to display a print preview.

Print Preview

The Print Preview dialog box displays every page of the active view as it will look when printed.

To open the Print Preview dialog box:



- Click  on the Standard toolbar.

If your project information occupies more than one page along the horizontal axis, you may display two pages at a time by clicking the Two Pages button on the toolbar. This option is available when either the Previous Page button or the Next Page button is enabled. When a single page has enough room for the entire contents of the current window along the time line, the Two Pages button is disabled. In addition, when either the Page Up button or the Page Down button is enabled, this indicates that in the current window your project contains more than one page along the vertical axis. In such case, you may choose a page to view.

In multiple page printing, TurboProject Express counts the printer pages, starting from the upper-left corner. If vertically tiled layout is required, TurboProject Express counts pages from top to bottom, and from left to right.

An image displayed in the Print Preview dialog box may be zoomed. To do this, press <Ctrl>+<Z>, or place the mouse cursor on the image, and after its shape is changed to that of a magnifier, click with left mouse button. Now you get an enlarged display of the current view. Zooming once more, you restore the previous state of the print preview display. You can also zoom a display of your document in print preview by toggling the Zoom button.

If the print preview satisfy your requirements, the next step is printing. The Print Preview dialog box allows you to set up the printing options and then create a hard copy of your print preview.


To set the printing options, click  on the Standard toolbar; to print, click .

Using Page Setup

TurboProject Express gives you many options to set up pages to print the contents of any TurboProject Express window on multiple tiled sheets of paper.

If you want to create a printout of a specific layout, you should use the Page Setup dialog box.

To open the Page Setup dialog box:

- Click  on the Standard toolbar.

This displays a dialog box with four tabs: Page, Header, Footer, and Options.

TurboProject Express comes with some default settings in the tabs of this dialog box. You can select the options to change the default page setup to meet your requirements.

Emailing Project Files

TurboProject Express allows you to send your project file (filename.pep) to colleagues via email.

To send a project via e-mail:

1. Open the project you want to send.
2. Select File|Send.
The New Message dialog box of your email application opens, with the project file automatically attached.
3. Enter the recipients' email addresses, and then click Send.

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Customizing TurboProject Express

You can customize the functions and appearance to meet your project requirements and to improve your work efficiency. With TurboProject Express, you can do the following:

- Set your project preferences. You can set defaults in TurboProject Express to specify how it handles your project files, such as the default view, date and time formats, and the file locations
- Customize the views. You can customize the tables, forms and windows to meet your preferences

Setting Preferences

In TurboProject Express, you can set default options that specify how it handles your project files using the Preferences dialog box.

To set the project preferences:

1. Select Tools|Preferences.
The Preferences dialog box opens.
2. On each tab, select the options for your projects.
3. Click OK to save the preferences and close the dialog box.

To restore the settings on any particular tab to the TurboProject Express defaults:

1. Select Tools|Preferences.
The Preferences dialog box opens.
2. Click Default.

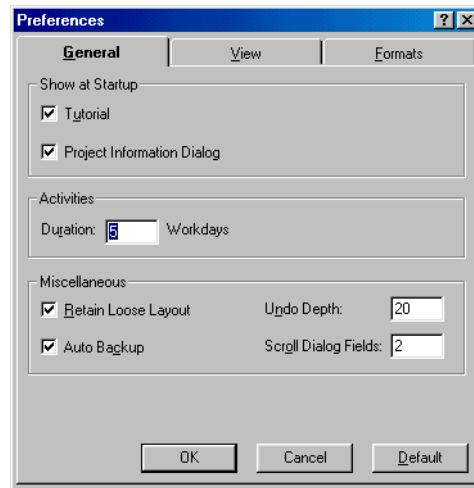
Setting General Preferences

Using the General tab of the Preferences dialog box, you can set global options for TurboProject Express.

Show at Startup Group

Tutorial—Select this check box if you want the Tutorial to open each time you launch TurboProject Express.

Project Information Dialog—Select this check box if you want the Project Information dialog box to open each time you create a new project.



General Preferences

Activities Group

Duration—Type the default duration value, in work days.

Miscellaneous Group

Retain Loose Layout—Select this check box if you want to preserve the layout, even when changes are made to the subprojects.

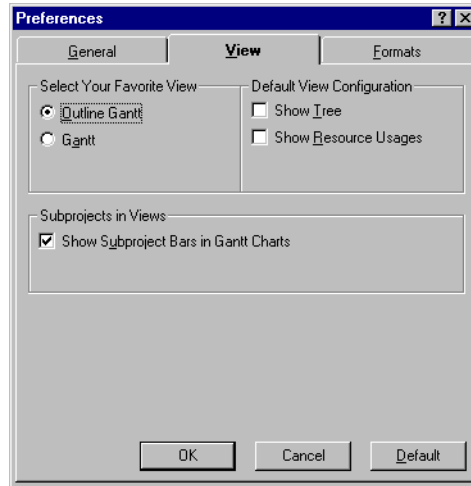
Auto Backup—Select this check box if you want TurboProject Express to create a backup copy of your project every time you save.

Undo Depth—Type the number of Undo operations.

Scroll Dialog Fields—Type a value corresponding to the number of fields to be displayed in the scroll box of the vertical scroll bar.

Setting View Preferences

Using the View tab of the Preferences dialog box, you can specify which views will open by default when you launch TurboProject Express.



View Preferences

Select Your Favorite View—Enable the option of the view you want as the default. Choose either Outline Gantt or Gantt.

Default View Configuration Group

Show Tree—Select this check box if you want to display the Project Tree in the default view.

Show Resource Usages—Select this check box if you want to display Resource Usages in the default view.

Subprojects in Views Group

Show Subproject Bars in Gantt Charts—Select this check box if you want to display the subproject bars in the chart pane of your project view.

Defining Formats for Numbers, Currency, Time and Date

Using the Formats tab of the Preferences dialog box, you can define how numbers, currency, date and time appear in project views.

Number Format Group

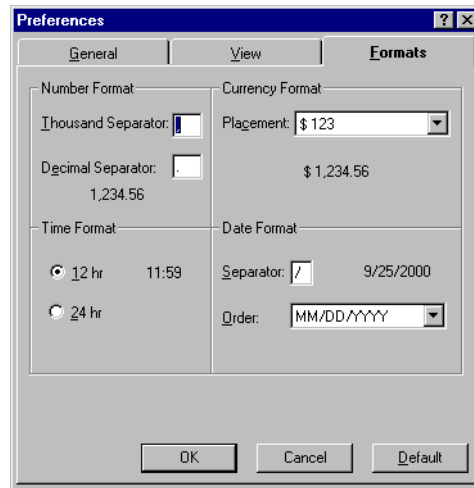
Thousand Separator—Type the character you want to use to separate the thousands units in numbers.

Decimal Separator—Type the character you want to use to separate the decimal units.

Time Format Group

12 hr—Enable this option if you want to use a 12-hour time format.

24 hr—Enable this option if you want to use a 24-hour time format.



Format Preferences

Currency Format Group

Placement—Choose a placement format from the drop-list.

Date Format Group

Separator—Type the character you want to use to separate the numbers in a date.

Order—Choose an order format from the drop-list.

Customizing the Views

TurboProject Express provides dialog boxes for customizing the display characteristics of most the views. In addition to options specific to a given display context, these dialog boxes also provide control over font sizes, styles, and colors of display elements. The following list summarizes these dialog boxes:

- The Gantt View Options dialog boxes for customizing the display of Gantt chart views
- The Table View Options dialog box for controlling the structure and display characteristics of all TurboProject Express tables
- The Project Tree Options dialog box for configuring the display of a project tree
- The Time Scale dialog box for customizing the time scale that appears in Outline Gantt/Profile, Outline Gantt, and Gantt views

- The Vertical Scale Layout dialog box for customizing the scales that are displayed in the Profile view

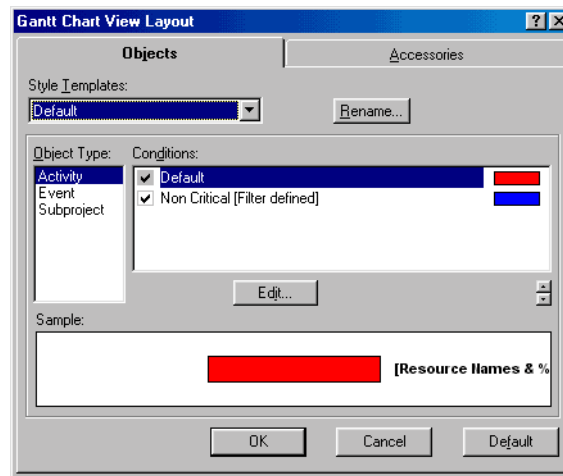
Customizing the Gantt Chart Views

The Gantt, and Outline Gantt views are the most commonly used interfaces in TurboProject Express. The Outline Gantt and Gantt views also display the planning objects and workflow connections. The Gantt Chart View Options dialog box is accessible when the current view is Outline Gantt or Gantt. To open the Gantt Chart View Layout dialog box:

- Double-click anywhere in the chart pane of the Outline Gantt or Gantt view, or right-click anywhere in the chart pane of the Outline Gantt or Gantt view, and select **Layout** from the local menu.

Setting Options on the Objects tab

Using the Objects tab, you can edit the styles to achieve the desired look for the objects in your project.



Customizing the Objects in the Gantt Chart View

Style Templates

You can change the look of the bars in your projects by selecting a predefined template from the Style Templates list box. In TurboProject Express you can only rename a style template.

Object Type

The Object Type list box provides a list of planning object types. Select an object from the list, and

then edit the corresponding conditions.

Conditions

A condition is a set of planning object parameters. You can define how a particular object will be displayed in your project, depending on the conditions, or filters, that are applied. The conditions displayed in the list depend on the object you have selected in the Object Type list.

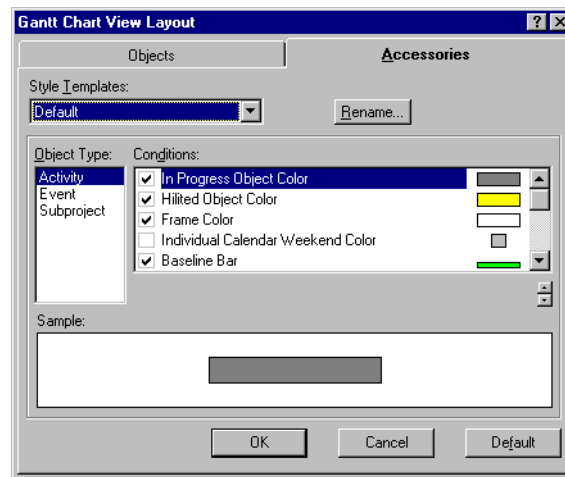
Each condition includes a name, filter criteria, and information about the shape used to represent the object in a project and how the object is labeled. In TurboProject Express you can only edit the existing condition.

Sample

As you change the settings for a selected object, the updated object is displayed in the Sample box. You can restore the TurboProject Express default settings by clicking **Default**.

Setting Options on the Accessories tab

Using the Accessories tab, you can define the settings for accessories such as the Baseline Bar, Split Bar, or constraint status for the planning objects.



Customizing the Accessories in the Gantt Chart View

Style Templates

You can change the look of the accessories in your projects by selecting a predefined template from the Style Templates list box. In TurboProject Express you can only rename the style template.

Object Type

The Object Type list box provides a list of planning object types. You can select an object type by highlighting it in this list.

Conditions

A condition is a set of accessory parameters. You can define how a particular accessory will be displayed in your project, depending on the conditions, or filters, that are applied. The conditions displayed in the list depend on the object you have selected in the Object Type list.

Sample

As you change the settings for a selected object, the updated object is displayed in the Sample box. You can restore the TurboProject Express default settings by clicking Default.

Customizing the Profile View

In TurboProject Express, a profile chart shows resource usage over time, with units displayed on the vertical axis and time on the horizontal axis. You can customize the profile chart using the Profile View Options dialog box.

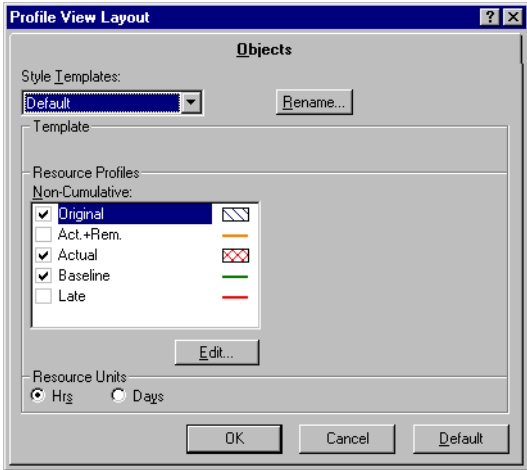
To open the Profile View Layout dialog box:

- Double-click anywhere in the Profile pane of your project view, or right-click anywhere in the Profile pane, and select **Layout** from the local menu.

There is a vertical axis in the Profile pane of the project view. This axis controls the highest value of non-cumulative resource usage displayed for the vertical scale and affects the proportionality of the profile display. You can customize the vertical scale of the Profile view using the Vertical Scale Layout dialog box.

Setting Options on the Objects tab

Using the Objects tab, you can define the style template and resource profile options.



Customizing the Objects in the Profile View

Style Templates—Select a style that you want to apply to the profile from the list. You can also edit the template name.

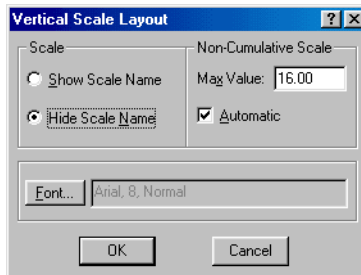
Resource Profiles—Select the non-cumulative profiles that you want to display.

Resource Unit—Select Hrs or Days as the unit to be used for resource assignments.

The Default button is used to restore the default settings.

Customizing the Vertical Scale of the Profile

The Vertical Scale dialog box controls the display of the vertical axis used for the Profile view. This dialog box also controls the parameters of the left and right windows of the vertical scale. Once the Profile view is open, you can use the dialog box.



Customizing the Vertical Scale

To display the Vertical Scale dialog box:

- Double-click on the left window of the vertical scale in the Profile pane of a project view.

The Vertical Scale dialog box contains two control groups: Scale Type and Non-Cumulative Scale.

The radio buttons of the Scale Type control group allow you to customize the display of the scale windows. You can expand the window width, compress it, or hide the window labels.

The Non-Cumulative Scale control group contains a data entry field and a check box.

The Max Value field determines the highest value displayed for the vertical scale and affects the proportionality of the profile display. If the Automatic check box is enabled, the maximum value is calculated, based on the project resources and expenses.

Clicking Fonts opens the Font dialog box that allows you to change the font used to display the vertical scale values.

Customizing the Table View

In the planning and management environment of TurboProject Express, the tabular presentation of all project information takes place in the table pane of the Project View.

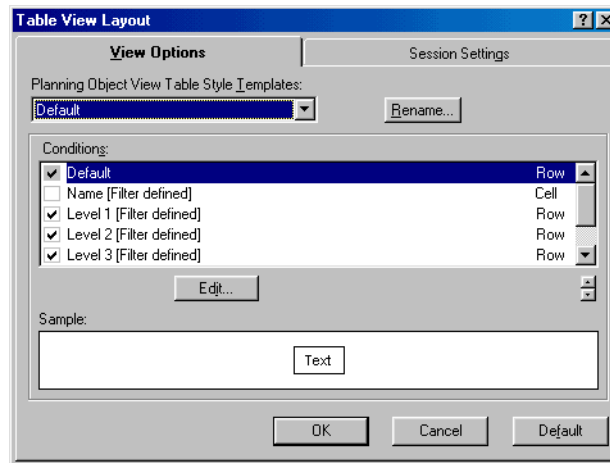
The Project View window displays the Project Tree in the left pane and either the Outline Gantt or Gantt view in the right pane. You can change the appearance of the rows and columns in the table using the Table View Layout dialog box.

To open the Table View Layout dialog box:

1. Click in the table pane of the Project view.
2. Do one of the following:
 - Select View|Layout
 - Right-click to open a local menu, and then choose Layout

Setting the Table View Options

Using the View Options tab of the Table View Layout dialog box, you can define how the planning objects will be displayed in the table.



Customizing the Table View Options

Planning Object View Table Style Templates

You can change the look of the bars in your projects by selecting a predefined template from the Style Templates list box. In TurboProject Express, you can only rename the templates.

Conditions

A condition is a set of planning object parameters. You can define how a particular object will be displayed in your table, depending on the conditions, or filters, that are applied.

Sample

As you change the settings for a selected object, the updated object is displayed in the Sample box.

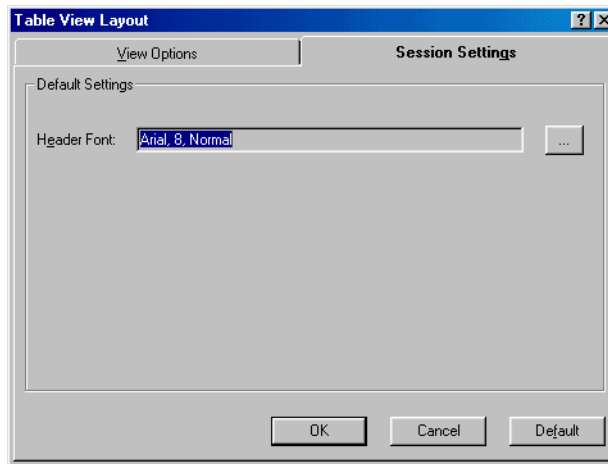
You can restore the TurboProject Express default settings by clicking **Default**.

Defining Table Session Settings

Using the Session Settings tab of the Table View Layout dialog box, you can define the default table to be displayed, as well as the font for the column headers.

Default Settings

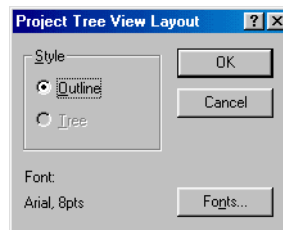
Header Font—Click **...** to define the font settings for the column headers.



Customizing the Session Settings in the Table View

Customizing the Project Tree View


Through the Project Tree View Layout dialog box, you can customize the layout of the Project Tree displayed in a Project View or Project Tree pane, and choose a font style and size. To access this dialog box, you need first to display either the Project Tree window or the Project Tree window of the Project View pane.



Customizing the Project Tree View

The Project Tree pane, representing a graph of the project structure, is optionally displayed or hidden. When the Project Tree pane is in view, it occupies the left side of the window. To switch the Project View window from two-pane state to the one-pane state, use the Show/Hide Tree button. The View pane display area supports several different display formats for inspecting and modifying project data.

To open the Project Tree View Layout dialog box in the Project Tree View window:

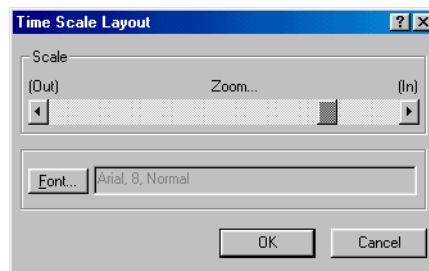
1. To display the Project Tree view window, click the Show/Hide Tree button  on the Views toolbar.
2. Do one of the following:
 - Select View|Layout
 - Double-click anywhere within the Project Tree pane
 - Right-click and choose Layout from the local menu

The Project Tree View Layout dialog box provides control over the display format of the tree structure as well as the fonts and colors used to display elements.

One important point to remember is that the Project Tree View window allows you to display the project tree in either tree-like or outline representation. However, the tree-like display is disabled for the Project View window (Outline Gantt and Gantt views).

Customizing the Time Scale

Using the Time Scale Layout dialog box, you can expand or contract the time scale in the project view, as well as define the font used.



Customizing the Time Scale

Scale

The Zoom control allows you to expand or to contract the displayed time scale. The control group provides a frame of reference for scrolling around your project.

Font

By clicking Font, you can define the font settings for the time scale in your project.

To open the Time Scale dialog box:

- Select View|Time Scale|Layout, or right-click on the time scale.

Appendix B

Glossary

Activity

A task that usually requires time, manpower, and resources to complete. An activity is the basic unit of workflow in the TurboProject Express system. By defining and connecting activities, you can describe your project design. Each activity has a start and finish date. An activity may have resources assigned to it. In the graphic pane of a project view (Outline Gantt, Gantt, Network, or Network/Profile), activities are displayed graphically as horizontal bars, with their length corresponding to their duration in calendar days.

See **Resource**, **Outline Gantt View**, **Gantt View**, **Network View**, and **Network/Profile View**.

Activity Float

The time between the end of a predecessor event and the beginning of a successor event. The amount of time the activity can be delayed without affecting the earliest start of another activity in the workflow.

Backward Pass Computation

The method of computing a project schedule that sets an end date for a project and working backward, giving the latest allowable start and finish times for each activity and the latest allowable occurrence time for each event. See **Activity**, **Event** and **Scheduling Computations**.

Baseline Schedule

A schedule of activities that can be captured and stored. Set a baseline schedule for all the activities in a project, activities located in the current subproject network (including any subordinate networks), or only selected activities. The baseline schedule appears in the view as a hollow bar above each activity bar. See **Subproject Network** and **Schedule**.

Budget Code

A code used to group resource usages, usually for accounting purposes. See **Usage**.

Budget Code Group

A code that relates a set of related Budget codes in reports. See **Budget Code**.

Calendar

A list of days where workdays and holidays are defined over a period of time. Separate calendars with different workday/holiday schedules can be created and assigned to activities and resources. TurboProject Express partially bases its calculations on the calendar for the schedule for the activity.

Connection

A link between activities that is used to calculate the activity's early and late schedule dates.

Constraining

Forcing activities to be rescheduled in order to not exceed a maximum resource availability limit.

CPM (Critical Path Method)

Evaluating all the events of a project to define the most critical activities. See **Critical Path**.

Critical Activities

The project activities which together show the critical path(s) through the project, or the flow of work critical to completing the project in time. Critical activities are those activities which must be completed as soon as possible so as not to delay the project deadlines.

Critical Path

The path through a network of activities that shows the interrelationship of all the activities in the project. If one of the activities is delayed, it will affect the completion date of the project.

Distribute

The process of saving subprojects as separate project files. See **Integrate**.

Early Schedule

The earliest possible schedule for a planning object; based on all the events which must precede its start and finish.

Elastic Usage

A resource assignment that is automatically distributed evenly over the duration of activity. Elastic resource usage spreads the amount committed evenly and calculates the required daily rate.

Event

A point in time in your project design, usually signifying the origin or termination of an activity. Events have no duration. They are considered either AM or PM activities (the open or close of business on a given date). Events may be constrained and can be connected in the workflow. Events are represented by inverted triangles in the Chart pane of a project view. See **Constraining**.

Expense

The amount of money or time spent by a resource.

Expense Assignment

The amount of money or time applied to an activity. This amount can be applied independently or can be calculated by the total usage amount and the expense rate of the resource.

Expense Usage

The amount of money or time used by an activity. This amount can be specified directly or can be calculated by the resource usage and the expense rate of the resource.

Export

To save TurboProject Express information to an external file which can be loaded into another program. In TurboProject Express, you can create external files which comply with either ASCII, Lotus worksheet, or dBASE database formats.

Fixed and Non-Fixed Resource Usage

Fixed resource usages have a fixed rate, a fixed duration, or a fixed total amount of usage. One aspect of the resource is fixed, one is set by the project manager, and the third is calculated by TurboProject Express.

Non-fixed resource usages occur for the duration of the activity (these are uniform and elastic).

Fixed Duration Resource Usage

A resource usage that occurs in a non-changeable time scale.

Fixed Total Resource Usage

The total amount of resource usage does not change. If the resource usage rate is changed, TurboProject Express recalculates the resource usage duration. If you change the resource usage duration, TurboProject Express recalculates the rate. In both cases, the total remains fixed.

Float

Unassigned work time created by establishing a connection between two planning objects which have a non-connected start-to-finish date. If a planning object is delayed, it will not be updated as is it is delayed if there is float between the slipped object and any of its predecessors.

Forward Pass Computations

The method of computing a project schedule by setting the start date for a project and working forward, giving the earliest allowable occurrence time for each event. See also **Scheduling Computations**.

Gantt View

Provides a combination of tabular and graphical project representations of your schedule with a choice of table templates. A Gantt view consists of two panes: the Gantt table, which lists of information about planning objects (activities, events, subprojects, etc.), and the Gantt bar chart, which displays the position of planning objects along a time scale (as well as their duration). A distinctive feature of the Gantt view is that it presents the project information visible from a current location, or node, in the project tree. See also **Project View Window** and **Outline Gantt View**.

Hammock

A planning object that summarizes progress. This is based on workflow connections made between the hammock and the sequence of activities to be summarized. Hammocks are represented by bars in the graphic pane of a project view.

Histogram

A graphical representation of a frequency distribution, used to display resource usage information over time.

Import

To add a new project information or update existing project information by loading data from an external file. You can import information from ASCII, Lotus, and dBASE, Microsoft Project MPX files.

Inquiry

A piece of information or a field that you can refer to when sorting, filtering, or laying out tables. Inquiries are references to individual pieces of project information contained in TurboProject Express's database. Project information is grouped by type: planning object, usage, resource, budget code, calendar, connection and network. Inquiries can be references to complex objects which are combinations of different type of project information, and can be used to access project information of one type from the perspective of another type. An inquiry can be direct or indirect.

Integrate

To update master project information from subproject files which have been created by using the Distribute command. See **Distribute**.

Interface Event

Activities that belong to a subproject and control its schedule. In the Chart pane of a project view, interface events always appear in two places: above the subproject bar to which they belong, and in the network containing the subproject's detailed activities. An interface event is visible on both levels of the subproject presentation: detail and summary. Interface events allow you to establish workflow across multiple levels of your plan so that project information rolls up from a detail view to the summary level. Interface events are represented by diamonds in the graphic pane of a project view.

Level

A command used to smooth a resource or expense profile without affecting the project deadlines.

Log File

A report file created when importing or exporting. It records the comments, errors, and warnings which can occur during the import or export process.

Network

A graph showing the dependency relationship among project activities following this rule: all activities preceding a given activity must be completed before the given activity may begin.

Network View

A network chart that allows a user to construct a project plan by creating and connecting planning objects in a time-scaled graphical context. The network shows the relationships between the project activities using this rule: all activities preceding a given activity must be completed before the given activity may begin. The network view presents the project information visible from a current location, or node, in the Project Tree. See **Project View Window**.

Network/Profile View

The Network/Profile view consists of the Network pane and Profile pane and combines the possibilities of both views. The upper pane provides a time-scaled network view of your project data. The lower pane provides a profile of the corresponding resource or expense information. The Network/Profile view presents the project information visible from a location, or node, in the Project Tree. See **Network View** and **Profile View**.

Non-critical Activity

An activity that does not endanger a project's deadline, and whose float value is greater than zero.

Node

A specific location in the project tree.

ODBC (Open Database Connectivity Interface)

Allows you to access and modify the project file data using other database applications that conform to a standard of database access.

Outline Gantt View

Allows you to outline activities for the entire project, organized into major phases or subprojects. Outlining will not change the start dates of the activities. Through outlining, you can see the overall structure of your project. This makes the project schedule easier to manage. See **Project View Window** and **Gantt View**.

Path Float

The number of days that an activity (on the current path) can exceed its completion date without affecting the start date of another activity. Path float is the total float associated with a path. Any path is a sequence of activities and/or events. Path float is determined by activity float. See **Activity Float**.

Planning

Preparing to commit the project's resources in the most effective way. The process of deciding on a proposed future course of action.

Planning Object

An element of project workflow. Planning objects are usually referred to as activities, events, interface events, subprojects, summaries, and hammocks. Sometimes the term "activity" is used to refer to any planning object as an abbreviation.

Posting Progress

Updating the project status date, as well as changing the planning object and usage information to reflect work which is completed or still remaining.

Profile View

Provides a histogram and cumulative curve(s) of either the resource totals assigned to a project network or of the expenses associated with that resource usage. Displayed in a Project View window, the Profile view may occupy the window space alone or share it with the Project Tree. The Profile view shows the information on resource or expense usage of the project corresponding to the current location in the Project Tree. When you are in a network which contains no networks below it, project information located in other networks will not be included in the displayed profile. When you are in a subproject network which contains subordinate networks, all information in those networks will be included. When you are in the top level of the project tree, all information in the project will be included. Hence, a location selected on the project tree “filters” the resource/expense information currently displayed in the Profile view. See **Histogram** and **Resource Usage**.

Project

A set of tasks or activities with a planned objective. It may have constraints on time, cost, and performance of the end product. In the graphic pane of a project view, the project is represented by a bar; the length of its bar shows the length of the project.

Project Management

The coordination of activities by a manager. The manager will plan, organize, staff, direct, and control achievement of an objective with constraints on time, cost, and performance of the end product.

Project Management Software (PMS)

A computerized system providing a project manager with automated support to fulfill the project.

Project View Window

The Project View window is an interface for inspecting and modifying project information in different graphical and tabular formats. The Project View window has two panes: the Project Tree and View. The Project Tree pane, presenting a graph of the project structure, is either displayed or hidden. When the Project Tree pane is in view, it occupies the left side of the window. The View pane display area supports several different display formats for inspecting and modifying project data. Among these formats are: Outline Gantt, Gantt and Network views. See **TurboProject Express Window Types**.

Project Tree

A graphic presentation of the project structure, which shows how subproject networks relate to one another hierarchically. When the Project Tree is displayed in a pane, it can be used to change network views.

Report

A text presentation of selected project information. See **TurboProject Express Standard Reports**.

Resource

The person, group, equipment, or materials used to complete an activity.

Resource Assignment

The amount of resource assigned to an activity necessary to complete the work.

Resource Calendar

A special calendar which defines a unique schedule of workdays and holidays for a single resource. The resource calendar calculates which days to count as workdays when calculating the schedule for an activity to which the resource is assigned.

Resource Group

A code used to relate resources.

Resource Profile

A line or bar graph representing resource usage. Units are shown on the vertical scale and time on the horizontal scale.

Resource Table

A tabular entry form which allows a user to define a list of resources and expenses to be used in the project. The resource table contains information associated with resources.

Resource Usage

The amount of resource used by an activity.

Schedule

A timetable for the performance of an activity.

Scheduling

TurboProject Express uses the critical path method (CPM) to calculate the schedule. Scheduling with the CPM enables project managers to easily recognize the important parts of the project. See **CPM (Critical Path Method)**.

Scheduling Computations

The calculation of the project schedule involves a forward and a backward pass through the project network. As the result of forward and backward computations, the project schedule consists of early and late schedules. After the forward and backward pass computations are completed, the float can be computed for each activity, and the critical and subcritical paths through the project network determined. See **CPM (Critical Path Method)** and **Float**.

Split Activity

An activity whose work cannot be performed continuously due to the lag of the finish-to-finish connection.

Status

To determine the progress of an activity or project by comparing its early start date with its actual start date.

Status Date

The date up to which progress has been posted to planning objects in the project and from which a new schedule is generated.

Subproject

A planning object that is usually used to represent one of the major phrases of work in your project which is usually done by a particular functional area or group. A subproject can contain and encapsulate a bulk of project workflow. Breaking a project into meaningful chunks or modules of work, i.e. subproject, serves to make a large project design more manageable. Subprojects are helpful in developing a project plan because they support the application of top-down and other project planning methodologies. Starting from the top-level view at the top of the Project Tree hierarchy, you can use subprojects to build the overall structure of your project before developing the network within. The subproject is a kind of summary object. Using the code scheme of TurboProject Express, you can use the same code value to the Code 1 field of the current subproject and the Code 1 fields of events and activities which must be added to the subproject network.

Subproject Network

The network containing the work which is summarized by the subproject. The subproject always has the network located directly below the network containing the subproject bar.

Summary

A planning object for summarizing the progress of activities based on a user-defined coding structure. TurboProject Express supplies a number of code fields which can be used to define such a code scheme. The most useful aspect of look at your project from different perspectives, independent of the Work Breakdown Structure (WBS) of your project. Summaries are represented by bars in both Network and Gantt views. See **Work Breakdown Structure (WBS)**.

Time Scale

The scale at the top of the planning screen which represents calendar days. The time scale can be expanded and contracted to show less or more time.

TurboProject Express Standard Reports

A set of report templates available in TurboProject Express environment. You can configure and print standard reports on your project information within the program.

TurboProject Express Window Types

In planning and management environment of TurboProject Express, all project information is displayed and edited through three windows: Project View window, Project Tree window, and Table window.

Uniform Resource Usage

Uniform resource usage preserves the daily rate of a resource regardless of changes the user makes to the duration of the activity. You define the resource rate that will stay unchanged and TurboProject Express calculates the total amount required, depending on the duration of the activity. The activity with uniform resource usage is duration-driven.

Usage

A specified amount of a resource or expense which is used in the course of completing the activity. An amount required to complete the activity (resource usage) or amount of money to be spent (expense usage).

Usage Inquiries

A reference to the project information on resource and expense usages. Usage inquiries refer to the information kept in the usage tables where the resource and expense usage tables of an activity form are of prime importance. Some fields of these tables are vital inquires for each type of assigned resources and expenses. These are *OrgRes* (original resource), *OrgDur* (resource original duration), *OrgResRate* (original resource rate), *ResPct* (resource percent complete), *ActRes* (actual resource), *RemRes* (remaining resource), *RemResRate* (remaining resource rate), *OrgExp* (original expense), *ExpPct* (expense percent complete), *ActExp* (actual expense) and *RemExp* (remaining expense), and *BudCode* (budget code).

User List

A text file containing a list of people and an MS-DOS path for saving and loading subproject files, created by the **Distribute** and **Integrate** commands.

Work Breakdown Structure (WBS)

Features that allow you to break your project down into manageable pieces, providing various views of the project from the detail to the summary level.

Workday

A day on which work may be performed. Workdays are defined in calendars.

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