PERT Chart EXPERT

User's Guide

Table of Contents

Overview of PERT Chart EXPERT	5
What is PERT Chart EXPERT?	5
What is a PERT chart?	6 7
Installation and Configuration	7
System Requirements	7
Installing on a Local PC	8
Installing on a Network	9
Configuring Microsoft Project	10
Configuring a Network Version of MS Project	13
Using PERT Chart EXPERT	15
Terminology and Basic Concepts	15
Overview of Creating a PERT chart	18
Creating and Modifying Tasks	19
Creating Dependencies	21
Scheduling	23
Critical Path	28
Moving & Repositioning Tasks	29
Displaying Fields in Task Boxes	31
Grouping Tasks	32
Displaying a Timescale	35
Tracing Tasks	37
Fields in PERT Chart EXPERT	38
Printing	39
Saving PERT charts	41
Transferring a PERT chart to Microsoft Project	43
Transferring a PERT chart to WBS Chart Pro	44
Creating PERT charts from Microsoft Project plans	45
Tips when using PERT Chart EXPERT with MS Project	47
Reference (by Menu)	48
File Menu	49
New	49
Open	50
Close	52
Save	53
Save As	54
Save As Picture	56
Save As Web Pages	57
Page Layouts	59
Page Layouts (Edit)	61
Page Setup	64
Print	67
Print Preview	69
Unlink	70
Properties	71
Most Recently Used Files (1,2,3,4)	74
Fyit	75

PERT Chart EXPERT

Edit Menu	76
Undo	76
Redo	77
Cut	78
Сору	79
Paste	80
Insert Task	81
Delete	82
Task Information	83
Find	88
Find Next	89
Go To	90
Select All	91
View Menu	92
Normal	92
Page Layout	93
Online Layout	94
Toolbars	95
Views	96
Open Group	98
Close Group	99
Show All	100
Focus	101
Show Only Groups	102
Progress Marks	103
Hyperlink Symbols	104
Zoom	105
Format Menu	106
Fields	106
Borders	111
Chart	114
Dependency Lines	115
Custom Box Settings	117
Timescale	119
Group	121
Lock Box Positions	124
Layout Selected	125
Tools Menu	126
Chart Settings	126
Calendar	127
Resources	129
Trace	131
Renumber Tasks	132
Field Names	133
Border Names	135
Microsoft Project	136
Microsoft Project Setup	137
Goto WBS Chart Pro	138
Options	139
Window Menu	141
	1-71

PERT Chart EXPERT

Cascade	141
Tile	142
Arrange Icons	143
List of Projects	144
Help Menu	145
Content and Index	145
Tip of the Day	146
About PERT Chart EXPERT	147
Toolbar Buttons	148
Toolbar Buttons Defined	148
Frequently Asked Questions	151
List of Frequently Asked Questions	151
Error Messages and Prompts	154
Microsoft Project Messages	154
Unable to Open Linked Data File	156
Invalid Data	157
Cannot Merge	158
No Calendar Available	159
Opening Old PERT charts	160
HTML Template	161
Confirm Unlink	162
Unable to Save Image	163
Overwriting HTML Files	164
Demo Limits Exceeded	165
Program Registration	166
Displays a blank PERT chart from MS Project plans	167
Contacting Critical Tools, Inc.	168
Company Address	168
Support	169

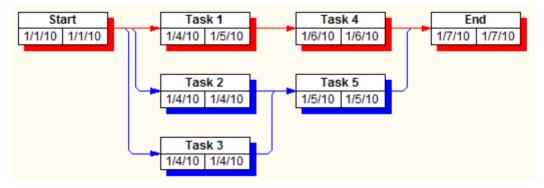
Overview of PERT Chart EXPERT

What is PERT Chart EXPERT?

PERT Chart EXPERT is a Windows-based project management software application that is used to create and display projects using a PERT chart.

PERT Chart EXPERT can be used for project planning

As a planning tool, use PERT Chart EXPERT to quickly sketch a project plan on the screen by clicking and dragging to create tasks and dependency between tasks. Doubleclick a task to add schedule information like Duration, Start Date, Finish Date, Cost, Work, etc... PERT charts c an be displayed in many different styles and colors. An example of a PERT chart is shown below:



Plans created in PERT Chart EXPERT can be maintained and managed separately or transferred to Microsoft Project or any program that can read the "MPX" Microsoft Project file format.

PERT Chart EXPERT can be used with Microsoft Project

PERT Chart EXPERT can be used to generate PERT charts directly from existing Microsoft Project files. PERT Chart EXPERT uses the tasks and predecessors created in Microsoft Project to generate a dependency-based view of the data. A PERT Chart EXPERT toolbar button is installed into Microsoft Project for easy transfer of data.

When you create a PERT chart of an existing Microsoft Project plan, all changes made in the PERT chart are immediately reflected in the Microsoft Project plan. You can add/delete/reorganize/update your Microsoft Project plan using the PERT chart. PERT Chart EXPERT contains a seamless integration with Microsoft Project to exchange data between the two programs.

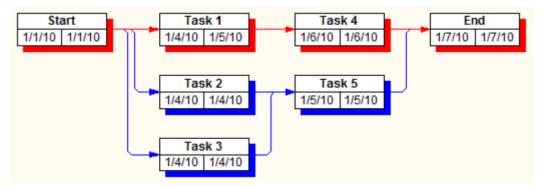
Additionally, PERT charts can be created first in PERT Chart EXPERT and then transferred directly to Microsoft Project. When a PERT chart is transferred to Microsoft Project, all of the task, dependency and resource information entered into the PERT chart is automatically transferred to Microsoft Project where additional scheduling can be performed.

What is a PERT chart?

A PERT chart (sometimes referred to as a Network Chart, Dependency Diagram or Precedence Diagram) is a way of creating and displaying a project by showing tasks as boxes and the dependencies between tasks as lines between these boxes.

Important Note: The term PERT (short for Program Evaluation and Review Technique) actually comes from a technique used to calculate the most likely outcome of a project using Optimistic, Pessimistic, and Most Likely durations of tasks. This is not what PERT Chart EXPERT does. The origin of the name PERT Chart EXPERT comes from Microsoft Project. Several years ago, Microsoft Project started using the term PERT Chart to describe a dependency-based chart. This is how many people got to know these types of diagrams and this is how PERT Chart EXPERT got its name. Versions of Microsoft Project prior to Project 2000 referred to this type of diagram as a PERT chart. In Project 2000, they changed the name to Network Diagram.

The traditional PERT chart diagram (or Network Diagram) displays tasks with dependencies between tasks displayed as lines between the task boxes. The following diagram is an example of a simple PERT chart:



Installation and Configuration

System Requirements

PERT Chart EXPERT is a Windows based project planning software application. PERT Chart EXPERT can be used as a standalone project planning tool or as an add-on to Microsoft Project.

PERT Chart EXPERT system requirements:

Windows 2000, XP, Vista or Windows 7 5 MB free disk space

Runs on all major Networks

PERT Chart EXPERT is compatible and integrates seamlessly with the following versions of Microsoft Project:

Microsoft Project 98

Microsoft Project 2000

Microsoft Project 2002

Microsoft Project 2003

Microsoft Project 2007

Microsoft Project 2010

If you are using a version of Microsoft Project later than the ones listed above, go to our website at www.criticaltools.com for information on newer versions of PERT Chart EXPERT.

PERT Chart EXPERT does not require Microsoft Project.

Installing on a Local PC

PERT Chart EXPERT can be used as a standalone project planning tool or it can be used with Microsoft Project.

To use PERT Chart EXPERT as a standalone software application if you do not have Microsoft Project, run Setup and answer No to the prompt during Setup to modify Microsoft Project. Once installed, PERT Chart EXPERT can be started by selecting the Start Menu-Program s-PERT Chart EXPERT or by doubleclicking on the PERT Chart EXPERT shortcut on your desktop if you chose to add this.

To install PERT Chart EXPERT and configure PERT Chart EXPERT to work with a copy of Microsoft Project on your computer, run Setup and answer Yes to the prompt during Setup to modify Microsoft Project. Once installed with the Microsoft Project option, you can start PERT Chart EXPERT by itself using the above-mentioned techniques or you can start Microsoft Project and select the PERT Chart EXPERT toolbar button within Microsoft Project to create a PERT chart of the current Microsoft Project plan.

There is no difference between the above two installations other than the fact that a PERT Chart EXPERT Toolbar button will be installed into Microsoft Project if you choose the second option. You do not need Microsoft Project to run PERT Chart EXPERT.

If you have already installed the demo version of PERT Chart EXPERT, start the program, go to the Help-About PERT Chart EXPERT menu, select Register and enter the Product ID provided with your purchase.

See also:

Configuring MS Project for use with PERT Chart EXPERT

Installing on a Network

Installing on a Network

PERT Chart EXPERT Licensing for Network Use

PERT Chart EXPERT utilizes "named user" licensing and not "concurrent user" network licensing. This means that each user who accesses PERT Chart EXPERT on a network must have a license. For example, if you have 10 people who need to use the version of PERT Chart EXPERT on your network you must have a 10 User Network License. User Licenses can be transferred. If a user no longer accesses PERT Chart EXPERT on the network another user can replace that user.

Recommended approach to installing PERT Chart EXPERT on your Network

The simplest way to install a Network License is to install PERT Chart EXPERT into a directory on the network, and assign access to individuals up to the total number of licenses purchased. If a user no longer needs to use the software, the network administrator can replace their name with another.

The first time each user starts the program it will be in Demo mode until the Product ID is entered on the users' computer. To enter the Product ID, start PERT Chart EXPERT, go to the Help-About PERT Chart EXPERT menu, select Register and enter the Product ID provided.

Configuring the Network version of Microsoft Project for use with PERT Chart EXPERT If you wish to use PERT Chart EXPERT with a network installation of Microsoft Project, refer to the Help topic Configuring a Network Version of MS Project for PERT Chart EXPERT

Configuring Microsoft Project

Configuring Project 98 thru Project 2007

The following are instructions for configuring Microsoft Project 98 through Project 2007. Instructions for configuring Project 2010 follow these instructions.

PERT Chart EXPERT can be accessed from within Microsoft Project through the use of a Toolbar button.



The PERT Chart EXPERT Toolbar button within Microsoft Project

With the PERT Chart EXPERT Toolbar button you can open a Microsoft Project plan and c lick this button to create a PERT chart of the current plan in Microsoft Project. During PERT Chart EXPERT Setup you are prompted to install this Toolbar button. If you chose to do this and you see the button when you start Microsoft Project then you are ready to create PERT charts of your Microsoft Project plans and can proceed to the Help topic, Creating PERT charts from Microsoft Project plans.

If you do not see the PERT Chart EXPERT Toolbar button in Microsoft Project, check the following:

- 1. Are you using Microsoft Project installed on a network? If so, there may not be sufficient rights to modify Microsoft Project on the network. Therefore, the PERT Chart EXPERT Toolbar button will not be saved as part of Microsoft Project. See <u>Configuring a Network Version of MS Project for PERT Chart EXPERT</u> for more information.
- 2. During PERT Chart EXPERT Setup, did you answer Yes when prompted to install the PERT Chart EXPERT Toolbar button into Microsoft Project? If not, run Setup again and answer Yes when prompted to install the PERT Chart EXPERT Toolbar button into Microsoft Project.
- 3. If you are using a locally installed version of Microsoft Project and you answered Yes to the Toolbar prompt during PERT Chart EXPERT Setup, try manually installing the Toolbar button into Microsoft Project as described below.

Manually installing the PERT Chart EXPERT Toolbar button into Microsoft Project

- 1. Start Microsoft Project.
- 2. Choose the File menu and select Open.
- 3. Open the Folder where PERT Chart EXPERT is installed (the default is C:\Program Files\PERT Chart EXPERT).
- 4. Open the SETUP file for the appropriate version of Microsoft Project:

SetupPERT41.mpp if you are using Microsoft Project 4.1a.

SetupPERT98.mpp if you are using Microsoft Project 98.

SetupPERT2000.mpp if you are using Project 2000.

SetupPERT2002.mpp if you are using Project 2002.

SetupPERT2003.mpp if you are using Project 2003.

SetupPERT2007.mpp if you are using Project 2007.

These Setup files contain macros that are automatically run when opened and you must choose to Enable Macros if you receive a message. These macros install the appropriate items into Microsoft Project to configure it to work with PERT Chart EXPERT.

After opening the SETUP file from within Microsoft Project, does the PERT Chart EXPERT Toolbar button appear? If so, click it to see if it takes you to the PERT Chart EXPERT program. Then, close PERT Chart EXPERT to return to Microsoft Project. Upon returning to Microsoft Project, close Microsoft Project and reopen it to see if the PERT Chart EXPERT Toolbar button is still there. If the PERT Chart EXPERT Toolbar does not appear when you restart Microsoft Project then there is a problem saving information to the GLOBAL.MPT file. The Global.mpt file is a Microsoft Project file and you should obtain the rights to modify and save the Global.mpt file.

If you do not have rights to modify the Global.mpt file then you can temporarily configure Microsoft Project for use with PERT Chart EXPERT. To do this, start Microsoft Project and then start PERT Chart EXPERT. From within PERT Chart EXPERT, choose Tools-Microsoft Project-Setup-OK. This copies the necessary Tables, Views, Macros and Toolbar button into Microsoft Project. These items will remain there until Microsoft Project is closed. You will need to repeat this the next time you want to use PERT Chart EXPERT with Microsoft Project.

Technical Explanation of how Microsoft Project is configured for PERT Chart EXPERT When Microsoft Project is configured for use with PERT Chart EXPERT, several items are copied to Microsoft Project and stored in the GLOBAL.MPT file. The GLOBAL.MPT file is a Microsoft Project file that is used to store things like Macros, Tables, Views, Toolbar Buttons, etc. Microsoft Project installs this file into the same directory with the other Microsoft Project program files. When installing PERT Chart EXPERT, you need Read/Write access to the GLOBAL.MPT file for the PERT Chart EXPERT-specific items to be saved as part of Microsoft Project.

If you are running Microsoft Project on a local computer, you probably have sufficient Read/Write access to the GLOBAL.MPT file on the local computer and configuring should not be a problem. If you are running Microsoft Project on a network then the GLOBAL.MPT may be locked (made Read-Only) along with the rest of the Microsoft Project program files and you will need to follow the instructions for configuring Microsoft Project on a network, see Chart EXPERT.

When you configure PERT Chart EXPERT to work with Microsoft Project the following items are installed into the GLOBAL.MPT file:

- A PERT Chart EXPERT Toolbar button this starts the Macro used to exchange data.
- GotoPERTChartEXPERT— this macro is used to initiate the process of exchanging data between Microsoft Project and PERT Chart EXPERT.
- A View (beginning with the words Critical Tools), ensures a consistent view of the data.
- A Filter (beginning with the words Critical Tools), ensures the proper number of tasks are exchanged.
- Several Tables (each beginning with the words Critical Tools), used to extract the Microsoft Project fields in the correct order.

In order for PERT Chart EXPERT to seamlessly exchange data with Microsoft Project, all of the above items need to be present in Microsoft Project to perform the necessary operations.

Note: Do not modify any of the above items as this may prevent PERT Chart EXPERT from properly exchanging data with Microsoft Project.

Configuring Microsoft Project 2010

To configure PERT Chart EXPERT to work with Project 2010, during Setup, choose to Modify Microsoft Project to add the items needed to integrate PERT with Project 2010. Setup will copy the Tables, Views, Filters and Macro needed for PERT Chart EXPERT to integrate with Project 2010.

Configuring Project 2010 during Setup does not add a button to the Ribbon in Project 2010. You need to do this manually. To add a Tab and Button to the Ribbon in Project 2010:

- 1. Start Project 2010, right click on the Ribbon and select "Customize the Ribbon..."
- 2. Click a Tab in the Main Tabs section in the right column and select the New Tab button. Click this New Tab, click Rename to name this tab to something like "Critical Tools" and click OK.
- 3. In the left column, click the "Choose commands from" drop down list and select Macros.
- 4. Select New Group in the right column.
- 5. Click the GotoPERTChartEXPERT macro in the left column and then click the Add>> button to copy this to the New Group*.
- 6. Click New Group and Rename if you wish to rename this group.
- * If you don't see the GotoPERTChartEXPERT macro after running Setup and choosing to Modify Project 2010 then do this:
 - 1. Open Project 2010, go to File-Options-Trust Center-Trust Center Settings and select "Enable All Macros".
 - 2. Open the file called SetupPERT2010.mpp. This file is located in the C:\Programs Files\PERT Chart EXPERT folder by default.
 - 3. Repeat the steps above and if you see the Macros you can close the Setup file without saving.

See also:

Creating PERT charts from Microsoft Project plans

Configuring a Network Version of MS Project

When Microsoft Project is configured for use with PERT Chart EXPERT, several items are copied into Microsoft Project and stored in the GLOBAL.MPT file. The GLOBAL.MPT file is a Microsoft Project file that is used to store things like Macros, Tables, Views, Toolbar Buttons, etc. This file is installed by Microsoft Project into the same directory with other Microsoft Project program files.

When you configure PERT Chart EXPERT to work with Microsoft Project, the following items are installed into the GLOBAL.MPT file of Microsoft Project:

A PERT Chart EXPERT Toolbar button — this is used to start the Macro use to exchange data.

GotoPERTChartEXPERT – this macro is called and is used to initiate the process of exchanging data between Microsoft Project and PERT Chart EXPERT.

A View – (beginning with the words Critical Tools), ensures a consistent view of the data.

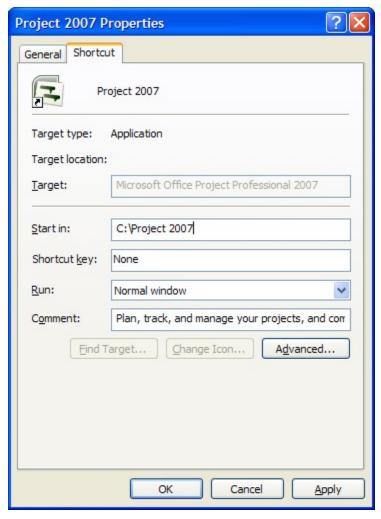
A Filter – (beginning with the words Critical Tools), ensures the proper number of tasks are exchanged.

Several Tables (each beginning with the words Critical Tools), used to extract the Microsoft Project fields in the correct order.

PERT Chart EXPERT requires that the above items be installed into Microsoft Project to allow a seamless integration between the two programs. If you have Microsoft Project installed on a network there may not be sufficient rights to modify the GLOBAL.MPT. If this is the case and if you wish to use your Network version of Microsoft Project with PERT Chart EXPERT, you have three options for doing this. They are:

- 1. Copy the necessary items into Microsoft Project each time you use PERT Chart EXPERT. To do this, start Microsoft Project and then start PERT Chart EXPERT. From within PERT Chart EXPERT, choose Tools-Microsoft Project-Setup-OK. This copies the necessary Tables, Views, Macros and Toolbar button into Microsoft Project. These items will remain there until Microsoft Project is closed.
- 2. Obtain temporary Read/Write access to the GLOBAL.MPT file on the network, run PERT Chart EXPERT Setup and answer Yes to the prompt to modify Microsoft Project. This adds a PERT Chart EXPERT Toolbar button to the network installation of Microsoft Project. This Toolbar button could access the PERT Chart EXPERT program installed on the Network or a version of PERT Chart EXPERT installed on a local computer. The disadvantage to this procedure is that everyone who uses the version of Microsoft Project on the network will see this PERT Chart EXPERT button but they may not have access to the PERT Chart EXPERT program.
- 3. Create a copy of the GLOBAL.MPT file and store it on your local computer. This way, Microsoft Project can be run from the network but all custom settings (Views, Tables, Macros, Reports, Toolbars, etc...) will be stored on the local computer. You can then instruct Microsoft Project to use the GLOBAL.MPT on your local computer instead of using the one on the network. To do this, copy the GLOBAL.MPT file from the network to a local drive and directory and make this directory the Working Directory (also called the Start In directory in some operating systems). To make a local directory the Working Directory (or Start In directory), modify the icon that you use to start Microsoft Project. If this is in your Start menu then you will need to go to the Start Menu, select Settings-Task Bar-Start Menu Programs-Advanced,

locate the icon used to start Microsoft Project, Right-Click with the mouse and display the Properties. If you use an icon on your desktop, Right-Click this icon. Then, enter the Drive and Path to the directory where you copied the GLOBAL.MPT file. For example:



This is the Properties dialog for Microsoft Project. Notice that Microsoft Project is installed and run from the network but the Start in directory is pointing to C:\Project 2007. If there is a GLOBAL.MPT in this directory, Microsoft Project will use this one instead of the one on the Network.

Using PERT Chart EXPERT

Terminology and Basic Concepts

Tasks

To create a project in PERT Chart EXPERT you simply click and drag with your mouse to create tasks. Task boxes can display certain pieces of information like the name of the task, the task Id (task number), the duration (how long it will take), and the start and finish date. You can display any number of fields in a task box for displaying on the screen.

Select Format-Fields to define additional fields to display in the task boxes.

See also: <u>Displaying Fields in Task Boxes</u>

For additional information on creating and modifying Tasks, see: Creating and Modifying Tasks

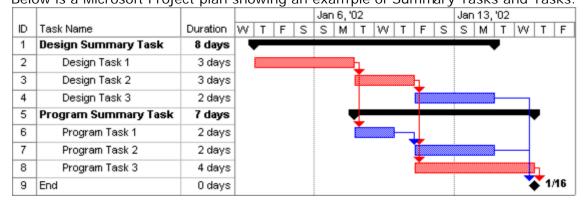
Dependencies

A dependency is a relationship between two tasks. To specify that the tasks in your project occur in a certain order, you create dependencies between these tasks by clic king and dragging between tasks. A dependency says that one task must follow another task in some way (For example, a task starts after another finishes or starts 5 days after another starts, etc...).

For more information on creating/modifying dependencies and an explanation of the different types of dependencies see: Creating Dependencies

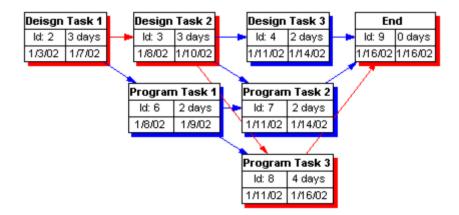
Summary Tasks and Tasks

A Summary Task is a term used to describe a task that summarizes a set of tasks. Summary Tasks are generally used to roll up information when projects are being displayed as a list. Below is a Microsoft Project plan showing an example of Summary Tasks and Tasks:



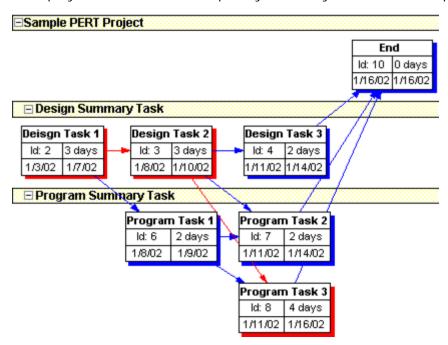
PERT charts are a different type of diagram and do not display data as a "list". For this reason, if you display a PERT chart from a Microsoft Project plan, the sum mary tasks will not be displayed unless they have a dependency. For example,

The plan above would look like this in PERT Chart EXPERT:



Notice that the Summary Tasks for Design and Program do not display in the PERT chart.

You can however, display the PERT chart Grouped by Summary Tasks, for example:



The above PERT chart is grouped by Outline which corresponds to the Summary Tasks in Microsoft Project.

See also: Grouping Tasks

Views

A View is a collection of formatting options for displaying a PERT chart in a certain way. There are many Views in PERT Chart EXPERT from which to choose and you can toggle through these Views until you find one that displays the chart the way you like.



The View toolbar buttons

The current View is displayed in the window on the toolbar. Use the Next View (right arrow) and Previous View (left arrow) buttons on the View bar to toggle to different Views.

To modify a View, simply display that View and choose the many formatting options in the Format menu.

See also: Views

These are some of the basic concepts for working in PERT Chart EXPERT.

For additional information on using PERT Chart EXPERT go to the Using PERT Chart EXPERT section of Help.

For information on creating a PERT chart from Microsoft Project, see: <u>Creating PERT charts</u> <u>from Microsoft Project plans</u>

Overview of Creating a PERT chart

Here are the basic steps to creating a new* PERT chart using PERT Chart EXPERT:

- Open PERT Chart EXPERT (a New chart is created for you to begin planning). See also: <u>New</u>
- 2. Click and Drag to create tasks. See also: Creating and Modifying Tasks
- 3. Click and drag from one task to another to create a dependency. See also: <u>Creating Dependencies</u>
- 4. Click on the edge of a task box, drag and move it to rearrange the tasks in the chart. See also: Moving & Repositioning Tasks
- 5. Change Views to display the PERT chart differently. See also: Views
- 6. Print your PERT chart. See also: Printing
- 7. Save your PERT chart. See also: Saving PERT charts

These are only the basic steps for creating a PERT chart. There are many additional options available for working with PERT charts. For more ways to use PERT Chart EXPERT, see the topics under the Using PERT Chart EXPERT section of Help.

^{*} To create a PERT chart from an existing Microsoft Project plan, see the Help topic: <u>Creating PERT charts from Microsoft Project plans</u>

Creating Tasks

To add a new task in a chart, click and drag with your mouse:

- 1. In an empty chart, click and drag anywhere in the chart to add a new task. A task box will appear in the upper left corner.
- 2. In a chart with tasks, click within a task and drag to empty space to create a new task that is dependent on the first task.

or

3. In a chart with tasks, click and drag in empty space to create a new task.

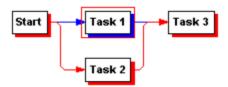
Entering Information

There are two ways to enter information for tasks in the PERT chart. One is to enter the task information directly into the task box by simply selecting the task on the screen and typing the information directly. The other way to enter information is to doubleclick a task and enter the information into the Task Information form. Both options are discussed below:

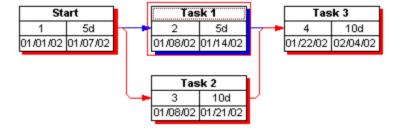
Entering Information using the Task box on the screen

You can enter information about a Task by simply selecting a task on the screen and typing information directly into the selected field for that task. The information you can enter is dependent on which fields are currently displayed on the screen.

For example, with the PERT chart below, only the Task Name is displayed so you can only change the Name of the task directly on the screen:



However, with this PERT chart, there are many fields displayed in the chart. Click the field you wish to change and type in the new information.



Tips:

- The currently selected task is the one with the red line around it.
- The currently selected field within a task is the one with the dashed line around it. In the above example, the Name field (Task 1) is the currently selected field.
- If the task box selected on the screen contains multiple fields you can use the Tab key to

move around the different fields.

- When you select a field in a Task box, select the Edit bar (or press F2) to modify existing text for that field.
- To display PERT charts containing different arrangements of fields, try switching Views using the Next View and Previous View buttons at the top of the screen. For more information on changing Views, see: <u>Views</u>
- To add/delete or modify the fields that are currently displayed in the Task boxes, select the Format menu and choose Fields.

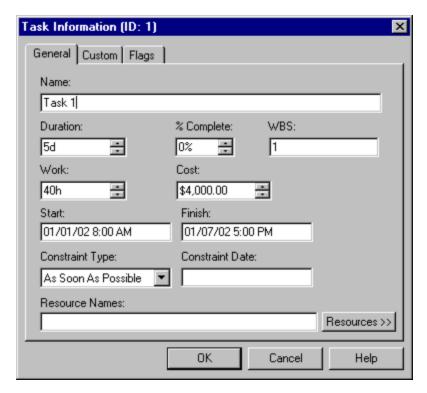
Entering Information using the Task Information Form

The Task Information form is found by doubleclicking a task or by selecting a task and clicking on the Task Information toolbar button.



The Task Information toolbar button

The Task Information form allows you to enter data for the selected Task or Summary Task as shown below:



Type information into the various fields and click OK when finished. For more information on how to use this form, see: <u>Task Information</u>

For more information on how PERT Chart EXPERT performs scheduling see: Scheduling

Dependencies

A dependency is a relationship between two tasks. To specify that the tasks in your project occur in a certain order, you create dependencies between these tasks by clic king and dragging between tasks. A dependency says that one task must follow another task in some way (eg: Start after another Finishes or Start 5 days after another Starts, etc...).

There are several types of dependencies. These include:

- Finish to Start One task cannot start until another is finished.
- Start to Start One task cannot start until another has started.
- Finish to Finish One task cannot finish until another is finished.
- Start to Finish One task cannot finish until another has started.

Microsoft Project Users: In Microsoft Project you create task dependencies by "linking" tasks. PERT Chart EXPERT supports the linking of tasks by dragging from one task to another to create a dependency (or from within one task to empty space to create a new task and a dependency).

Predecessors and Successors

The first task between two dependent tasks is considered the Predecessor and the second the Successor.

In the following example, Task A is a Predecessor to Task B. Conversely, Task B is a Successor to Task A.



Task A is a Predecessor to Task B (and Task B is a Successor to Task A)

The most important thing to remember when creating a project in PERT Chart EXPERT is defining the order in which tasks occur. You do this by clicking and dragging between tasks. By clicking and dragging from one task to the next you are automatically defining which task is the Predecessor and which is the Successor.

When clicking a dragging to create dependencies, the task you drag from is considered the Predecessor and the task you drag to is considered the Successor.

Creating dependencies

To create a dependency:

1. Click and drag from one task to another to create a Finish to Start dependency (the first task must Finish before the second can Start).

or

2. Click and drag from one task to empty space in the chart to create a new task that is dependent on the first task.

To modify a dependency between two tasks:

1. Click and drag between any two dependent tasks. This displays a form showing the dependency that exists between these two tasks. Use the form to change the dependency.

or

2. Doubleclick the dependency line between two tasks. This displays a form showing the dependency that exists between these two tasks. Use the form to change the dependency.

See also: Scheduling and Critical Path

Scheduling

PERT Chart EXPERT schedules tasks based on the information you enter. It uses the Project Start Date (or Project Finish Date when scheduling from the Project Finish), Duration, Dependencies and Constraints to calculate when each task must Start and Finish. PERT Chart EXPERT also calculates the Critical Path (see <u>Critical Path</u>). Below is an explanation of how tasks are scheduled.

Tasks are scheduled based on the following:

- 1. By Project Start Date If a task does not have a dependency, Constraint Date or Actual Start then the task is scheduled to start on the Project Start Date and its finish is determined by the Duration of the task.
- 2. By Duration Each task's finish date is determined by the Start Date plus the Duration you enter taking into account the Calendar (working and non-working days, hours per day, etc.).
- 3. By Dependencies If a task has a dependency but does not have a Constraint Date or Actual Start then the task is scheduled based on the dependency.
- 4. By Constraint Date If a task has a Constraint Date then it schedules the task based on the Constraint Date and Constraint Type.
- 5. By Actual Start/Finish If a task has an Actual Start or Actual Finish it will be scheduled based on these dates.

Each of these concepts is explained below:

Project Start Date and Project Finish Date

The Project Start Date in PERT Chart EXPERT is more then just the date on which the project starts. The Project Start Date is used to define the Start date for all tasks that do not have dependencies, Constraint Dates or an Actual Start.

By default, the Project Start Date is set to the current date when you open a New file. To change the Project Start Date:

- 1. Select the Tools-Chart Settings menu.
- 2. Select Schedule from Project Start date.
- 3. Enter a date into the Project Start date in the field.

To schedule from the Finish of the project, select the Schedule from Project Start date option and enter a date into the Project Finish date. When you schedule from the Project Finish, all tasks are given an As Late As Possible constraint and are schedule backwards from the date you enter.

Duration

The duration is the amount of time it takes to complete a task. A duration for a task can be entered in Minutes, Hours, Days, Weeks, Months or Years. A duration can be entered into the Duration field using the following format:

M = Minutes

H = Hours

D = Days

W = Weeks

MO = Months

Y = Years

For example, for a 10 day task you can simply enter 10d in the duration field, a 2 week task would be 2w.

When scheduling from the start of the project (check the option "Schedule from Project Start Date" under Tools-Chart Settings), the duration is used to calculate the Finish date of a task.

When scheduling from the finish of the project (deselect the option "Schedule from Project Start Date" under Tools-Chart Settings), the duration is used to calculate the Start date of a task.

Note: The above duration units take into account the Calendar (Working and Non-Working Time). By default, PERT Chart EXPERT provides a standard 5 day workweek, 8 hour workday calendar. The duration you enter will work around this calendar and as you change this calendar your schedule will change accordingly. For example, if a task starts on Wednesday morning and you enter a duration of 5 Days then the task will Finish on the following Tuesday evening (5 working days from Wednesday).

Durations can also be entered in Elapsed Days. Elapsed days ignore the calendar and schedules based on a 24 hour day, 7 days a week with no non-working days. Elapsed duration units are defined by entering an E prior to the Duration unit. For example, 12eh for 12 Elapsed Hours or 5ed for 5 Elapsed Days. A duration of 5 Elapsed Days from Wednesday would make the finish of a task occur on Sunday evening.

To enter the Duration:

1. If the Duration field is displayed in the Task boxes on the screen, click in this field and type the Duration.

or

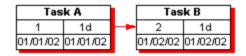
2. Doubleclick the task and type the Duration into the Duration field.

Dependencies

A dependency is a relationship between tasks specifying that one task cannot start or finish until another task has started or finished. A dependency is the single most important factor for determining the schedule of tasks.

When planning projects, many tasks must happen in a certain order. This order is defined by creating dependencies between tasks or "linking" tasks to specify that a particular task has to finish before another can start or that one task can only start after another has worked for 5 days, etc. One of the main features of PERT Chart EXPERT is the ability to click and drag to easily create dependencies between tasks.

There are several different types of dependencies. The basic type of dependency is the Finish to Start dependency. This means that you cannot Start a task until one is Finished. Like this:



In the above example, "Task B" starts immediately after "Task A". Since "Task A" is a 1 day

task and ends on 01/01/02, "Task B" starts at the beginning of the following day (01/02/02). The date and time that a task can start following its dependent task is determined by the Calendar. See also Calendar.

Note: When you have a dependency between two tasks, the first task in the chain is called the Predecessor and the second is the Successor. You can also create dependencies by entering task id numbers in the Predecessor and Successor fields or you can display the Predecessor and/or Successor field in the task boxes to list the dependent tasks.

To create a Finish to Start dependency in PERT Chart EXPERT:

1. Use the mouse to click from inside one task, drag to another and let go to create the dependency. By default, this creates a Finish to Start dependency between the first task you selected and the second task.

or

2. Click within a task and drag to empty space to create a new task with a Finish to Start dependency from the first.

To modify a dependency between two tasks:

1. Click and drag between any two dependent tasks. This displays a form showing the dependency that exists between these two tasks. Use the form to change this dependency.

or

2. Doubleclick the dependency line between two tasks. This displays a form showing the dependency that exists between these two tasks. Use the form to change this dependency.

There are several types of dependencies that you can create between tasks. Each of the dependency types is described below:

- Finish to Start One task cannot start until another is finished.
- Start to Start One task cannot start until another has started.
- Finish to Finish One task cannot finish until another is finished.
- Start to Finish One task cannot finish until another has started.

Lag

Most tasks in a project start immediately after one has finished but occasionally you may need to enter a delay. When there is an amount of time that must transpire before the second task must occur you can use a "lag" for this. A lag is the amount of time that the second task must wait after the first task starts or finishes.

For example, a Finish to Start dependency with a 5 day lag means that the successor task cannot start until 5 days after the predecessor task has finished. Consider the following example where Task A is linked to Task B with the various types of dependencies and lags:

Finish to Start with a 5 day lag – Task B cannot start until 5 days after Task A finishes.

Start to Start with a 5 day lag – Task B cannot start until 5 days after Task A starts.

Finish to Finish with a 5 day lag – Task B cannot finish until 5 days after Task A finishes.

Finish to Start with a -5 day lag - Task B starts 5 days before the finish of Task A.

Finish to Start with a -50% lag - Task B starts halfway from the finish of Task A.

Constraint Dates

A Constraint Date is a specific date that you assign to a task. Along with this date is a Constraint Type which determines how the date is used (Must Start On, Must Finish On, Start no Earlier Then, etc.). There are several different types of constraints, all require that you enter a date except As Soon As Possible and As Late as Possible.

To display the Constraint Date and Constraint Type for a task, doubleclick the task to display the Task Information form.

Constraint Type

The Constraint Type field allows you to enter the type of constraint. Choose from one of the following:

As Soon As Possible – Schedules the task to happen as soon as it can based on dependencies that precede the task, the task's duration and the project start date. The "As Soon As Possible" constraint does not actually constrain a task to a particular date. Set the Constraint Type to As Soon As Possible if you no longer wish to have a Constraint Date associated with a task. It will then be scheduled based on the dependencies.

As Late as Possible – Schedules the task to happen as late as it can based on dependencies that follow the task, the task's duration and the project finish date. The "As Late As Possible" constraint does not actually constrain a task to a particular date.

Finish No Earlier Than – Schedules the task to finish no earlier than the date listed in the Constraint Date field.

Finish No Later Than – Schedules the task to finish no later than the date listed in the Constraint Date field.

Must Finish On – Schedules the task to finish on the date listed in the Constraint Date field.

Must Start On – Schedules the task to start on the date listed in the Constraint Date field.

Start No Earlier Than – Schedules the task to start no earlier than the date listed in the Constraint Date field.

Start No Later Than – Schedules the task to start no later than the date listed in the Constraint Date field.

Constraint Date

The constraint date is used along with the Constraint Type for scheduling tasks. The As Soon As Possible and As Late As Possible constraint types do not use a Constraint Date thus allowing the task to be scheduled based on the dependencies associated with a task.

Note: To remove a date constraint assign the As Soon As Possible constraint to a task. This will remove the Constraint Date and allow the task to schedule based on the dependencies.

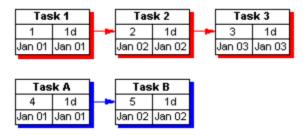
Actual Start and Actual Finish

Entering an Actual Start and/or Actual Finish will schedule the task on these dates thus overriding any of the above scheduling options used.

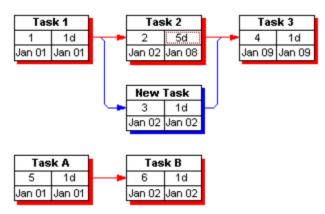
Critical Path

The Critical Path is a schedule calculation that determines the longest path to the end of a project or to the end of a set of tasks. PERT Chart EXPERT can calculate the Critical Path in two ways. These are:

To the end of the project – All tasks are compared to the last task in the project. If a delay in a task would impact this date then the task is considered critical. The two exceptions to this are Must Start On/Must Finish On date constraints and Completed Tasks. A task with a Must Start On or Must Finish On date constraint is always considered critical and a task that is complete is always considered Noncritical. The example below shows the critical path to the end of the project.



To the end of each set of tasks (or task) – Each network of tasks calculates critical path separately within its own set of tasks. A task is considered critical if it impacts the end of its network of tasks (a single task is even considered its own network and is therefore critical). The example below shows two separate network of connected tasks, each calculating critical path within its own set of tasks.



To switch between the two methods of calculating critical path:

- 1. Choose Tools-Chart Settings.
- 2. Select Calculate Multiple Critical Paths if you want each network of tasks to calculate critical path on its own.
- 3. Click OK.

Moving & Repositioning Tasks

Task boxes in PERT Chart EXPERT are positioned in the chart either Automatically or Manually. Before you begin clicking and dragging to move tasks around, it is a good idea to understand these two concepts.

Automatic Box Positioning

Automatic Box Positioning means that PERT Chart EXPERT determines the best location for positioning boxes in the chart. In general it tries to place a Successor to a task directly to the right of its Predecessor but there are many other rules for placing boxes to account for tasks without dependencies, multiple successors and different types of dependencies (like Start to Start, etc).

By default, all boxes are positioned Automatically until you manually move a box. Once you move a box then the entire PERT chart becomes "locked" and boxes are no longer automatically positioned.

A PERT chart that is "locked" will display the word LOCK in the lower right corner of the program and the Lock toolbar button will appear pressed.

Click the Lock toolbar button to Unlock and automatically position all tasks in the chart. Or, select a group of tasks on the screen and choose Format-Layout Selected to automatically position just the currently selected tasks.

When you create a PERT chart from Microsoft Project, a chart is created and the PERT boxes are Automatically positioned. As mentioned, if you move a task then the entire PERT chart becomes "locked" and boxes are no longer automatically positioned. The exception to this is if you go back to Microsoft Project and add tasks. Upon returning to PERT Chart EXPERT, all boxes that were previously locked will stay in place and "new" boxes will be added to the PERT Chart and Automatically placed in the most logical position relative to the locked boxes.

Manual Box Positioning

You can click and drag the edge of a box and place it anywhere in the chart. When you manually position boxes this way the automatic positioning of boxes is turned off and all boxes are locked into position.

To move a task in PERT Chart EXPERT:

- 1. Place the cursor on the edge of a box until you see a four-way arrow.
- 2. Click and drag this box to a new location in the chart.

To move multiple tasks:

- 1. Click on empty space in the chart and drag to enclose a group of tasks.
- 2. Click the edge of one of the tasks and drag this group to a new location.

You can also Ctrl-Click to select multiple tasks and move them (hold the Ctrl key down while selecting multiple tasks with your mouse. Then drag them to a new location in the chart).

In both cases above, if you place tasks in between rows or columns or if you place a task on top of another then it may create a new row or column to accommodate the moved tasks.

When you click and drag move a box then the entire PERT chart becomes "locked" and boxes are no longer automatically positioned. Boxes will stay in their positions until you Unlock them

or change a feature that requires a reposition of the boxes.

A PERT chart that is "locked" will display the word LOCK in the lower right corner of the program and the Lock toolbar button will appear pressed.

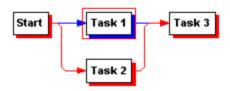
Click the Lock toolbar button to Unlock and automatically position all tasks in the chart. Or, select a group of tasks on the screen and choose Format-Layout Selected to automatically position just the currently selected tasks.

Note: Certain features like grouping and applying a timescale may rearrange the boxes in the chart thus overriding the manual box positions that you may have used. If you have manually positioned tasks in the chart and you wish to group or timescale the chart, try making a copy of the current View or try switching Views. Each View maintains box positions separately therefore you can have one view where your boxes are positioned exactly where you want them and another View using the Group or Timescale feature with automatic box positions.

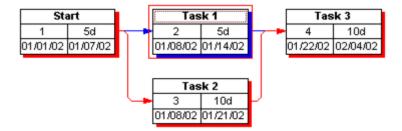
Displaying Fields in Task Boxes

You can display a variety of fields in the Task boxes such as name, cost, start, finish, etc. If you are using Microsoft Project, all Microsoft Project Task fields, except the Notes field, can be displayed in the Task boxes on the screen.

For example, you could simply have the Name field displayed in the boxes like this:



Or, you could display the Id, Duration, Start and Finish dates for the Tasks in your chart like this:



The number of fields and arrangement of fields within a box is completely configurable. There are no limits to the numbers of fields you can place in a box. You can even place fields outside of a box.

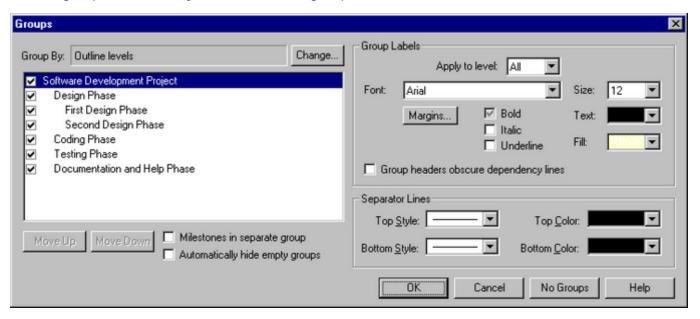
Many of the Views in PERT Chart EXPERT contain different arrangement of fields in the boxes. Try switching Views using the Next View and Previous View toolbar buttons to see these.

For more information on how to configure the fields within Task Boxes see Fields

Grouping Tasks

Grouping tasks in PERT Chart EXPERT creates horizontal bands of tasks based on certain fields. Tasks can be grouped by Resource Names, Resource Groups, Resource Initials, Text fields (Text 1 thru Text 30) and by Outline (the Summary Tasks in your Microsoft Project plan or the levels of a WBS chart).

The Groups dialog box indicates which field you are currently grouped by, lists the currently defined groups and allows you to format the groups.



Group By: - Select this to change the field by which the tasks are grouped in the PERT chart. See below for a complete explanation.

List of current Groups/Outline levels - The area below the Group By field contains the list of current Groups or the list of Summary Tasks in your plan if grouped by Outline. The checkbox next to the group indicates whether the group is displayed in the chart.

Checkbox – The small box to the left of the group name allows you to Hide and Unhide groups. If checked, the group heading and tasks are displayed in the chart. Deselect the check mark to "hide" the group. Hiding a group means that all the tasks plus the group heading will be hidden.

Move Up/Move Down – Select a group from the list and click Move Up or Move Down to rearrange the selected group within the list. This option is not available when grouped by Outline Levels.

Milestones in separate group – Select to create a separate group at the top of the chart that contains only the milestones in the plan.

Automatically Hide Empty Groups – Select to automatically hide groups that do not contain any tasks. For example, if you have resources defined in your plan and you group by Resource Names it would display a group for each resource. If a resource did not have tasks assigned then a group heading would appear in the chart with no tasks under it. Choose this option to hide this group heading.

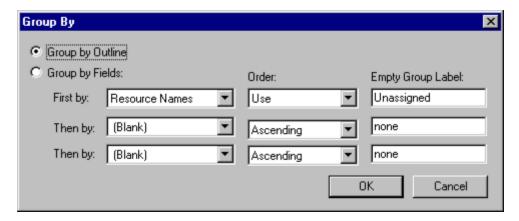
Group Labels – The options listed below this topic allow you to configure how the Group headings appear in the chart. Select Apply to level to format all groups at once or a specific level. Choose Font, Colors, etc. Select Group Headers obscure dependency lines to display the dependency lines behind the Group headings on the screen.

Separator Lines – Select the line style and color of the group headings.

No Groups – Select this to remove grouping from the chart.

Change:

To change what field to use for grouping, select the Change button to display the Group By form.



Group by Outline

If you are using Microsoft Project, the Outline refers to the Summary Tasks in a project. Summary Tasks in Microsoft Project are created by indenting tasks in the Gantt Chart. If you create a PERT chart of a Microsoft Project plan and group by Outline, each Summary Task in the project is displayed as a group.

If you are using WBS Chart Pro, the Outline refers to the levels in the Work Breakdown Structure. Each level in the tree can be used to define a Group in PERT Chart EXPERT.

You cannot create the Outline in PERT Chart EXPERT, you must use Microsoft Project, WBS Chart Pro or some other program to create this outline.

Group by Fields

Select to group the chart by the following fields:

Resource Names/Resource Initials/Resource Group – Groups the chart by the resource information in the project. In PERT Chart EXPERT, go to the Tools-Resources menu to view and define the resources. If you are using Microsoft Project, go to the View-Resource Sheet menu to view and define the resources. When grouped by resource names or initials, dragging a task from one resource group to another will reassign the task to that resource.

Text fields (Text1 thru Text30) – Groups the chart by a Text field. The Text fields are used to enter any user-defined or custom information. There are 30 Text fields (Text1 thru Text30) in PERT Chart EXPERT. These Text fields also correspond to the Microsoft Project Text fields of the same name. If you use these in Microsoft Project then you can use them in PERT Chart EXPERT. When grouped by a Text field, dragging a task from one group to another automatically changes the value in the text field for those tasks. In other words, if

you are grouped by Text1 and you drag from Group A to Group B the task will change the value in its Text1 field to Group B.

Order

You can arrange the groups in the chart based on the options in the Order list. They are:

Ascending – Lists the groups in the chart from the lowest to the highest value (1, 2, 3... a, b, c).

Descending – Lists the groups in the chart from the highest to the lowest value (3, 2, 1... c, b, a).

Use – Lists the group in the chart in the order that the fields are used. For example, if you group by resource, it would list the resources in the order that they are defined in the Resource List (under Tools-Resources in PERT Chart EXPERT or in the Resource View in Microsoft Project).

Note: If the chart is grouped by the Resource or Text fields you can rearrange a group within this list by selecting the Move Up and Move Down buttons.

Empty Group Label – If there are tasks in the project that do not contain any value for the field in which you are grouping then these tasks are included in a separate group. Use the Empty Group Label to identify this group. For example, if you are grouping by Resource and there are tasks with no resources assigned then these will be placed into a separate group with the title that is entered in the Empty Group Label (such as "Unassigned").

Displaying a Timescale

Applying a timescale to a chart allows you to display tasks that Start or Finish within certain time periods. Display time units such as Days, Weeks, Months, Quarters or Years (or every 3 days, every two weeks, etc...). You can specify different time units and whether you want to view tasks that Start in this time period or Finish in this time period.

To apply the Timescale:

- 1. Select the Format-Timescale menu.
- 2. Select the appropriate options and click OK.

or

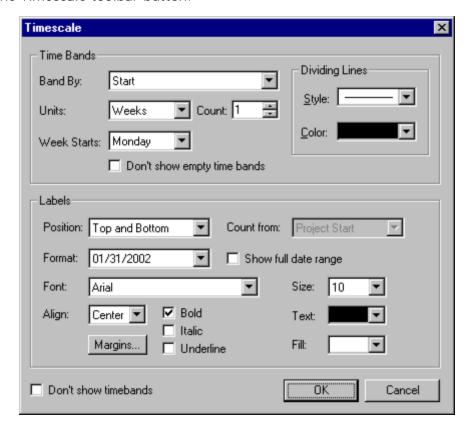
- 1. Press the Timescale toolbar button to display the Timescale form.
- 2. Select the appropriate options and click OK.

To turn the Timescale off:

- 1. Select the Format-Timescale menu.
- 2. Select the Don't show timebands option and click OK.

or

1. Press the Timescale toolbar button.



Time Bands

Band By – Select the field to use when placing a task in the time band. If you select Start, all tasks that Start during the time period are displayed in the time band. If you select Finish then all tasks that finish within that time period are displayed in the time band.

Units – Select to display the timescale by Hour, Day, Week, Month, Quarter, Half Year or Year time units.

Count – Select the time interval between units. Enter 1 to display every time period, 2 to display every other time period and so on. For example, if you were displaying Weeks as the Units, entering 2 in the Count would display a time band every two weeks.

Week Starts – Specify the day of the week to use when displaying weeks as the time unit.

Don't Show Empty Time Bands – Hides the time bands in the chart that do not contain tasks.

Dividing Lines – Defines the color and line style of the vertical timescale dividing lines.

Labels

Position – Select to display the timescale labels at the Top, Bottom or both Top and Bottom.

Count From – This option only applies when you choose to display dates (using the Form at option) as Day 1, Day 2... or Week 1, Week 2, etc... The Project Start option uses the Project Start Date to start counting up from this date, eg: Day 1, Day 2, etc. Project Finish uses the Project Finish Date to start counting down from this date eg: Day –5, Day –4, etc... Earliest Task uses the earliest task displayed on the screen to start counting. Latest Task uses the latest task displayed on the screen to start counting down from this date. Today uses today's date to start counting.

Format – Select the date format for the timescale.

Show Full Date Range – Displays the full range of dates when applicable. For example, if a two week period is selected, the full date range would display dates as Jan 1, 2002 – Jan 14, 2002 instead or Jan 1, 2002.

Font – Select the font size for the timescale labels.

Align – Select to align the labels within the time band either left, right or center.

Size – Select the font size of the timescale label.

Text – Select this to define the color of the timescale label text.

Fill – Select this to define the background color of the timescale labels.

Margins – Select to adjust the margins around the timescale label.

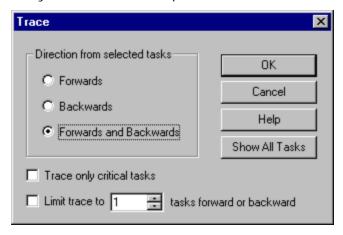
Don't show timebands – Select this option and click OK to turn off the timescale so it is not displayed on the chart. You can also press the Timescale toolbar button to turn off the timescale.

Tracing Tasks

The Trace feature lets you select a task in PERT Chart EXPERT and display only those tasks that lead up to that task and/or follow that task. You can also specify that only Critical Tasks are included in the trace and that the trace be limited to so many tasks forward or backwards from the selected task.

To perform a Trace, select a task in PERT Chart EXPERT by clicking on it. Then, select the Format-Trace menu (or press the Trace toolbar button) and choose from the available options. When you click OK the Trace is applied to the chart.

You can also select multiple tasks to Trace. In the PERT chart, CTRL-Click with your mouse to select multiple tasks. When you trace with multiple tasks, each selected task is traced.



Direction from selected tasks – Select one of the three options to trace tasks Forward from the selected task, Backwards from the selected task or both Forwards and Backwards from the selected task.

Trace only critical tasks – Select to display only the Critical tasks when the Trace is applied. Deselect this option to include Critical and Noncritical tasks when the Trace is applied.

Limit trace to x tasks forward or backward – Select to display only \varkappa number of tasks forward or backward from the selected task when the trace is applied. If you do not select this option then all tasks forward or all tasks backwards are included in the trace.

For example, if you wanted to see only the immediate predecessors and successors to a selected task, select this option and enter a 1 in the number field. Deselect this option to trace all the way forward or back.

Show All Tasks – Select this button to remove the Trace and display all tasks in the chart.

You can also use the Trace toolbar button to invoke a Trace and remove the Trace.

Fields in PERT Chart EXPERT

There are many different data fields in PERT Chart EXPERT for entering information into, including fields like Name, Duration, Start, Finish, Cost, Work, etc. These fields are similar to the Task fields found in Microsoft Project.

Note: PERT Chart EXPERT does not use all of the fields of Microsoft Project. PERT Chart EXPERT accesses most of the data in Microsoft Project's Task Table. PERT Chart EXPERT does not import the Notes field from Microsoft Project and certain Resource and Resource Assignment data are not accessed by PERT Chart EXPERT.

If you are using Project 98 or Project 95 (version 4.1) some of the fields used in PERT Chart EXPERT are not transferable to these programs since some of the fields are specific to later versions of MS Project. If you were to use a field in PERT Chart EXPERT that is not supported by the version of Microsoft Project that you are using then this information would be stored in the PERT chart file since it cannot be transferred to Microsoft Project. For example, PERT Chart EXPERT supports 20 Flag fields. Project 2000 and Project 98 support these 20 Flag fields but Project 95 does not. If you were using Project 95 and used all 20 Flag fields in PERT Chart EXPERT and then transferred your PERT chart to Project 95, it would transfer the first 10 Flag fields and the remaining 10 would be stored in the PERT chart file.

Tip: You can rename any field in PERT Chart EXPERT using the Field Names... option in the Tools menu. This will permanently rename that field in PERT Chart EXPERT so that the new name appears in all forms, dialog boxes and printouts. For example, you could rename the Flag 1 field to Engineering Dept, the Flag 2 field to Sales Dept and so on. See also <u>Field Names</u>

Printing

Here is a process we recommend for printing your PERT charts:

1. Select a View – In the PERT chart, before you print or select Print Preview you should select a View that contains the formatting that you want. You can change Views and select one you like or change Views until you find one that is similar to the one you want and modify it. To change Views, select the Next View toolbar button in the upper right c orner of the screen.



Select the Next View button (the right arrow) to change Views

For more information on selecting and modifying Views see Views

2. Select Print Preview – Selecting Print Preview is the quickest way to see how your PERT chart will be printed before you send the PERT chart to the printer. Select the Print Preview toolbar button or select Print Preview from the File menu.

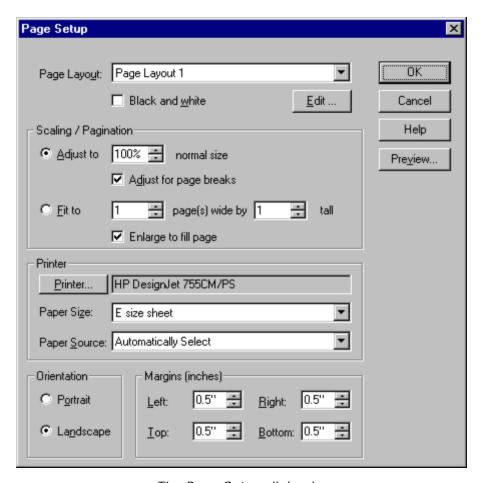


The Print Preview toolbar button

The PERT chart and surrounding data on the printout displayed in Print Preview are based on several configurable options. They are:

- a) Summary Info Your PERT chart may display fields of information around the chart like Title, Manager, or Company. This information can be entered from within Print Preview. Select the Summary Info button to enter information about your project that can also appear in the PERT chart. To see how these fields are arranged on the page, see the section below on Page Layout. For more information on Properties, see Properties
- b) The Current Printer and Paper Size Select the Page Setup button (from within Print Preview) to see what size paper and other print options are currently set. You can change some basic settings for the printout in the Page Setup form like Scaling, Paper Size, Margins, etc. To change or modify settings for the printer, select the Printer button from with Page Setup. For more information on using the Page Setup dialog box, see Page Setup
- c) The Page Layout In Print Preview you may notice a border around the PERT chart, perhaps page numbers and maybe even data fields around the PERT chart. The general layout of the PERT chart on the page is determined by a Page Layout. Each View in the PERT chart uses a specific Page Layout. In the Page Setup dialog box the Page Layout field displays the current Page Layout being used. To see how a different Page Layout would look with your PERT chart, select a different Page Layout from the list and click the Preview button to return to Print Preview to display the PERT chart with this different Page Layout.

You can also modify an existing Page Layout by selecting the Edit button in Page Setup. If you want to modify a Page Layout, use the Page Setup dialog to select one that is close to what you are looking for and then choose the Edit button with that Page Layout listed in the Page Layout field. For more information on using Page Layouts, see Page Layouts



The Page Setup dialog box

3. Print the PERT chart – When you are satisfied with the current PERT chart displayed in Print Preview, press the Print button to send the PERT chart to the printer.

Saving PERT charts

A PERT chart is either saved "standalone" or "linked" to a datasource (such as a Microsoft Project plan, an MPX file or a Text file).

Saving a PERT chart (standalone)

Saving a standalone PERT chart saves all of the project data, box colors, views and form atting options into a single file. This is what happens when you simply open PERT Chart EXPERT, create a PERT chart and save the PERT chart. If you only use PERT Chart EXPERT to create your PERT charts then your charts are always saved "standalone" and this PERT file is a completely self-contained file.

To save a PERT chart standalone:

- 1. Choose File-Save (or File-Save As).
- 2. Select a location to save the file and enter a name for this file in the filename field.
- 3. Make sure the "save as type" option is set to PERT chart and click OK to save this file.

PERT chart files created in PERT Chart EXPERT have an extension of .PCE.

Saving a PERT chart (linked)

Saving a PERT chart that is "linked" to a datasource saves the PERT chart formatting into the PERT file but the data remains in the datasource.

For example, if you are using PERT Chart EXPERT with Microsoft Project and you create a PERT chart of a Microsoft Project plan, the data is in Microsoft Project but the PERT chart formatting are part of the PERT file (the *.PCE file). The PERT file is then "linked" to this Microsoft Project plan. The data that you see in the PERT chart is not actually in PERT Chart EXPERT but a reflection of what is maintained in Microsoft Project. If you make changes to this data in PERT Chart EXPERT such as adding new tasks, moving tasks or deleting tasks, this is actually being done dynamically in Microsoft Project.

When you create a PERT chart from a Microsoft Project plan and save the PERT chart (to a .PCE file) this link is remembered so that the next time you create a PERT chart from this same Microsoft Project plan, the PERT chart displays as you left it.

Note: When you Save a PERT chart that is linked to a Microsoft Project plan this also saves the plan in Microsoft Project.

Opening a standalone PERT chart

To open a PERT chart, choose the File-Open menu and locate the appropriate PERT chart file. Select the PERT chart file and choose Open.

Opening a PERT chart linked to a Microsoft Project plan

There are two ways to open a PERT chart that is linked to a Microsoft Project plan. They are:

- 1. From within Microsoft Project, click the PERT Chart EXPERT toolbar button. If you have previously created a PERT chart from this Microsoft Project plan and saved the PERT chart, it will remember this and automatically open this chart for you to continue working. If it does not open the previously saved PERT chart, see the Note below.
- 2. From within PERT Chart EXPERT, if you open the PERT chart (*.PCE file) that is linked to

the Microsoft Project plan it will automatically open Microsoft Project and the corresponding Microsoft Project plan.

Note: If you rename or move a Microsoft Project plan that is linked to a PERT chart file it may not be able to locate this PERT chart file the next time you to create a PERT chart from the Microsoft Project plan. If you move or rename a Microsoft Project plan that is linked to a particular PERT chart file, perform the following to link this new MS Project plan to the PERT chart file:

- 1. Open PERT Chart EXPERT.
- 2. Select File-Open.
- 3. Click on the PERT chart file (the .PCE file) that was linked to the Microsoft Project plan.
- 4. Click "Link to another datasource" and click Open.
- 5. Locate the MS Project plan and select Open.

When you save the PERT chart it will remember the name and location of the new Microsoft Project to which it is linked.

Transferring a PERT chart to Microsoft Project

Use PERT Chart EXPERT to create your projects first and then transfer these charts to Microsoft Project for further scheduling.

If you create a new chart in PERT Chart EXPERT, configure this chart and save this chart, it is considered a "standalone" PERT chart. This means that the PERT chart file is a self-contained file with all of the data and formatting within this file.

In PERT Chart EXPERT you can make dependencies between tasks plus modify various fields of information about the tasks in your project. PERT Chart EXPERT contains a simple scheduling system. For more elaborate scheduling, to manage resources, do resource leveling, etc. you can transfer the PERT chart to Microsoft Project.

To transfer the current PERT chart to Microsoft Project, select the Goto Project toolbar button.



The Goto Project toolbar button

Transferring a standalone PERT chart to Microsoft Project means that the data that exists in the PERT chart will be removed from the PERT chart and placed into a Microsoft Project plan. The PERT chart then becomes linked to this Microsoft Project plan. You are prompted to save the Microsoft Project plan and you must enter a filename for this Microsoft Project plan to continue transferring the PERT chart to Microsoft Project. You will then have two files; the Microsoft Project file containing the data (information like names, start dates, finish dates, costs, etc.), and the PERT chart file containing the formatting options that are PERT chart-specific (such as custom colors, box placement, etc.).

After transferring the data to Microsoft Project, the next time you open the PERT chart it not only opens the PERT chart with all the formatting but also opens the corresponding Microsoft Project file to which it is now linked.

You can also open the Microsoft Project plan first and select the Goto PERT Chart EXPERT button to open the saved PERT chart corresponding to the Microsoft Project plan.

Transferring a PERT chart to WBS Chart Pro

WBS Chart Pro is the other product from our company (Critical Tools) that allows you to plan and display projects using a Top-Down type of chart. This chart displays the Work Breakdown (WBS) of the phases and tasks in a project. You can seamlessly transfer projects from PERT Chart EXPERT to WBS Chart Pro and vice versa.

To transfer the current PERT chart to WBS Chart Pro just press the Goto WBS Chart Pro toolbar button.

When you transfer a PERT chart to WBS Chart Pro your PERT chart is saved to the WBS Chart Pro format (a .WBS file) and then immediately opened in WBS Chart Pro. You will no longer have a PERT chart file, it will become a WBS chart file. To create a PERT chart file again simply press the Goto PERT Chart EXPERT button in WBS Chart Pro to transfer it back to PERT Chart EXPERT.

Note: If the Goto WBS Chart Pro button is not available (is grayed out) this means that you either do not have WBS Chart Pro or you do not have a version of WBS Chart Pro that works with PERT Chart EXPERT. You must have version 4.1 or greater of WBS Chart Pro for this to work. Select the Help-About menu to see which version you have. Contact Critical Tools for information on obtaining a version of WBS Chart Pro that works with PERT Chart EXPERT.

See Contacting Critical Tools

Creating a PERT chart from your MS Project plans

To create a PERT chart from an existing Microsoft Project plan:

- 1. Start Microsoft Project and open the desired Microsoft Project plan.
- 2. Click the PERT Chart EXPERT toolbar button*.



The PERT Chart EXPERT toolbar button

PERT Chart EXPERT is started and the current project plan from Microsoft Project is displayed in a PERT chart.

When you create a PERT chart from an existing Microsoft Project plan, the PERT chart is dynamically linked to this Microsoft Project plan. Any changes made in the PERT chart are immediately reflected in Microsoft Project.

Tip: When a PERT chart is dynamically linked to a Microsoft Project plan the word LINKED appears in the lower right corner of the screen.

Saving a PERT chart linked to a Microsoft Project plan

After modifying the linked PERT chart, when it comes time to save and close your PERT chart it helps to remember that the data is stored in Microsoft Project (a .MPP file) and the PERT chart formatting is stored in the PERT chart file (a .PCE file).

When you save a PERT chart that is linked to a Microsoft Project plan, it saves both the PERT chart file (.PCE) and the corresponding Microsoft Project plan (.MPP).

The saved PERT chart contains the formatting of the chart, and a link to the Microsoft Project plan where the data is stored.

To save the PERT chart, select the File menu and choose Save (or Save As). Specify a filename and click OK.

Opening a PERT chart linked to a Microsoft Project plan

There are two ways to open a PERT chart that is linked to a Microsoft Project plan. They are:

- 1. From within Microsoft Project, click the PERT Chart EXPERT toolbar button. If you have previously created a PERT chart from this Microsoft Project plan and saved the PERT chart, it will remember this and automatically open this chart for you to continue working. If it does not open the previously saved PERT chart, see the Note below.
- 2. From within PERT Chart EXPERT, if you open the PERT chart (*.PCE file) that is linked to the Microsoft Project plan it will automatically open Microsoft Project and the corresponding Microsoft Project plan.

Note: If you rename or move a Microsoft Project plan that is linked to a PERT chart file it may not be able to locate its corresponding PERT chart file. If you move or rename a Microsoft Project that is linked to a particular PERT chart file, perform the following to link this new MS Project plan to the PERT chart file:

- 1. Open PERT Chart EXPERT.
- 2. Select File-Open.

- 3. Click on the PERT chart file (the .PCE file) that was linked to the Microsoft Project plan.
- 4. Click "Link to another datasource" and click Open.
- 5. Locate the Microsoft Project plan and select Open.

When you save the PERT chart it will remember the name and location of the new Microsoft Project to which it is linked.

*If you do not see the PERT Chart EXPERT toolbar button in Microsoft Project, see the help topic Configuring MS Project for use with PERT Chart EXPERT

If you want to create a PERT chart and Unlink it from the Microsoft Project plan see the topic Unlink

Tips when using PERT Chart EXPERT with MS Project

When you create a PERT chart from an existing Microsoft Project plan you must remember that you are dynamically linked to this plan and any changes made in the PERT chart are immediately reflected in Microsoft Project. If you add or delete tasks in the PERT chart, these tasks are immediately added or deleted in Microsoft Project.

A PERT chart created form an existing Microsoft Project can be saved but this does not save the data; all project data is still maintained in Microsoft Project. Saving a PERT chart that is linked to a Microsoft Project plan only saves the link and any PERT chart-specific items that cannot be saved in Microsoft Project like box placement, custom box colors and formatting options for the PERT chart. See also <u>Saving PERT charts</u>

If you create a PERT chart from an existing Microsoft Project plan and you do not want this PERT chart to be dynamically linked to the corresponding Microsoft Project plan then you can save the PERT chart as a "standalone" PERT chart. This will "unlink" the PERT chart from the Microsoft Project plan and save all of the data to the PERT chart file. Once you save as a standalone chart, this PERT chart cannot be linked back to the original Microsoft Project plan from which it was created. You can only use this standalone PERT chart to create a new Microsoft Project plan. See also Saving PERT Charts

Reference (by Menu)

File Menu

New (File Menu)

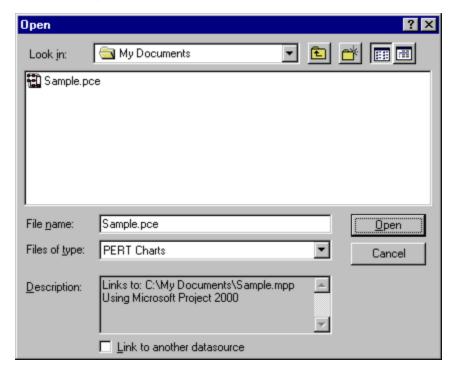
Displays a blank screen for creating a new PERT chart.

To create your first task, click and drag anywhere on the blank page to create a task. Click that task and drag outside of the task to create another task that is dependent on this task or click and drag in the chart background to add a task that is independent of others.

See also Creating a New PERT chart

Open (File Menu)

Displays the File Open dialog box to open a previously saved file.



Look in:

Displays a list of folders and drives where files are stored.

File Name:

Type the file name of the file you wish to open or select the file from the list of files in the window.

Files of type:

Choose the type of file to list and open. The types of files that can be opened in PERT Chart EXPERT are as follows:

PERT Charts – Lists all PERT Chart EXPERT files (.PCE extension) and allows you to open a chart that has been previously saved. A .PCE file may be Standalone or Linked. If you select a PERT file from the list and the Description field is empty then this file is a Standalone PERT chart. A Standalone PERT chart file contains all data and formatting in one file. If the PERT chart is linked then the Description field displays a reference to an external datasource. A Linked PERT chart stores only formatting information in the PERT chart file with a reference to a datasource where the data is stored (such as a Microsoft Project plan).

If you open a .PCE file that is linked to a Microsoft Project plan, it will start Microsoft Project, open the referenced plan and display the PERT chart of that data.

WBS Charts – Lists all WBS Chart Pro files (.WBS extension) and allows you to open a chart created in WBS Chart Pro in PERT Chart EXPERT.

PERT Views - Lists all PERT Chart EXPERT Views (.PCV extension) and allows you to merge

Views into the current PERT chart.

PERT Page Layouts – Lists all PERT Chart EXPERT Page Layouts (.PCP extension) and allows you to merge Page Layouts into the current PERT chart.

Microsoft Project Plans (mpp) – Lists all Microsoft Project files (.MPP extension). If you open a Microsoft Project Plan in PERT Chart EXPERT it opens this MPP file in MS Project (starting MS Project if necessary) and creates a PERT chart of this MS Project plan.

MPX – Lists all MPX files (.MPX extension) and allows you to create a PERT chart from the MPX file format. The MPX file format is a text-based version of a Microsoft Project plan. Many applications including other project management software programs can save to this file format thus allowing you to create PERT charts from these programs by opening the MPX file.

Text – Lists all Text files (TXT extension) and allows you to create a PERT chart from Text files.

Description:

If the selected PERT chart is linked to an external datasource (like Microsoft Project) then this field displays the file it is linked to and the location of this file.

Link to another datasource – If the current PERT chart is linked to a specific datasource and you need to link this to another datasource then select this option before you open the PERT chart. When selected, you are prompted to pick a new datasource before opening the PERT chart. The PERT chart then becomes linked to this new datasource. This option is useful when you have renamed or moved the datasource and allows a linked PERT chart to "find" its datasource.

Close (File Menu)

Closes the current PERT chart. You are prompted to save the PERT chart if changes have been made to the PERT chart since it was opened.

Save (File Menu)

Saves the current PERT chart to the same file name. If the PERT chart file has never been saved it will prompt you for a file name.

To save the current file to a different file name, use the Save As command.

For a complete explanation on Saving PERT charts, see the help topic <u>Saving PERT charts</u>

Save As (File Menu)

Displays the Save As dialog box and allows you to confirm saving the current PERT chart to the same file name or allows you to save the file to a different file name. To save the file to another file name, type this new name into the File name field. To save a chart to its existing name and folder, click Save. To save a PERT chart to the same file name and avoid this dialog box, use the Save command.



Save in:

Displays a list of folders and drives where files are stored.

File Name:

Type a file name for the PERT chart. You do not have to include the .PCE extension as long as the Save as type field displays PERT chart.

Save as type:

Choose the type of file to save the current PERT chart to. The types of files that can be saved in PERT Chart EXPERT are as follows:

• PERT Chart – Saves the PERT chart to the file name specified with the .PCE extension. A PERT Chart EXPERT file may be Standalone or Linked. If you have created the PERT chart from scratch then saving the PERT chart saves all task data and form atting information into a self-contained Standalone PERT file. If you have created the PERT chart from a datasource (such as a Microsoft Project plan), saving the PERT chart stores the form atting information into a PERT chart file with a reference to the datasource where the task data is stored (such as a Microsoft Project plan). This PERT file is then Linked to the datasource. Saving a PERT chart that is linked to a Microsoft Project plan also saves the plan in Microsoft Project.

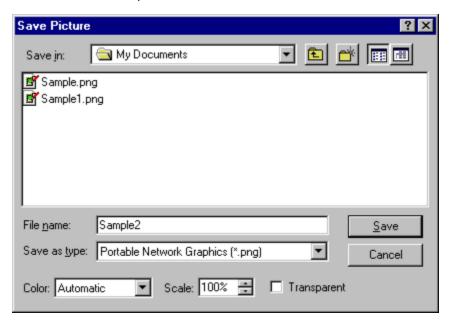
You do not need to specify whether to save the PERT chart Standalone or Linked, this is determined automatically based on whether you created the PERT chart from scratch or created the PERT chart from a datasource.

 WBS Chart – Saves the current PERT chart to the WBS Chart Pro format. You can then open this file in WBS Chart Pro. · MPX – Saves the current PERT chart to an MPX file. The MPX file format is a text-based version of a Microsoft Project plan. Many applications including other project management software programs can read this file format thus allowing you to create PERT charts and transfer the chart to other programs.

For a complete explanation on Saving PERT charts, see the help topic Saving PERT charts

Save As Picture (File Menu)

Saves the current PERT chart to a picture file.



Save in – Choose the folder to save the picture to.

File name – Type in the name of the file.

Save as type – Select to save the picture to the various types of file formats.

Note: Due to licensing issues, the GIF file format is not supported. We suggest you try the PNG format as it is very similar and supported by most programs.

Color – Select Automatic to produce a picture with all the colors as it appears on the screen. Choose Grayscale to produce a picture using shades of gray instead of color. Choose Black & White to produce a picture in plain black and white. The advantage to using Grayscale or Black & White is that they produce picture files that are substantially smaller then color files.

Scale – Specify the scaling factor for the picture. Select 100% to produce a picture that is the same size as the current PERT chart on the screen (assuming 100% zoom on the screen). Enter a smaller number to shrink the PERT chart when it is saved to the file or a larger number to increase the size of the PERT chart in the file.

Transparent – Select this option to make the PERT chart background transparent in the file. If you then paste this picture into a file that has a color background the PERT chart background will show through. Deselect this option to always make the saved picture use the background color defined in the PERT chart.

Save As Web Pages (File Menu)

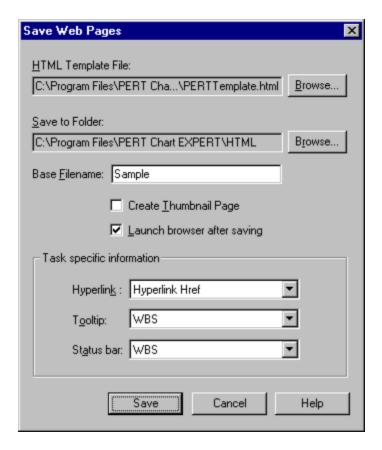
Saves the current PERT chart to a web page in the listed folder using the selected template.

The Save As Web Pages feature allows you to save the PERT chart image and incorporate this image into a pre-defined Web Page. We provide a basic template for this purpose. You can modify this template to do many things but not in PERT Chart EXPERT, you must modify the template in a text editor or HTML editor. The PERT Chart EXPERT program is not intended to be an HTML Editor so you should be familiar with HTML Editing to modify the Template.

Note: See the file, PERT HTML Commands.txt, for additional information on the PERT Chart EXPERT Template commands. This file was copied into the PERT Chart EXPERT directory during Setup.

The basic concepts for saving PERT charts to a Web Page are:

- 1. Create and configure your PERT chart.
- 2. When you want to publish this chart, select the File menu and Save as Web Pages.
- 3. Select the template. If you have created your own or modified an existing template, select it in the field provided.
- 4. Select the Folder to save the HTML pages.
- 5. Choose the other options if necessary.
- 6. Click OK. This will generate the HTML pages. Unless the PERT chart is very small or you have modified the template to produce one output page, there may be several pages of HTML output. Since Browsers are not made to handle large scrollable pages, PERT Chart EXPERT will break up the chart into as many pages as it needs to output the entire chart.
- 7. If you have selected to open your browser upon creation of the Web Pages then the first page of your output will be opened automatically. If you chose not to open your browser upon creation of the Web Pages, you need to open the first page of the HTML output in your browser. The standard template contains buttons for scrolling the HTML documents Left, Right, Up and Down so that if you open the first page of the output you can scroll through each page of your HTML output.



HTML Template - Specify the Template to use for formatting the HTML page.

Save to Folder – Save the HTML output to this folder.

Include thumbnail page – Select to include an initial HTML page that contains small representative pictures of the different pages of the PERT chart as they would appear in the different HTML documents. The thumbnail page will be the first page of the set of files and when opened in a browser you can see the overall layout of the PERT chart in small tiles. Click an image in the thumbnail to go to that HTML page.

Launch browser after saving – Select to launch your default browser after you press the Save button. This starts the browser and loads the first page of the HTML output.

Task specific information – Select a field in Hyperlink to jump to the specified email/website/document address if that field contains a valid address. For example, if you listed an email address in the Text1 field and displayed the Text1 field in your PERT chart, then you could choose the Text1 field in the Hyperlink field and jump to this when selected in your PERT chart embedded in the HTML page. Select a field in Tooltip to display when you hover over a box in the PERT chart embedded in the HTML page. Select a field to display in the Status bar at the bottom of the browser as you hover over a box in the PERT chart embedded in the HTML page.

Page Layouts (File Menu)

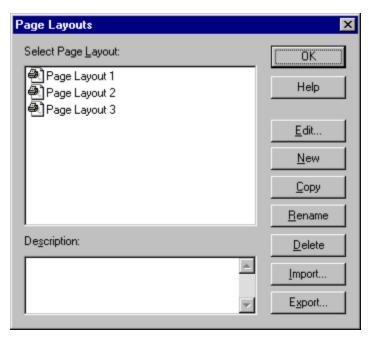
A Page Layout defines how the PERT chart is arranged on the page and also defines how the information is placed around the chart on the page such as Titles, Page Numbers, Legends, etc. Each View in PERT Chart EXPERT uses a Page Layout. Some Views may even share the same Page Layout.

To see which Page Layout a View is using, switch to that View and select File-Page Layouts. The Page Layout that is currently being used by that View will be highlighted (you can also choose File-Page Setup to see which Page Layout is being used). The Page Layouts form allows you edit, create new, copy, rename, delete, import and export Page Layouts.

When a PERT chart is first created, all Page Layouts located in the Layouts directory are copied into the PERT chart. You can specify where the default set of Page Layouts are stored by selecting the Tools-Options menu and setting the path to the Views and Layouts directory.

When creating a new PERT chart, Page Layouts that are currently in the Views and Layouts directory are copied into the existing PERT chart. If you add additional Page Layouts to this directory later, you must Import these additional Page Layouts.

If you make changes to a Page Layout (by selecting Edit) in a PERT chart, these changes are saved with the current PERT chart only. If you want to use a Page Layout created or modified in an existing PERT chart then you would use the Export button to copy a Page Layout from an existing PERT chart. If you copied a Page Layout into the default directory then it would be available to all New PERT charts. Existing PERT charts would require you to Import new or modified Page Layouts.



Edit – Displays the Page Layout dialog box which allows you to configure all of the options for setting up the page. For more information on editing Page Layouts, see Page Layout

New – Creates a New Page Layout within the current PERT chart. Press Edit to configure this new layout. This New Page Layout is only available within the current PERT chart. To make this Page Layout available in other PERT charts, use the Export button.

Copy – Copies the existing Page Layout within the current PERT chart. Press Edit to configure this layout.

Rename – Renames the selected Page Layout.

Delete – Deletes the selected Page Layout from the current PERT chart. This does not delete the selected Page Layout from the default directory of Page Layouts. To delete a Page Layout from your system, use the File-Open command or Windows Explorer.

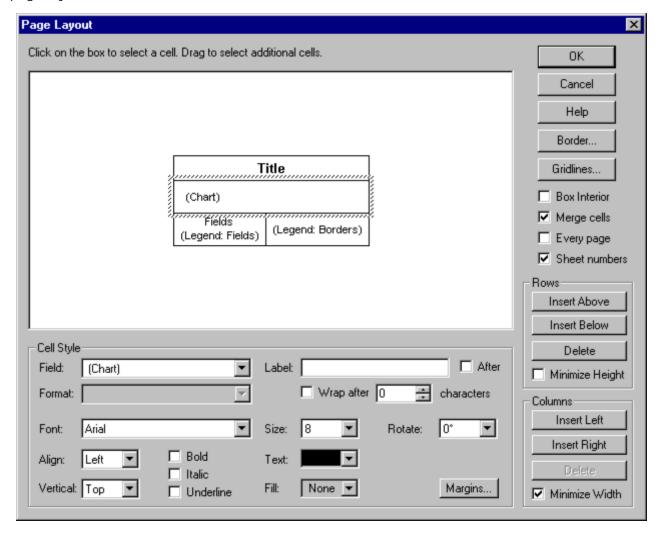
Import – Copies selected Page Layouts from the specified directory into the current PERT chart.

Export – Copies selected Page Layouts from the current PERT chart to the specified directory.

Page Layouts (Edit)

Specify how the pages of the PERT printout are configured. With the Page Layout form you define where to place the PERT chart plus any surrounding fields of information including Titles, Legends and Page Numbers.

When defining or modifying a Page Layout, you arrange a group of cells on a page and one of these cells is the PERT chart itself, referred to as "(Chart)". In the example below, the (Chart) cell shows the placement of the PERT chart within the Page Layout with a Title above and two Legends below. The PERT chart is also left justified on the page. The options for configuring the page layouts are described below.



Headers and Footers

In PERT Chart EXPERT there are not specific items called Headers and Footers. To achieve the effect of headers and footer you place fields of information around the (Chart) cell. The (Chart) cell refers to the actual PERT chart and you can place fields such as Title, Manager, Page Numbers and Legends around this cell.

To add fields to a box, use the Rows and Columns buttons on the right side of form. Rows and Columns are inserted relative to the selected cell in the sample grid in the middle of the form.

Rows

Insert Above – Adds a cell or row of cells above the selected cell.

Insert Below – Adds a cell or row of cells below the selected cell.

Delete – Removes the entire row containing the selected cell.

Minimize Height – Select this option to make the selected row as short as possible. This option is useful for minimizing the height of certain rows when the rows need to be stretc hed within the box. Rows may need to be stretched when data in one area of the box causes the box to be bigger.

Columns

Insert Left – Adds a cell or column of cells to the left of the selected cell.

Insert Right – Adds a cell or column of cells to the right of the selected cell.

Delete – Removes the entire column containing the selected cell.

Minimize Width – Select this option to make the selected column as narrow as possible. This option is useful for minimizing the width of certain columns when the columns need to be stretched within the box. Columns may need to be stretched when data in one area of the box causes the box to be bigger.

Formatting the Fields

To format a field, select the field (cell) by clicking on the appropriate field in the sample grid in the middle of the form. Then, select the formatting options in the Cell Style area.

Following is an explanation of each of the options in Cell Style:

Field – Select the drop down arrow to display a complete list of fields. Choose a field from this list to display in the selected cell. Some fields such as Title, Manager and Company come from the File-Properties menu in PERT Chart EXPERT. These fields can also come from Microsoft Project. Some fields like Actual Cost, % Complete and Work are project totals and come from these calculated fields in Microsoft Project. You can place these fields around your PERT chart and they will display the values that you have typed into these fields or are calculated elsewhere.

Tip: If you simply want to display a field with some text around your chart try displaying the [Blank] field and typing text into the Label field.

The fields with the brackets such as the [Blank], [Legends], [Page Number] and [Chart] fields are only used in Page Layout.

Label – Enter text to display before or after the data in the selected cell. Leave the After checkbox unchecked to display text to the left of the data in the cell or click the After checkbox to display the label to the right of the data in the cell.

Format – Displays options for formatting the selected cell. Some fields do not have formatting options and this option is unavailable.

Wrap after xx characters – Specify the number of characters on which to "Word Wrap". PERT Chart EXPERT attempts to wrap the line of text at the number of characters specified. However, it can only wrap on a space and may wrap at more or less then the number of characters specified.

Font – Sets the font type for the selected cell.

Size – Sets the font size for the selected cell.

Rotate – Displays the text in the cell normal (0°) , top-to-bottom (90°) , or bottom-to-top (270°) .

Align – Sets the alignment of the text Horizontally Left, Center or Right within the cell.

Vertical – Sets the alignment of the text Vertically Top, Center or Bottom within the cell.

Bold/Italic/Underline - Sets the text to Bold, Italic or Underlined for the selected cell.

Text – Sets the color for the text in the cell. Choose the Same as Box Border option to display the text the same color as the border.

Fill – Sets the background color for the cell.

Margins – Allows you to set the left, right, top and bottom margins around the text in the selected cell.

Setting Additional Page Layout Options

Gridlines – Select to configure the gridlines between the fields. The separating lines between the fields that you have displayed in the Summary or Task Boxes are referred to as Gridlines. You can choose to turn them all off, turn them all on or individually select which gridlines appear.

Box Interior – Defines the box interior so fields can be displayed outside of the border. To define the "Box Interior" simply click and drag across the fields (cells) that you want to include inside the border and select Box Interior.

Merge Cells – Makes a field span more then one cell. To merge cells, click and drag to select multiple cells and then select the Merge Cells option.

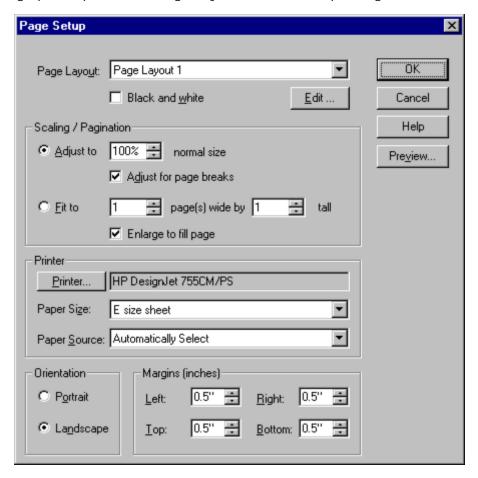
Every Page – Select this option to place this Page Layout on every page of the printout. Deselect this option to stretch this Page Layout across the total number of pages in the printout.

Tip: If you have defined to display page numbers by placing the Page Number field in a cell and you have deselected the Every Page option then page numbering will not work since there is really only one big page that is divided up into sheets based on the size paper you are using. In other words, if you use the Page Number field then you have to place this field on every page and you must choose the Every Page option to do this. Including the Page Layout on every page might not always be desired but numbering the pages might be. If you do not want a Page Layout on every page, try removing the Page Number field and use the Sheet Number feature described below to number the pages in the printout.

Sheet Number – Places a number in the upper right corner of the page corresponding to the number of pages in the printout. This option is useful if you choose to have the Page Layout stretch across the entire printout and you want some kind of page numbering system. The Sheet Number is fixed, you cannot change the font or position of this number.

Page Setup (File Menu)

Specify printing options plus which Page Layout to use when printing.



Page Layout – Select the Page Layout to use from the list of layouts. The Page Layout selected is saved with the current View.

Black and white – Converts the colors in a PERT chart to black and white. All text, lines and shadows are converted to black and all fills are converted to white. This option is useful if you want to print a color PERT chart to a black and white printer and you do not want to convert the colors to shades of gray. If you do not select the Black and white option when printing to a black and white printer, the colors in the PERT chart are automatically converted into shades of gray.

Edit – Select to edit the Page Layout listed in the Page Layout field. This displays the Page Layout dialog box to configure how the PERT chart is arranged on the page and also defines the information that is placed around the chart on the page such as Titles, Page Numbers, Legends, etc. See Page Layout

Scaling / Pagination

Adjust to x% normal size – Reduces or enlarges the printed PERT chart. Select 100% if you do not want to reduce or enlarge the printed PERT chart. When set to 100%, the PERT chart prints to as many pages as necessary depending on the font styles, spacing between boxes, and other chart characteristics. Decreasing this number shrinks the PERT chart and

increasing this number enlarges the PERT chart by the percentage specified.

Adjust for page breaks – Repositions boxes that fall on a page break onto the next page. Instead of splitting a box that appears on a page break, space between boxes is added where necessary to force any box that falls on a page break to appear in its entirety on a subsequent page.

Tip: When using the Adjust for page break option, try selecting Page Layout from the View menu to see how tasks are arranged on the page. While in Page Layout Mode you can also manually drag boxes to avoid page breaks.

Note: Using the Adjust for page breaks option may make your PERT charts bigger since it needs to add space to avoid page breaks.

Fit to x page(s) wide by y tall – Forces the PERT chart to the specified number of pages. The "Fit to page" option shrinks the PERT chart proportionally to fit the number of pages selected (if Enlarge to fill page is not selected). This means that shrinking a 10 page wide PERT chart to 5 pages wide would not only reduce the width of the chart but also the height of the chart by the same amount to stay in proportion.

To increase the size of the PERT chart to the specified number of pages, select the Enlarge to fill page option along with the Fit to page option.

Note: When using the Fit to x page wide by y tall option there is no corresponding "Adjust for page breaks" option. Since the "Fit to Page" option is forcing it to a certain number of pages it would be impossible to impose the extra space necessary to "Adjust for page breaks".

Enlarge to fill page – Automatically increases the size of the chart to fill the remaining space in the printout until it reaches one edge of the chart (width or height). For example, suppose your PERT chart is normally 1 ½ pages wide and ½ page tall. If you select Fit to 2 pages wide by 1 page tall and Enlarge to fill page, PERT Chart EXPERT enlarges the chart until either the chart is a full 2 pages wide or 1 page tall, whichever is reached first. PERT Chart EXPERT only increases the size *proportionally* so once it reaches the edge of the page (the width in the above example) it stops enlarging.

Remember that when using the Enlarge to fill page option, once it reaches one edge of the chart (width or height) it will stop enlarging. If you try to print a very wide PERT chart to a big piece of paper with the Enlarge to fill page option, you may still have quite a bit of white space below your chart if the width of the PERT chart is as wide as the page. When this happens you need to use the features of PERT Chart EXPERT to make it taller and less wide. Try dragging some of the Tasks in your chart down the page or try setting Word Wrap to fewer characters so your boxes get taller and narrower.

Paper

Size – Select the paper size from the list of available sizes. The sizes listed are those supported by the currently selected printer. To change the currently selected printer, choose the Printer button.

Source – Select the source of the paper for the currently selected printer.

Orientation

Portrait – Select to print the PERT chart in Portrait mode.

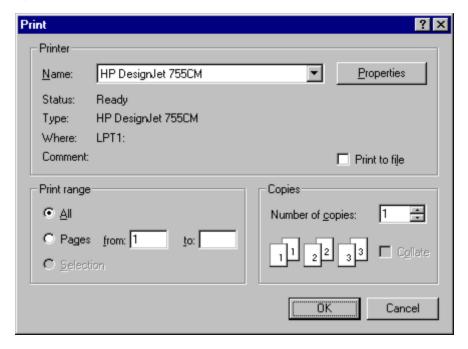
Landscape – Select to print the PERT chart in Landscape mode.

Margins

Specify the distance between the left/right/top/bottom edge of the page and the first printed line.

Print (File Menu)

Specify certain options before you print the PERT chart. Once you select the appropriate options, pressing OK will initiate the print.



Printer

Name – Lists the printers that are set up on your computer.

Status – Shows information about the selected printer.

Type – Displays the type of printer currently selected.

Where – Shows which printer port the printouts will be routed to or displays File if printing to a file.

Comment - Shows information about the selected printer.

Properties – Select to set up options for the selected printer. The options available depend on the features of the printer.

Print to file – Prints the PERT chart to a file instead of routing it directly to a printer. You will be prompted to specify a filename and location. To print this file, choose the Start Menu and select Run. In the Run command line, type the following, replacing the location, filename and printer port as necessary:

Print C:\OUTPUT.PRN LPT1

Print Range

All – Select to print the entire PERT chart.

Pages from x to y – Select to print a certain range of pages.

Selection – This option is not currently supported in PERT Chart EXPERT.

Copies

Numbers of copies – Specify the number of copies that you want to print.

Collate – If you have selected more then one copy, specifies whether you want the copies to be collated.

Print Preview (File Menu)

Displays a sample of what the PERT chart will look like when printed. Print Preview uses the currently selected printer and paper size to display the PERT chart exactly how it will appear when printed.

The information in the lower left corner of the Print Preview window displays useful information regarding the printout. For example, it might display

Scale - Page: 1 of 10 Size: 2 rows by 5 column Scale: 100%

This means that you have selected the "Adjust to" option in Page Setup, it is currently displaying Page 1 of this 10 page chart. The printout is 2 rows and 5 columns of paper and the Scale is 100% as set in the Page Setup dialog box under Scaling.

In the Print Preview window, you can:

Scroll – On a multiple page printout, the buttons in the upper left corner of the Print Preview window allow you to scroll through the different pages of the printout. Click the Left, Right, Up and Down buttons to scroll (a button is only selectable if you can scroll in that direction).

Select a One Page or Two Page window – The One / Two Page button allows you to display the Print Preview window in a single page or double page view. Two pages is the most you can see at a time in Print Preview. If you want to see more then two pages at once, close Print Preview and select View-Page Layout. This displays the entire PERT chart including page breaks (but without the fields around the page as is shown in Print Preview).

Zoom In and Out – The Zoom and Zoom out buttons allow you to see more or less detail in the PERT chart. You can also click anywhere on a page to Zoom In and Out.

Print – Select the Print button to send the PERT chart to the printer. You can also set printer options by clicking the Print button. See also Print printer.

Modify Page Options – Select the Page Setup button to change paper size, print orientation, margins and to change the Page Layout used for this PERT chart. See also Page Setup

Enter Project Properties – Select the Properties button to enter information like Title, Manager, Company, etc. See also Properties

Note: You cannot edit the PERT chart in the Print Preview window, however, if you close Print Preview and choose View-Page Layout, you can see (and edit) the PERT chart including where the page breaks appear.

Unlink (File Menu)

Removes the link to the datasource specified.

What it means to be Linked to a datasource

When you are linked to a datasource (such as a Microsoft Project plan), the data that is displayed in the PERT chart is actually stored in the datasource and not in the PERT chart. The PERT chart is only a reflection of the data in the datasource. Saving the PERT chart linked to a datasource saves the formatting options into the PERT file but the data is stored in the datasource.

Unlinking from a Microsoft Project plan

If you create a PERT chart from a Microsoft Project plan, the PERT chart is linked to the MS Project plan. Any changes you make to the PERT chart are immediately reflected in the Microsoft Project plan. With Microsoft Project you have a dynamic link back to the datasource, which means that you can change the PERT chart and send this information back to Microsoft Project. As mentioned above, when linked to a Microsoft Project plan all of the data is stored in Microsoft Project and the PERT formatting options are saved in the PERT chart file.

Unlinking a PERT chart from a Microsoft Project plan will transfer the data into the PERT chart so that the PERT chart will become a standalone file containing all of the data and formatting.

Important Note: When you Unlink a PERT chart from a Microsoft Project plan you cannot re-link it to this same Microsoft Project plan. This is because you would then have two sets of data, one in Microsoft Project and one in the PERT chart file. If you unlink a PERT chart from an existing Microsoft Project plan you can only send it back to Microsoft Project as a New Microsoft Project plan, you cannot use it to modify an existing Microsoft Project plan.

Unlinking from an MPX or Text file

If you create a PERT chart from an MPX or Text file this PERT chart is linked to these files but not dynamically. In other words, you cannot modify the PERT chart and have this modify the MPX of Text file.

You can select to Unlink from an MPX or Text file by selecting the Unlink command. However, Unlinking from a MPX or Text file will happen automatically if you change the data in the linked PERT chart (if you add a task, for example). Since PERT Chart EXPERT cannot write back to the MPX or Text file and since you have changed the data it must Unlink from the MPX or Text file to manage the data properly.

See also Creating PERT charts from Microsoft Project plans

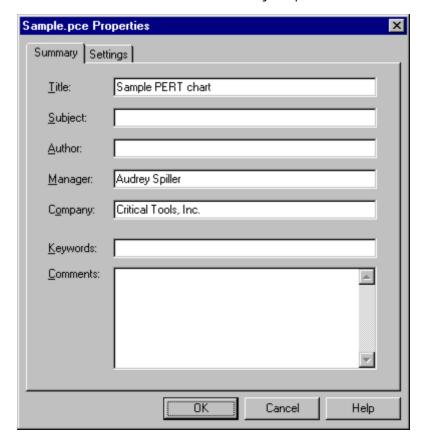
Properties (File Menu)

Enter fields to describe the PERT chart using the Summary tab or set default project information using the Settings tab.

Summary

Enter the desired information into the appropriate fields. These fields can then be displayed in PERT chart printouts or in a saved web page.

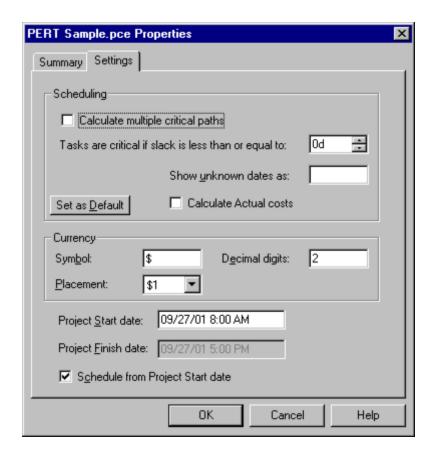
The various fields under the Summary tab are similar to the Properties option in Microsoft Project (under File-Properties). If you enter them in Microsoft Project they appear here in PERT Chart EXPERT when you create a PERT chart from Microsoft Project. If you enter the Summary data in PERT Chart EXPERT first and then create a Microsoft Project plan from this PERT chart then this information is transferred to the Microsoft Project plan.



Hint: You can also enter Summary information while you are in Print Preview by selecting the Summary Info button in Print Preview.

Settings

Sets the current PERT chart settings.



Scheduling

Calculate multiple critical paths – Select this to have PERT Chart EXPERT calculate the critical path to each end point in the project. Each network of tasks (a single task is considered a single network) will calculate its own critical path rather then to a common end point. See also <u>Critical Path</u>.

Tasks are critical if slack is less than or equal to: – Set this to the slack amount you wish to use to calculate whether a task is critical or not. By default, a task is considered critical if it has 0 (zero) slack. You can change this to a higher or lower amount.

Show unknown dates as – Converts any unknown date in a date field to the specified value (or converts the unknown date to a blank if this field is left blank). This is useful for removing unwanted values in date fields.

For example, if you display the Microsoft Project field "Actual Start", it may display the value NA. Use this field to convert the NA to some other text or to a blank field by leaving the "Show unknown dates as" field blank.

Calculate actual costs – Select this if you want Actual and Remaining Costs to be automatically calculated based on the % complete of the task.

Set as default – Select to make the options in the Scheduling section the default for all new PERT charts.

Currency

Symbol – Sets the default currency symbol for the current PERT chart.

Placement – Sets the placement of the currency symbol in relation to the currency amount.

Decimal Digits – Specifies the number of decimal digits for the currency.

Project Start date – Set the start date of the current PERT chart.

Project Finish date – Set the finish date for the current PERT chart.

Schedule from Project Start date – Select this to schedule tasks forward from the Project Start Date. Deselect this to schedule tasks backwards from the Project Finish Date.

Most Recently Used Files (1,2,3,4 on File Menu)

Displays the most recently used files in PERT Chart EXPERT. Select the number to open that file.

Exit (File Menu)

Closes the PERT Chart EXPERT program.

Edit Menu

Undo (Edit Menu)

Removes the last command performed in PERT Chart EXPERT. When using PERT Chart EXPERT to create a standalone PERT chart, most operations can be undone.

IMPORTANT NOTE: When using PERT Chart EXPERT to modify an existing Microsoft Project plan, certain operations cannot be undone. Adding, Deleting or Moving tasks in a PERT chart that is linked to a Microsoft Project plan cannot be undone. The reason for this is that PERT Chart EXPERT uses OLE automation to make Microsoft Project perform required operations. Unfortunately there is no way to tell Microsoft Project to Undo any operation that is perform ed on it using OLE. We have worked around this in a few instances. For example, when renaming a task in a PERT chart that is linked to Microsoft Project you are able to Undo this but more involved operations like adding and deleting tasks are too complex to Undo.

Redo (Edit Menu)

Reverses the action of the Undo command. To undo recent actions one at a time, click Undo. If you didn't want to undo an action click Redo.

Cut (Edit Menu)

Cuts (deletes) the selected task and places it on the Clipboard so you can paste it elsewhere.

Select another task in the PERT chart and choose Edit-Paste to insert the cut task before the selected task. You can also Right-Click on a task to Paste.

Copy (Edit Menu)

Copies the selected task and places it on the Clipboard so you can paste it elsewhere.

Select another task in the PERT chart and choose Edit-Paste to insert the copied task before the selected task. You can also Right-Click on a task to Paste.

Paste (Edit Menu)

Pastes previously Cut or Copied tasks before the selected task.

Insert Task (Edit Menu)

Inserts a new task before the selected task.

Tip: You can also use the Ins key on the keyboard.

Delete (Edit Menu)

Deletes the selected Task. If you delete a Task you are not prompted to confirm this deletion. Select Undo if you want to undo the delete.

Task Information (Edit Menu)

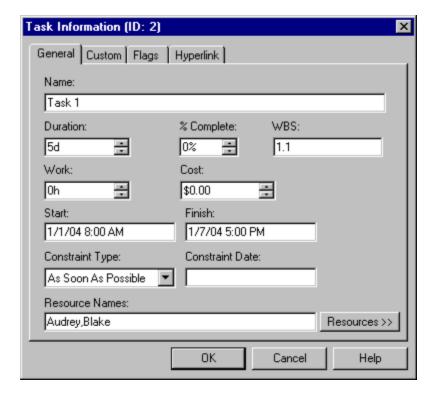
The Task Information form can be found by selecting it from the Edit menu, doubleclicking on a task or by selecting a task and clicking on the Task Information toolbar button.



The Task Information toolbar button

The Task Information form is used for both Summary Tasks and Tasks. If you display the Task Information form for a Summary Task there may be some fields in the form that cannot be edited due to the fact that they are rolled up (calculated) fields.

The Task Information form contains 4 Tabs of information. The form and descriptions of each Tab is shown below:



General

Name – Enter a name or description of the task.

Duration – Enter the duration for the task. The duration can be entered in Minutes, Hours, Days, Weeks or Months by typing in M,H,D,W or MO (for example, 2w for 2 weeks, or 10d for 10 days).

% Complete – Enter the Percent Complete for the task.

WBS – Enter the WBS number for the task. If you enter data into the WBS field yourself, PERT Chart EXPERT will no longer calculate this number for you even if you move the task. To make PERT Chart EXPERT calculate the WBS field after you have entered information into this field, remove the data that you entered. PERT Chart EXPERT will then calculate this data again.

Work - Enter the Work (Hours) for the task.

Cost - Enter the Cost for the task.

Start – Enter a Start date for the task. The default Finish time is set in the Tools-Chart Settings menu.

Finish – Enter the Finish date for the task. The default Finish time is set in the Tools-Chart Settings menu.

Constraint Type – Select a constraint from the list. For more information on how to use constraints, see <u>Scheduling</u>

Constraint Date – Enter a date for the constraint. For more information on how to use constraints, see <u>Scheduling</u>

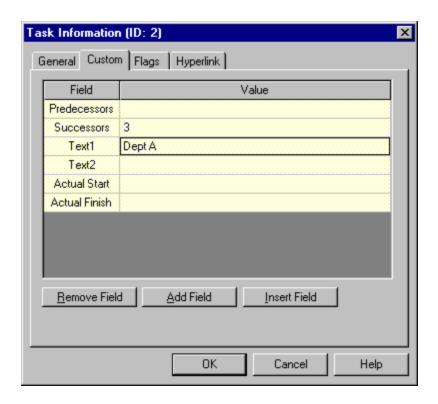
Resource Names – Lists resources that are assigned to this task. You cannot assign resources into this field directly, you must use the Resources button.

Resources >> - Displays the Assign Resource form. In the Assign Resource form, select a resource (or resources) to assign to this task and press OK. The assigned resources will then appear in the Resource Names field. If the Resources button is not available it means that you do not have resources defined in this project. You must define the list of resources before you can assign them. To define the Resources for this project select the Tools-Resources menu.

Custom

The Custom Tab allows you to list additional fields for entering data. For example, if you wanted to enter data into the Actual Start and Actual Finish fields then you could list these fields in the Custom Tab since they are not fields that appear in the General Tab.

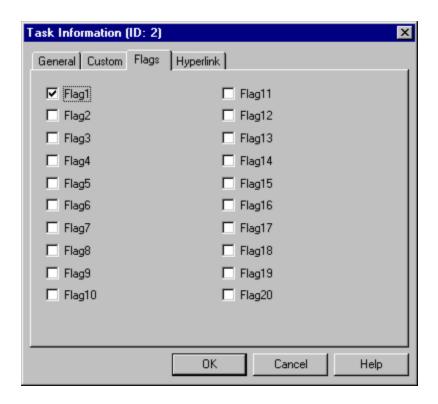
Choose the Add Field button to add a field to the end of the list. Choose Insert Field to instead a field above the selected field. Choose Remove Field to remove the selected field.



Flags

The Flag Tab allows you to quickly set a Flag field for a task. The Flag fields are simple Yes/No fields that are displayed in this form as checked or non-checked fields (checked means Yes and non-checked means No). The Flag fields in PERT Chart EXPERT correspond to the Microsoft Project Flag fields but you can use them independent of Microsoft Project to define colors in the PERT chart.

To use the Flag fields to define colors, select the Format-Borders menu and select the "Borders Based on Flags" option. Then, define different colors/styles/shadows for each Flag field. Once this is done, select tasks in the PERT chart and use the Flag Tab in the Task Information form to define that a specific task use a specific Flag, as shown below:



For more information on the different ways to color your PERT chart dependent on Critical Path, the Flag fields or Progress, see <u>Borders</u>.

Hyperlink

The Hyperlink Tab allows you to enter a Hyperlink to go to a specified document or web page from within PERT Chart EXPERT. When you enter a Hyperlink file or web page address you can go to this link from within PERT Chart EXPERT by clicking the Hyperlink button associated with the task. This button is a small square that appears above and to the left of the task. Clicking this button jumps to the specified link.

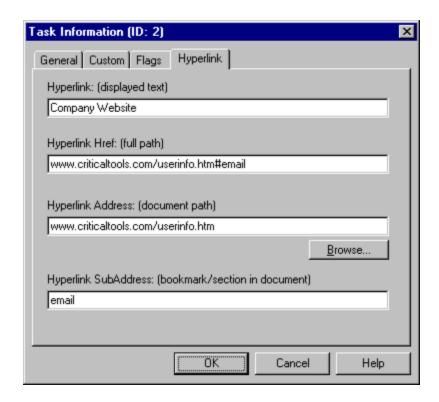
There are four Hyperlink fields in the Task Information form. These four fields work together to point to one hyperlink location for a task (you cannot enter more than one hyperlink per task). They are:

Hyperlink – This is the "displayed" name for the Hyperlink. By default when you enter a Hyperlink Address the Hyperlink field copies this information but if you type text into the Hyperlink field after the link is created it will display this text.

Hyperlink Href – This is the full address of the document or web page. It is the concatenation of the Hyperlink Address and Hyperlink Subaddress fields. You can enter the complete address in this field or enter the Hyperlink Address along with the Hyperlink Subaddress and the Hyperlink Href will be the sum of the two.

Hyperlink Address – This is the main document or web page that a task is linked to.

Hyperlink Subaddress – The Hyperlink Subaddress goes to a certain place within the link referred to in the Hyperlink Address field. The most common use for this is to jump to a Bookmark (section within a document or web page).



Find (Edit Menu)

Searches the PERT chart and selects the first occurrence of the text entered in the "Find what" field. The Find feature only looks for text that is currently displayed in the chart.

Select the Find Next button to find the next occurrence of the text. You can also press Cancel and press F3 to find each occurrence of the text.

Find Next (Edit Menu)

Searches the PERT chart and selects the next occurrence of the text entered in the Find form.

Goto (Edit Menu)

Searches for and selects a task in the PERT chart based on certain criteria. Type in the Id or WBS number for the task you are looking for and PERT Chart EXPERT will select this task.

Select All (Edit Menu)

Selects all tasks in the PERT chart.

Additional ways to select tasks in PERT Chart EXPERT:

- 1. Press Ctrl-A to select all tasks in the chart.
- 2. Click and drag in the PERT chart to enclose any number of tasks. Only those tasks that are fully enclosed become selected.

Note: if you click and drag and do not enclose any tasks then a new task is inserted (clicking and dragging in empty space is the command to add a new task).

3. Ctrl-Click (hold the Ctrl key down while selecting various tasks with the mouse) to select a random set of tasks.

View Menu

Normal (View Menu)

Displays the PERT chart in a regular window without page breaks or other output indicators.

Page Layout (View Menu)

Displays the PERT chart showing page breaks as they would appear if printed. Page breaks are displayed based on the currently selected printer and paper size. Go to File-Page Setup to change printers and/or paper size.

The Page Layout mode is useful for moving tasks around to avoid page breaks but you can also have PERT Chart EXPERT automatically adjust for page breaks by selecting this option in File-Page Setup.

Hint: Try the Zoom out command (or the View-Zoom menu) when in Page Layout mode to see the entire PERT chart and all pages of the chart.

Online Layout (View Menu)

Displays the PERT chart showing page breaks as they would appear if you selected Save As Web Pages for this PERT chart. Page breaks are displayed based on the size of the image specified in the template used to create the Web Pages.

See also <u>Save as Web Pages</u>

Toolbars (View Menu)

Turns the Toolbars on and off. There are several different toolbars that can be shown or hidden. A checkmark next to the Toolbar in the list indicates that it is currently selected (on).

Views

A View is a collection of formatting options that make up how your chart is displayed. The fields that are displayed in the boxes, the box colors, the style of connecting lines between boxes are a few of the things that make up a View. PERT Chart EXPERT comes with several pre-defined Views. You can use these, modify these or define your own.

How Views Work

There are several pre-defined Views stored in the folder where PERT Chart EXPERT was installed. These Views have a .PCV extension and are called PERT View 1, PERT View 2, etc. When you create a New PERT chart or create a PERT chart from Microsoft Project plan for the first time it copies these Views into the current chart. As you switch Views in the chart and modify the formatting of the chart this information is saved in two ways:

- 1. If you save the PERT chart, all changes made to the Views are saved within this chart. The next time you open this saved PERT chart all of your Views will be as you saved them.
- 2. As you close a PERT chart, all of the modified Views in this chart are automatically saved over the default Views in the folder where the Views are stored. This means that when you open another New chart or create another PERT chart from a Microsoft Project plan your Views will have a new look based on how you modified the Views in your last chart.

Note: if you do not want to automatically save the changed Views in a chart as you close it, select Tools-Options and change the "When closing a chart" option to "Prompt to save changed Views" or "Do not save changed Views". See Options

Displaying Different Views

You can use the View toolbar located in the upper right corner of the screen to switch Views and to create or copy a View.



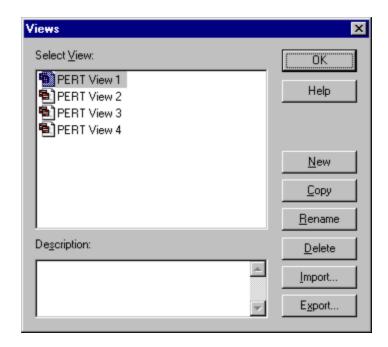
Click the arrows to display different views of the PERT chart, click ... to copy or create a new View

Creating and Modifying Views

To modify a View, switch to a View using the arrows on the View Toolbar or use the Drop Down arrow on the View Toolbar to select a specific View. When a View is displayed, anything you change in the PERT chart that is not data or program specific is saved in that View. The items in the Format menu (except for Custom Box Settings) and items selected in the View menu are most of the formatting options that are saved within a View.

To modify a View, it is best to select a View that is close to what you want and m ake additional changes from there.

You can also create new Views. To create a New View, select the View-Views menu or the ... button on the View toolbar.



The Views form allows you to create New Views, Copy, Rename, Delete, Import and Export Views. Selecting a View from this list and clicking OK will apply this View to the PERT chart. The other options are described below:

New – Creates a New View with minimal formatting options. Once created, click OK to apply this View to the current PERT chart and then modify this View using the Format and View menus.

Copy – Makes a copy of the selected View.

Rename – Allows you to rename the selected View. You can also press F2 to edit or rename a View.

Delete – Removes the selected View from the current PERT chart file. This does not delete the View from the directory where the Views are stored it only deletes the selected View from the current PERT chart.

Import – Allows you to import a View into the current PERT chart.

Export – Allows you to export the selected View from the current PERT chart.

Open Group

When Grouping, this option displays the tasks for the selected group if the tasks are hidden. You can also use the corresponding toolbar button as shown below:



Open Group Toolbar button

To reveal all tasks in the PERT chart, choose the Show All command or toolbar button. See Show All

Close Group (View Menu)

When Grouping, this option hides the tasks in the selected group. You can also use the corresponding toolbar button as shown below:



Close Group Toolbar button

Show All (View Menu)

Reveals all tasks throughout the PERT chart that were hidden using the Close Group, Trace feature or Filtering from MS Project. You can also use the corresponding toolbar button as shown below:



The Show All Toolbar button

Focus (View Menu)

When Grouped, this option displays the selected group (and any subgroups to the selected group) and hides the rest. You can also use the corresponding toolbar button as shown below:



Focus Toolbar button

This is useful for isolating a section of your PERT chart for display or printing. Select this button again to restore focus to the entire PERT chart.

Show Only Groups (View Menu)

When Grouped, this option displays only the group headers and hides all tasks in the chart. You can also use the corresponding toolbar button as shown below:



The Show Only Groups Toolbar button

Progress Marks (View Menu)

Turns the Progress Marks on and off. A checkmark next to the word Progress Marks in the View menu indicates that it is currently selected (on).

Progress Marks indicate the progress of tasks (and summary tasks) by placing an X or a single diagonal line through the task box based on the Percent Complete of the task. Progress Marks use the Percent Complete field to determine the progress of the tasks in the PERT chart using the following rules:

- Displays an X through the box if the task is 100% complete.
- Displays a diagonal line through the box if the task is 1% to 99% Complete (in progress).
- Does not display Progress Marks if the task is 0% complete.

Using Progress Marks is one of a number of different ways to display progress in a PERT c hart. You can also show progress using the following features:

- Use Colors and Border styles to display progress for your tasks in the PERT chart See Borders
- Fill in a Field for a task box based on progress. See <u>Fields</u>

Hyperlink Symbols (View Menu)

Turns the Hyperlink Symbol on and off. A checkmark next to the Hyperlink Symbols option indicates that it is currently selected (on).

Hyperlink Symbols allow you to quickly jump to the Hyperlink associated with a task by clicking the small symbol next to the task. If Hyperlink Symbols are displayed in the PERT chart, a Task with a Hyperlink displays a small box next to that task. Click this box to go to that Hyperlink.

Hyperlink Symbols can be positioned in different places around a task box. See <u>Chart</u> for information on how to change the location of the Hyperlink Symbol.

Zoom (View Menu)

Displays the Zoom dialog box for adjusting the PERT chart to specific zoom factors.



Select from one of the preset zoom factors (200% - 25%) to enlarge or shrink the PERT chart on the screen to the size selected.

Select Fit Chart Height to shrink the PERT chart to fit vertically on the screen.

Select Fit Chart Width to shrink the PERT chart to fit horizontally on the screen.

Select Fit Chart to shrink the entire PERT chart to one screen.

Select Custom to enter a specific zoom factor.

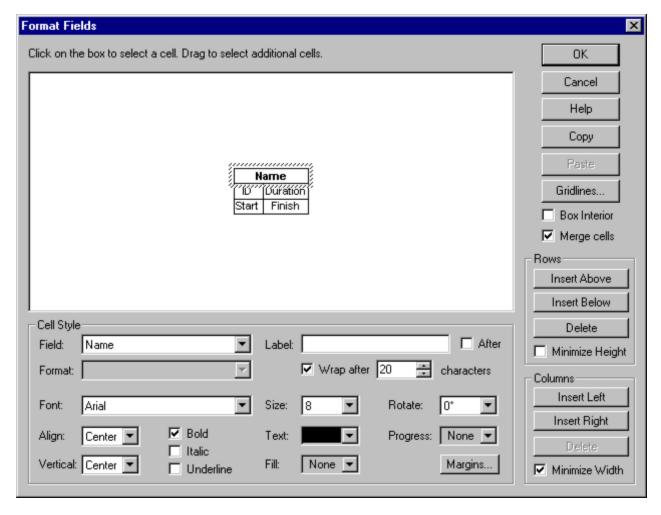
You can also Zoom In and Zoom Out by using the Zoom In and Zoom Out buttons on the Toolbar.

Format Menu

Fields (Format Menu)

Allows you to define the arrangement of fields and the formatting of these fields for the Task boxes in the PERT chart. You can arrange an unlimited number of fields in and around the boxes in your PERT chart using the form shown below.

The Format Fields form allows you to define the arrangement and formatting of fields within the box, however, it is not where you define the box colors, box shapes and box shadows. To define the box colors, shapes and shadows go to the Borders dialog in the Format menu. See Borders.



Adding/Deleting and Arranging Fields in the Task Boxes

To add fields to a box, use the Rows and Columns buttons on the right side of form. Rows and Columns are inserted relative to the selected cell in the sample grid in the middle of the form.

Rows

Insert Above – Adds a cell or row of cells above the selected cell.

Insert Below – Adds a cell or row of cells below the selected cell.

Delete – Removes the entire row containing the selected cell.

Minimize Height – Select this option to make the selected row as short as possible. This option is useful for minimizing the height of certain rows when the rows need to be stretc hed within the box. Rows may need to be stretched when data in one area of the box causes the box to be bigger or when you use the feature to Match Box Sizes.

Consider the example below where the text on the side makes the box tall. By making the box taller some rows need to stretch. If you did not select the Minimize Height option on any of the rows then all rows are stretched evenly, like this:

side.	Summary Task	
on the	5d	0%
Text o	1/1/00	2/29/00

If you select the second and third rows in the grid and select the Minimize Height option then it would look like this:

on the side.	Summa	ıry Task
¥	5d	0%
Te	1/1/00	2/29/00

It minimizes the space in the second and third rows and stretches the first row to fill the remaining space.

Note: If you select the Minimize Height option on all of the rows and rows need to be stretched (as in this example) then it will evenly distribute the space in the rows much like the first picture above.

Columns

Insert Left – Adds a cell or column of cells to the left of the selected cell.

Insert Right – Adds a cell or column of cells to the right of the selected cell.

Delete – Removes the entire column containing the selected cell.

Minimize Width – Select this option to make the selected column as narrow as possible. This option is useful for minimizing the width of certain columns when the columns need to be stretched within the box. Columns may need to be stretched when data in one area of the box causes the box to be bigger or when you use the feature to Match Box Sizes.

Consider the example below where the name of the task makes the box wide. By making the box wide some columns need to stretch. If you did not select the Minimize Width option on any of the columns then all columns are stretched evenly, like this:

This is a long Summary Task name		
4	5d	0%
1	1/1/00	2/29/00

If you select the first column in the grid and select the Minimize Width option then it would look like this:

This is a long Summary Task name		
4	5d	0%
Ľ	1/1/00	2/29/00

It minimizes the space in the first column and evenly spaces the remaining columns.

Note: If you select the Minimize Width option on all of the columns and columns need to be stretched (as in this example) then it will evenly distribute the space in the columns much like the first picture above.

Formatting the Fields in the Task Boxes

To format a field, select the field (cell) by clicking on the appropriate field in the sample grid in the middle of the form. Then, select the formatting options in the Cell Style area.

Following is an explanation of each of the options in Cell Style:

Field – Select the drop down arrow to display a complete list of fields. Choose a field from this list to display in the selected cell. The list of fields is similar to those used in Microsoft Project 2000. For a complete list of these fields and their meanings, see Fields in PERT Chart EXPERT.

Label – Enter text to display before or after the data in the selected cell. Leave the After checkbox unchecked to display text to the left of the data in the cell or click the After checkbox to display the label to the right of the data in the cell.

5d 0%		Summary Task	
4 /4 /00 2 /200 /00	-	5d	0%
1/1/00 2/29/00		1/1/00	2/29/00

5 days Duration	
2 Juays Duration 0 /0	
Start: 1/1/00 Finish: 2/29/00	

No Labels for the cells.

The Id, Start and Finish fields have labels before the date. Select the After checkbox to display the label following the field as in the Duration field above.

Format – Displays options for formatting the selected cell. Some fields do not have formatting options and this option is unavailable.

Wrap after xx characters – Specify the number of characters on which to "Word Wrap". PERT Chart EXPERT attempts to wrap the line of text at the number of characters specified. However, it can only wrap on a space and may wrap at more or less then the number of characters specified.

Font – Sets the font type for the selected cell.

Size – Sets the font size for the selected cell.

Rotate – Displays the text in the cell normal (0°) , top-to-bottom (90°) , or bottom-to-top (270°) .

Align – Sets the alignment of the text Horizontally Left, Center or Right within the cell.

Vertical – Sets the alignment of the text Vertically Top, Center or Bottom within the cell.

Bold/Italic/Underline - Sets the text to Bold, Italic or Underlined for the selected cell.

Text – Sets the color for the text in the cell. Choose the Same as Box Border option to display the text the same color as the box border. For example, this is useful if you were displaying Critical tasks in the chart as red boxes, Noncritical tasks in the chart as Blue boxes and you wanted the text within the boxes to match these colors.

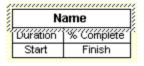
Fill – Sets the background color for the cell.

Progress – Displays a fill pattern within the cell based on the completion (% Complete) of the task.

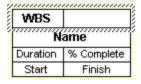
Margins – Allows you to set the left, right, top and bottom margins around the text in the selected cell.

Setting Additional Task Box Options

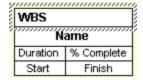
Merge Cells – Makes a field span more then one cell. To merge cells, click and drag to select multiple cells and then select the Merge Cells option. In the example below, the WBS field is added above the Name field and merged into one cell aligned at the left. To do this:



1. Start by inserting a row above the Name field. Select the Name field and select the Insert Above button.



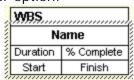
2. When the row is added, select the left cell and choose the WBS field from the Field drop down list. Then, click and drag from the WBS cell across the empty cell on the right to highlight both cells.



 Select the Merge Cells option to make the WBS field span the width of the box. You could also select the Align Left option to place the field on the left margin.

Box Interior – Defines the box interior so fields can be displayed outside of the box. To define the "Box Interior" simply click and drag across the fields (cells) that you want to include inside the box and select Box Interior.

Using the above example, to make the WBS field appear outside of the box, click and drag across the Name, Duration, %Complete, Start and Finish fields to highlight these field. Then, select the Box Interior option.



Name
Duration % Complete
Start Finish

Highlight the fields that make up the interior of the box.

Click the Box Interior option to make the WBS field appear outside of the box.

Selecting the Box Interior option removes the box border and any gridlines associated with the cell outside of the box. To replace the gridlines, select the Gridlines option.

Gridlines – Select to configure the gridlines between the fields. The separating lines between the fields that you have displayed in the Summary or Task Boxes are referred to as Gridlines. You can choose to turn them all off, turn them all on or individually select which gridlines appear.

Copy – Select to copy the arrangement of fields for pasting into the Summary Boxes or Task Boxes form. For example, if you are currently configuring Task Boxes and you wanted to use this same arrangement of fields for your Summary Boxes you would press Copy while in the Task Boxes form then go to the Summary Boxes form and press Paste.

Paste – Select to paste the copy of the fields into the current Sum mary or Task Boxes form. You must have previously selected Copy from either the Summary Boxes or Task Boxes form for this to work.

Borders (Format Menu)

Specify colors for tasks in the PERT chart based on different types of tasks. The Borders dialog box allows you to choose chart-wide color settings for the current View based on the Critical or Noncritical status of a task, the Flag Field status or the Progress of a task. You can set the colors for Tasks in PERT Chart EXPERT in the following ways:

- Chart-wide based on the Critical and Noncritical status of the tasks.
- Chart-wide based on the Flag Fields set for the tasks.
- Chart-wide based on the Progress of the tasks.
- Individually for each task, thus overriding the above-mentioned Chart-wide option currently selected.

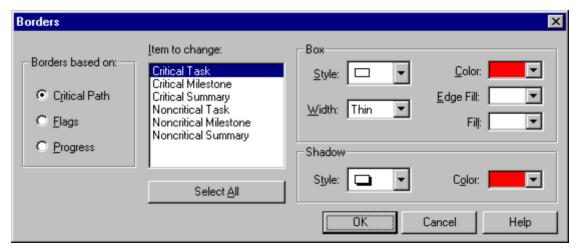
The settings you choose in the Borders dialog are only for the current View, therefore, you could have one View that displayed the Critical and Noncritical status of your PERT chart and another view that displayed the PERT chart based on the Progress of tasks.

Whichever border style you use for the current View also affects the Legend when you print the chart. The Legend prints the border definitions based on what you select in the Borders dialog.

Tip: You can rename the entries in the Item to change list by selecting the Tools-Border Names option. For example, Critical Task could be renamed to Critical Path Activity. This is also useful if you wish to translate the border style titles. See <u>Border Names</u>

Borders based on Critical Path

You can set the colors, borders and shadows of the Tasks, Summary Tasks and Milestones in the PERT chart based on whether these items are Critical or Noncritical.



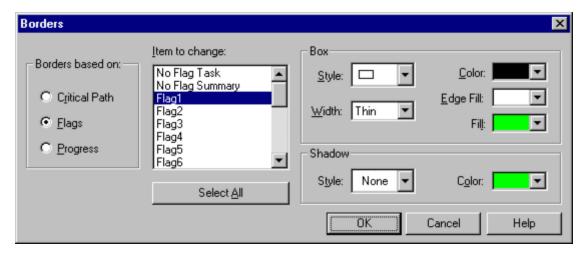
Click the Critical Path option to configure the current View to display tasks based on the Critical and Noncritical status of those tasks. Select the type of task to change (Critical Task, Critical Milestone, etc.) and define the style of box, colors and shadow accordingly.

Use the Ctrl key to select multiple items in the "Item to change" list. To do this, hold down the Ctrl key on your keyboard while you select multiple items with your mouse.

Microsoft Project users - PERT charts created from Microsoft Project plans use the Critical field that Microsoft Project calculates. Microsoft Project automatically calculates the Critical Path and places a Yes/No in the Critical field if a task is Critical or Noncritical. When you create a PERT chart from a Microsoft Project plan, PERT Chart EXPERT automatically looks at the Critical field to determine if a task is Critical or Noncritical.

Borders based on Flags

You can set the colors, borders and shadows of the Tasks, Summary Tasks and Milestones in the PERT chart based on Flag settings. Flags in PERT Chart EXPERT are simple Yes/No settings that you can apply to a task. There are 20 Flag fields (Flag1 through Flag20). By using the Flag fields, styles for a Flag field can be defined and then the Flag setting can be applied to tasks in your PERT chart. The task color will then display per the flag definition.

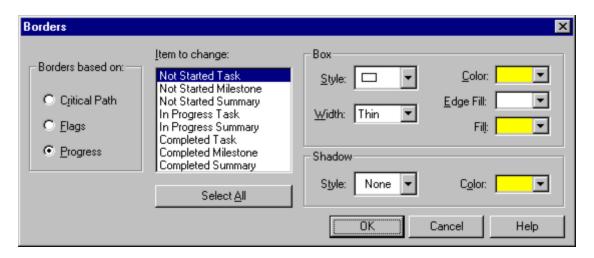


For example, if you wanted certain boxes in your PERT chart to be Green, some Purple and others Yellow then you could define the Flag 1 borders to be Green, Flag 2 to Purple and Flag 3 to Yellow. Then for each task that you wanted to be Green you would doubleclick that task, select the Flag tab in the Task Information form and click Flag 1. For each task that you wanted to be Purple you would select those tasks, set Flag 2 and so on.

If you are using Microsoft Project, the Flag fields in PERT Chart EXPERT correspond directly to the Flag fields in Microsoft Project. They can be set in Microsoft Project or in PERT Chart EXPERT.

Borders based on Progress

You can set the colors, borders and shadows of the Tasks, Summary Tasks and Milestones in the PERT chart based on the progress of the tasks.



Define colors for tasks (Milestones and Summary Tasks included) that have not started, are in progress or have completed. The % Complete (percent complete) field is used to determine the progress of a task using the following definition:

- If a task has 0 (zero) in the % Complete field than the task is considered Not Started.
- If a task has between 1 and 99 in the % Complete field than the task is considered In Progress.
- If a task has 100 in the % Complete field than the task is considered to be Completed.

Individually Coloring Boxes in the PERT chart

If you just want to select various boxes in the PERT chart and color them, you do not need to use the Borders dialog box to do this. Instead, just select a box on the screen and select Format-Custom Box Settings (or right click on a task and choose Custom Box Settings). The Custom Box Settings form allows you to color the selected box(es) as exceptions to the box colors defined in the Borders dialog box described above. These colors remain a part of that box until you delete the task or Reset it using the Custom Box Settings form. See also <u>Custom Box Settings</u>

Chart (Format Menu)

Displays various features used to configure the default options in a chart. The options available apply to the current View. This allows each View to have its own default.

Box Arrangement – Specify the method of placing boxes in the chart. Choose "Top Down From Left" to arrange boxes from the top left and down based on Predecessors, Successors and Id. Choose "Top Down - Critical First" to place them from the top left and down based on Predecessors and Successors but also attempt to place Critical Tasks first across the top of the chart.

Background Color – Specify the background color of the chart.

Hyperlink Symbols – Specify where to place the Hyperlink symbol associated with a task.

Row Spacing – Specify any extra space to include between rows in the chart.

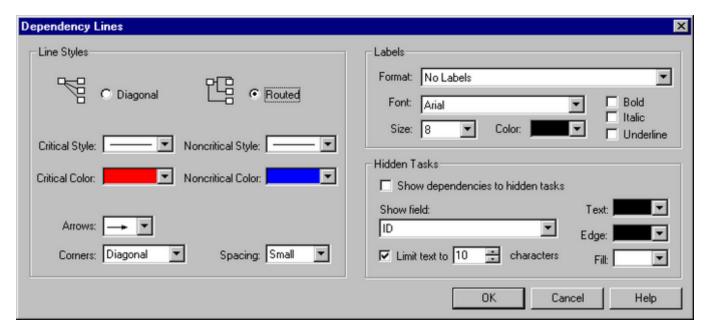
Column Spacing – Specify any extra space to include between columns in the chart.

Match box heights – Specify that all boxes are the same height (all boxes will be as tall as the tallest box).

Match box widths – Specify that all boxes are the same width (all boxes will be as wide as the widest box).

Dependency Lines (Format Menu)

Define dependency line styles plus any text associated with dependency lines in the PERT chart.



Line Styles

Define how the dependency lines are displayed in the PERT chart.

Diagonal – Draws dependency lines straight from the middle of one task box to another. Dependency lines may cut though other boxes or overlap other dependencies.

Routed – Draws dependency lines around task boxes in separate channels where necessary.

Critical Style – Define the line style and thickness of the critical dependency lines.

Critical Color – Define the line color of the critical dependency lines.

Noncritical Style – Define the line style and thickness of the noncritical dependency lines

Noncritical Color – Define the line color of the noncritical dependency lines.

Arrows – Define the style and size of arrowhead that is drawn at the end of each dependency line.

Corners – Define the shape of the corners when using the channeled (or right angle) dependency style. Note that some printers do not print the "Curve" corner style properly. We recommend using the Diagonal corner style for best results.

Spacing – Define the amount of space between dependency lines in the chart.

Labels

Select to display information about the dependency directly on the dependency line.

Format:

No Labels – Does not display any information about the dependency on the dependency line.

Dependency Type + Lag – Displays the type of dependency plus any lag on the dependency line. For example, it would display FS or FS+5d for a Finish to Start or Finish to Start plus a 5 day lag.

Lag Only – Displays only lag amounts that are not 0 (zero) on the dependency line.

Predecessor ID – Displays the type of dependency plus the Id of the predecessor on the dependency line.

Predecessor ID (without Dependency Type) – Displays the Id of the predecessor on the dependency line.

Unique Predecessor – Displays the type of dependency plus the Unique Id of the predecessor on the dependency line.

Unique Predecessor (without Dependency Type) – Displays the Unique Id of the predecessor on the dependency line.

WBS Predecessor – Displays the type of dependency plus the WBS number of the predecessor on the dependency line.

WBS Predecessor (without Dependency Type) – Displays the WBS number of the predecessor on the dependency line.

Font/Size/Color, etc. – Define the text attributes for the dependency line labels. These attributes also apply to the text at the end of Hidden Dependency Lines if you choose the option described below.

Hidden Tasks

Select this option to show dependency identifiers to tasks that are currently not displayed (hidden) in the chart.

Show dependencies to hidden tasks – Select this option to turn on this feature and to show the dependency plus a node at the end of the dependency line to identify the hidden task.

Show Field – Select the information to include at the node at the end of the dependency line such as the Id or the Name of the task.

Limit text to xx characters – Enter a maximum number of characters to include in the node for hidden tasks. Text will be truncated after the number of characters specified.

Text – Select the color for the text in the node.

Edge – Select the border color of the node.

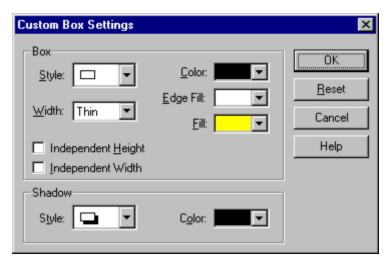
Fill – Select the color for the interior of the node.

Custom Box Settings (Format Menu)

Define custom settings for the selected task(s) in the PERT chart. Normally in a PERT chart you define box styles based on the type of task that is being displayed. For example, Critical Tasks in your chart may appear with a Red Shadow and Noncritical Tasks with Blue Shadows. You can override these styles by selecting certain tasks in your chart and using Custom Box Settings.

You can access Custom Box Settings from the Format menu under Custom Box Settings. Or, you can right click on a Task and choose the Custom Box Settings option.

You can apply Custom Box Settings to a single task by simply selecting that task and bringing up the Custom Box Settings form. Or, you can select multiple tasks and apply the Custom Box Settings to all selected tasks.



Style (Box) – Define the shape of the box by choosing from the various styles in this list.

Width (Box) – Define the thickness of the border by choosing Thin, Medium or Thick from the list.

Color (Box) – Define the color of the box from the list of colors.

Edge Fill (Box) - Define the color of the outside edge of the box. The Edge Fill color only applies if you have defined a Style that contains an area (edge) outside of the box. For example, defining a Red Edge Fill color would only work in the second and third examples below.



Edge Fill is ignored.

No edge, therefore the This box style contains an edge for the Edge Fill.

This box also contains an edge for the Edge Fill

Fill (Box) – Define the color of the interior of the box. The above example shows a Yellow Fill color on all three boxes.

Style (Shadow) – Define the style of the shadow or choose None for no shadow.

Color (Shadow) – Define the shadow color from the list of colors.

Independent Box Height – If you have chosen to Match Box Heights, you can select this option to not include the selected task(s).

Independent Box Width – If you have chosen the Match Box Widths, you can select this option to not include the selected task(s).

Reset - Removes all of the Custom Box Settings and reverts to using the default settings for this box.

Timescale (Format Menu)

Applying a timescale to a chart allows you to display tasks that Start or Finish within certain time periods. Display time units such as Days, Weeks, Months, Quarters or Years (or every 3 days, every two weeks, etc...). You can specify different time units and whether you want to view tasks that Start in this time period or Finish in this time period.

To apply the Timescale:

- 1. Select the Format-Timescale menu.
- 2. Select the appropriate options and click OK.

or

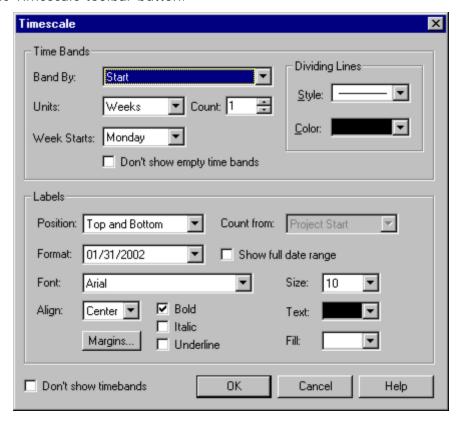
- 1. Press the Timescale toolbar button to display the Timescale form.
- 2. Select the appropriate options and click OK.

To turn the Timescale off:

- 1. Select the Format-Timescale menu.
- 2. Select the Don't show timebands option and click OK.

or

1. Press the Timescale toolbar button.



Time Bands

Band By – Select the field to use when placing a task in the time band. If you select Start, all tasks that Start during the time period are displayed in the time band. If you select Finish then all tasks that finish within that time period are displayed in the time band.

Units – Select to display the timescale by Hour, Day, Week, Month, Quarter, Half Year or Year time units.

Count – Select the time interval between units. Enter 1 to display every time period, 2 to display every other time period and so on. For example, if you were displaying Weeks as the Units, entering 2 in the Count would display a time band every two weeks.

Week Starts – Specify the day of the week to use when displaying weeks as the time unit.

Don't Show Empty Time Bands – Hides the time bands in the chart that do not contain tasks.

Dividing Lines – Defines the color and line style of the vertical timescale dividing lines.

Labels

Position – Select to display the timescale labels at the Top, Bottom or both Top and Bottom.

Count From – This option only applies when you choose to display dates (using the Form at option) as Day 1, Day 2... or Week 1, Week 2, etc... The Project Start option uses the Project Start Date to start counting up from this date, eg: Day 1, Day 2, etc. Project Finish uses the Project Finish Date to start counting down from this date eg: Day –5, Day –4, etc... Earliest Task uses the earliest task displayed on the screen to start counting. Latest Task uses the latest task displayed on the screen to start counting down from this date. Today uses today's date to start counting.

Format – Select the date format for the timescale.

Show Full Date Range – Displays the full range of dates when applicable. For example, if a two week period is selected, the full date range would display dates as Jan 1, 2002 – Jan 14, 2002 instead or Jan 1, 2002.

Font – Select the font size for the timescale labels.

Align – Select to align the labels within the time band either left, right or center.

Size – Select the font size of the timescale label.

Text – Select this to define the color of the timescale label text.

Fill – Select this to define the background color of the timescale labels.

Margins – Select to adjust the margins around the timescale label.

Don't show timebands – Select this option and click OK to turn off the timescale so it is not displayed on the chart. You can also press the Timescale toolbar button to turn off the timescale.

Group (Format Menu)

Grouping tasks in PERT Chart EXPERT creates horizontal bands of tasks based on certain fields. Tasks can be grouped by Resource Names, Resource Groups, Resource Initials, Text fields (Text 1 thru Text 30) and by Outline (the Summary Tasks in your Microsoft Project plan or the levels of a WBS chart).

The Groups dialog box indicates which field you are currently grouped by, lists the currently defined groups and allows you to format the groups.



Group By: - Select this to change the field by which the tasks are grouped in the PERT chart. See below for a complete explanation.

List of current Groups/Outline levels - The area below the Group By field contains the list of current Groups or the list of Summary Tasks in your plan if grouped by Outline. The checkbox next to the group indicates whether the group is displayed in the chart.

Checkbox – The small box to the left of the group name allows you to Hide and Unhide groups. If checked, the group heading and tasks are displayed in the chart. Deselect the check mark to "hide" the group. Hiding a group means that all the tasks plus the group heading will be hidden.

Move Up/Move Down – Select a group from the list and click Move Up or Move Down to rearrange the selected group within the list. This option is not available when grouped by Outline Levels.

Milestones in separate group – Select to create a separate group at the top of the chart that contains only the milestones in the plan.

Automatically Hide Empty Groups – Select to automatically hide groups that do not contain any tasks. For example, if you have resources defined in your plan and you group by Resource Names it would display a group for each resource. If a resource did not have tasks assigned then a group heading would appear in the chart with no tasks under it. Choose this option to hide this group heading.

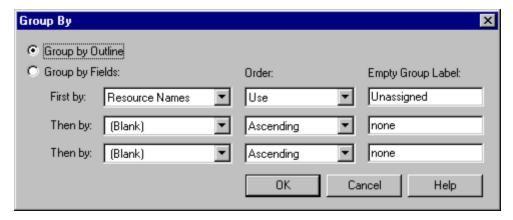
Group Labels – The options listed below this topic allow you to configure how the Group headings appear in the chart. Select Apply to level to format all groups at once or a specific level. Choose Font, Colors, etc. Select Group Headers obscure dependency lines to display the dependency lines behind the Group headings on the screen.

Separator Lines – Select the line style and color of the group headings.

No Groups – Select this to remove grouping from the chart.

Change:

To change what field to use for grouping, select the Change button to display the Group By form.



Group by Outline

If you are using Microsoft Project, the Outline refers to the Summary Tasks in a project. Summary Tasks in Microsoft Project are created by indenting tasks in the Gantt Chart. If you create a PERT chart of a Microsoft Project plan and group by Outline, each Summary Task in the project is displayed as a group.

If you are using WBS Chart Pro, the Outline refers to the levels in the Work Breakdown Structure. Each level in the tree can be used to define a Group in PERT Chart EXPERT.

You cannot create the Outline in PERT Chart EXPERT, you must use Microsoft Project, WBS Chart Pro or some other program to create this outline.

Group by Fields

Select to group the chart by the following fields:

Resource Names/Resource Initials/Resource Group – Groups the chart by the resource information in the project. In PERT Chart EXPERT, go to the Tools-Resources menu to view and define the resources. If you are using Microsoft Project, go to the View-Resource Sheet menu to view and define the resources. When grouped by resource names or initials, dragging a task from one resource group to another will reassign the task to that resource.

Text fields (Text1 thru Text30) — Groups the chart by a Text field. The Text fields are used to enter any user-defined or custom information. There are 30 Text fields (Text1 thru Text30) in PERT Chart EXPERT. These Text fields also correspond to the Microsoft Project Text fields of the same name. If you use these in Microsoft Project then you can use them in PERT Chart EXPERT. When grouped by a Text field, dragging a task from one group to another automatically changes the value in the text field for those tasks. In other words, if you are grouped by Text1 and you drag from Group A to Group B the task will change the value in its Text1 field to Group B.

Order

You can arrange the groups in the chart based on the options in the Order list. They are:

Ascending – Lists the groups in the chart from the lowest to the highest value (1, 2, 3... a, b, c).

Descending – Lists the groups in the chart from the highest to the lowest value (3, 2, 1... c, b, a).

Use – Lists the group in the chart in the order that the fields are used. For example, if you group by resource, it would list the resources in the order that they are defined in the Resource List (under Tools-Resources in PERT Chart EXPERT or in the Resource View in Microsoft Project).

Note: If the chart is grouped by the Resource or Text fields you can rearrange a group within this list by selecting the Move Up and Move Down buttons.

Empty Group Label – If there are tasks in the project that do not contain any value for the field in which you are grouping then these tasks are included in a separate group. Use the Empty Group Label to identify this group. For example, if you are grouping by Resource and there are tasks with no resources assigned then these will be placed into a separate group with the title that is entered in the Empty Group Label (such as "Unassigned").

Lock Box Positions

Select this to lock all boxes in the chart in their current positions. The Lock Box Positions option will also automatically become selected and lock boxes if you manually move boxes around in the chart. By default a PERT chart automatically positions boxes as you add tasks or when you create a chart from Microsoft Project or other software. If you move a box by clicking the edge of a box the entire chart will become Locked.

With boxes locked you can move boxes anywhere in the chart or add tasks exactly where you want them and they will stay where you place them. The exception to this is if you try to place a new box or move a box in between a row or column of tasks. In this case, it may create a row or column to accommodate the new tasks.

You can also lock boxes by selecting the Lock toolbar button.

To unlock box and have them automatically positioned in the chart, deselect the Lock Box Positions option or click the Lock toolbar button.

You can also Unlock the selected tasks by clicking and dragging to select a number of tasks and then choosing the Format-Layout Selected option. This will automatically position only the selected tasks in the chart relative to each of their predecessors.

See also <u>Moving and Repositioning Tasks</u>

Layout Selected

When boxes are Locked use this command to automatically position only the selected tasks in the chart. Each selected task will be automatically positioned relative to its predecessor.

See also <u>Moving and Repositioning Tasks</u>

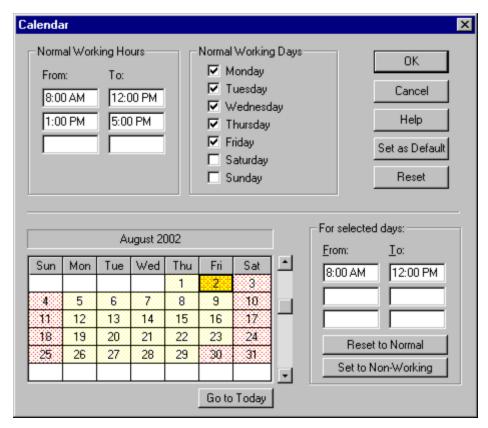
Tools Menu

Chart Settings (Tools Menu)

See <u>Properties</u>

Calendar

Define the workdays, hours in a workday and non working days for your project. By default, when scheduling tasks, PERT Chart EXPERT uses a Monday through Friday work week and an 8 hour work day from 8:00 AM to 5:00 PM (with an hour for lunch from 12:00 PM to 1:00 PM). You can change this for the current project or change it and set it as the default for all new projects.



Saturdays, Sundays and August 30th are non-working days. Friday, August 2nd is a partial workday.

Normal Working Hours

This option sets the default working hours for the Normal Working Days selected. For example, if your project uses a 4 day work week with 10 hour days (and an hour for lunch) you could set the Normal Working Hours to something like:

8:00 AM 1:00 PM

2:00 PM 7:00 PM

Normal Working Days

Select the default working days for your project. If you typically work a 5 day week from Monday through Friday then you would select Monday through Friday. If you typically work a 6 day week you could set it to Monday through Saturday.

Set as Default

Select this to make the current Calendar the default Calendar for all new projects. If you

customize a Calendar and select the Set as Default button, whenever you open a New project and begin planning, this customized Calendar is used. Using the Set as Default option does not affect any existing Calendars in existing projects.

Reset

Select Reset to remove any custom settings to the current Calendar and set it to the default Calendar.

For selected days

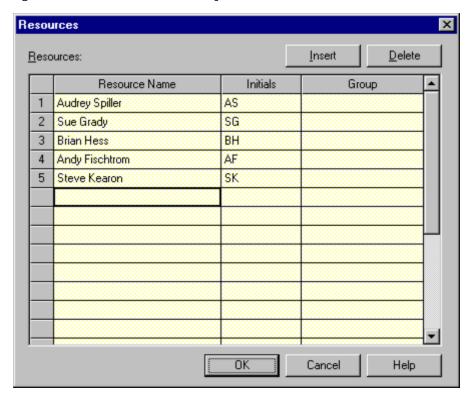
Select a date (or dates) in the Calendar grid and use the options in the "For selected days" area to set the hours for these dates by entering From and To times, Reset these dates to the default or set them to be Non-Working days.

The Calendar File

When Set to Default is selected, a Calendar file is created and saved to the folder where you installed PERT Chart EXPERT. This file is called Calendar.ctc. This calendar is then used for all new PERT charts you create. Any existing PERT charts will not be affected. If you have an existing PERT chart that you want to use with this new Calendar, open that chart, select Tools-Calendar and choose Reset.

Resources (Tools Menu)

Displays the Resources form for defining a list of resources for the project. Resources are the people or things that you assign to a task to perform work on that task. In PERT Chart EXPERT you cannot assign a resource to a task until you define the resource in this form.



Resource Name – Enter the resource name in this field. You can enter an individual, category of individual or any other way you want to identify and assign the resource.

The Resource Name field corresponds to the Resource Names field in Microsoft Project.

Initials – The initials are automatically created based on the Resource Name entered. You can accept the defaults or type in a new value. You may want to display the Initials field in the task boxes as an alternative to displaying the Resource Name field.

The Initials field corresponds to the Initials field in Microsoft Project.

Group – The Group field contains the name of the group to which each resource belongs.

The Group field corresponds to the Resource Group field in Microsoft Project.

Insert – Creates a blank row before the currently selected resource.

Delete – Deletes the currently selected resource.

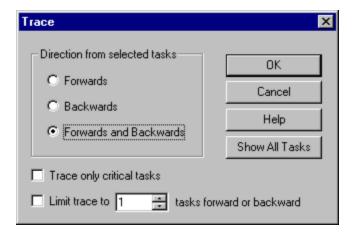
Note: If the current PERT chart is linked to a Microsoft Project plan, then the resources in the Resource form are the same as those listed in the Resource Sheet of Microsoft Project. Any changes made in the Resources form in PERT Chart EXPERT are immediately reflected in the Resource Sheet of Microsoft Project.

Trace

The Trace feature lets you select a task in PERT Chart EXPERT and display only those tasks that lead up to that task and/or follow that task. You can also specify that only Critical Tasks are included in the trace and that the trace be limited to so many tasks forward or backwards from the selected task.

To perform a Trace, select a task in PERT Chart EXPERT by clicking on it. Then, select the Format-Trace menu (or press the Trace toolbar button) and choose from the available options. When you click OK the Trace is applied to the chart.

You can also select multiple tasks to Trace. In the PERT chart, CTRL-Click with your mouse to select multiple tasks. When you trace with multiple tasks, each selected task is traced.



Direction from selected tasks – Select one of the three options to trace tasks Forward from the selected task, Backwards from the selected task or both Forwards and Backwards from the selected task.

Trace only critical tasks – Select to display only the Critical tasks when the Trace is applied. Deselect this option to include Critical and Noncritical tasks when the Trace is applied.

Limit trace to x tasks forward or backward – Select to display only \varkappa number of tasks forward or backward from the selected task when the trace is applied. If you do not select this option then all tasks forward or all tasks backwards are included in the trace.

For example, if you wanted to see only the immediate predecessors and successors to a selected task, select this option and enter a 1 in the number field. Deselect this option to trace all the way forward or back.

Show All Tasks – Select this button to remove the Trace and display all tasks in the chart.

You can also use the Trace toolbar button to invoke a Trace and remove the Trace.

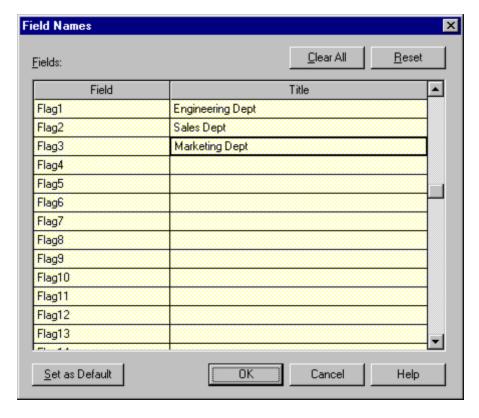
Renumber Tasks

Allows you to Renumber the Id's in your PERT chart. Renumbering occurs in a chart from the earliest task to the latest task and top to bottom for those tasks occurring on the same date. This option is only available while working in a standalone chart (not linked to MS Project or other datasource).

Field Names (Tools Menu)

Fields in the PERT Chart EXPERT database can be permanently renamed. This is useful if you are familiar with a certain term for a field and wish to see them displayed using these names instead of the default names for fields. For example, if you use the word Task Name instead of the word Name then you could rename the Name field to Task Name. This is also useful if you use fields such as the Text fields or Flag fields. For example, if you use the Text1 field to display the Department then you could rename Text1 to Department.

For example, say you wanted to color the boxes in the PERT chart based on 3 departments in your organization; the Engineering Dept, the Sales Department and the Marketing Department. You could use the Flag fields in PERT Chart EXPERT to specify that Flag 1 represents the Engineering Department, Flag 2 represents the Sales Department and Flag 3 represents the Marketing Department. To permanently rename the Flag 1, Flag 2 and Flag 3 fields to be Engineering Dept, Sales Dept and Marketing Dept you would enter this information into the Field Names form as shown below. From there you would go to the Format-Borders menu to define the colors for each department and then simply select the appropriate task(s), display the Task Information form and select Engineering, Sales or Marketing in the Flags section of the form.



Field – Select the field you wish to rename.

Title – Enter the new name for this field.

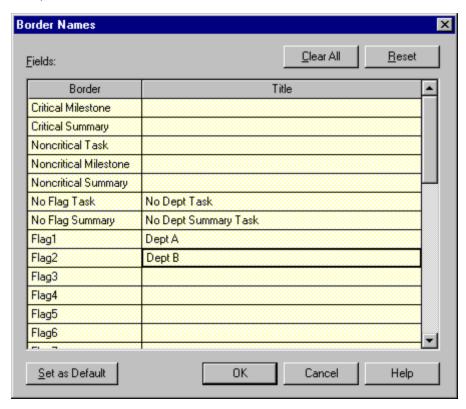
Clear All – Removes all entries from the Title column.

Reset – Reverts to the default list of renamed fields. The default list of renamed fields may be blank unless you had previously customized this list and had chosen the Set as Default option.

Set as Default – Changes made to the Fields Name form are saved to the current PERT chart. Select the Set as Default option to make the current Field Names form the default for all new PERT charts.

Border Names (Tools Menu)

Define custom names for the different styles of tasks used in the Form at-Borders dialog box. The options in Format-Borders allow you to define colors and borders for different types of tasks in the PERT chart. Since these border style titles can be printed in the Legend portion of the printout, you can rename the styles using the Border Names form so they print with different titles. Critical Task could be renamed to "Critical Path Activity", the Flag1 field could be renamed to "Dept A" and so on.



Border – Select the Border field you wish to rename.

Title – Enter the new name for this field.

Clear All – Removes all entries from the Title column.

Reset – Reverts to the default list of renamed fields. The default list of renamed fields may be blank unless you had previously customized this list and had chosen the Set as Default option.

Set as Default – Changes made to the Border Names form are saved to the current PERT chart. Select the Set as Default option to make the current Border Names form the default for all new PERT charts.

See also **Borders**

Microsoft Project (Tools Menu)

This allows you to select various options if you use PERT Chart EXPERT with Microsoft Project.

Display PERT chart of Active Project – Generates a PERT chart of the currently active project in Microsoft Project. If you already have a PERT chart of the active project displayed in PERT Chart EXPERT then this option updates the existing PERT chart.

Goto Project – If this is a Standalone PERT chart, this option transfers the current PERT chart to Microsoft Project. If the PERT chart is linked to a Microsoft Project plan then the Goto Project command simply returns to the existing Microsoft Project plan.

Transferring a Standalone PERT chart to Microsoft Project means that the data that exists in the PERT chart will be removed from the PERT chart and placed into a Microsoft Project plan. The PERT chart then becomes linked to this Microsoft Project plan. You are prompted to save the Microsoft Project plan and you must enter a filename for this Microsoft Project plan to continue transferring the PERT chart to Microsoft Project. You will then have two files. The Microsoft Project file, which contains the data (the task information like names, start dates, finish dates, costs, etc.), and the PERT chart file, which contains the form atting options that are PERT chart-specific (such as custom colors, box placement, etc.).

You can also select the corresponding toolbar button:



Goto Project Toolbar button

Setup - See Microsoft Project Setup

Microsoft Project Setup (Tools-Microsoft Project Menu)

Select which version(s) of Microsoft Project you want to configure to work with PERT Chart EXPERT.

For more information on Microsoft Project Setup see <u>Configuring Microsoft Project for use with PERT Chart EXPERT</u>

Goto WBS Chart Pro (Tools Menu)

WBS Chart Pro is the other product from our company (Critical Tools) that allows you to plan and display projects using a Top-Down type of chart. This chart displays the Work Breakdown (WBS) of the phases and tasks in a project. You can seamlessly transfer projects from PERT Chart EXPERT to WBS Chart Pro and vice versa.

To transfer the current PERT chart to WBS Chart Pro, select the Goto WBS Chart Pro menu option or press the Go to WBS Chart Pro toolbar button.

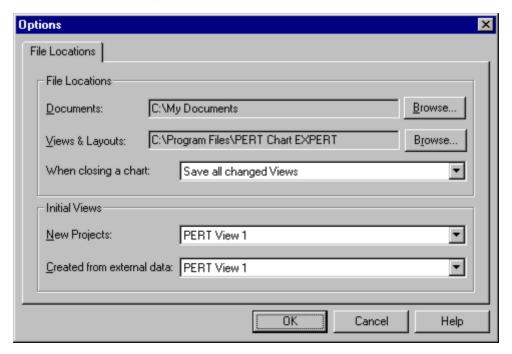
When you transfer a PERT chart to WBS Chart Pro your PERT chart is saved to the WBS Chart Pro format (a .WBS file) and then immediately opened in WBS Chart Pro. You will no longer have a PERT chart file, it will become a WBS chart file. To create a PERT chart file again simply press the Goto PERT Chart EXPERT button in WBS Chart Pro to transfer it back to PERT Chart EXPERT.

The Goto WBS Chart Pro button is not available (grayed out) if:

- A) You do not have WBS Chart Pro.
- B) You are working with a PERT chart that is linked to a Microsoft Project file. To create a WBS chart from a linked file, first go to Microsoft Project using the Goto Project toolbar button, then from within Microsoft Project use the Goto WBS Chart Pro toolbar button. Linked files require that you go to Microsoft Project first when switching between WBS Chart Pro and PERT Chart EXPERT since all of your project data is stored within Microsoft Project.

Options (Tools Menu)

Specify the default locations for Documents, Views and Layouts plus the Views to use when starting a new project or creating a project from an external data source.



File Locations

Documents – Specify the default location to store and retrieve your PERT charts. Select the Browse button to select a different Folder. PERT Chart EXPERT initially sets this to your Windows document folder.

Views & Layouts – Specify the default location to store the Views and Page Layouts used in PERT Chart EXPERT. PERT Chart EXPERT initially sets this to the installed directory. Whenever a new PERT chart is created all of the Views and Page Layouts are copied from this directory into the PERT chart.

When closing a chart – Specify how Views are saved when closing a chart. This option determines whether or not to overwrite the default Views stored in the PERT Chart EXPERT folder and is independent of whether or not you save your chart (saving your chart always saves the Views within the saved chart). Choose one of the following options when closing a chart:

Save all changed Views – Automatically saves all of the changed Views in the chart back to the Views folder. Any new charts you create will use these new Views.

Do not save changed Views – Automatically discards any changed Views in the chart. This will not overwrite the Views in the Views folder.

Prompt to save changed Views – Prompts you to save any changed Views each time you close a chart. You have then have the option to Save or Discard the changed Views each time you close a chart.

If you accidentally save a View over the default View and wish to restore it back to its

original state you can copy the original View from the Backup Views folder. This folder is found in the installed folder (for example: C:\Program Files\PERT Chart EXPERT\Backup Views).

Initial Views

New Projects – Specify the View to use when you create a new PERT chart. You may want to have a different View that you use to create new PERT charts as opposed to when you create a PERT chart from an external datasource (like Microsoft Project).

Created from external data – Specify the View to use when you create a PERT chart from an external datasource. You may want to have a different View that you use to create new PERT charts as opposed to when you create a PERT chart from an external datasource (like Microsoft Project).

Window Menu

Cascade (Window Menu)

Arranges all of the open PERT charts on the screen in an overlapping fashion.

Tile (Window Menu)

Arranges all of the open PERT charts on the screen.

Arrange I cons (Window Menu)

If you have minimized several open PERT charts, this option lines the chart icons up at the bottom of the screen.

List of Projects (Window Menu)

Displays a list of all open PERT chart files. The active PERT chart displays a checkmark next to the name of that chart.

Help Menu

Content and Index (Help Menu)

Displays the main Help program allowing you to search and locate Help topics.

Tip of the Day (Help Menu)

Displays a window when you start PERT Chart EXPERT offering a short tip on a particular feature of the program.

About PERT Chart EXPERT

Displays the version number of the software and company information. This section also allows you to register the product and turn the demo product into the full software.

Toolbar Buttons

Toolbar Buttons Defined

Button	Purpose		

- Opens a blank PERT chart for planning a new project. See also New
- Displays the Open dialog box allowing you to open a saved PERT chart, a Microsoft Project plan, an MPX file, or a TXT file. See also Open
- Saves the current PERT chart. Displays the Save As dialog if the chart has never been saved. Automatically saves (without prompting) to the same name if the file has been previously saved. See also Save As
- Instantly prints the current chart to the default printer. To view the printout on the screen first and to select print options, select Print Preview instead of Print.
- Displays the Print Preview screen allowing you to preview the current chart before printing. See also Print Preview
- Cuts the selected task and places it on the Clipboard

 Select another task in the PERT chart and choose Edit-Paste to insert the cut task before the selected task. You can also Right-Click the mouse on a task to Paste. See also Cut
- Copies the selected task and places it on the Clipboard.
 - Select another task in the PERT chart and choose Edit-Paste to insert the copied task before the selected task. You can also Right-Click the mouse on a task to Paste. See also Copy
- Places the contents of the Clipboard (cut or copied information) before the selected task. See also Paste
- Removes the last command done in PERT Chart EXPERT. Some operations when linked to a Microsoft Project plan cannot be undone. For more information on this, see Undo
- Reverses the action of the Undo command. To undo recent actions one at a time, click Undo. If you didn't want to undo an action click Redo. See also Redo
- Displays the Task Information form for entering data for the selected task. See also Task Information
- Increases the size of the PERT chart on the screen. Each time you click the Zoom In button it adjusts to the next level of magnification. See also Zoom
- Decreases the size of the PERT chart on the screen. Each time you click the Zoom Out button it shrinks the PERT chart. See also Zoom
- Switches to Microsoft Project. If the current PERT chart is a "standalone" chart (has never been transferred to Microsoft Project) then this button

transfers the data in the current PERT chart to Microsoft Project for further scheduling. The data is then stored in Microsoft Project and the PERT chart is "linked" to this Microsoft Project plan.

If the current PERT chart is linked to an open Microsoft Project plan then this button simply switches to that plan in Microsoft Project. See also Microsoft Project

- Transfers the PERT chart to the WBS Chart Pro software. The PERT chart (.PCE file) will be renamed to a .WBS file and opened in WBS Chart Pro. Click the corresponding Goto PERT Chart EXPERT button in WBS Chart Pro to send it back. You must have WBS Chart Pro version 4.1 or greater for this to work. In addition, this button is unavailable if the current PERT chart is linked to MS Project. If this is the case, go to MS Project and go to WBS Chart Pro from there.
- Displays the Groups form so you can choose the Grouping options. Click OK in the Groups form to apply Grouping. If Grouping is currently displayed then this button turns Grouping off.
- Displays the Timescale form so you can choose the Timescale options. Click OK in the Timescale form to apply a timescale. If a Timescale is currently displayed then this button turns the Timescale off.
- Display the Trace form so you can choose the Trace options. Click OK in the Trace form to apply the Trace. If a Trace is currently applied then this button turns off Trace. See also Trace
- Locks tasks in place for the entire PERT chart so that boxes are no longer automatically positioned. This button also becomes activated and the chart locked if you manually move a box in the chart. If tasks are currently locked then this button turns off the lock feature and all boxes become automatically positioned in the chart. See also Moving and Repositioning Tasks
- When Grouping, reveals a hidden group.
- When Grouping tasks, hides tasks in the selected group.
- Reveals all Tasks in the current PERT chart that were hidden using the Hide and Trace features of PERT Chart EXPERT or if you have used a Filter in Microsoft Project.
- When Grouping tasks, displays only the selected Group (and any subgroups) and hides the rest. Useful for displaying just a single group in your PERT chart. Select this button again to restore focus to the entire PERT chart.
- When Grouping tasks, displays only the Group headings in the PERT chart.

Edit Bar



Displays the contents of the current field being edited. Click the checkmark to accept the field (or press Enter) or click the X to reject the data entered into the field (or press Esc).

View Bar



Displays the current View that is applied to the PERT chart. Click the Left or Right arrow to toggle through the list and display different Views. Click the ... button to display the list of Views to Create, Delete, Rename, Copy, Import and Export Views. See also Views

Status Bar

The Status Bar is the strip of information located at the bottom of the PERT Chart EXPERT screen. The left part of the Status Bar displays messages about current operations, short descriptions of the Toolbar buttons as your cursor is placed over the buttons, and short descriptions of the menu items as they are highlighted.

The right side of the Status Bar contains six small box areas that describe the current state of a chart. They are, from left to right:

- 1. The total number of tasks in the current chart plus the number of hidden tasks.
- 2. The current Zoom factor (scale) of the current chart.
- 3. The Linked status of the PERT chart. If the current PERT chart is linked to a datasource (such as a Microsoft Project plan), the word LINKED is displayed.
- 4. Displays CAP if Cap Lock is on.
- 5. Displays NUM if Num Lock is on.
- 6. Displays SCRL if Scroll Lock is on.

Frequently Asked Questions

Frequently Asked Questions

After using PERT Chart EXPERT I noticed several .TMP and .TXT files listed in Microsoft Project's File menu. What are these and can I stop them from appearing?

When PERT Chart EXPERT tells Microsoft Project to transfer data to create a PERT chart it uses various .TMP and .TXT files for this process. As PERT Chart EXPERT opens and closes these temporary files they appear in Microsoft Project's File menu. Unfortunately, there is no way to prevent these files from appearing. We realize that they are ugly but they won't cause any harm and we do as much as we can minimize the number of files that have to appear.

In Print Preview, can I show more then two pages on the screen at once?

No, in Print Preview you can only show a single page or two pages of the printout at once. However, if you close Print Preview and choose View-Page Layout (Page Layout mode) this displays how the PERT chart appears on each page for the selected printer and selected paper size. In Page Layout mode, you can see all page breaks on the screen and even move tasks around to better position them to avoid page breaks. You can also tell PERT Chart EXPERT to automatically avoid page breaks by selecting the "Adjust for Page Breaks" option in File-Page Setup.

What happens if I rename a Microsoft Project plan that is linked to a PERT chart?

A saved PERT chart linked to a specific Microsoft Project plan remembers the exact name and location of the Microsoft Project plan. If you rename or move the Microsoft Project than the PERT chart can no longer link to this plan. To relink a saved PERT chart to its corresponding Microsoft Project plan:

- 1. If you rename the Microsoft Project plan while the PERT is currently open you will receive a message when the PERT chart is activated that the chart needs to be resynchronized. Simply select the third option to relink to a renamed Microsoft Project plan.
- 2. If you rename the Microsoft Project plan while the PERT chart is closed, open PERT Chart EXPERT and select File-Open. Select the PERT chart file and choose "link to another datasource". Choose Open and select the corresponding Microsoft Project plan.

Can I display Critical Tasks across the top of my chart?

Yes, go to the Format Menu, select Chart and choose "Top Down - Critical First" from the Box Arrangement list. The default placement of tasks ("Top Down From Left) is by Successor and Id order. This means that if a task has two successors it will place them to the right of the predecessor task placing the lowest Id task first. The "Top Down - Critical First" option displays critical successors first thus displaying the critical tasks at the top of the chart when possible.

PDF Files – What are they and how can I use them in PERT Chart EXPERT?

A .PDF file is a document (chart) that anyone can read on their computer using a PDF "reader". Think of a PDF file as a chart that was printed to a file rather then on paper using a printer. A PDF file can be viewed by opening it in a PDF reader. Multiple page charts appear across multiple pages in the document and you scroll from page to page in the PDF reader.

You can create a PDF file and send (email) this file to anyone who has a PDF reader. To create a PDF file you would need to purchase Adobe Acrobat. The steps to creating a PDF file are the same as printing a chart. Once Adobe Acrobat is installed, you configure the chart, preview it (if you want) but instead of printing directly to a printer you print to a PDF file by selecting the PDF writer as your printer. This produces a file that can be opened using the PDF reader.

The PDF writer (Adobe Acrobat) is not included as part of Microsoft Project nor is it included with Microsoft Windows like other printer drivers. You must purchase it from Adobe.

The PDF reader is free software that anyone can install to read .PDF files. For more information about this process and to download the Acrobat Reader from Adobe, see their website at: www.adobe.com.

How can I stop it from displaying NA in my date fields?

Select the Tools-Chart Settings menu, select the Settings tab and enter a blank space into the "Show unknown dates as" field. Any character displayed in a date field in PERT Chart EXPERT that is not a valid date is an "Unknown Date" and can be converted into another word or removed by putting a space into the "Show unknown dates as" field. For example, Microsoft Project displays an NA for any task that does not have an Actual Start or Actual Finish. If you wish to display these fields in PERT Chart EXPERT and remove this NA, use this procedure.

When using the Save as Web Pages option, why does it produce so many pages of output?

The Save as Web Pages feature uses a Template that, by default, limits the HTML output to be no bigger then a single Browser page based on a screen resolution of 1024x768. If your PERT chart is bigger then one page then it will produce multiple, one page HTML documents that you can toggle through using the buttons at the bottom of each HTML page. This way you can view one page at a time in your Browser rather then having to scroll the Browser to view the entire chart.

If you want to increase or decrease the size of each output page you can edit the PERTTemplate.html file and increase/decrease the numbers in the line that reads:

PERTChart: chart width="975" height="490"

If you want the Save as Web Pages feature to produce one big PERT chart in the HTML document, select the PERTTemplate2.html file in the Save as Web Pages dialog box. This template does not specify the Width and Height of a chart but produces one PERT chart image in the HTML document.

says I should be able to print using the Demo. Why can't I print?

You can print using the Demo version of PERT Chart EXPERT as long as there are not more then 50 tasks in the PERT chart. Certain features of the Demo program like creating tasks, printing and saving are disabled when there are more then 50 tasks. Even though you can create a PERT chart from a Microsoft Project plan with more then 50 tasks you cannot print it once it gets past 50 tasks.

Note that even though you can't print more then 50 tasks you can still use Print Preview to see how the PERT chart would be printed. For a complete explanation of the Demo program, see Demo Limits

Error Messages and Prompts

Microsoft Project Messages

These are messages that you might see when working with PERT Chart EXPERT and Microsoft Project.

This PERT chart is currently self-contained

This message appears when you press the Goto Project button or when you choose Goto Project from the Tools-Microsoft Project menu. This means you are attempting to send a PERT chart to Microsoft Project. If this is a standalone PERT chart this involves transferring the data to this Microsoft Project plan. For a complete explanation, see <u>Transferring a PERT chart to Microsoft Project</u>

Unable to Start Microsoft Project

This message appears when the PERT Chart EXPERT program cannot start Microsoft Project or cannot communicate with Microsoft Project. PERT Chart EXPERT uses DDE and OLE to communicate with Microsoft Project and if for some reason this communication is not working, this message will appear

First, try closing all open applications and turn your computer completely off and then back on again. This may reinitialize the necessary files needed to communicate with Microsoft Project.

If this does not work, try reinstalling Microsoft Project. Microsoft Project should install all of the necessary files for this communication to take place so reinstalling Microsoft Project may help solve this problem if these files were deleted or overwritten.

If, after reinstalling Microsoft Project it still fails, try contacting Critical Tools technical support. See $\underline{\text{Support}}$

Cannot save - file already open in Microsoft Project

This message appears when you attempt to save to a Microsoft Project plan that is currently open in Microsoft Project. When you transfer a PERT chart to Microsoft Project the plan must be saved in Microsoft Project for the PERT chart to be linked to the Microsoft Project plan. Part of the process of transferring the PERT chart to Microsoft Project is to save that file in Microsoft Project. It cannot save to a Microsoft Project plan that is open so you must either save to a different Microsoft Project filename or close the open file in Microsoft Project and try again.

Microsoft Project has not been configured for a seamless integration

This message appears when you attempt to transfer PERT chart information to Microsoft Project and Microsoft Project has not been configured for use with PERT Chart EXPERT. In order to interact seamlessly with Microsoft Project, it is necessary to copy some Tables, Views, a Macro and Toolbar button to Microsoft Project. These are then stored in Microsoft Project (if you have access to change Microsoft Project) for future interaction with PERT Chart EXPERT. For more information on configuring Microsoft Project see Configuring MS Project for use with PERT Chart EXPERT

Resynchronize PERT chart

This message appears when you access a PERT chart that was linked to a Microsoft Project

and the Microsoft Project is no longer available. If you have just closed the Microsoft Project plan and are in the process of closing the PERT chart, then choose the Close PERT chart option. If you need to make additional changes to the PERT chart then it must reopen the Microsoft Project plan and you must choose the Re-activate option to do this. If you have renamed the Microsoft Project plan then the current PERT chart can no longer find the plan it was linked to and you must choose the third option to relink to this newly named Microsoft Project plan.

The Active project has not been saved so the PERT chart won't be linked

This message appears when you attempt to create a PERT chart from a Microsoft Project plan that has not been saved. To create a PERT chart from a Microsoft Project you should first save the Microsoft Project plan and then create a PERT chart from the Microsoft Project plan.

Wrong Version of Microsoft Project Responding

This message can appear when you have two different versions of Microsoft Project on the same computer and you attempt to send a PERT chart to a specific version of Microsoft Project. PERT Chart EXPERT is trying to communicate with a specific version of Microsoft Project and another is incorrectly responding. For example, if you had Project 98 and Project 2000 on the same computer and you attempted to send a PERT chart to Microsoft Project 98, Project 2000 would probably respond and you would receive this error. To resolve this issue, try opening the specific version of Microsoft Project that you are attempting to use (and close other versions of Project). If the version of Microsoft Project is already open when PERT Chart EXPERT attempts to communicate with it then there is less chance for a miscommunication.

Unable to Open Linked Data File

There are two variations of this message, each is explained below.

Unable to Open Linked Data File - This data file is already in use by another chart.

This message appears when you attempt to open a PERT chart that is linked to a datasource and this datasource is already in use by another PERT chart.

For example, you cannot open a PERT chart that is linked to Microsoft Project plan xxx.mpp if another PERT chart is currently open and is linked to Microsoft Project xxx.mpp. Close the first PERT chart if you wish to open the second PERT chart linked to xxx.mpp.

Unable to Open Linked Data File – The data file could not be found.

This message appears when you attempt to open a PERT chart that is linked to a datasource and it can't find the datasource. It could be that you deleted the datasource file, moved it or renamed it. If you moved or renamed the datasource, you can relink the PERT chart to the appropriate file. Choose Yes to browse for the datasource file or No to cancel the Open operation.

Invalid Data

You have entered data into a field that is not valid for that field. Below are the most common of these messages and a short explanation of each.

Invalid Currency – Enter a valid currency amount. You don't have to include the currency symbol but you must enter an amount that can be converted into a currency value.

Invalid Date – Enter a valid date.

Invalid Dependency – Enter a valid dependency.

Invalid Duration – Enter a valid Duration. You must use a valid duration unit such as Minute, Hour, Day, Week or Month or the abbreviations M, H, D, W or MO. For example, type 5d for 5 days, or 2w for 2 weeks.

Invalid File – Enter a valid filename avoiding characters like *, ? or /.

Invalid Flag – Enter a valid Flag value. Flag fields can only accept Yes or No. There are several other Yes/No fields that work this way and you may get the Invalid Flag message even though they are not Flag fields. If you receive this message and the field you are editing is not a Flag field it means that it is simply a Yes/No field and you can only enter Yes or No into that field.

Invalid Folder - Enter a valid folder.

Invalid Measurement – Enter a valid measurement.

Invalid Number – Enter a valid number. You cannot enter text into a field that only accepts numbers.

Invalid Percent – Enter a valid Percent such as .50 or 50%.

Invalid Resource – Enter a valid resource from the list of Resources (as defined in Tools-Resources). When assigning resources in the Task Information form, you must enter the exact name of an existing resource or you will receive the "Invalid Resource" message. Try using the Resources button to assign resource instead of typing them. To add, delete or change the names of resources, use the Resources form in the Tools menu.

Invalid Time – Enter a valid time, including AM or PM if you are using the 12 hour format.

Cannot Merge

This message is displayed when you are attempting to open a View (*.PCV file) or a Page Layout (*.PCP) when there is no PERT chart open to merge the View or Page Layout into.

If you have a PERT chart currently displayed and you open a View (*.PCV) or Page Layout (*.PCP) then this file will be merged (imported) into the open PERT chart. To merge a View or Page Layout into the open PERT chart, choose the File-Open menu and choose "Files of Type" Views or Page Layouts. This is another way to Import a View or Page Layout into a PERT chart. However, you must have an existing PERT chart open in order to import a View or Page Layout.

No Calendar Available

This message appears when you choose Calendar from the Tools menu in PERT Chart EXPERT and you are currently linked to a Microsoft Project plan. For technical reasons PERT Chart EXPERT cannot update a calendar in Microsoft Project while a chart is linked. To modify the calendar, return to Microsoft Project and select Tools-Change Working Time.

Opening Old PERT charts

You cannot use PERT Chart EXPERT version 2 to directly open a PERT chart file created in PERT Chart EXPERT version 1.x. To transfer a version 1.x PERT chart to PERT Chart EXPERT version 2, do the following:

- 1. Open the PERT chart in PERT Chart EXPERT version 1.x.
- 2. Save it as an MPX file.
- 3. Start PERT Chart EXPERT version 2 and open this MPX file.

Templates created in PERT Chart EXPERT version 1.x are not transferable to PERT Chart EXPERT 2. You must recreate all templates (now called Views) in PERT Chart EXPERT version 2.0.

HTML Template

This message appears when you are in the Save As Web Pages dialog box and no tem plate is listed in the HTML Template File field or if the template listed could not be found. If no template is listed, use the Browse button to locate a template. If a template is listed and it was moved to a different folder, renamed or deleted, use the Browse button to locate another template.

See also Save As Web Pages

Confirm Unlink

This message allows you to confirm that you want to remove the link to the datasource. For a complete description of this topic, see $\underline{\mathsf{Unlink}}$

Unable to Save I mage

This message appears when you are attempting to save the PERT chart as a picture and PERT Chart EXPERT cannot save this image. This may be due to a lack of available memory. Saving images requires a large amount of memory for a temporary bitmap image to be saved before the specified image file is saved. Therefore, even if the ultimate PNG, JPEG or TIFF file is relatively small, it may require a bigger temporary file then the available memory allows.

Try reducing the size of the PERT chart or in the Save Picture dialog box, try selecting a Grayscale or Black & White image.

Overwriting HTML Files

This message appears when you use the Save As Web Pages dialog box to save a set of HTML documents to the same name in the same folder. Saying Yes to update the HTML files will delete all files with the same name from the specified folder and create new HTML files of the latest PERT chart. Select No to save the Web Pages to a new name or to a new folder.

See also Save As Web Pages

Demo Limits Exceeded

You are currently using the Demonstration version of PERT Chart EXPERT and you have exceeded the limits of this Demo version.

The Demo version of PERT Chart EXPERT is limited to 50 tasks and expires 30 days after installation. The 50 task limit applies to Creating/Modifying tasks, Printing, Saving and Transferring PERT charts to Microsoft Project. The 50 task limit does not apply when you create a PERT chart from a Microsoft Project plan. Therefore, you can use the Demo version to test how your large Microsoft Project plans are displayed and you can even use Print Preview to see how they would be printed.

Remember: You can use the Demo version just like the Full version for projects up to 50 tasks. This means you can Create, Print, Save and Transfer PERT charts to Microsoft Project. If you create a PERT chart that exceeds 50 tasks than Creating/Modifying Tasks, Printing, Saving and Transferring PERT charts to MS Project are disabled.

The Demo version of PERT Chart EXPERT can be turned into the Full version of PERT Chart EXPERT at any time, including while you are currently running the Demo version.

To turn the Demo version of PERT Chart EXPERT into a Full version:

- 1. Within PERT Chart EXPERT, choose Help-About PERT Chart EXPERT.
- 2. Choose Register and fill out the User Name, Organization and Product ID fields.

You must have a valid Product ID to turn the Demo into the Full version. To purchase PERT Chart EXPERT and obtain a Product ID, contact Critical Tools at: Company Address

Program Registration

In order to use the full PERT Chart EXPERT product you must enter a valid Project ID. This number is either displayed on the inside front cover of the PERT Chart EXPERT documentation, on the CD envelope or was emailed to you. The format of the Product ID is this:

123-12345-1234-123456

Note: You must include the dashes between the numbers.

If you do not have a Product ID you can only use the PERT Chart EXPERT as a Demonstration version. The Demo version of PERT Chart EXPERT is limited to 50 tasks and expires 30 days after installation. The 50 task limit applies to Creating/Modifying Tasks, Printing, Saving and Transferring PERT charts to Microsoft Project. The 50 task limit does not apply when you create a PERT chart from a Microsoft Project plan. Therefore, you can use the Demo version to test how your large Microsoft Project plans are displayed and you can even use Print Preview to see how they would be printed.

The Demo version of PERT Chart EXPERT can be turned into the Full version of PERT Chart EXPERT at any time, including while you are currently running the Demo version.

To turn the Demo version of PERT Chart EXPERT into a Full version:

- 1. Within PERT Chart EXPERT, choose Help-About PERT Chart EXPERT.
- 2. Choose Register and fill out the User Name, Organization and Product ID fields.

To purchase PERT Chart EXPERT and obtain a valid Product ID, contact Critical Tools at: Company Address

Displays a blank PERT chart from MS Project plans

No PERT chart (all tasks "Hidden" per the message at the bottom of the screen)

If you attempt to create a PERT chart from a MS Project plan and PERT Chart EXPERT displays a blank screen, this is due to using Project 2003 SP2 or SP3. Microsoft decided to add a feature with these Service Packs that must be turned off. Reinstalling PERT Chart EXPERT should fix this (reboot first and do not start any other Office applications before reinstalling PERT Chart EXPERT).

If reinstalling does not work, try the following:

For Project 2003 SP3:

- 1. Open Project 2003 SP3.
- 2. Go to Tools-Options-Security.
- 3. Click the bottom option to "Allow loading files with Legacy or non default file formats".

For Project 2003 SP2 (only if reinstalling does not fix it):

- 1. Close Project 2003.
- 2. Choose Start and select Run...
- 3. Type Regedit and click OK.
- 4. Doubleclick HKEY_CURRENT_USER and then Software\Microsoft\Office\11.0\MS Project\Security
- 5. Doubleclick the LegacyFiles item on the right and set the number to 2. If you do not see a LegacyFiles option on the right (if it only has Default and Level) then you need to add this entry. To do this select Edit-New-DWORD Value. Type LegacyFiles as the new name for this option and doubleclick it to open the form. Enter a 2 in the Value Data field and click OK.
- 6. Exit the Registry.

Contacting Critical Tools, Inc.

Company Address

Critical Tools, Inc. makes and distributes the Windows-based project management software, WBS Chart Pro and PERT Chart EXPERT.

Contact: Critical Tools, Inc.

7308 West Rim Drive Austin, Texas 78731

USA

Phone: 512-342-2232

Fax: 512-342-2234

Website: <u>www.criticaltools.com</u>

Our website contains a detailed description of our products plus downloadable demo versions, online ordering and the latest product announcements.

Sales Email: sales@criticaltools.com

Support

support@criticaltools.com

Email:

Critical Tools, Inc. is a Microsoft Certified Partner. In addition, Critical Tools has fulfilled all requirements and is active in the ISV/Software Solutions Competency of the Microsoft Certified Partner program. As part of this process, Critical Tools' software was independently tested and certified. Testing was conducted independently by VeriTest, a testing service of Lionbridge Technologies.



ISV/Software Solutions

Support

Critical Tools, Inc. offers free support for the current version of the PERT Chart EXPERT software. You can obtain support in the following ways:

Phone Support: 512-342-2232

Support Hours: 8:00am – 5:00pm US Central Time (Monday – Friday)

Email Support: support@criticaltools.com

The majority of the time we can respond to your email inquiries the same day. Less frequently it will take us up to 24 hours. If you do not hear from us in 24 hours, we suggest you email again or call us at the number above.

Index



Cascade 141 Company Address 168



Show Subtasks 98



Hide Subtasks 99



Focus 101



Progress Marks 103

Zoom 105

Fields

Borders 111

Lines 115



Resources 129



Field Names 133



Toolbar 95



Options 139



Goto 90



Tile 142



Arrange Icons 143



List of Projects 144



About PERT Chart EXPERT 147



Frequently Asked Questions 151



PDF Files 151



Configuring a Network Version of MS Project 13 Creating a PERT chart from your MS Project plans 45



Moving Tasks 29



Displaying Fields in Task Boxes 31



Saving PERT charts 41



What is PERT Chart EXPERT? 5



Microsoft Project 136



Page Layouts 59, 61



What is a PERT chart? 6



System Requirements 7



Installing on a Local PC 8 Installing on a Network 9



Adding New Tasks 19



Configuring Microsoft Project 10



New 49



Open 50



Close 52



Save 53 Save As 54



Views 96



Save As Web Pages 57 Support 169



Page Setup 64 Print 67 Print Preview 69 Properties 71



Most Recently Used Files (1 2 3 4) 74



Exit 75



Undo 76



Cut 78 Copy 79



Paste Before 80



Insert Before 81



Delete 82



Save As Picture 56



Grouping 32



Printing 39



Confirm Unlink 162 Cannot Merge 158



Unable to Save Image 163



Overwriting HTML Files 164

Unable to Open Linked Data File 156

Find 88 Find Next 89

Border Names 135

- D -

Demo Limits Exceeded 165

- P -

Product Registration 166

- O -

Opening Old PERT charts 160

Calendar 127

- M -

Microsoft Project Messages 154

Timescale 35, 119 Trace 131



Dependencies 21



Group 121



Lock Box Positions 124 Layout Selected 125



Tracing Tasks 37



Critical Path 28



Transferring a PERT chart to WBS Chart Pro 44



Goto WBS Chart Pro 138



No Calendar Available 159

Hyperlink Symbols 104

Scheduling & Critical Path 23



Task Information 83

- O -

Overview of Creating a PERT chart 18

- T -

Toolbar Buttons 148

- Z -

Zoom In Toolbar Button 148 Zoom Out Toolbar Button 148

- T -

Tips when using PERT Chart EXPERT with MS Project 47

- S -

Show All Subtasks 100

- C -

Chart 114

- F -

Fields in PERT Chart EXPERT 38

- C -

Custom Box Settings 117

- D -

Displays a blank PERT chart from MS Project plans 167

- P -

Project Settings 126



HTML Template 161 Hyperlinks 83



Renumber Tasks 132



Select 91



Microsoft Project Setup 137



Show Only Summary Tasks 102



Unlink 70



Normal 92



Page Layout 93



Online Layout 94



Content and Index 145



Tip of the Day 146 Transferring a PERT chart to Microsoft Project 43 Terminology and Basic Concepts 15



Invalid Data 157



Redo 77

