



PRIMAVERA

**P3 to P6 Professional Migration Guide
Release 8.1**

May 2011

Copyright

Oracle Primavera P3 to P6 Professional Migration Guide

Copyright © 1999, 2011, Oracle and/or its affiliates. All rights reserved.

The Programs (which include both the software and documentation) contain proprietary information; they are provided under a license agreement containing restrictions on use and disclosure and are also protected by copyright, patent, and other intellectual and industrial property laws. Reverse engineering, disassembly, or decompilation of the Programs, except to the extent required to obtain interoperability with other independently created software or as specified by law, is prohibited.

The information contained in this document is subject to change without notice. If you find any problems in the documentation, please report them to us in writing. This document is not warranted to be error-free. Except as may be expressly permitted in your license agreement for these Programs, no part of these Programs may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose.

The platform-specific hardware and software requirements included in this document were current when this document was published. However, because new platforms and operating system software versions might be certified after this document is published, review the certification matrix on the My Oracle Support (formerly OracleMetaLink) Web site for the most up-to-date list of certified hardware platforms and operating system versions. The My Oracle Support (formerly OracleMetaLink) Web site is available at the following URL:

<http://metalink.oracle.com/>

or

<http://support.oracle.com/>

If the Programs are delivered to the United States Government or anyone licensing or using the Programs on behalf of the United States Government, the following notice is applicable: U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the Programs, including documentation and technical data, shall be subject to the licensing restrictions set forth in the applicable Oracle license agreement, and, to the extent applicable, the additional rights set forth in FAR 52.227-19, Commercial Computer Software -- Restricted Rights (June 1987). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

The Programs are not intended for use in any nuclear, aviation, mass transit, medical, or other inherently dangerous applications. It shall be the licensee's responsibility to take all appropriate fail-safe, backup, redundancy and other measures to ensure the safe use of such applications if the Programs are used for such purposes, and we disclaim liability for any damages caused by such use of the Programs.

Oracle and Primavera are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. The Programs may provide links to Web sites and access to content, products, and services from third parties. Oracle is not responsible for the availability of, or any content provided on, third-party Web sites. You bear all risks associated with the use of such content. If you choose to purchase any products or services from a third party, the relationship is directly between you and the third party. Oracle is not responsible for: (a) the quality of third-party products or services; or (b) fulfilling any of the terms of the agreement with the third party, including delivery of products or services and warranty obligations related to purchased products or services. Oracle is not responsible for any loss or damage of any sort that you may incur from dealing with any third party.

To view the list of third party component disclosures related to this product, please see the *Commercial Notices and Disclosures* document for the release.

Contents

Copyright.....	2
Preface.....	7
P6 Professional Documentation.....	7
Where to Get Documentation Updates.....	9
Where To Get Training	9
Where to Get Support	9
About this Guide	9
Welcome to P6 Professional.....	11
What is P6 Professional?	11
New Environment - Same Processes	11
Roles and Responsibilities	14
Implementation Strategy	17
Set Your Goals and Business Objectives	17
Develop an Implementation Strategy	18
Assess Needs	19
Communicate the Plan	22
The Implementation Process.....	23
Understanding Data Structures in P6 Professional	23
Connecting Data Structures	25
Process Overview: Structuring Data in P6 Professional	26
Familiar Features.....	27
File Menu (P3/P6 Professional)	27
Edit Menu (P3/P6 Professional).....	28
View Menu (P3/P6 Professional)	28
Format Menu (P3/P6 Professional)	30
Tools Menu (P3/P6 Professional)	31
Data Menu (P3/P6 Professional)	34
Comparison of Terminology and Date Fields.....	35
Comparing Terminology	35
Understanding Dates in P6 Professional.....	36
Tips and Tricks.....	39
Understanding Activity Types.....	39
Understanding Duration and Percent Complete Types	41
Creating Hammock Activities.....	44
Using Autocost.....	47
Creating a P3 Report in P6 Professional	56

Using Global Change	61
Creating a Timescaled Logic Diagram	68
Grouping Activities by Resource	68
Stacking Multiple Resource Bars in a Profile	70
Displaying the Activity Network	71
Planning for Conversion.....	75
Why Plan for Conversion?	75
P3 Conversion Considerations	75
P6 Professional Conversion Considerations.....	86
Setting Up the EPS	86
Setting Up Resources.....	88
Importing P3 Projects to P6 Professional	91
Running the Import Wizard	91
How P6 Professional Converts P3 Data.....	99
Advanced Conversion Options.....	100
Before and After Conversion Example	102

Preface

In This Chapter


P6 Professional Documentation.....	7
Where to Get Documentation Updates.....	9
Where To Get Training.....	9
Where to Get Support.....	9
About this Guide	9

P6 Professional Documentation

You can access reference manuals and administrator’s guides from the P6 Professional Documentation Center, located in the \Documentation\<language> folder of the P6 Professional physical media or download. Most documentation assumes a standard setup of the product, with full access rights to all features and functions.

Media packs include all files necessary to install P6 Professional applications, all manuals and technical documents related to the installation, administration, and use of P6 Professional components, and the Quick Install Guide. For information on the contents of the P6 Professional Media Pack, see the *P6 Professional Quick Install Guide*.

The following table describes documentation publications and lists the recommended readers by role. P6 Professional roles are described in the *P6 Professional Administrator’s Guide*.

Title	Description
<i>P6 Professional Administrator’s Guide</i>	Explains how to set up the P6 Professional database, servers, and components; it also provides an overview of all the components in the P6 Professional solution. The guide describes the procedures required to administer P6 Professional, including setting up security and configuring global preferences.  The P6 Professional network administrator/database administrator should read this guide.
<i>Tested Configurations</i>	Lists the configurations that have been tested and verified to work with P6 Professional. The network administrator/database administrator and P6 Professional administrator should read this document.

Title	Description
<i>P6 Professional Standalone Installation and Configuration Guide</i>	Explains how to install and configure P6 Professional as a standalone application.
<i>P6 Professional Help</i>	Explains how to use P6 Professional to plan, set up, and manage projects in a multiuser environment. If you are new to P6 Professional, use this Help to learn how to use the software effectively to plan and manage projects. The P6 Professional administrator, program manager, project manager, resource/cost manager, and team leader should read this Help.
<i>P6 Professional User's Guide</i>	This guide explains how to plan, set up, and manage projects in a multiuser environment. If you are new to P6 Professional, start with this guide to learn how to use the software effectively to plan and manage projects. When you need more detail, refer to the P6 Professional Help. The program manager, project manager, resource/cost manager, and team leader should read this guide.
<i>Primavera Timescaled Logic Diagram Help</i>	Describes how to create, modify, and manage Timescaled Logic Diagrams. Timescaled Logic Diagrams condense the project schedule displayed in the Gantt Chart into a more readable, easier to understand format that provides a snapshot of the entire project plan and the chains of activities that drive the project schedule.
<i>P6 SDK Web-based documentation</i>	Describes how to use the P6 SDK to connect to the P6 Professional database. The tables, fields, and stored procedures that you can access through the P6 SDK are described. Examples are also provided to show how you can use the P6 SDK to perform several basic tasks, such as creating a new project or assigning a resource to a project activity. The P6 Professional network administrator/database administrator should read this documentation, which is available in <i>local drive\Program Files\Oracle\Primavera P6 Professional\PMSDK\Doc\</i> by default. Double-click the INDEX.HTML file to open the Table of Contents.
<i>P3 to P6 Professional Migration Guide</i>	This guide provides best practices for migrating your P3 data to P6 Professional, and details how P3 functionality maps to P6 Professional functionality.

Distributing Information to the Team

You can copy the online documentation to a network drive for access by project participants. Each team member can then view or print those portions that specifically relate to his or her role in the organization.

Where to Get Documentation Updates

For the latest updates to the P6 Professional Documentation library, go to http://download.oracle.com/docs/cd/E23006_01/index.htm.

Where To Get Training

To access comprehensive training for all Primavera products, go to:

<http://education.oracle.com>

Where to Get Support

If you have a question about using Oracle products that you or your network administrator cannot resolve with information in the documentation or help, go to:

<http://www.oracle.com/us/support/index.html>

This page provides the latest information on contacting Oracle Global Customer Support and the support renewals process.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

About this Guide

This guide provides information to help you move your existing projects from Primavera Project Planner (P3) to P6 Professional. It is organized by sections as follows:

- ▶ Welcome to P6 Professional
Oracle provides a suite of products for supporting the needs of varying levels of an organization that manage small or large numbers of projects at one time in different locations. Read the topics in this section to learn about the modules that make up P6 Professional. The roles typically found in the Construction and Engineering industry are also outlined, along with their responsibilities and how they might use P6 Professional.
- ▶ Implementation Strategy

Company-wide project management is a systematic way to organize, prioritize, plan, and manage your projects and resources. To ensure good results, up-front planning and coordination are essential. The topics in this section discuss some of the steps necessary to implement P6 Professional properly. These topics are not intended to provide you with a complete implementation plan, but will introduce you to key concepts, such as the need to set business objectives, develop an implementation strategy, assess needs, and communicate the plan once it is defined.

- ▶ **The Implementation Process**

An important part of your implementation is determining how to map your business processes into P6 Professional to support your objectives. To do this, first you need to set up data structures in P6 Professional. Read the topics in this section to learn about these structures, how they fit together, and how data flows between them. This chapter also provides overviews of the processes for implementing data structures and managing projects.

- ▶ **Familiar Features**

All the familiar P3 features can be found in P6 Professional. The topics in this section contain tables that list options on the P3 menus and indicate where you can find them in P6 Professional. You can also refer to the Online Helps for the latest feature information.

- ▶ **Comparison of Terminology and Date Fields**

Although the project management concepts remain the same between P3 and P6 Professional, P6 Professional does use some different terms. This section provides the names of fields or functions in P3 and their corresponding new names in P6 Professional. Items that use the same name across products are not listed. You can also review definitions for the various date fields in P6 Professional, along with definitions for all the activity data items.

- ▶ **Tips and Tricks**

While many of the features and functions in P6 Professional work the same as in P3, there are some differences. This section discusses considerations for conversion and gives you some tips and tricks for getting the results you want from P6 Professional.

- ▶ **Planning for Conversion**

Because you are moving from a single user, single project environment to a multiuser, multiproject environment, planning before conversion is essential. You can think of it as moving from a two-dimensional product to a three-dimensional product. To take full advantage of P6 Professional's global capabilities, you will want to review your existing projects and processes and evaluate any necessary changes. The topics in this section discuss what you need to consider before converting your projects and how to set up some structures in P6 Professional.

- ▶ **Importing P3 Projects to P6 Professional**

These topics discuss how to use the P6 Professional Import wizard to move your P3 projects to P6 Professional. Most data converts directly from P3 to P6 Professional. Where differences exist, this section describes how the data is converted. The import is done using P6 Professional.

Welcome to P6 Professional

In This Section

What is P6 Professional?	11
New Environment - Same Processes	11
Roles and Responsibilities.....	14

What is P6 Professional?

P6 Professional is project, cost, and resource management software that enables organizations to make informed decisions and improve their ability to deliver programs and projects on time and on budget. P6 Professional creates a collaborative environment with easy-to-use, personalized interfaces for all project stakeholders.

P6 Professional integrates traditional project management with resource and cost management. It is ideal for single-project users, as well as organizations that need to simultaneously manage multiple projects and support multiuser access across job sites or the entire organization.

P6 Professional also provides centralized resource management, and you can also match people with roles and proficiency levels, and then use that information to assign tasks effectively.

P6 Professional uses standard Windows interfaces, client/server architecture, and scalable, network-based (Oracle and Microsoft SQL Server) databases.

You can choose to use P6 SDK with P6 Professional. P6 SDK enables you to integrate the data in the project management database with external databases and applications. It provides access to the schema and to stored procedures that encapsulate business logic. P6 SDK supports the Open Database Connectivity (ODBC) standard and ODBC-compliant interfaces, such as OLE-DB and JDBC, for connecting to the project management database. P6 SDK must be installed on any computer that needs to integrate with the project management database.

New Environment - Same Processes

Large business owners can have hundreds of engineering and construction projects underway at one time to create the new products that build their future. General contractors have projects that help contribute to the same goals as those of business owners. These projects cross normal business hierarchies and chains of command, making project management an organization-wide, cross-disciplinary challenge.

The pressure to complete projects on time and within budget, *and* maintain a competitive edge is driving organizations to develop and implement project management processes. They are moving away from a traditional functional structure to a multiple-project organization that must achieve clear, but urgent, goals using limited, shared resources, and they need the fastest payback from those projects to realize potential revenue.

P6 Professional enables organizations to budget, prioritize, plan, and manage multiple projects while optimizing shared resources. It provides comprehensive information on all projects in an organization, from top management summaries to detailed plans by project. Individuals across all levels of the company can analyze, record, and communicate reliable information and make timely, informed decisions that support ontime project delivery.

By putting the right tool in the right hands, P6 Professional enables an organization to

- ▶ Make strategic business decisions
- ▶ Control the details necessary to finish projects
- ▶ Understand current resource demands, set priorities, and evaluate long-term resource requirements
- ▶ Reorganize projects to fit shifting priorities without sacrificing quality
- ▶ Improve communication
- ▶ Report across projects
- ▶ Manage by exception
- ▶ Utilize early warning indicators

Same processes — new environment

As an existing P3 user, you can take comfort in knowing that much of the functionality and processes you will follow in P6 Professional remain the same—for example, you schedule projects in P6 Professional just as you would in P3. The focus, however, changes from a single user environment to a multiuser, role-based environment. In P3, individual projects are managed separately by one or more project managers, each with their own set of codes, resources, calendars, reports, and so on. This process can work fine in many circumstances, but when many projects and programs need to be managed at the same time, upper management needs a way to assess their progress and relationship to one another at a higher level.

Because P6 Professional supports thousands of programs and projects in a single database repository, management can maintain a better grasp on all the projects and resources within the organization, while individual project managers can review just the data that is relevant to them.

In the P3 standalone environment, the project manager and/or administrator is responsible for collecting data, entering it into the program, tailoring and running reports for different audiences, and analyzing the data, which can be a time-consuming process. The multiuser environment of P6 Professional eliminates this bottleneck by having defined roles with shared responsibilities and accountability. Individuals can record progress using P6 Professional, which then can easily update the project database. Project managers can schedule, review, and analyze data in P6 Professional. Upper management can review reports across all projects in summarized format using a project website.

Latest technology

While P3 has used the extremely reliable Btrieve database engine since 1985, its 16-bit technology is quickly becoming outdated. P6 Professional is based upon, and installed to run in, one of two new supported platforms:

- ▶ **Server:** Project data is stored in a central project database that resides on a server running Microsoft SQL Server or Oracle. This type of relational database management system offers many advantages over the file structure used in P3. For one, not all projects are managed separately - because data is stored in a central database, rather than on the user's PC, P6 Professional enables managers to access project data anywhere, at any time. Cross-project analysis, including resource usage and project summaries, is also possible.
- ▶ **Standalone:** Project data is stored locally on your PC using an Oracle XE database.

The P6 Professional database structure provides better data security. Tables in a database on a central server cannot be as easily manipulated as individual project files on a user's PC. Database tables also let you maintain a huge number of records that contain the data for all projects, facilitating organization-wide project management and scalability.

P6 Professional also allows project managers to publish project data to a website as a way to disseminate status.

When you need to integrate project data with other enterprise systems, such as Accounting or Human Resources applications, you can use the P6 SDK on computers that require access to the data. The P6 SDK makes project data available to external applications through Open Database Connectivity (ODBC) interfaces, such as OLE-DB.

Standardization and organization

Repeatable and efficient data management can be accomplished through global data structures. P6 Professional lets you set up a hierarchical structure for all projects (EPS), along with structures for work responsibilities (OBS), resources, project codes, activity codes, costs, and calendars. Organizing data globally not only saves time in data entry, but it also provides the consistency necessary for cross-project summaries and analysis. See ***Understanding Data Structures in P6 Professional*** (on page 23) for more detailed information about data structures.

Support

Oracle provides you with the tools to centralize and utilize the diverse skills and dispersed information that exist across your organization. Oracle has a long and established relationship with its existing P3 customers, especially in the construction industry, which you can continue to rely on. We want to make your migration from P3 to P6 Professional a smooth and successful transition. You will still receive the same worldwide, certified "world-class" customer support to which you have become accustomed.

Roles and Responsibilities

The following section describes the organizational roles as they typically apply to P6 Professional. Roles can vary or overlap, depending on the organization and industry.

Network administrators

Network administrators configure an organization's network environment (local and wide area networks) for optimal performance with P6 Professional. They install and maintain the server and client modules in P6 Professional. They manage user access to project data and develop and maintain a comprehensive security policy to ensure that project data is protected from unauthorized access, theft, or damage.

Network administrators ensure that the hardware and software supporting P6 Professional function reliably by:

- ▶ Setting up and maintaining the network to ensure reliable connections and the fastest possible data transfer;
- ▶ Creating and maintaining accurate lists of network resources and users so that each has a unique network identity.

Database administrators

Database administrators (DBAs) are responsible for setting up, managing, and assigning access rights for the P6 Professional databases. They set and oversee rules governing the use of corporate databases, maintain data integrity, and set interoperability standards.

Database administrators ensure reliable access to the databases by:

- ▶ Installing, configuring, and upgrading database server software and related products as required;
- ▶ Creating and implementing the databases;
- ▶ Monitoring database performance and tuning as needed;
- ▶ Planning for growth and changes and establishing and maintaining backup and recovery policies and procedures.

Program managers

Program managers are responsible for strategic planning and ongoing performance analysis. They use P6 Professional to identify and monitor problem areas in current projects and analyze past projects to apply lessons learned when planning future projects.

Program managers might be responsible for:

- ▶ Initiating, prioritizing, and budgeting projects;
- ▶ The profit/loss for a specific business unit;
- ▶ Funding and go/no-go decisions about projects.

Project managers and schedulers

Project managers and/or project schedulers are responsible for managing multiple small, repetitive projects or a single, complex project. They use P6 Professional to:

- ▶ Add projects to the database;
- ▶ Determine resource requirements for a project;
- ▶ Perform cross-project analysis;
- ▶ Perform baseline analysis;
- ▶ Manage projects to on-time and on-budget completion;
- ▶ Plan projects before they are funded.

They might also perform detailed financial analysis of projects, handle project billing, and integrate financial information within the company.

Crew foreman

Crew foremen manage the work for a project that might be a portion of a larger project. They are managers who produce work and manage a team, and they use P6 Professional to prioritize short-term tasks or objectives, typically when the duration is less than the planning period of the project.

Crew members

Crews are trained in a specific skill required on a project. They work with their manager to develop activities and durations for incorporation into the schedule. Once activities are added to the schedule, crew members can update them using P6 Professional to indicate the work they performed during designated accounting periods.

Implementation Strategy

In This Section

Set Your Goals and Business Objectives	17
Develop an Implementation Strategy	18
Assess Needs.....	19
Communicate the Plan	22

Set Your Goals and Business Objectives

In most companies, though their scope and duration can vary, projects tend to have similar goals: improve quality, reduce costs, increase productivity and revenue, reduce delivery time, and streamline operations. Often, the ultimate goal is to gain a competitive advantage. Controlling these projects is becoming increasingly difficult, especially if they are planned and run by project teams that are distributed across multiple locations. Organizations need to ensure that each team stays on track with its projects without losing sight of company objectives.

Company-wide project management using P6 Professional enables project teams to plan and control their work while providing a continuous, centralized understanding of progress and performance. To begin the process of implementing P6 Professional, you might want to broaden your project management goals to focus on the multi-user, role-based environment.

Specific objectives could include:

- ▶ Providing the project office with access to dynamic status information that they can use to make timely decisions.
- ▶ Improving efficiency of resource use by properly allocating skilled labor, communicating methodologies, and forecasting resource needs more accurately.
- ▶ Improving productivity across the project team as a result of continuous collaboration.
- ▶ Improving communication with all project participants through the use of integrated, organizational-wide products that put project information on individual's desktops.
- ▶ Increasing accountability by making consistent, summarized project status information available to top management.
- ▶ Increasing quality and client satisfaction through the use and reuse of best practices.
- ▶ Enabling maintenance of performance data on completed projects to confirm estimating metrics, and collect job cost data.
- ▶ Integrating with other business systems to provide a total information system.

These goals are specific to project management. You can include additional goals that are particular to your company or industry. For example, one specific objective for a construction company might be to complete the inspection process in a more timely manner. Use best practices from your industry as a guide to setting your goals.

Develop an Implementation Strategy

Implementing P6 Professional successfully requires that an appropriate "culture" be established within your organization. Instead of having many independent projects with no ability to aggregate and control them, you can now have a consolidated, organized project information system.

Creating the culture requires an understanding of the data and how it flows, and the roles and responsibilities of individuals as project participants and managers. Your challenge will be to create an open environment in which all these participants share data and performance information.

You would not think of allowing construction workers to work on a job site without designating a field manager to oversee the work, nor would you implement a new project without assigning a general contractor. The project management environment is best created by your own administrator, who would perform an equivalent function—if you don't have such a person, you need one. Designate one person or a team of people to plan and coordinate the implementation. The responsibility of this team will be to develop an implementation strategy that includes helping participants understand the organizational project management approach. You might decide you need help with your implementation from Oracle Consulting or one of our business partners. Contact Oracle for more information.

While the implementation strategy will be specific to your organization, it will most likely include a needs assessment as one of the first steps. Even though you are already using project management software, take the opportunity to analyze and determine your company's business requirements, along with system requirements and the processes necessary to fulfill those requirements. You will also need to determine how to structure data to facilitate those processes. It is important to document the processes and procedures that you define. See **Assess Needs** (on page 19) for more detailed information about assessing needs.

To ensure that data is flowing as planned, create a prototype. Use real project data to set up structures in a test database and run your processes through a typical work cycle. The prototype should include all modules of P6 Professional that you will be using, along with any interfaces to external applications. Develop a plan that identifies all the possible scenarios to test. Include a method for collecting test data and a way to resolve issues. Use this step to make sure your system requirements are sufficient to meet the needs of all users.

A prototype can be followed by a pilot program, where you establish a small group of users to work with P6 Professional in their environment. They can be introduced to the software using familiar project data while performing their daily work tasks. More than likely, the pilot users will identify flaws in the processes and have suggestions and questions. Make refinements and changes based on their feedback. You can also want to begin internal training programs at this time, using your pilot group of users. Ongoing performance monitoring should continue during this stage and adjustments made as necessary.

When the pilot program is satisfactory, a rollout of P6 Professional to your entire company can begin. This step involves installing the client software on all necessary desktops and populating the database with project data. You should develop a rollout schedule and get the appropriate approvals. Be sure to include the lessons learned from the pilot testing. Communicate the rollout schedule to ensure its success.

Assess Needs

A needs assessment is a crucial step to a successful P6 Professional implementation. It will provide the basis for the entire system design, how it will operate, and who will use it.

Assessing needs can range from an evaluation of the corporate culture to analyzing hardware/software requirements to reviewing existing processes and developing new ones. Most of your information will come from interviewing key personnel. Meet with representatives from all areas of the company who participate in the project management process, from the owners to the individuals doing the actual work. Ask questions about the tasks they need to perform and the project information they need to know to do their jobs effectively.

Determine corporate culture

As mentioned, understanding the corporate culture plays an important role in any major implementation. You need to know ahead of time whether your company is ready, willing and capable for the change. Evaluate your company's state of readiness for company-wide project management. For example:

- ▶ Does your organization have a clear understanding of project management?
- ▶ Are they familiar with computers and software?
- ▶ Are standard processes in place for managing projects?

If the answer to these questions is No, include a training program in your implementation plan. Depending on the degree of readiness, you might also need to address issues that involve preparing employees mentally for dealing with change.

Define hardware/software requirements

Review the system requirements necessary to run P6 Professional. Then, conduct interviews with your Information Technology (IT) personnel, or those responsible for maintaining network integrity and new hardware/software installations to inquire about the current technical environment. Include questions, such as:

- ▶ Do you have servers or hardware in place? If so, what kind?
- ▶ How are remote locations managed?
- ▶ Do you have separate servers for development and production?
- ▶ Are you running Oracle or SQL server on one or more servers? If so, which version?
- ▶ Are you running any other database software?
- ▶ Do you have a LAN and/or WAN in place?
- ▶ Do you have mobile user requirements?

Answers to these types of questions will help you determine your hardware specifications. Be sure to identify items such as database server requirements, application server requirements, LAN requirements, and PC requirements. This step should be performed early in the process, since you might need to order new equipment or upgrade existing software before installing P6 Professional.

Define integration requirements

While examining hardware requirements, review any integration requirements.

- ▶ Will you be interfacing with other software systems, such as ERP?
- ▶ Will custom integration to an existing financial system or asset management system be required?
- ▶ Do you have resources who are skilled to develop necessary interfaces or are consultants required?

If you are integrating P6 Professional with third-party applications or legacy systems, you should identify interface points that provide continuous flow of data while minimizing data loss.

Define how data is structured

To manage projects successfully in P6 Professional, you first need to set up data structures for your organization, projects, resources, and costs. You might also want to define special codes to help you organize and report on data more effectively. To structure data properly, review how you handle data currently along with how you want to handle it. For example:

- ▶ How do you group projects? How many levels of projects do you have?
- ▶ Are projects cross-departmental? Do they have multiple locations?
- ▶ What is your typical project scope, size, and cost?
- ▶ How many projects are you managing at one time?
- ▶ What is your organizational structure?
- ▶ How do you group resources? Are resources assigned to projects as groups or individuals? Are resources shared across projects?
- ▶ Do you track skills for each resource?
- ▶ Do you have a work breakdown structure already in place?
- ▶ Do you have a need for multiple calendars? Do resources need calendars?
- ▶ What types of reports do you use? How often are they produced?

When you answer these types of questions, you can define the necessary data structures, such as the project hierarchy, organizational breakdown structure, and the work breakdown structure.

Determine current procedures/processes

To define how data will flow in P6 Professional, you need to understand how your business operates. Look at your current processes and procedures and modify them to suit your project management objectives. Making decisions early about process changes saves time and money. Answer the following types of questions when you analyze business processes.

- ▶ Do you have a project methodology in place? If so, is it working?
- ▶ What is the life cycle of a project?
- ▶ What are the determining factors in deciding if a project is go or no-go?
- ▶ How are decisions made regarding project selection and budgeting?
- ▶ Is your budgeting/planning process top-down or bottom-up oriented?
- ▶ How do you estimate and track costs?
- ▶ Do you have a Project Management Office or something similar?
- ▶ What time reporting mechanism do you use?
- ▶ How do you track and measure progress?
- ▶ How do project participants get work assignments?
- ▶ What is your process for communicating project information to others?
- ▶ What information do you require or expect from the project management process?
- ▶ Who controls security? What security is required for project information? Do you need to restrict data access on a group or individual basis?

See **Planning for Conversion** (on page 75) for a checklist of considerations for P3 and P6 Professional. See **Importing P3 Projects to P6 Professional** (on page 91) for steps on using the Import wizard.

Define project conversion requirements

Since you are moving your projects from P3 to P6 Professional, you need to consider how and when to convert this data. The topics under, "Planning for Conversion" and "Importing P3 Projects to P6 Professional, later in this guide, help you with this process.

These are just some of the questions that need to be answered. As a result of your interviews and analysis, you should have a clear understanding of how your project processes flow.

Communicate the Plan

In successful P6 Professional implementations, people accept the changes and use the new system. Any new system or business process means a change to the way people are currently doing their jobs. Employees who are affected by the change need to know what to expect. Top management also needs to know what is going on if they are to provide support and commitment.

Communicate the implementation plan early and repeat it often. Set expectations and manage them continuously, being careful to avoid disappointing, frustrating, or surprising people.

There are many ways to communicate the implementation plan. You could introduce the plan at a company meeting along with a demonstration of P6 Professional to show how it will benefit the entire organization. Explain any changes to business processes that might occur and what it means to individuals. Define a timeframe so everyone knows when the changes will happen. Encourage people use the software and experiment hands-on to increase their comfort level when it comes time for them to make the change. Publicize commitment by ensuring that the implementation team has support and by providing training programs and seminars. Provide a method for all levels of the organization to address concerns, questions, and suggestions.

See the subjects in ***The Implementation Process*** (on page 23) to learn about the data structures and how they fit together in P6 Professional.

If you foster a challenging workplace that can develop individual careers along with open communication, those individuals will want to make the process successful.

The Implementation Process

In This Section

Understanding Data Structures in P6 Professional	23
Connecting Data Structures	25
Process Overview: Structuring Data in P6 Professional	26

Understanding Data Structures in P6 Professional

P6 Professional contains many data structures to support your project management needs and business processes. Well-defined structures make entering data faster and easier; they enable you to organize and summarize data more effectively. Review the following definitions to help you better understand the data structures in P6 Professional.

Enterprise project structure (EPS)

The EPS is a hierarchy that represents the breakdown of projects in a company. Nodes at the highest, or root, level might represent divisions within your company, phases of projects, or other major groupings that meet the needs of your organization, while projects always represent the lowest level of the hierarchy. Every project in the organization must be included in the EPS.

Resource hierarchy

The resource hierarchy represents the people, materials, and/or equipment used to perform work on activities. The resource hierarchy includes the resources across all projects in the organization. Resources are assigned to activities in P6 Professional.

Role hierarchy

The role hierarchy represents the roles, or job titles, that exist in your organization and have some responsibility to complete project requirements. You can associate resources with roles. In the planning stages of a project, you can assign roles to activities to establish an initial project plan without committing individual resources to activities; then, before work on an activity begins, you can assign a resource that meets the defined role requirements. You are not required to define a role hierarchy.

Work breakdown structure (WBS)

The WBS is a hierarchical arrangement of the products and services produced during and by a project. In P6 Professional, the project is the highest level of the WBS, while an individual activity required to create a product or service is the lowest level. Each project in the EPS has its own WBS.

Organizational breakdown structure (OBS)

The OBS is an outline of managers responsible for the projects in your company. There is one OBS for the entire organization. It is used to control access to projects and data.

Project, activity, and resource codes

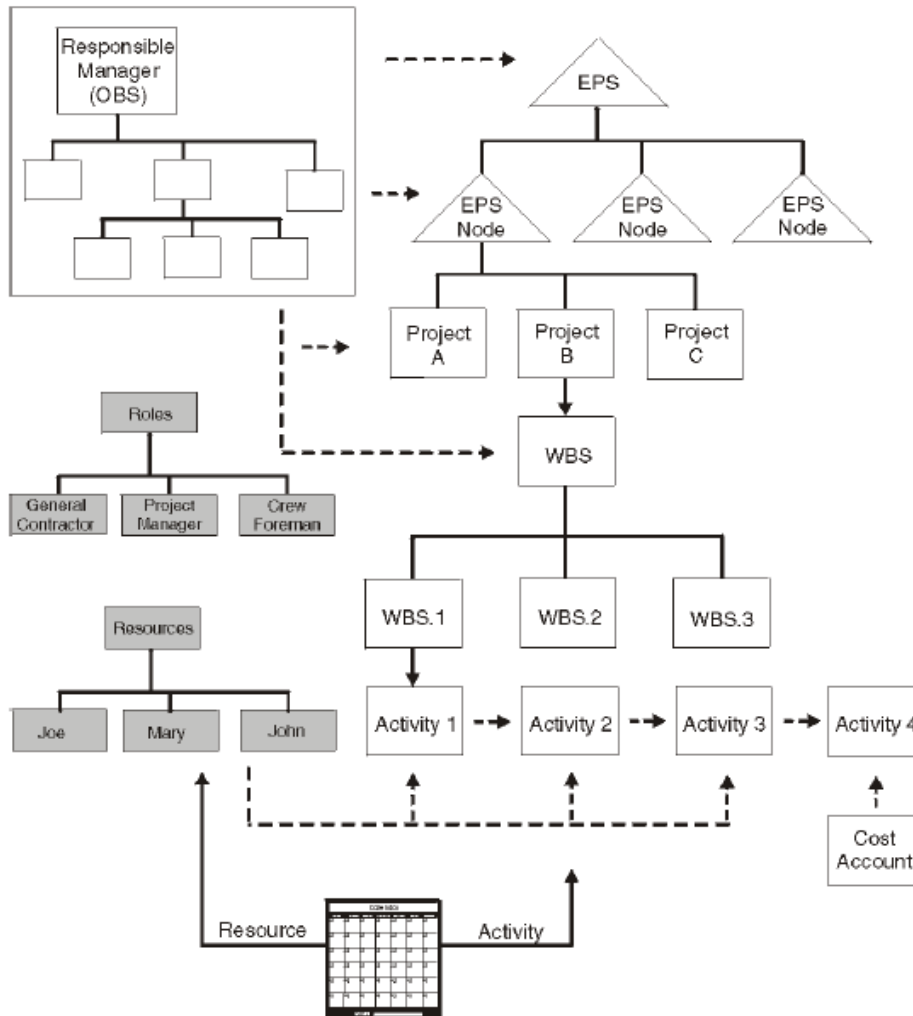
In addition to the EPS, WBS, and resource hierarchy, you can also create coding structures. Codes allow you to categorize projects, activities, and resources that have similar attributes; you can group, sort, filter, and summarize based on these codes.

Calendars

Calendars define standard workdays and the available number of hours in each day, along with holidays, vacations, and other nonworktime. You can create global, project-specific, and resource-specific calendars. Calendars are assigned to activities and/or resources; they determine start and end dates during scheduling and resource leveling.

Connecting Data Structures



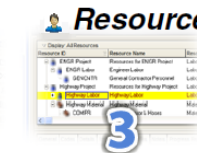
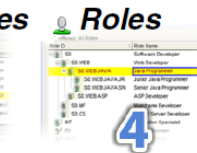
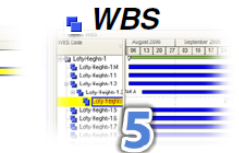
The following diagram illustrates how the data structures relate to each other in P6 Professional.



The EPS categorizes work in your company. Projects belong to EPS nodes. Each project has its own WBS that further breaks down the work in that project. Activities are the lowest level of the WBS. Additional structures include resources, roles, calendars, and cost accounts, which are assigned to activities. The OBS represents the responsible managers in your company and can be assigned at the EPS, project, and/or WBS level.

Process Overview: Structuring Data in P6 Professional

The hierarchical structuring of data serves as the foundation before the addition of actual project data. The following sequence is suggested for setting up the main structures:

				
<p>1</p> <p>Set up the EPS— the hierarchical structure that identifies company-wide projects and enables organization and management of those projects.</p>	<p>2</p> <p>Set up the OBS— the hierarchical arrangement (by actual individuals or by roles) of your company's management structure.</p>	<p>3</p> <p>Set up Resources— your organization's hierarchical resource structure; these resources will later be assigned to activities.</p>	<p>4</p> <p>Set up Roles— a hierarchy based on your organization's recognized job functions; resources will later be assigned to these roles. (Optional)</p>	<p>5</p> <p>Set up the WBS— the hierarchical arrangement of the sub-projects, task groups, products, and services produced during and by each project.</p>

Administrators, working with program managers and project managers, structure the EPS and OBS hierarchies. An EPS can consist of multiple root nodes, which enable particular types of projects to be grouped together, such as high-risk projects. Within each root node, you can further break down an EPS into multiple EPS nodes to categorize the types of projects.

The WBS acts as a continuation of the EPS for the individual projects in the enterprise. A WBS provides organization and control of project and activity information through a hierarchy of WBS elements. When you create projects, P6 Professional automatically creates a WBS element at the same hierarchy level and with the same name as the project. The P6 Professional enables you to set anticipated project dates, budgets, and spending plans for a WBS at a high level to indicate when the work should occur and how much its planned budget and monthly spending should be. You can use the pre-established budget amounts and funding information you set for WBS elements for their project and activity counterparts.

Familiar Features

In This Section

File Menu (P3/P6 Professional).....	27
Edit Menu (P3/P6 Professional)	28
View Menu (P3/P6 Professional)	28
Format Menu (P3/P6 Professional).....	30
Tools Menu (P3/P6 Professional).....	31
Data Menu (P3/P6 Professional)	34

File Menu (P3/P6 Professional)

The following table lists the commands on the File menu in P3 3.x and their corresponding location or functionality in P6 Professional.

P3 Menu Item:	P6 Professional Menu Item:
New	File, New
Open	File, Open
Close	File, Close All
Project Overview	Enterprise, Projects
General	Enterprise, Projects, Project Details, Dates tab
Targets	Project, Maintain Baselines
Project Codes	Enterprise, Projects, Project Details, Codes tab (assign)
	Enterprise, Project Codes (define)
Page Setup	File, Page Setup
Print Preview	File, Print Preview
Print	File, Print
Print Setup	File, Print Setup
Save as Web Page	Tools, Publish, Project Web Site
	Tools, Publish, Activity Layouts
	Tools, Publish, Tracking Layouts

Edit Menu (P3/P6 Professional)

The following table lists the options on the Edit menu in P3 and their corresponding location or functionality in P6 Professional.

P3 Menu Item:	P6 Professional Menu Item:
Cut	Edit, Cut
Copy	Edit, Copy
Paste	Edit, Paste
Edit Activity	Double-click in cell
Fill Cell	Edit, Fill Down
Delete	Edit, Delete
Dissolve Activity	Edit, Dissolve
Find Activity	Edit, Find
Select All	Edit, Select All
Unselect	Click anywhere
Period Performance	Project, Resource Assignments, display period columns in spreadsheet
Relationships	Double-click relationship line
Link Activities	Edit, Link Activities

View Menu (P3/P6 Professional)

The following table lists the options on the View menu in P3 and their corresponding location or functionality in P6 Professional.

P3 Menu Item:	P6 Professional Menu Item:
PERT	Project, Activities. Then, choose View, Show on Top, Activity Network.
Trace Logic	View, Show On Bottom, Trace Logic
Zoom	Zoom icons on Activity toolbar
Layout	Project, Activities
New	Modify the existing layout, then Save As

Open	View, Layout, Open
Save	View, Layout, Save
Save As	View, Layout, Save As
Transfer	View, Layout, Open, Import/Export button
Delete	View, Layout, Open, Delete
Options	n/a
Activity Form	Project, Activities. Then, choose, View, Show on Bottom, Activity Details.
Activity Detail	View, Show on Bottom, Activity Details
Budget	Summary tab
Codes	Codes tab
Constraints	Status tab
Cost	Expenses tab or Resource tab (assign)
Custom Data	Layout, Columns, then select User-Defined data
Dates	n/a
Log	Notebook tab
Predecessors	Predecessors tab or Relationships tab
Resources	Resources tab
Successors	Successors tab or Relationships tab
WBS	General tab
Resource Profile	Project, Activities. Then, choose View, Show on Bottom, Resource Usage Profile
Select	Resource Hierarchy
Display	Resource Usage Profile
Resource Table	Project, Activities. Then, choose View, Show on Bottom, Resource Usage Spreadsheet.
Relationships	Project, Activities. Then, click the Layout Options bar and choose Bar Chart Options.
Progress Spotlight	View, Progress Spotlight.
Toolbar	View, Toolbars
Attachment Tools	Project, Activities. Then, click View, Attachments, Curtain, Add Curtain or

Attachments, Text.

Current Users

File, Open, Users button

Format Menu (P3/P6 Professional)

The following table lists the options on the Insert menu in P3 and their corresponding location or functionality in P6 Professional.

P3 Menu Item:	P6 Professional Menu Item:
Columns	Project, Activities. Then, choose View, Columns For all other views, choose View, Columns, Customize.
Bars	For activities, choose Project, Activities. For projects, choose Enterprise, Projects, Then, choose View, Bars.
Endpoints	Bar Style tab
Patterns	Bar Style tab
Selected Bars	View, Bars
Summary Bars	For activities, choose Project, Activities. For projects, choose Enterprise, Projects. Then, choose View, Bars, Options. Select the Collapsed Bars tab.
Organize	For activities, choose Project, Activities, then choose View, Group and Sort. For all other views, choose View, Group and Sort By, Customize.
Reorganize Now	Tools, Reorganize Now
Filter	For activities, choose Project, Activities, then choose View, Filters. For projects, choose Enterprise, Projects, then choose View, Filter By, Customize.
Summarize	Double-click group title band in Activities window. Be sure Summary Bars are displayed in Bars dialog box.

Summarize All	Tools, Summarize (for projects)
	Project, Activities. Then, choose View, Collapse All.
Timescale	Project, Activities. Then, choose View, Timescale. For projects, choose Enterprise, Projects, then right-click anywhere in bar area and choose Timescale.
Sight Lines	With Gantt chart displayed, choose View, Bars, then click the Options button and select the Sight Lines tab.
Row Height	View, Table Font and Row
Screen Colors	View, Table Font and Row
Fonts	View, Table Font and Row
Dates	Edit, User Preferences, Dates tab
Activity Box Configuration (PERT only)	With the Activity Network displayed, choose View, Activity Network, Activity Network Options, Activity Box Template tab.
Relationships (PERT only)	n/a
Trace Logic (PERT only)	With Trace Logic displayed, choose View, Bottom Layout Options.

Tools Menu (P3/P6 Professional)

The following table lists the options on the Tools menu in P3 and their corresponding location or functionality in P6 Professional.

P3 Menu Item:	P6 Professional Menu Item:
Schedule	Tools, Schedule
Options	Tools, Schedule, Options button
Level	Tools, Level Resources
Prioritization	Tools, Level Resources (activities) Enterprise, Projects, Project Details, General tab (projects)
Report	Log to file option (complete analysis report not available)

Global Change	Tools, Global Change
Trial Run	Choose Apply Change to run report. Choose Commit Change in report.
Update Progress	Tools, Update Progress
Store Period Performance	Tools, Store Period Performance
Tabular Reports	Reports window. View, Group and Sort By Report Group. Or, Tools, Reports, Reports
Schedule	Report Group: Schedule
Resource	Report Group: Resource Usage
Cost	Report Group: Cost, Report Group: Cost & Schedule
Report Writer	Select a report, then right-click and choose Modify
Production	Tools, Reports, right-click and choose Run, Batch
Options	Tools, Reports, Reports. Right-click and choose Run, Report.
Graphics	Use Project, Activity or Tracking Layouts
Bar	Gantt Chart
Timescaled Logic	Tools, Timescaled Logic Diagram
Pure Logic	Activity Network (Activities window)
Resource & Cost	Resource Usage Spreadsheet, Resource Usage Profile (Activities window)
	Resource Analysis (Tracking layouts)
Options	Activity Usage Profile
InfoMaker	n/a
	n/a
Web Publishing Wizard	Tools, Publish, Project Web Site
	Tools, Publish, Activity Layouts
	Tools, Publish, Tracking Layouts

MPX Conversion Utility	File, Import, then select Microsoft Project (MPX format) File, Export, then select Microsoft Project (MPX format) (Note: Microsoft Project must already be installed.)
Project Utilities	
Copy	Enterprise, Projects, then choose Edit, Copy.
Delete	Enterprise, Projects, then choose Edit, Delete.
Merge	Open multiple projects simultaneously
Summarize	Tools, Summarize
Back Up	File, Export, then select Project (Export Type), XER format
Restore	File, Import, then select Project (Import Type), XER format
Targets	Project, Assign Baselines
Update	Project, Maintain Baselines, Update
Import	File, Import
Export	File, Export
Fragnet	n/a
Options	
Autocost Rules	Enterprise, Projects, Project Details, Calculations tab
Summarization	Default Global Calendar (resources)
	Percent Complete columns (projects)
Earned Value	Admin, Admin Preference, Earned Value
Activity Inserting	Enterprise, Projects, Project Details, Defaults tab
Critical Activities	Enterprise, Projects, Project Details, Settings tab
Set Language	Tools, Set Language
Change Password	Edit, User Preferences, Password

Default Activity Codes	Enterprise, Activity Codes, Global option
Project Check in/Checkout	File, Check In File, Check Out

Data Menu (P3/P6 Professional)

The following table lists the options on the Data menu in P3 and their corresponding location or functionality in P6 Professional.

P3 Menu Item:	P6 Professional Menu Item:
Calendars	Enterprise, Calendars
Week Starts On option	Admin, Admin Preferences, General tab
Shifts for resource limits option	Enterprise, Resource Shifts
Activity Codes	Enterprise, Activity Codes
Project Codes	Enterprise, Project Codes
WBS	Project, WBS
Copy	Copy command
Structure	Admin, Admin Preferences, General tab (default for new projects) Enterprise, Projects, Project Details, Settings tab (selected project only)
Resources	Enterprise, Resources
Limits	Units and Prices tab
Prices	Units and Prices tab
Shift limit tables	Units and Prices tab
Resource Curves	Enterprise, Resource Curves
Prorate	Modify, Prorate button
Cost Accounts	Enterprise, Cost Accounts
Custom Data Items	Enterprise, User Defined Fields

To transfer dictionary items in P6 Professional, use the Copy/Paste commands. To print dictionary items, use the Report Wizard.

Comparison of Terminology and Date Fields

In This Section

Comparing Terminology 35

Understanding Dates in P6 Professional..... 36

Comparing Terminology

Review the following alphabetical list of changes in terminology between P3 and P6 Professional.

Name in P3:	Name in P6 Professional:
Activity columns	Activity Table
Activity Form	Activity Details
Activity logs	Notebooks
Bar Chart	Gantt Chart
Costs (lump sum)	Expenses
Custom data items	User-defined fields
Estimate at Completion (resource)	At Completion units
Estimate to Complete (resource)	Remaining Units
Expedition	Contract Management
Fragnets	n/a
Hammock activity	Level of effort activity. See Creating Hammock Activities (on page 44) for more information.
Independent activity type	Resource dependent activity type
PERT	Activity Network
Resource lag	Original lag/remaining lag
Resource Profile	Resource Usage Profile/Activity Usage Profile
Resource Table	Resource Usage Spreadsheet/Activity Usage Spreadsheet

Target	Baseline
Task activity type	Task Dependent activity type
WBS activity type	WBS Summary activity type

Note: Context-sensitive on-screen help for column (field) values in P6 Professional table layouts is also provided by the Hint Help feature.

Understanding Dates in P6 Professional

P6 Professional includes many new date fields. The following table describes each type of activity date that you can include as columns in the Activity Table.

Date Field	Definition
Start	The current start date of the activity. Set to the remaining start date until the activity is started, then set to the actual start date. An "A" after the Start value indicates that it is the Actual Start; an asterisk "*" indicates that a Start constraint is applied to the activity.
Finish	The current finish date of the activity. Set to the activity planned finish date while the activity is not started, the remaining finish date while the activity is in progress, and the actual finish date once the activity is completed. An "A" after the Finish value indicates that it is the Actual Finish; an asterisk "*" indicates that a Finish constraint is applied to the activity.
Actual Start	The date on which the activity actually started.
Actual Finish	The date on which the activity actually finished.
Early Start	The earliest possible date the remaining work for the activity can begin. This date is calculated by P6 Professional based on activity relationships, schedule constraints, and resource availability.
Early Finish	The earliest possible date the activity can finish. This date is calculated by P6 Professional based on activity relationships, schedule constraints, and resource

availability.

Late Start	The latest possible date the remaining work for the activity must begin without delaying the project finish date. This date is calculated by P6 Professional based on activity relationships, schedule constraints, and resource availability.
Late Finish	The latest possible date the activity must finish without delaying the project finish date. This date is calculated by P6 Professional based on activity relationships, schedule constraints, and resource availability.
Project Planned Start	The date the activity is scheduled to begin. This date is set equal to the early start date by P6 Professional, but can be updated manually by the project manager. This date is not changed by P6 Professional once you apply an Actual Start date.
Planned Finish	The date the activity is scheduled to finish. This date is set equal to the early finish date by P6 Professional, but can be updated manually by the user. This date is not changed by P6 Professional once you apply an Actual Finish date.
Remaining Early Start	The date the remaining work for the activity is scheduled to begin. This date is calculated by P6 Professional, but can be updated manually by the user. Before the activity is started, the Remaining Early Start is the same as the Project Planned Start.
Remaining Early Finish	The date the remaining work for the activity is scheduled to finish. This date is calculated by P6 Professional, but can be updated manually by the user. Before the activity is started, the Remaining Early Finish is the same as the Planned Finish.
Expected Finish	The date the activity is expected to finish. When scheduling your projects, you can choose to use or ignore the Expected Finish dates.

Constraint Date	The date for which the activity's constraint applies. Depending on the constraint type, this date could be a start or finish date. For example, for a Finish On constraint, the constraint date is the date on which the activity must finish. If the activity does not have a constraint, this field will be empty.
Suspend Date	The date work has stopped on a given activity for an unknown, but temporary, period of time. For example, an event can force an activity to be interrupted.
Resume Date	The date work has resumed on a given activity after an unknown, but temporary, period of time.

Before an activity has progress, P6 Professional schedules the *early start* date similar to P3 - the earliest possible date the activity can begin based on network logic, constraints, and resource availability. The *project planned start* is set equal to the early start, and in turn, the *current start* and the *remaining early start* dates are set equal to the project planned start, which means all calculated start dates are the same when an activity has no progress.

When you record an actual start date for an activity, P6 Professional sets the current start date equal to the actual start date. The project planned start date is not changed, unless you change it manually, and the early start date is calculated. The remaining early start date is the same as the early start date, unless you change it manually.

Tips and Tricks

In This Section

Understanding Activity Types	39
Understanding Duration and Percent Complete Types.....	41
Creating Hammock Activities	44
Using Autocost.....	47
Creating a P3 Report in P6 Professional.....	56
Using Global Change.....	61
Creating a Timescaled Logic Diagram	68
Grouping Activities by Resource	68
Stacking Multiple Resource Bars in a Profile.....	70
Displaying the Activity Network	71

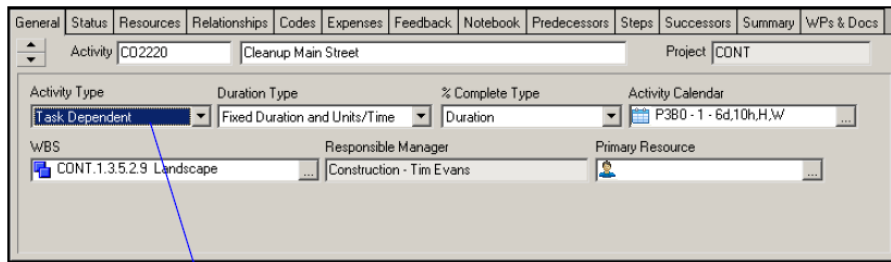
Understanding Activity Types

P6 Professional uses different types of activities to reflect varying schedule situations—similar to P3. Each activity must be assigned an activity type. Choose from five types of activities that describe a specific function, along with the calendar designation for scheduling.

The following table maps each activity type from P3 3.x to its corresponding activity type in P6 Professional. A description of each activity type and when you might use it follows the table.

P3 3.x Activity Type:	P6 Professional Type:
Task	Task Dependent
Independent	Resource Dependent
Start Milestone	Start Milestone
Finish Milestone	Finish Milestone
Meeting	Resource Dependent
Start Flag	Start Milestone
Finish Flag	Finish Milestone
Hammock	Level of Effort
WBS	WBS Summary

As shown below, you can set the activity type for an activity on the General tab of the Activities window using P6 Professional.



Set activity type on the General tab of the Activities window.

You can set the default activity type for new activities in your projects. Choose Enterprise, Projects, then choose View, Show on Bottom, Project Details.

- ▶ Choose *task dependent* when you want to control the duration of the activity yourself (that is, no resources are assigned), or when one or more resources assigned to the same activity can work according to the same calendar. The activity is scheduled according to the activity's calendar, not the resource calendars. For example, you might have an activity to cure concrete; you know how long the task takes and the addition of resources won't complete the task any earlier. You would designate this activity as task dependent.

Note: In P6 Professional, you can choose whether to allow new resource assignments' durations to drive the activity's duration and dates, or to allow the resources' durations to be independent of the activity. See **Before and After Conversion Example** (on page 102), later in this guide, for more information.

- ▶ Choose *resource dependent* when you want to schedule each resource according to his/her own time schedule, or resource calendar, not the activity calendar. The assigned resource availability determines the start and finish dates of the activity. Typically, you use this type when multiple resources assigned to the same activity can work independently, or when availability can affect the activity's duration. For example, an activity that requires an Inspector might be delayed if that resource is assigned to multiple projects or is on vacation.
- ▶ Choose *start milestone* or *finish milestone* to indicate that the activity marks the beginning or end of a major stage in the project. Milestones have zero duration. They can have expenses assigned to them, but not resources. In an office building addition project, examples of milestones might include Project Definition Complete, Structure Complete, or End Bidding Process.

- ▶ Choose *level of effort* to indicate that the activity's duration depends on its predecessor and/or successor activities. A level of effort activity is usually one that is ongoing, such as clerical work, change management, or project management tasks. For example, site cleanup could be considered a level of effort activity; it occurs repeatedly and is dependent on the completion of a phase. Hammock activities are similar to the level of effort activity. See **Creating Hammock Activities** (on page 44) for more information.
- ▶ Choose *WBS Summary* to indicate that the activity is a summary-level WBS activity. A WBS Summary activity represents a group of activities that share a common WBS level. The summary-level WBS activity enables roll-ups of dates for the activity group. The duration of a WBS Summary activity extends from the start of the earliest activity in a group to the finish of the latest activity. WBS codes control which activities are part of a WBS Summary activity; P6 Professional incorporates any activities that share a component of the WBS Summary activity's WBS code into the WBS Summary activity. For example, all activities whose WBS codes begin with A (A.1, A.1.1, A.1.2, etc.) can be part of one WBS Summary activity whose WBS code is A. At a lower level, all activities whose WBS codes start with A.1 (A.1.1, A.1.2, etc.) can be part of a WBS Summary activity whose WBS code is A.1.

Understanding Duration and Percent Complete Types

Each activity in P6 Professional uses a duration and percent complete type to determine certain calculations when updating.

As shown below, you can set duration and percent complete type on the General tab of Activity Details using P6 Professional.

Set the duration and percent complete type on the General tab of Activity Details.

You can set the default percent complete and duration type for new activities in your projects. Choose Enterprise, Projects, then choose View, Show on Bottom, Project Details.

Duration type

The duration type determines whether the schedule, resource availability, or costs are most important when updating activities. The duration type applies only when you have resources assigned to the activity.

To help you understand the effects of the duration type, you should first review how P6 Professional calculates resource data. The following equation must hold true regardless of which data you update:

$$\text{Remaining Units (resource)} = \text{Units/Time} \times \text{Remaining Duration (activity)}$$

For example, if you have a resource assigned to an activity for 8 hours per day for 5 days, the remaining units or work effort is calculated as 40 hours. The duration type enables you to control which variables of this equation are calculated when you change a value.

- ▶ Choose *fixed duration and units/time* or *fixed duration and units* to indicate that the schedule is a limiting factor in your project. The activity's duration does not change, regardless of the number of resources assigned when you modify or update activities. You usually choose this duration type when you are using task-dependent activities. An example of a fixed duration activity might be preparing drawings in a highway construction project; you know that the design engineer only has a certain amount of work to do during a specified time period.
 - ▶ When you update the remaining duration for the activity, you can choose to have P6 Professional calculate either the remaining units or the units per time period. If you want to recalculate the remaining units and keep the units/time for the resource constant, choose *fixed duration and units/time*. P6 Professional uses the equation:
$$\text{Remaining Units} = \text{Units/Time} \times \text{Remaining Duration}$$
 - ▶ If you want to keep the remaining units constant instead and recalculate the units/time, choose *fixed duration and units*. P6 Professional uses the equation:
$$\text{Units/Time} = \text{Remaining Units} / \text{Remaining Duration}$$
- ▶ Choose *fixed units/time* to indicate that resource availability is the most critical aspect of your project. In this case, the units/time or rate of the resource remains constant, even if the activity's duration or work effort changes. You most often use this duration type when you are planning resource dependent activities. For example, you have an engineer who can only work 4 hours/day.
- ▶ Choose *fixed units* to indicate that the budget (units or cost) is a limiting factor; that is, the total amount of work is fixed. When you update activities, the work effort required to complete the activity does not change, even if the activity's duration or the resource rate changes. Typically, you would use this type in conjunction with resource dependent activities. Increasing resources can decrease the activity duration. For example, if flooring and carpeting needs to be installed for an office building, you have a fixed amount of work, but adding resources to complete the installations simultaneously could reduce the time it takes.

Considerations for conversion

The following table shows how resource assignments in P3 3.x convert to duration types in P6 Professional.

P3 3.x Resource Assignment**Duration Type in P6 Professional**

If all resource assignments on the task are non-driving AND Freeze Resource Units per Time Period is marked on Autocost rules	Fixed duration & units/time
If all resource assignments on the task are non-driving AND Freeze Resource Units per Time Period is NOT marked on Autocost rules	Fixed duration and units
If any resource assignment on the task is driving AND Freeze Resource Units per Time Period is marked on Autocost rules	Fixed units/time
If any resource assignment on the task is driving and the Freeze Resource Units per Time Period is NOT marked on Autocost rules	Fixed units

Percent complete type

Define the percent complete type for an activity based on how you will report progress.

- ▶ Choose *Duration* if activity progress can most easily be reported based on original and remaining duration. For example, if you have a 10-day activity that has 5 days remaining, it is 50% complete. The percent complete is calculated as

$$[(\text{Original Duration} - \text{Remaining Duration}) / (\text{Original Duration})] \times 100$$
- ▶ Choose *Units* if activity progress is best reported according to the accomplished work effort (units) and how much work remains. The activity's percent complete is calculated from the actual and remaining units. For example, if an activity has an assigned resource with 40 hours of work to complete and the resource has actually completed 20 hours with 20 hours remaining, the activity is 50% complete.
- ▶ Choose *Physical* if activity progress is most accurately described by personal judgment. In this case, you manually enter the percent complete for the activity.

Converting from P3

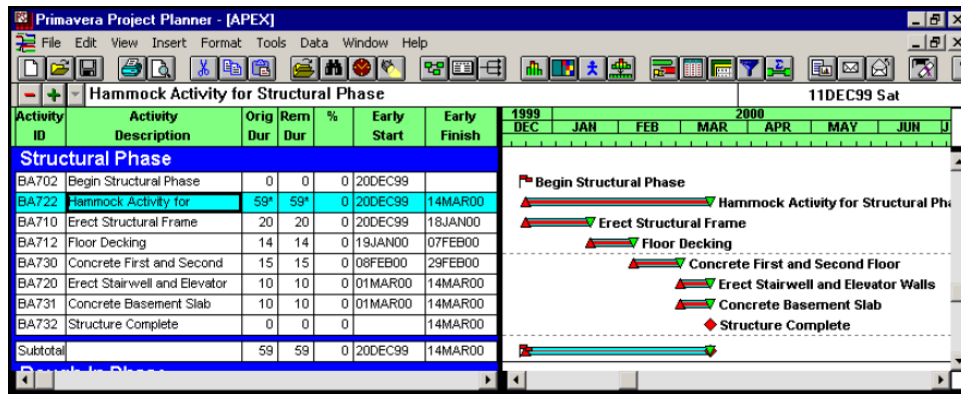
If you have the P3 autocost rule set to Link Remaining Duration and Schedule Percent Complete, when you import activities from P3 to P6 Professional they are assigned the Duration % complete type. This type specifies that the activity's percent complete is calculated from the original and remaining durations.

If the percent complete and the remaining duration are not linked in P3, when you import activities into P6 Professional, all activities are assigned the Physical % complete type.

Creating Hammock Activities

In P3, hammock activities are used to monitor the elapsed beginning-to-end duration of a group of activities. Duration for the group of activities is based on its assigned predecessors and successors. While P6 Professional does not have hammock activities, you can use the Level of Effort (LOE) activity type to create simple hammock-like activities. The LOE activity type is used to represent activities that are ongoing such as, project management tasks, reviews, and meetings.

For example, you can create a LOE activity in P6 Professional that duplicates the P3 hammock activity shown in the following figure.



Create a level of effort activity in P6 Professional

To create a level of effort activity in P6 Professional, choose Project, Activities. Add an activity and assign it the Level of Effort activity type in the General tab. Assign the appropriate duration type, percent complete type, and activity calendar.

Assign LOE activity type

The screenshot shows the 'General' tab for activity BA722, 'Hammock Activity for Structural Phase'. The 'Activity Type' is set to 'Level of Effort'. The 'Duration Type' is 'Fixed Duration and Units/Time'. The '% Complete Type' is 'Duration'. The 'Activity Calendar' is 'APEX - 1 - Standard 5-day'. The 'WBS' is 'BLDG-1.UNASSIGNED UNASSIGNED'. The 'Responsible Manager' is 'Hydra Corporation'. The 'Primary Resource' is empty.

Use the Predecessors and Successors tabs or the Relationships tab to assign the LOE activity only start to start predecessors and finish to finish successors.

Activity ID	Activity Name	Relati...	Lag	Activity Sta
BA710	Erect Structural Frame	SS	0.0d	Not Started

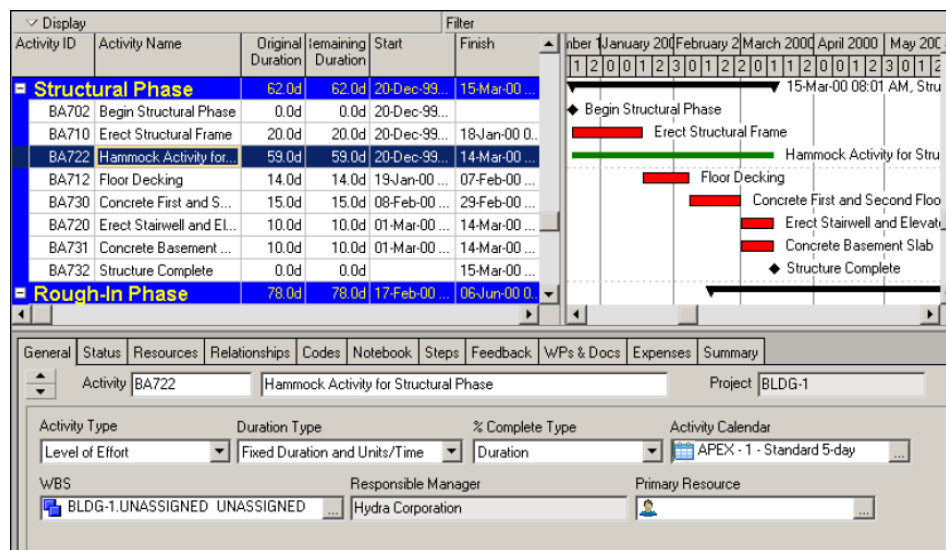
Activ...	Activity Name	Relati...	Lag	Activity Sta
BA731	Concrete Basement Slab	FF	0.0d	Not Started

Assign the LOE activity's predecessor using only the start to start relationship type.

Assign the LOE activity's successor using only the finish to finish relationship type.

When you schedule, P6 Professional calculates the level of effort (LOE) for the activity's duration from the *earliest early start* of its predecessors/successors (linked to the start end of the level of effort activity) to the latest early finish of its predecessors/successors (linked to the finish end of the level of effort activity).

The following figure illustrates the same hammock activity from P3 in the Activities window of P6 Professional:



Additional notes for using LOE activities

Review the following information regarding how LOE activities differ from hammock activities:

- ▶ A hammock activity expands to "umbrella" the activities encompassed within it. A LOE activity acts like a "filler" activity—it compresses to fit between activities.
- ▶ Hammocks are not scheduled using their own calendar. A LOE activity uses its assigned calendar during scheduling.

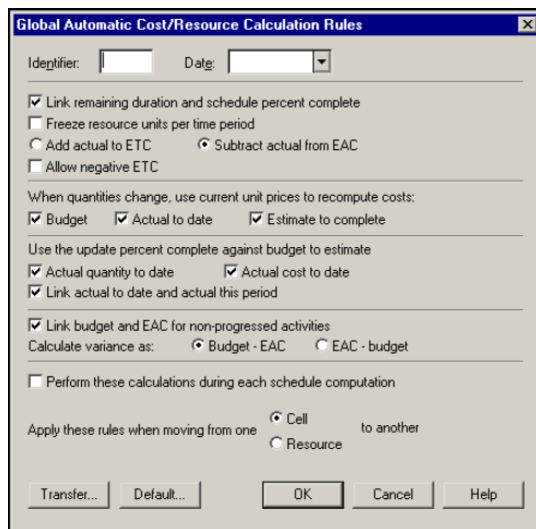
- ▶ A hammock activity's duration is calculated as the earliest early start of its predecessors to the latest early finish of its successor activities. A LOE activity's duration is calculated from the latest early start of its predecessors to the earliest late finish of its successor.

Note: To duplicate a hammock activity as a LOE activity in P6 Professional, you should only assign one predecessor to the LOE activity and one successor activity from the LOE activity.

Using Autocost

P3 uses Autocost rules to determine how resource and cost variables are calculated. P6 Professional also provides resource/cost calculation rules similar to Autocost. You can also model most of the Autocost rules using activity and duration types.

The following figure shows the Autocost rules from P3 3.x. The following paragraphs describe how to map each Autocost rule from P3 to its corresponding function in P6 Professional.



Rule #1 - Link remaining duration and schedule percent complete

P6 Professional always links the remaining duration and the schedule percent complete for an activity when it has the Duration percent complete type. When you convert activities from P3, they are automatically assigned the Duration percent complete type, indicating that the activity's percent complete is calculated from its original and remaining durations.

P6 Professional refers to estimate to complete (ETC) as Remaining Units. The estimate at completion (EAC) is now called At Completion units.

To display an activities remaining duration and schedule percent complete fields in P6 Professional, choose Activity, Details, Status tab.

If you update the activity's remaining duration, the Duration % is automatically updated. Labor units are updated based on the settings of other rules.

If you want to unlink the percent complete from the remaining duration, you should set the percent complete type to Physical, which means that you manually enter percent complete and remaining duration for each activity.

Rule #2 - Freeze resource units per day

In P6 Professional you can choose to freeze or not freeze the resource units per time by setting the appropriate duration type as shown in the following table. Keep in mind that P6 Professional uses the same fundamental equation as P3 to balance resource values when you update.

Remaining Units (RU)- Units/time period (UPT) x Remaining Duration (RD)

For this resource setting in P3:	Set to this duration type in P6 Professional:	Comments:
Freeze resource units/time period (for nondriving resources)	Fixed duration and units/time	Freezing the UPT in P3 is the same as fixing the UPT in P6 Professional. A nondriving resource means you want the units calculated based on the duration, so you would also fix the duration. RU = UPT X RD.

Do Not Freeze resource units/time period (for nondriving resources)	Fixed duration and units	Not freezing the UPT in P3 is the same as holding the RU constant in P6 Professional (UPT = ETC/RD). A nondriving resource means you want the units calculated based on the duration, so you would also fix the duration.
Freeze resource units/time period (for driving resources)	Fixed units/time	Freezing the UPT means that either the RD or the RU can be recalculated. A driving resource indicates that the RU determines the RD, so both of these variables are changed. In this case, you would simply fix the UPT in P6 Professional.
Do Not Freeze resource units/time period (for driving resources)	Fixed units	When resource units per time period are not held constant and the resource is driving. Indicates that the RD is calculated based on the resource units and UPT, and you want to fix the units.

When you convert projects from P3 to P6 Professional, the conversion sets the appropriate duration type based on your existing resource assignments and Autocost Rule #2. See ***Understanding Duration and Percent Complete Types*** (on page 41) for more information.

Rule #3 - Add actual to ETC or Subtract actual from EAC

In P6 Professional you can also choose to add actual units to the remaining units, or you can subtract the actual units from the estimate at completion. Set this rule at the project level.

Proceed as follows using P6 Professional to add actual units to the remaining units or to subtract the actual units from the estimate at completion.

- ▶ Choose Enterprise, Projects. Choose Display, Show on Bottom, Project Details. Then select the Calculations tab and choose a project from the upper pane.

To add actual units to the remaining units:

- ▶ From the Calculations tab in P6 Professional, choose Add Actual to Remaining Units or Costs.

Choosing either option causes P6 Professional to calculate a new at completion value when the remaining units or the actual units changes:

$$\text{At Completion Units} = \text{Remaining Units} + \text{Actual Units}$$

To subtract the actual units from the estimate at completion:

- ▶ From the calculation tab in P6 Professional, choose Subtract Actual from At Completion.

Choosing this option causes P6 Professional to calculate a new remaining units value when the at completion or actual units change:

$$\text{Remaining Units} = \text{At Completion Units} - \text{Actual Units}$$

Using the new remaining units, P6 Professional recalculates the units per time period as:

$$\text{Units per Time Period} = \text{Remaining Units} / \text{Remaining Duration}$$

Or, the remaining duration can be calculated as:

$$\text{Remaining Duration} = \text{Units/Time Period} / \text{Remaining Units}$$

When the activity duration type is set to Fixed Duration and Units/Time, P6 Professional always uses the Add rule, regardless of the Add/Subtract setting - similar to freezing the units per time period in P3. The Subtract rule must recalculate either the units per time period or the remaining duration (as indicated in the previous equations), which contradicts the Fixed Duration and Units/Time duration type that indicates you do not want the duration and the units per time period to change.

Converting P3 - "Allow negative ETC" to P6 Professional

The Allow Negative ETC option in P3 is not supported in P6 Professional. P6 Professional converts the P3 Autocost setting for the Add/Subtract rule to the same setting on the Project Details, Calculations tab.

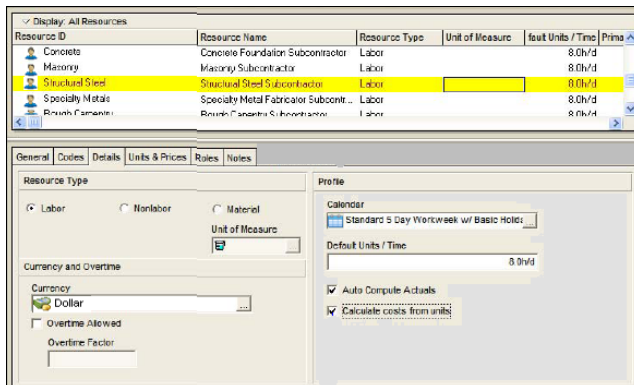
P6 Professional does allow you to specify negative budgeted, actual, and remaining units and cost for activities with Fixed Duration types (Fixed Duration & Units or Fixed Duration & UPT). P6 Professional indicates a negative value with a minus sign.

Rule #4 - When quantities change, use current unit prices to recompute costs: Budget, Actual to Date, Estimate to Complete

P6 Professional has a similar setting that enables you to recalculate costs associated with a resource when its quantities change.

Proceed as follows in P6 Professional to recalculate costs associated with a resource when its quantities change:

Choose Enterprise, Resources. Show the detailed tabs at the bottom of the Resources window by choosing Display, Details. Select a resource from the resource hierarchy, then choose the Details tab. For each resource, mark the option to Calculate Costs from Units, as shown in the figure below, if you want P6 Professional to calculate costs based on quantity changes for that resource. You must also have defined a price/unit for the resource.



Note: You can also change this setting for the resource at the activity level if you display the Calculate Costs from Units column in the Activities window, Activity Details, Resources tab. To display the Calculate Costs from Units column, in the Resources tab, right-click on any column heading and select Customize Resource Columns. In the Columns dialog, right-click anywhere in the Available Options section and select Group and Sort By, List. From the list, select Calculate Costs from Units and click the right arrow to move it to the Selected Options section. Click Apply, OK.

P6 Professional uses the following equations:

Budgeted Cost = Budgeted Units x Price/Unit

Actual Cost = Actual Units x Price/Unit

Remaining Cost = Remaining Units x Price/Unit

At Completion Cost = Remaining Cost + Actual Cost

To display costs for the resource, choose the Resources tab in Activity Details. Right-click anywhere along the column titles to customize the columns. You can add columns to show the cost data for each assigned resource.

Click the Status tab to review the activity's total costs. Click the Labor Cost list to display the options bar from units to costs.

When you choose to update costs based on resource units, you can also update units based on changes to costs by marking the Update Units when Costs Change on Resource Assignments option on the Calculations tab. To keep the calculations similar to P3 3.x, you would clear this option.

Rule #5 - Use the update percent complete against budget to estimate Actual quantity to date, Actual cost to date

You can set a similar option in P6 Professional that enables you to use the Duration percent complete to automatically update the actual units and actual costs on resource assignments.

Proceed as follows in P6 Professional to use the Duration percent complete to automatically update the actual units and actual costs on resource assignments:

Choose Enterprise, Projects. In Project Details, select the Calculations tab, then select a project from the upper pane.

On the Calculation tab, the Recalculate Actual Units and Costs when duration % complete changes option corresponds to the Autocost rule #5 in P3. When you select this option, P6 Professional links the Duration percent complete to actual values.

$$\text{Actual Units} = \text{Budgeted Units} \times \text{Duration \% complete}$$

Actual costs are also updated if you have the option set to recalculate costs based on units in the Resources window.

The screenshot displays the 'Resources' tab in P6 Professional. The top navigation bar includes tabs like General, Status, Resources, Codes, Relationships, Notebook, Steps, Feedback, WPs & Docs, Expenses, and Summary. The 'Resources' tab is active, showing details for Activity BA730, 'Concrete First and Second Floor', under Project APEX. The 'Duration' section on the left lists Planned (15.0d), Actual (0.0d), Remaining (9.0d), and At Complete (9.0d). The 'Status' section in the middle shows 'Started' on 10-Feb-00 08:00 with a 'Duration %' of 40% highlighted by a blue box. Other status options include Finished, Exp Finish, Suspend, and Resume. The 'Constraints' section at the bottom shows Primary and Secondary constraints set to '< None >'. On the right, the 'Labor Units' section shows Planned (150d), Actual (60d), Remaining (90d), and At Complete (150d).

In this example, a Duration % equal to 40 was entered. The Actual Units were updated as 150 x 40% = 60.

The newly calculated actual units for the activity are then distributed to the assigned resources, as shown in the following figure.

1. The actual units are based on Duration type and are distributed equally between the resources, so each resource is updated with 24 hours.
3. A new At Completion is calculated by adding the remaining units to the actual units.

Resource ID Name	Budgeted Units	Remaining Units / Time	Actual Regular Units	Remaining Units	At Completion Units
Excavate, Excav...	64.00	32.00/d	24.00	32.00	56.00
FINISH, Finisher	32.00	16.00/d	24.00	16.00	40.00

2. This activity has the Fixed Duration and UPT duration type assigned, which indicates that the remaining units are calculated as $RU = UPT / RD$.

Additional Notes for using the update percent complete against budget to estimate Actual quantity to date, Actual cost to date

The Recalculate Actual Units and Costs when Duration % Changes setting only applies when the Percent Complete type is set to Duration. If an activity is assigned the Units Percent Complete type, the actual units are automatically calculated for you the first time you update.

The table listed under Rule #2 earlier in this section correlates the Duration type in P6 Professional to the resource assignment in P3 3.x.

In addition, the setting to update actual units/costs when the Duration percent complete changes type does not apply to any activity whose Duration type is set to Fixed Units or Fixed Units per Time. These two cases are similar to having driving resources in P3 3.x. When you have resources that drive the duration of an activity, the most accurate update method is to update each resource's actual to date and remaining units, rather than having the actual units calculated for you based on a percent complete at the activity level. (This condition is the same as having Autocost Rule #1 set to link the remaining duration and schedule percent complete with driving resources in P3 - P3 does not allow you to change the activity's percent complete or remaining duration when the resource is driving.)

Note: When you apply actuals in P6 Professional (by marking the Auto Compute Actuals setting), P6 Professional uses these actuals, rather than the actuals calculated from the Recalculate Actual Units and Costs when Duration % Changes setting.

Converting from P3

When importing projects from P3 to P6 Professional, P6 Professional looks at how you have Autocost Rule #5 set in P3. If you have both the actual quantity to date and actual cost to date options selected to recalculate based on the percent complete, then P6 Professional selects the Recalculate Actual Units and Costs when Duration % Changes setting in the Projects window, Project Details, Calculations tab. If only one or neither option is selected in P3, then P6 Professional leaves the Recalculate Actual Units and Costs when Duration % Changes setting blank.

Rule #6 - Link actual to date and actual this period

This rule in P3 converts to a similar rule in P6 Professional.

Proceed as follows using P6 Professional to add actual units to the remaining units or to subtract the actual units from the estimate at completion:

- ▶ Choose Enterprise, Projects. In Project Details, select the Calculations tab.

If you select the Link actual to date and actual this period units and cost option and change either the actual or actual this period for an activity or resource, P6 Professional updates the other value. If you clear this check box, changing one value has no effect on the other. At the end of each accounting period, reset the actual this period values for units and costs for all activities and resource assignments as follows:

- ▶ Use the Store Period Performance command on the Tools menu.

Note: The Link actual to date and actual this period units and cost option corresponds to Autocost Rule #6 in P3 3.x.

Rule #7 - Link budgeted to EAC for non-progressed activities

You can set a similar option in P6 Professional that enables you to link the budgeted amount to the at completion amount for activities that have not started.

Proceed as follows using P6 Professional to link the budgeted amount to the at completion amount for activities that have not started:

- ▶ Choose Enterprise, Projects. In Project Details, select the Calculations tab.
If you select the Link Budget and At Completion for not started activities option, choose how to distribute the actual units on an activity when its actual start or finish is removed. You can choose to reset the original duration and units to equal the remaining duration and units. Or, to keep the calculation similar to P3 3.x, you can reset the remaining duration and units to equal the original duration and units.

Note: The Link Budget and At Completion for not started activities option correspond to Autocost Rule #7 in P3 3.x.

Rule #8 - Calculate variance as Budget-EAC, EAC-Budget

P6 Professional does not calculate a variance between the budgeted amount and at completion amount. However, you can set the current project as a baseline and calculate a variance between total costs.

Perform schedule calculations during each schedule computation

P6 Professional performs calculations during schedule computations.

Proceed as follows using P6 Professional to perform calculations during schedule computations:

- ▶ Choose Tools, Schedule, and then click the Options button. Select the Recalculate assignment costs after scheduling check box.

Schedule "nondriving" resource assignments

Resources that do not drive the dates of the activity they are assigned to are considered to be nondriving. You can define resources as driving or nondriving by default in the Projects window, Project Details, Resources tab. When scheduling nondriving resources, P6 Professional applies the following rules:

- ▶ When scheduling on the forward pass, if the activity has any driving resource assignments, P6 Professional calculates the early start date as the earliest Early Start date of all driving resource assignments. Once the Early Start of the activity is calculated from the driving assignments and relationships, all nondriving resources are scheduled on or after this date using the activity's assignment duration. The Early Finish dates of the nondriving assignments can fall earlier or later than the Early Finish of the activity.
- ▶ When scheduling on the backward pass, the Late Start date of the activity and all nondriving resources is calculated as the earliest Late Start date of all driving resource assignments. Once the Late Start date of the activity is calculated from the driving assignments and relationships, all nondriving resources are scheduled on or after this date using the activity's assignment duration. This means the Late Finish date of the nondriving assignments can fall later than the Late Finish date of the activity to which they are assigned.
- ▶ The finish dates of the nondriving resource assignments can fall later than the latest calculated Early Finish date of the project, which is driven by the activity dates.
- ▶ If no driving resources exist on the activity, the activity dates are used as the calculated dates for the nondriving resources.

Creating a P3 Report in P6 Professional

P3 provides reports and graphics that enable you to communicate detailed or summarized information about your projects. You determine the content, format, order, and selection of activities, among other options. The reports are preformatted, yet flexible, providing project data covering schedule, resource, and cost information.

Many of the reports you are familiar with in P3 can be found in P6 Professional as default global reports. Choose Tools, Reports, Reports to view the list of reports available in P6 Professional.

You can easily add a wide-variety of new reports or modify existing reports using the Report Wizard in P6 Professional. Wizard reports are created by selecting a base table and fields to view, combined with options for grouping, sorting, and filtering. You can easily modify a report as you're building it, and you can modify reports that were previously created by the Report Wizard.

Note: The Edit Global Reports security privilege is required to create, run, and save a report from the Report Wizard.

Create a schedule report

A schedule report provides a list of schedule data showing activity IDs, descriptions, durations, float, and early and late schedule dates. You can customize reports to show additional data on separate lines, such as budgets, resources, predecessor/successor activities, and logs.

The Classic Schedule Report (SR-01) in P3 displays basic schedule information and is sorted by Early Start and Total Float. A similar report is found in the list of global reports in P6 Professional. You can modify the report or create a new one using the Report Wizard. This section shows how to use the Report Wizard to create a new schedule report that duplicates the report in P3.

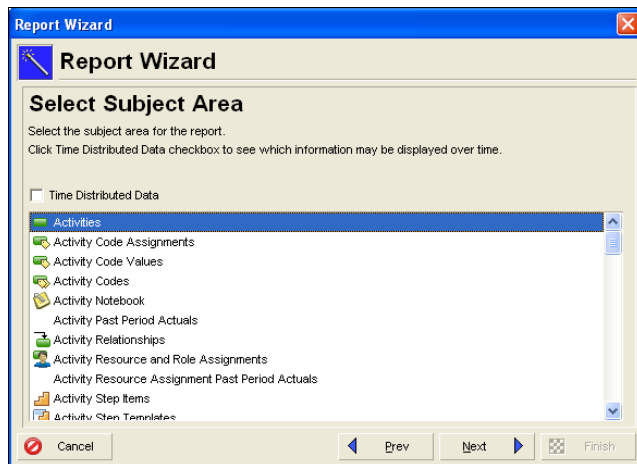
Acme Motors					PRIMAVERA PROJECT PLANNER		Plant Expansion & Modernization				
REPORT DATE 30SEP02 RUN NO. 36					-----Project Schedule-----		START DATE 19JUL99 FIN DATE 13FEB01				
9:44							DATA DATE 27SEP99 PAGE NO. 1				
Classic Schedule Report - Sort by ES, TF											
ACTIVITY ID	ORIG DUR	REM DUR	CAL %	CODE	ACTIVITY DESCRIPTION	EARLY START	EARLY FINISH	LATE START	LATE FINISH	TOTAL FLOAT	
BA400	20	0	1	100	ENG Design Building Addition	19JUL99A	27AUG99A				
AS100	10	0	1	100	ENG Define System Requirements	20JUL99A	4AUG99A				
AS101	20	0	1	100	ENG System Design	3AUG99A	31AUG99A				
AS204	10	0	1	100	ENG Prepare Drawings for Temp Control Equipment	17AUG99A	31AUG99A				
AS216	10	5	1	50	ENG Prepare Drawings for System Controller	23AUG99A	1OCT99		12JUN00	174	
BA501	14	0	1	100	ENG Review and Approve Designs	30AUG99A	20SEP99A				
AS102	10	0	1	100	ENG Approve System Design	31AUG99A	13SEP99A				
AS205	5	0	1	100	ENG Review and Approve Temp Control Equipment	31AUG99A	13SEP99A				
AS200	5	0	1	100	PCH Prepare and Solicit Bids for Temp Control Equip	7SEP99A	16SEP99A				
AS240	0	0	1	100	ISD Installation Begins	14SEP99A					
ASBB10	10	2	1	80	ISD Site Preparation	14SEP99A	28SEP99		9MAY00	155	
AS201	2	0	1	100	PCH Review Bids for Temp Control Equipment	20SEP99A	21SEP99A				
BA450	10	5	1	50	PCH Assemble Brick Samples	20SEP99A	1OCT99		23NOV99	37	
AS202	1	0	1	100	PCH Award Contract for Temp Control Equipment	21SEP99A	21SEP99A				
BA630	0	0	1	100	CON Begin Building Construction	21SEP99A					
BA640	20	18	1	10	CON Site Preparation	21SEP99A	20OCT99		20OCT99	0	
BA480	10	7	1	30	PCH Assemble and Submit Flooring Samples	21SEP99A	5OCT99		28MAR00	120	
AS206	20	16	1	20	PCH Fabricate & Deliver Temp Control Equipment	22SEP99A	18OCT99		14JUN00	165	

Choose Tools, Reports, Reports. Click Add to run the Report Wizard. Select New Report, then click Next.



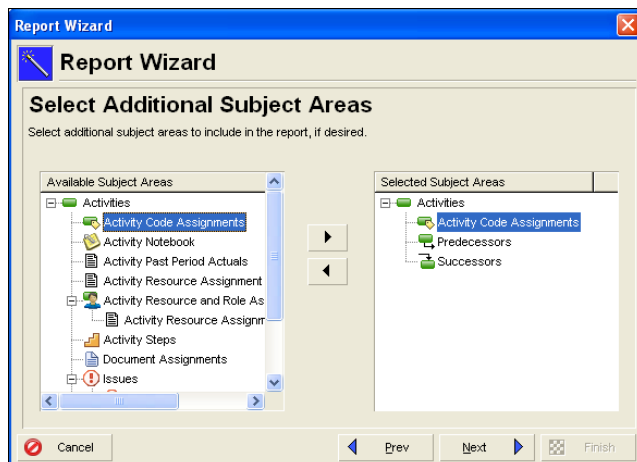
Choose the subject area that includes the information you want to display in the report. To create a schedule report that contains activity durations and dates, select Activities. Click Next.

Select the Time Distributed Data checkbox, shown below, to limit the subject areas to data that may be distributed over time.



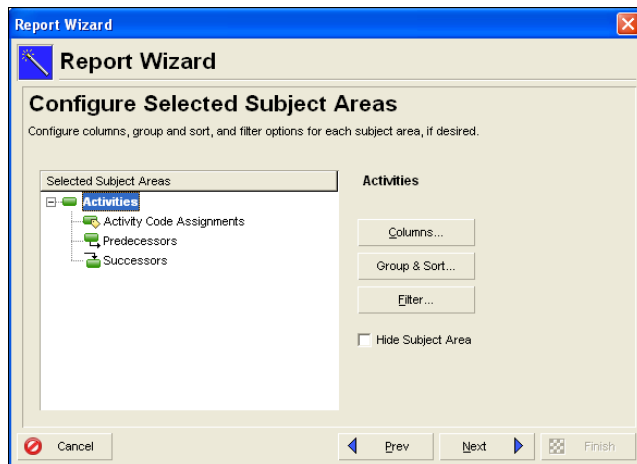
Choose additional subject areas to include in the report. The additional areas available are based on the subject area selected in the previous screen. Click Next.

Note: You cannot add additional subject areas to time-distributed reports.

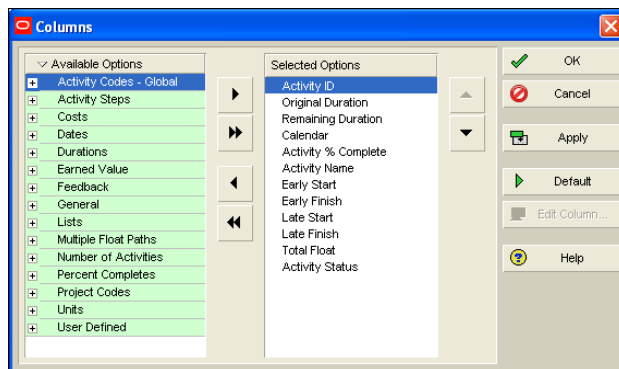


Configure the display options for each Subject Area. Click Columns to select the activity data to display in the report. The Columns dialog box contains all fields available to you based on the selected Subject Area.

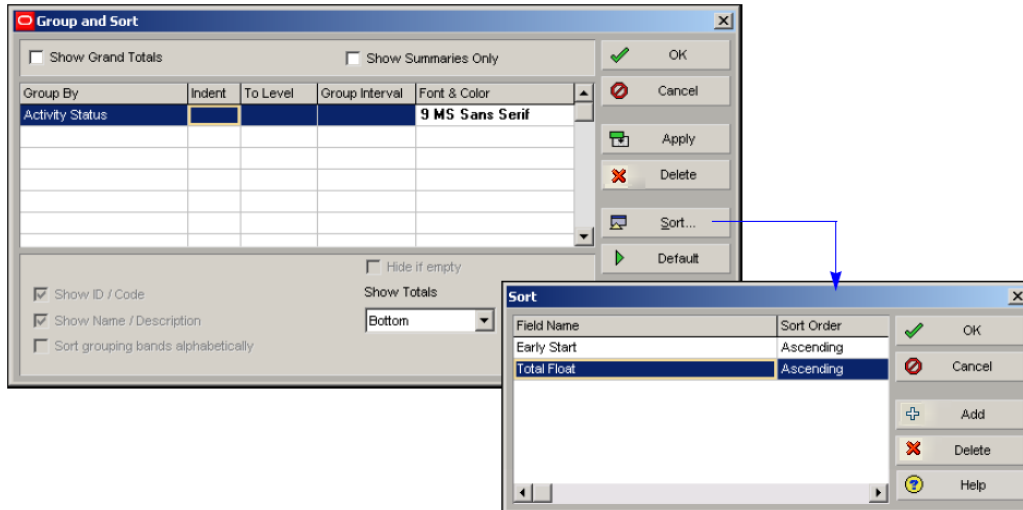
For example, as shown below, select a subject area to choose its columns, and to define its group, sort, and filter options. Then click Columns.



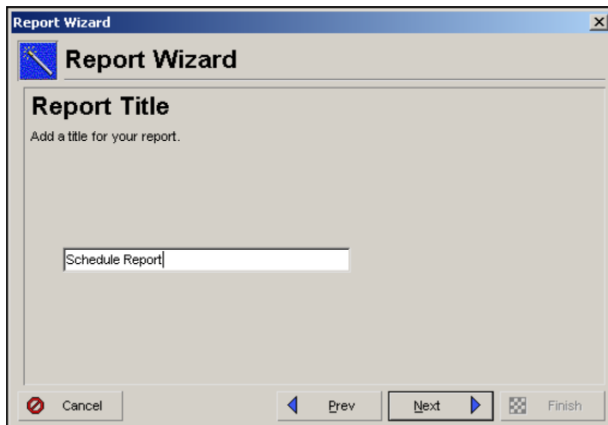
In the Columns dialog box, select the fields, as shown below, to duplicate the SR-01 report in P3.



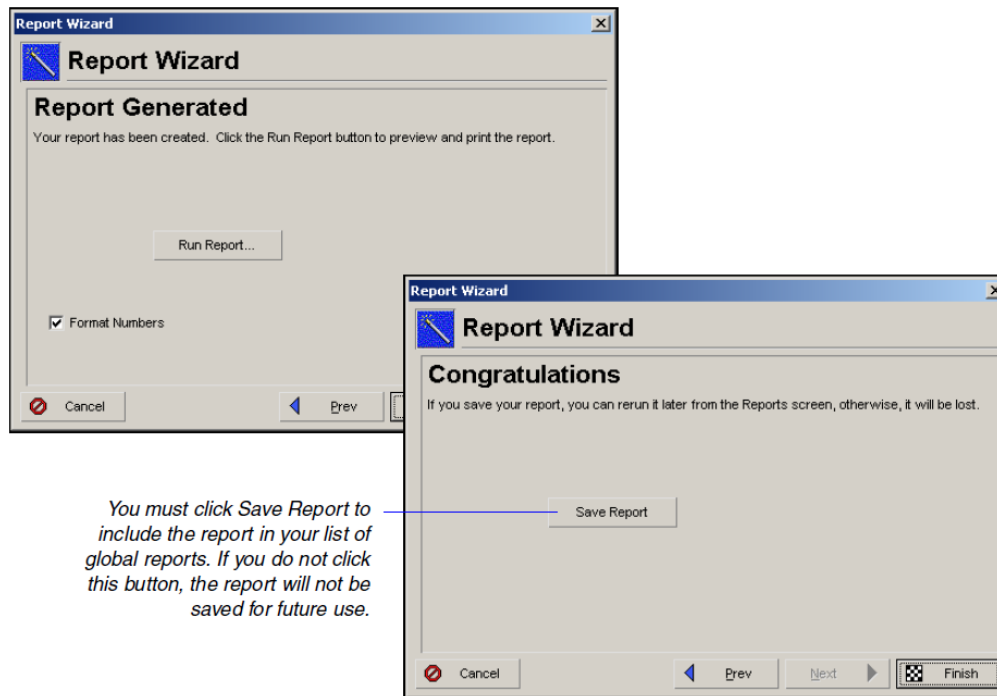
Click Group and Sort to determine the order in which data is listed in the report. Clear the items in the Group and Sort dialog box so the report is not grouped. In the Group and Sort dialog box, click Sort to order the information by Early Start, then Total Float. Click Filter if you want to limit the activities displayed in the report. Otherwise, click Next.



Type a title for your report. The title appears centered at the top of the report.



Click Run Report and choose to view the report in Print Preview, send directly to a printer, publish as an HTML file, or print to an ASCII text file. Click Next, and then click Save Report to save the report for future use.

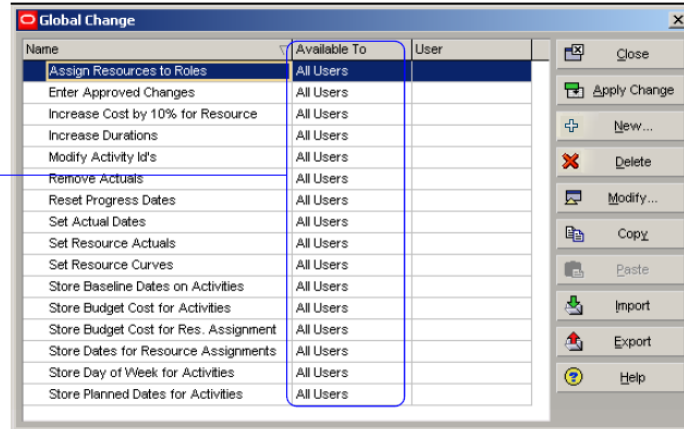


Using Global Change

Global Change is a powerful P3 feature that allows you to change data for many activities in a single operation. You can still take advantage of this functionality in P6 Professional. Similar to P3, use If, Then, and Else statements to determine the changes you want to make. Read this section to learn how to build a Global Change specification in P6 Professional. Differences between P3 and P6 Professional are also highlighted.

In P6 Professional, open the project whose data you want to modify. Choose Tools, Global Change. Just as P3 does, P6 Professional provides several sample specifications. Global Change specifications are available to all projects.

Specifications can be made available to you—the current user, all users, or to a another specific user.



Choose an existing specification and click Modify to review its definition. For example, the following figure compares the same Global Change specification from P3 and P6 Professional regarding increasing costs by ten percent for resources.

In P3, use If statements to select the field engineer resources whose duration is greater than zero.

A Then statement increases the budgeted cost by 10% by multiplying the current budgeted cost by 1.1.

First choose a subject area—activities, activity resource assignments, or project expenses.

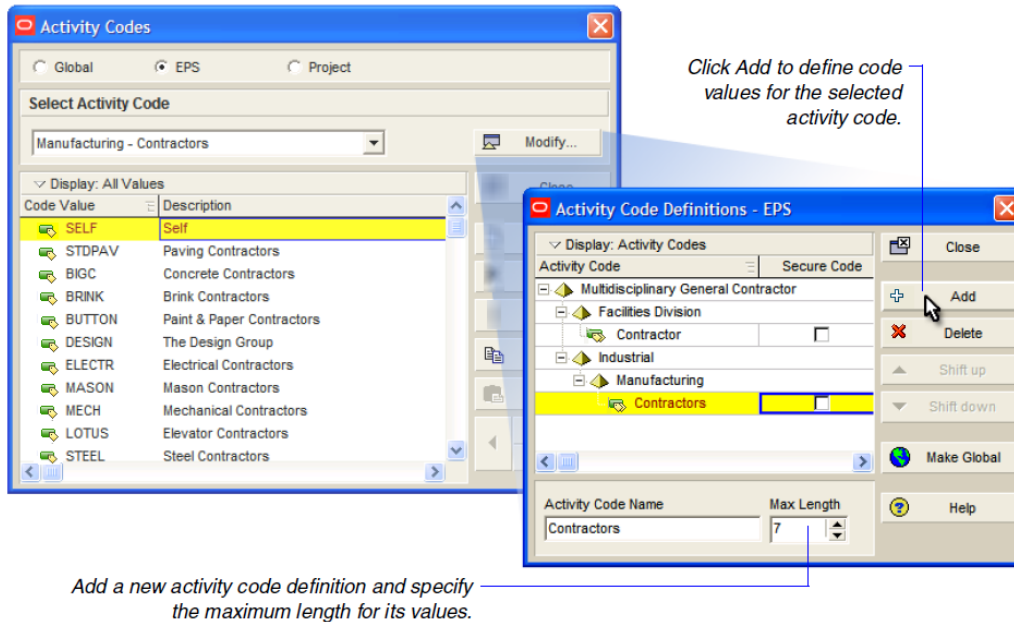
Double-click the Value field to choose a resource from the resource hierarchy.

Create a similar If statement to select the data to modify. The parameters you can choose are based on the subject area.

Define the same Then statement that you used in P3.

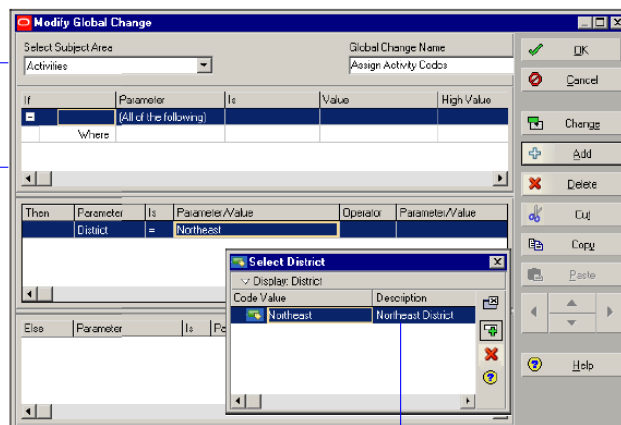
Create a Global Change specification to assign activity code values

The following example demonstrates how to define a new Global Change specification for assigning an activity code value to activities in a school construction project. First, open the project and choose Enterprise, Activity Codes to add a new activity code and associated values. In the Activity Codes dialog box, choose Modify, then Add to add a new classification.

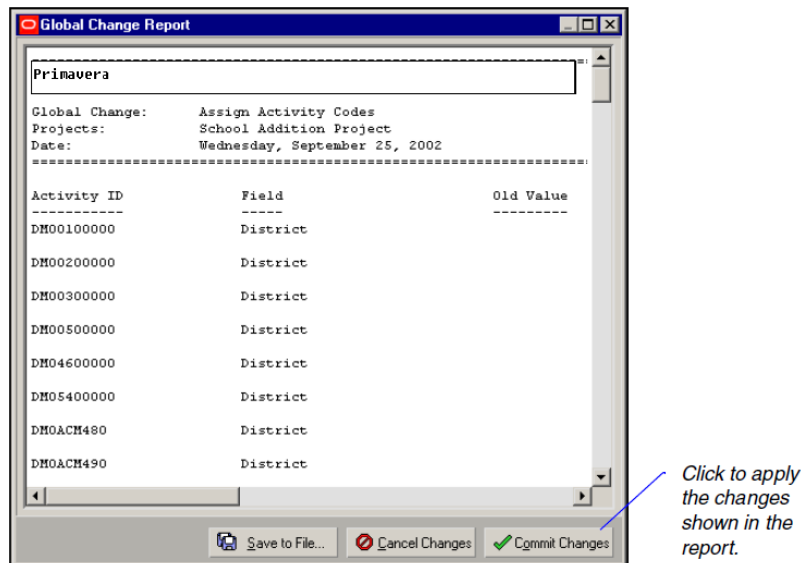


Once the activity code is defined, display the Activities window and choose Tools, Global Change to define a specification that assigns the code value to activities. Choose New to create a new specification. Click anywhere in the If, Then, or Else area of the Modify Global Change dialog box, then choose Add to define the criteria.

Choose a Subject area and use the If section to select the data that you want the global change to affect. Leave this area blank to change all activities in the open project.



In P6 Professional, the Change button on the Modify Global Change dialog box acts the same as P3's Trial Run command. Click Change to run a Global Change report that details the activities, assignments, or expenses affected by the change, including the old and new values. If you are satisfied with the results, choose Commit Change at the bottom of the report to apply the changes.



You can create a layout that includes columns for activity codes for review.

The activity code value has been globally assigned to all activities in the School Addition Project.

Activity ID	Activity Name	District	Phase	CSI - CSI Division	Department	Responsibility
Project: School School Addition Project						
DM00100000	Mobilization	Northeast	FOUND	02.000	CON	AM
DM00200000	Building Demolition	Northeast	FOUND	02.050	CON	AM
DM00300000	Sitework	Northeast	FOUND	02.000	CON	AM
DM00500000	Footing Excavation	Northeast	FOUND	02.220	CON	AM
DM04600000	Waterdown construction road	Northeast	FOUND	02.220	CON	AM
DM05400000	Repair fence at Area P-B	Northeast	FOUND	02.220	CON	AM
DM0ACH480	Phase II Occupancy	Northeast	FINSH	00.950	CON	JN
DM0ACH490	Punchlist	Northeast	FINSH	00.700	CON	JN
DM0ACH500	Final Clean up	Northeast	FINSH	01.400	CON	JN
DM0ACH510	Close Out	Northeast	FINSH	00.900	CON	JN
DM0BRN180	Windows/Panes	Northeast	ROUGH	08.500	CON	JN
DM0BRN190	Ext. Doors	Northeast	CLOSE	08.100	CON	JN
DM0BRN200	Overhead Doors	Northeast	CLOSE	08.350	CON	JN
DM0BRN230	Interior Partition Walls	Northeast	CLOSE	10.500	CON	MF
DM0BRN240	Interior Doors/Finishes	Northeast	CLOSE	08.000	CON	JN
DM0BRN250	Accessories	Northeast	CLOSE	10.900	CON	MF
DM0LEC360	Electrical Rough-In 1st Floor	Northeast	ROUGH	15.000	CON	AM
DM0LEC350	Electrical Rough-In 2nd Floor	Northeast	ROUGH	15.000	CON	AM
DM0MAS070	Masonry Foundations	Northeast	STRUC	04.000	CON	MF
DM0MAS160	Masonry Building Walls	Northeast	STRUC	04.000	CON	MF
DM0MAS220	Masonry Walls Interior	Northeast	STRUC	04.000	CON	MF
DM0MEC110	Exhaust System (rough)	Northeast	ROUGH	15.500	CON	AM

Comparing functions

P6 Professional contains many of the same functions as P3's Global Change feature. The functions are displayed in the Parameter/Value dropdown list of the Modify Global Change dialog box when an appropriate data item is specified in the Parameter field. The following table compares the functions.

Function in P3:	Function in P6 Professional:	Purpose:
RIGHT(item, x)	RightString(field name,#)	Extracts a specific number of characters from any data type, where field is the name of the field and # is the number of characters to extract, starting with the last character.
LEFT(item, x)	LeftString(field name,#)	Extracts a specific number of characters from any data type, where field is the name of the field and # is the number of characters to extract, starting with the first character.
SUBSTR(item, x, y)	SubString(field name,#,#)	Extracts a specified number of characters (y) from a data field starting at a specified position (x), where field is the name of the field.
DAY(date)	Dayof Week(date field or date)	Returns the day of the week for the specified date, resulting in Monday, Tuesday, and so on.
DATE(date)	CurrentDate/Time	Supplies the current system date. A date field must be specified in the Parameter field.
STDATE(date)	Not required	P6 Professional converts date fields to text strings whenever necessary.
TRM(field)	Not required	P6 Professional does not include leading blank spaces in fields.
RTRIM(field)	Not required	P6 Professional does not include trailing blank spaces in fields.

Additional notes on using Global Change

Read the following guidelines for using Global Change in P6 Professional. See the P6 Professional online help for detailed information.

- ▶ You can enter custom text, dates, or numbers to modify data. For example, if a text data item such as, Activity Name, is selected in the Parameter field type, you can specify text in the Parameter/Value field. Choose Custom from the dropdown list. You are then prompted to enter the text. If a date field were specified in the Parameter field, the Custom parameter prompts you to enter a specific date.

Choose Custom in the Parameter/Value field when you want to add text.

- ▶ You can combine text strings or concatenate using the ampersand (&) operator, similar to P3. Specify the text you want to concatenate within quotation marks in the Value field.
- ▶ P6 Professional does not use temporary variables. Instead, use user-defined fields as temporary place holders. User-defined fields are similar to P3's custom data items. You can define user-defined fields in the User Defined Fields dialog. Choose Enterprise, User Defined Fields. User-defined fields can be displayed as columns in the Activity Table and in reports.
- ▶ You can use arithmetic equations to change numeric data such as quantities, costs, and durations. Use addition, subtraction, multiplication, and division to calculate new values.
- ▶ Security privileges are required to use Global Change. You must be assigned the global privilege Edit Global Change Definition to create, edit, and delete Global Change specifications that are available to all users. You must also be assigned the project privilege Run Global Change to apply Global Changes to currently open projects along with having access to the data that you are changing.
- ▶ When you enter a value for a unit or duration field, the value is not converted to hours. For example, if you enter 5d, the value of 5d is applied when you run the global change. By applying the value of 5d (rather than, for example, 40 hours), global change can accurately change units and durations for activities and resource assignments that use calendars with varying settings for hours per time period.

Creating a Timescaled Logic Diagram

In P3, you can define, run, and display Timescaled Logic Diagrams (TSLDs). TSLDs condense the project schedule displayed in the Gantt Chart into a more readable, easier to understand format that provides a snapshot of the entire project plan and the chains of activities that drive the project schedule. Similar capabilities are provided in P6 Professional.

In P6 Professional you can create Timescaled Logic Diagrams (TSLDs) using the Primavera Timescaled Logic Diagram application. In P6 Professional the Primavera Timescaled Logic Diagram application is an external graphics viewer that you start automatically by exporting project data from P6 Professional.

When you start the Primavera Timescaled Logic Diagram application, the Timescaled Logic Diagram workspace (the TSLD workspace) appears.

You use the TSLD workspace to create, view, edit, print, and save timescaled logic diagrams (TSLDs), and to create and modify templates.

To initially create a TSLD, you need to export project data from P6 Professional to the Primavera Timescaled Logic Diagram application. The TSLD workspace automatically opens when the project data is exported.

Next, you use the Timescaled Logic Diagram Templates dialog box to select a template and to create the TSLD. The settings from the selected template shape the appearance of the TSLD. You can change the appearance of the TSLD by changing settings and applying them interactively so as to quickly see the resulting diagram. You can also choose to save the modified settings to the open template for later use.

A template consists of settings used to shape the form and content of the TSLD. The product provides a default template along with several sample templates, and you can create your own. When you create a TSLD, the settings in the selected template are applied against project data to create a TSLD. You can select a template to use for any project data exported from P6 Professional to the TSLD application.

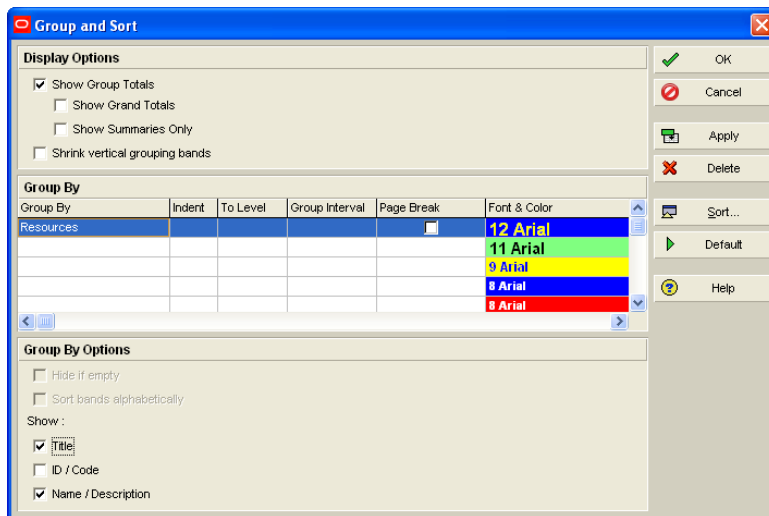
After you generate a TSLD, use the TSLD workspace to view the diagram, to modify the diagram, to save modified settings to the selected template, and to print or save the diagram to a graphical format.

For more information about exporting project data from P6 Professional to the Primavera Timescaled Logic Diagram application, see the P6 Professional online help. See the Primavera Timescaled Logic Diagram online help for more information about using the Primavera Timescaled Logic Diagram application.

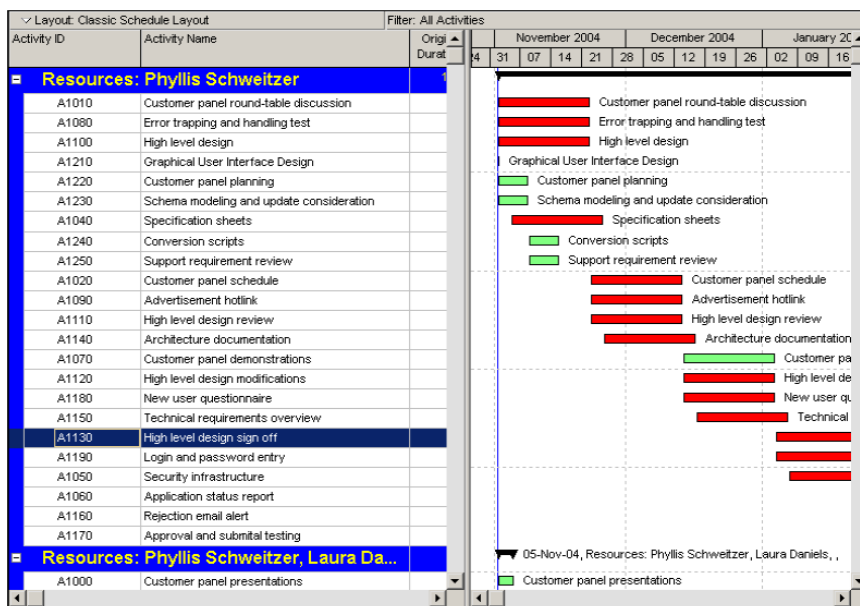
Grouping Activities by Resource

In P3, you can group activities by resource in the Bar Chart, using the Format, Organize command. You can also group by resources in P6 Professional.

In P6 Professional, choose View, Group and Sort. In the Group By field, select Resources. Then click OK.

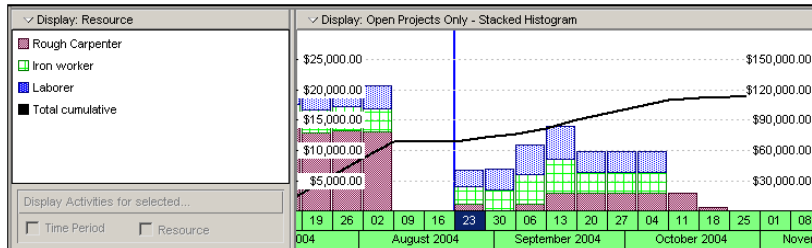


In this grouping by Resources example, the top of the Activities window shows activities grouped for Phyllis Schweitzer:



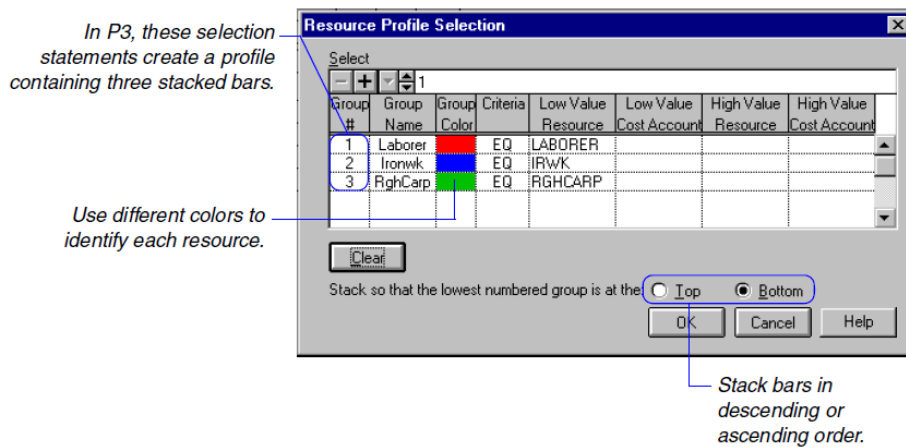
Stacking Multiple Resource Bars in a Profile

In P3, the Resource/Cost Profile displays a histogram that tracks use or cost per time period. You could combine several resources into one profile, but still see individual use or cost for each resource. The stacked profile lets you focus on summarized and individual use at the same time. You can also stack resource bars in P6 Professional.

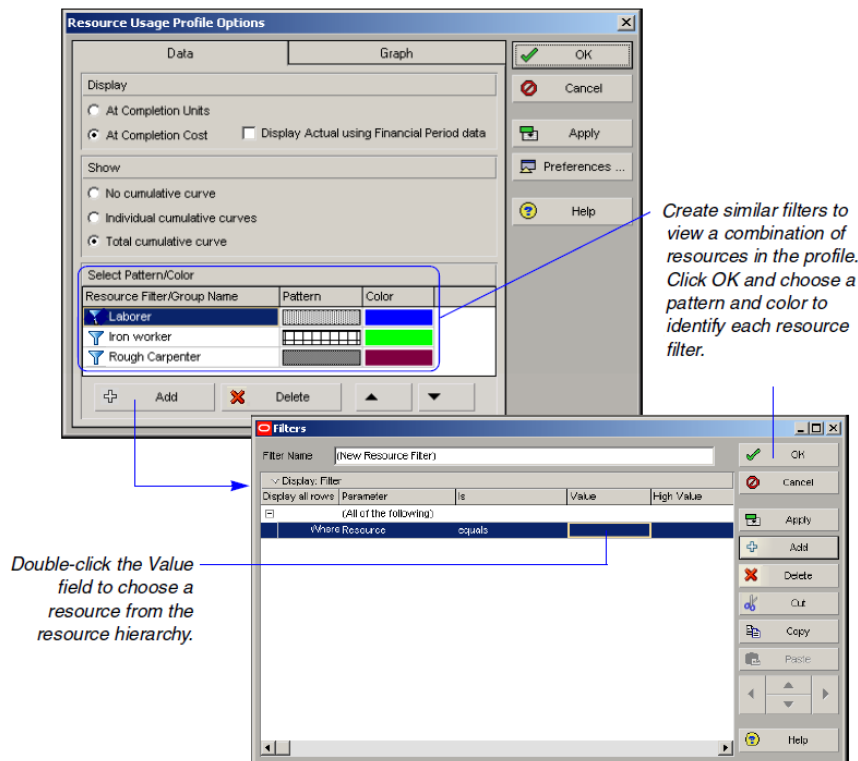


The following figures compare the same resource usage profile options from P3 and P6 Professional.

In P3:



In P6 Professional:



Format the resource settings for the stacked histogram

To display the Resource Usage Profile in P6 Professional, click the Layout Options bar, then choose Show on Bottom, Resource Usage Profile. Next, click the Display Options bar and choose Stacked Histogram. Then, click the Display Options bar and choose Resource Usage Profile Options. Click the Data tab, then specify the type of data to display in the profile and the way it will be represented. Click the Graph tab to select additional display options for the profile. Or, right-click in the Resource Usage Profile area and choose Resource Usage Profile Options.

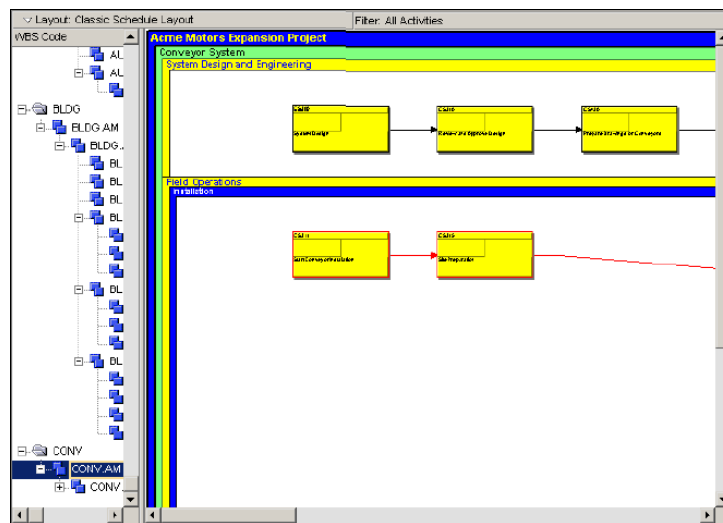
View a legend

Click anywhere in the profile to display a legend that identifies each stacked bar and shows the use or cost value for the time period where you clicked.

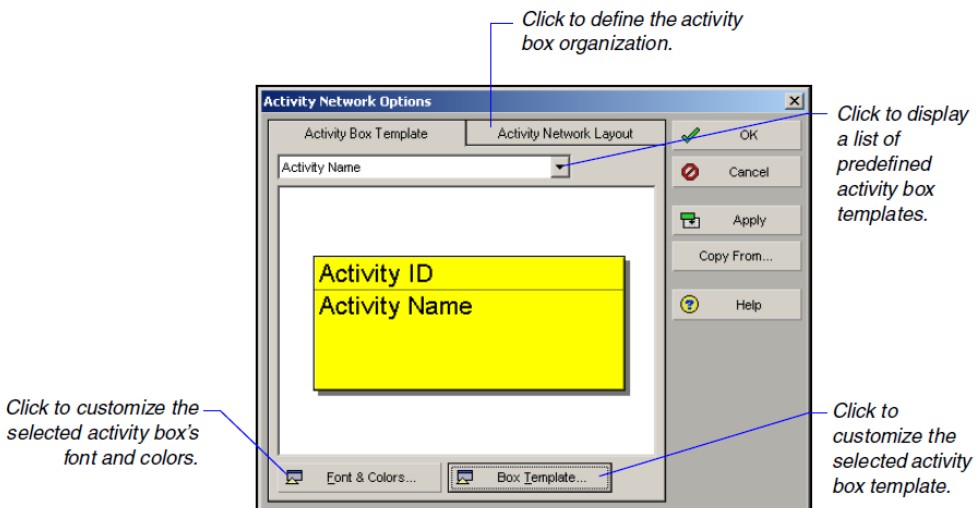
Displaying the Activity Network

The Pure Logic diagram is a useful feature in P3. It shows the sequential relationships between activities in a project without consideration of time. Similarly, you can display the Activity Network in P6 Professional to show a project as a diagram of activities and relationships, according to the work breakdown structure (WBS).

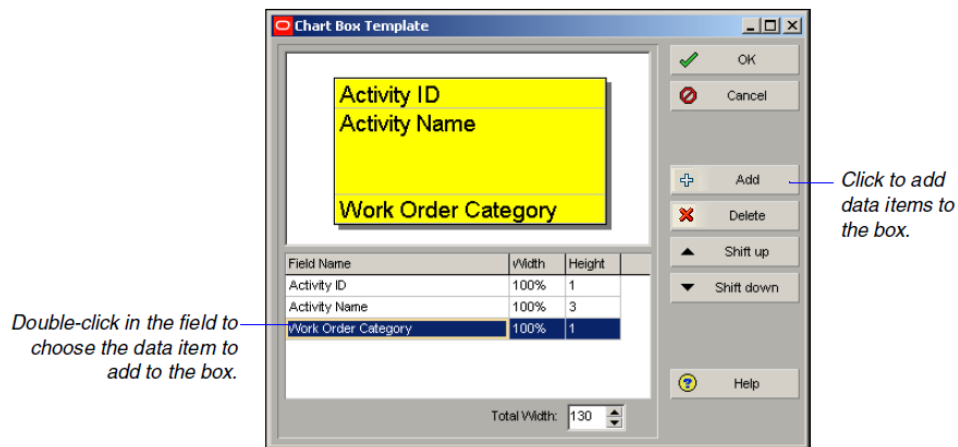
In P6 Professional, to display the Activity Network in the Activities window choose View, Show on Top, Activity Network.



When customizing boxes, you can specify particular fonts and colors, set spacing and positioning, and copy styles from another layout. Right-click on the Activity Network and choose Activity Network Options. Click the Activity Box Template tab.



You can add rows for inserting new fields and determine how high and wide the field cells should be within the activity box.



See the P6 Professional online help for detailed information.

Planning for Conversion

In This Section

Why Plan for Conversion?	75
P3 Conversion Considerations	75
P6 Professional Conversion Considerations.....	86
Setting Up the EPS	86
Setting Up Resources.....	88

Why Plan for Conversion?

The Import wizard in P6 Professional is a powerful tool that enables you to move your P3 projects into P6 Professional. Import wizard options help you determine where you want converted data to reside, how you want to handle duplicate information, and how some data should be calculated once it is converted. Planning before conversion ensures that project and resource hierarchies and other global structures, such as activity and project codes, are organized in a meaningful way and can eliminate rework after conversion.

The following sections provide a checklist of items and decisions to consider before you convert your projects. To produce the results you want, you should make these decisions before you run the conversion process. You can also fine-tune data in P6 Professional after the conversion is completed.

P3 Conversion Considerations

Review this topic before you convert P3 projects to P6 Professional.

For additional information on how P6 Professional converts P3 data, refer to the topics under Importing P3 Projects to P6 Professional.

Projects

- ▶ Decide which projects in P3 you want to convert to P6 Professional.
- ▶ Clear your P3 project of any errors. You can run the PFXW.EXE file located in the //P3WIN/P3PROGS directory before converting your project.
- ▶ Decide whether the projects within the project group should be converted as individual projects or combined into one large project.

If you mark the option in the Import wizard to create separate projects, when the project group is converted to P6 Professional, an individual project is created for each subproject; however, the master project is not imported. For example, in P3, the project group APEX contains three subprojects, AUTO, BLDG, and CONV. This group is converted to three individual projects. Before the import, create an EPS node in P6 Professional to select as the location for the converted projects. You could use the project group name as the EPS node name.

If you mark the option in the Import wizard to combine subprojects, when the project group is converted to P6 Professional, one project is created. The project is named according to the project group name and each subproject becomes a WBS level in P6 Professional project.

Note: If your master projects typically contain activities and you want to retain these activities in P6 Professional, you should choose to combine subprojects when importing. If your master projects do not typically contain activities, you can choose to combine subprojects or create separate projects as needed.

- ▶ You might need to change the total float option, depending on whether or not you are combining projects when converting your Project Group. In P3, from the Tools menu select Schedule, then click Options. In the Advanced tab of Schedule/Level Calculation Options, locate the Project Group Scheduling section. If you are combining projects when converting, select Project Group to base the total float on the end date of the project group. If you are not combining projects when converting, select Each Project to base the total float on the end date of each project.
- ▶ Consider how you want to organize your projects once moved to P6 Professional and where the converted projects should reside. In the instance where the project group contains no activities (as described in the previous bullet), you might want to add an EPS node for the project group and import its subprojects into that EPS node. See **Setting Up the EPS** (on page 86) for more information.
- ▶ The projects you convert must be restored and they must be multiuser.
- ▶ If converting a SureTrak project, you must save the project in the Concentric (P3) format.
- ▶ Verify that the project to be imported uses either a daily or an hourly planning unit. Weekly and monthly projects are not supported—you must first convert the planning unit in P3 before you import the project to P6 Professional.

Resources and Costs

- ▶ Consider how you want to organize resources once moved into P6 Professional and where the imported resources will be placed. See **Setting Up Resources** (on page 88) for more information.

- ▶ P6 Professional contains one master resource pool across all projects. A sample resource hierarchy is provided when you install P6 Professional. When you import a project, the resources are imported to the location in the hierarchy you specify in the Import wizard. If duplicate resource IDs are encountered during the import process, you can choose how to resolve each conflict by modifying the import configurations in the Import wizard.
- ▶ Verify each resource's unit of measure in P3 and how it will convert to P6 Professional.
 - ▶ P6 Professional classifies resources as labor, nonlabor, or material. Any resource in P3 with a unit of measure equal to most variations of a time unit, such as h, hr, hour, mh, d, day, md, w, week, m, month, and so on, is converted as a labor resource. Any resource in P3 with a unit of measure equal to the following will also convert as a material resource:
feet,ft,ft.,sqft,cyds,cyd,cyd.,yard,yrd,yrd.,yrds,yd,yd.,yds,
yds.,inch,ton,tons,in,in.,lf,lft,lft,ea,each,unit,u

This default list is defined in the PRMCONVERT.INI file.

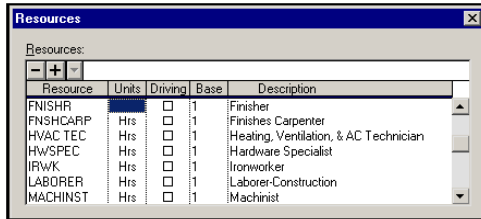
All other resources are converted as nonlabor. Labor units are displayed as hrs/day. You can change the display unit by choosing Edit, User Preferences, and then clicking the Time Units tab in P6 Professional.

You can change the classification in P6 Professional after the conversion if the resource has not yet been assigned to activities.

- ▶ You can modify the PRMCONVERT.INI file to add more resource unit of measure abbreviations to the list. See **Advanced Conversion Options** (on page 100) for more information.
- ▶ If importing a daily project, verify how you want resource assignments to be handled.
- ▶ All time-based calculations in P6 Professional are based on hourly units. If your project in P3 is planned in days, P6 Professional refers to each resource's unit of measure to determine how to convert resource assignments. If the resource unit of measure is equal to most variations of an hourly time unit, such as hr or mh, the P6 Professional resource assignment is based on hours and converts it as-is. If, however, the resource unit of measure is something other than hours, such as day or d, P6 Professional assumes the resource assignment is in days and multiplies all resource values by a factor of eight (assuming 8 hr/day). In this case, decide whether eight is the correct multiplier. You can change the multiplier in the PRMCONVERT.INI file. You can also modify the list of unit of measure abbreviations that P6 Professional refers to during the conversion. See **Advanced Conversion Options** (on page 100) for more information.

- ▶ For resources that have a blank unit of measure, use the Import wizard to decide how to handle the assignments. You can choose to convert the resource assignments in days or hours. If you choose hours, P6 Professional retains the resource values as-is. If you choose days, P6 Professional multiplies all resource values by a factor of eight (assuming 8 hr/day). You can change the multiplier in the PRMCONVERT.INI file. See **Advanced Conversion Options** (on page 100) for more information.

P6 Professional looks at the Units field, as shown below, for resources in the P3 Resource Dictionary to determine how to convert resource assignments.



Resource	Units	Driving	Base	Description
FNISHR		<input type="checkbox"/>	1	Finisher
FNSHCARP	Hrs	<input type="checkbox"/>	1	Finishes Carpenter
HVAC TEC	Hrs	<input type="checkbox"/>	1	Heating, Ventilation, & AC Technician
HW/SPEC	Hrs	<input type="checkbox"/>	1	Hardware Specialist
IRW/K	Hrs	<input type="checkbox"/>	1	Ironworker
LABORER	Hrs	<input type="checkbox"/>	1	Laborer-Construction
MACHINST	Hrs	<input type="checkbox"/>	1	Machinist

- ▶ Resources assigned to milestone activities in P3 become expenses in P6 Professional. The resource name is used for the expense name, and the resource's budgeted cost is the expense's budgeted cost. The first resource found on the milestone becomes the primary resource in P6 Professional.
- ▶ Decide whether resource units and costs should be linked when converted to P6 Professional. During the Import process, you are prompted to calculate costs for resource assignments based on the price per unit, or you can retain the current cost values.
- ▶ Decide how to convert lump sum costs. A lump sum cost in P3 is any activity that has a monetary cost associated with it, but has either just a cost account or a resource with no unit amounts assigned. During the Import process, you are prompted to import activities with only a budgeted cost as an expense or a resource assignment with a budgeted cost.

Note: The conversion process creates additional levels in the resource structure for P3 3.x hierarchical resources. P6 Professional supports only maximum limits for resources. Normal resource limits are not converted.

- ▶ In P3, the estimate to complete can be a negative value to account for cost overruns on an activity. All negative cost values import to P6 Professional as expenses, so the cost overruns can be tracked.

See **Understanding Duration and Percent Complete Types** (on page 41) for additional information on how resource assignments are converted.

Resource curves

- ▶ You can specify the allocation of resources and costs over the duration of an activity using resource curves. All resource curve definitions assigned to the projects being exported from P3 are imported into P6 Professional. The curve name is prefaced by the P3 3.x project name in P6 Professional (e.g., APEX - Triangular). The resource curve assignments are also imported.

P3 divides the activity's duration into 11 increments (points) from 0 through 100 percent. Each increment indicates resource use. The value for 0% represents the amount of resource already used when the activity begins; the value for 10% represents the usage between the start and 10% completion. Curves in P6 Professional are defined using 21 points. The first point from P3 3.x imports directly into P6 Professional. The other 10 curve values are split in half and rounded to the nearest 10th.

For example:

P3 3.x Bell Shape 0 1 3 8 15 23 23 15 8 3 1

P6 Professional Bell

Shape: 0 .5 .5 1.5 1.5 4 4 7.5 7.5 11.5 11.5 11.5 11.5 7.5 7.5 4 4 1.5 1.5 .5 .5

Note: In P6 Professional, you can additionally create custom manual curves by manually entering budgeted and remaining early unit values, per period, for resource assignments to activities. When you manually enter budgeted and remaining early unit values for assignments, you are not limited to 21 curve points.

Activity IDs

- ▶ In P3, numeric activity IDs are right-justified. In P6 Professional, all activity IDs are left-justified. Activity IDs in P6 Professional can include alpha and numeric characters. When you import a P3 project that uses numeric activity IDs into P6 Professional, they are left-justified. In P6 Professional, activity IDs can have a maximum of 20 characters.
- ▶ In P3, alphanumeric Activity IDs are unique when you add an underscore to the beginning of the ID. For example, the Activity IDs ABC and _ABC are unique in P3 but are not unique in P6 Professional. When you import a P3 project that uses underscores in an Activity ID, P6 Professional adds two underscores to the beginning of the ID. For example, the P3 Activity ID _ABC would import to P6 Professional as __ABC.

Activities

- ▶ All time-based calculations in P6 Professional are based on hourly units. When converting a daily project, P6 Professional multiplies activity durations, total float, free float, and relationship lag by a factor of eight (assuming an 8 hr/day). If your projects are based on a different rate, such as ten hours/day, you can change the daily multiplier in the PRMCONVERT.INI file. See **Advanced Conversion Options** (on page 100) for more information.

Note: If you change the daily multiplier to some value other than eight, you should also change the value used to calculate the hours/day in P6 Professional. For example, if your P3 project has activities and resources that are planned using ten hours/day, then you should also change the hours/day setting in P6 Professional to ten. You can change hours per time period settings globally on the Admin Preferences dialog box, Time Periods tab, or you can define hours per time period for each defined global, project, and resource calendar (choose Enterprise, Calendars). Refer to the P6 Professional online help for more information.

- ▶ Decide whether you want P6 Professional to schedule the imported project once the process is complete. For example, if your P3 project has specific dates set for activities with no relationships, you might not want to calculate the schedule immediately when the Import process completes. You can choose this option in the Import wizard.

Work Breakdown Structure (WBS)

- ▶ In P6 Professional, a WBS must exist and all activities must be assigned to a WBS code. If no WBS exists in the P3 project, P6 Professional creates a WBS root node and names it PROJ, where PROJ is the P3 project name. All activities are assigned to this WBS code.
- ▶ The WBS value assigned to an activity must exist in the P3 WBS dictionary. If it does not, P6 Professional will not import the WBS assignment.
- ▶ Decide whether you want the project's entire WBS dictionary from P3 imported to P6 Professional. If no activities are assigned to a particular WBS branch, you can choose not to import it during the Import wizard.
- ▶ Decide whether you want to import the WBS code from P3 as an Activity Code or WBS structure in P6 Professional during the conversion process. See **Advanced Conversion Options** (on page 100) for more information.

Project codes

- ▶ P6 Professional contains a global project codes dictionary which is available to all projects in the company. You can assign a project code value to projects for each project code you create. All 10 project codes defined in the P3 project and their assignments are imported.

Note: If the import option "Merge sub projects" is marked in the Import wizard, the project codes and values assigned to the master project are imported.

Activity Codes

This might be a good time to evaluate your project coding structures. You might find that you can eliminate some codes because of the hierarchical structuring that P6 Professional provides.

- ▶ P6 Professional contains global, EPS-level, and project-level activity codes. Global activity codes are provided with the sample data delivered with P6 Professional. If you choose to create separate projects (rather than combine them) in the Import wizard, all activity codes, activity ID codes, and alias codes from P3 3.x import as global activity codes in P6 Professional, so they are available to all projects. If you choose to combine subprojects into one project to import, the activity codes, activity ID codes, and alias codes import as project-specific activity codes.
- ▶ When activity codes are imported into P6 Professional, the P3 activity code description is used as the activity code in P6 Professional. For example, if the activity code name in P3 is RESP and the description is Responsibility, then Responsibility is imported as the activity code in P6 Professional. If there is no description associated with an activity code, then the four-character name is imported as the activity code.
- ▶ Alias codes from P3 are not converted. However, Activity ID codes are converted when merging the projects. If you want to retain the Activity ID codes, but you choose not to combine subprojects in the Import wizard, transfer the activity ID code to an activity code in P3 prior to conversion. Decide whether you want to build any ID codes into P6 Professional activity codes or project codes.
- ▶ Verify that all activity code values assigned to activities in P3 are defined in the Activity Codes Dictionary; otherwise, they will not be converted to P6 Professional. Click the Refresh button in the P3 Activity Code Dictionary to incorporate any new activity code values that have not been validated into the Activity Codes dictionary.

Activity Details

In P3, you can view activity details in the Activity Form. To access the Activity Form, select View > Activity Form. For resource assignment information, select the Res tab.

- ▶ For activities that do not have an Actual Finish (AF) date, determine if any activities have a Remaining Duration (RD) of zero. If so, as an option, you can set the RD to 1 or set an AF date.
- ▶ For activities that do not have an AF date, determine if any resource assignments have a To Complete value of zero. If so, as an option, you can either set the To Complete value to 1 or set an AF date for the activity.
- ▶ Determine if any resource assignments have a Budgeted Quantity greater than zero. If so, as an option, you can either set the Budgeted Quantity to a value greater than zero or delete the resource assignment.
- ▶ For activities that do not have an Actual Start (AS) date, determine if any resource assignments have an Actual To Date value greater than zero. If so, you can either delete the Actual to Date quantity or set an AS date. If you do neither, P6 Professional will assign an AS date.
- ▶ If Budgeted Quantity and Estimate at Complete are linked in the Autocost Rules in P3 and activities do not have an AS date, determine if any resource assignments have unequal values for Budgeted Quantity and At Completion in P6 Professional. If so, either set an AS date or make the Budgeted Quantity and At Completion values equal.

- ▶ For activities that do not have an AS date, Percent Complete is set to zero. This action is recorded in the PROJtemp.log file, where PROJ is the project name. The log file is created in the user's Temp directory during import.
- ▶ For activities that do not have an AS date, determine if any activities do not have equal values for the Remaining Duration (RD) and the Original Duration (OD). If so, either enter an AS date or make the RD and OD values equal. However, if the Link Budget and At Completion setting is on, P6 Professional will set the OD equal to the RD. This action is recorded in the PROJtemp.log file.
- ▶ Verify that all AS and AF dates are set to valid workdays. If the AS or AF dates are set to nonwork days, P6 Professional will use the next available workday as the AS and/or AF values.

Hammocks and Milestones

- ▶ Identify any hammocks that contain the same predecessor and successor. If any hammocks do contain the same predecessor and successor, you can add a milestone so that the relationships convert. For example, assume a hammock has Activity 100 associated as a Start-to-Start (SS) predecessor and as a Finish-to-Finish (FF) successor. In P6 Professional, this is considered a loop. Therefore, you must break the predecessor relationship between Activity 100 and the hammock. To do this, add a milestone and set the milestone as the predecessor to Activity 100. Then, link the milestone to the hammock as an SS predecessor.
- ▶ Verify that all hammocks have SS predecessors and FF successors with no lag. If other relationships exist, they will be deleted.
- ▶ Start and finish milestones are converted from P3 to P6 Professional. In P3, a milestone can have multiple resource assignments. In P6 Professional, a milestone can have one primary resource with no costs or units associated with the assignment. During conversion, determine if you want milestones to have primary resource assignments. Resources and costs assigned to milestones will convert to expenses.

Start and Finish Flags

- ▶ Start and finish flags convert to start and finish milestones in P6 Professional. Before conversion, make sure all start flags have SS relationships with its predecessors, and that all finish flags have FF relationships with its predecessors. In P3, start and finish flags summarize the start and finish of its predecessor, respectively, regardless of the relationship type. In P6 Professional, the converted milestones will schedule differently if the predecessors do not have a Start-to-Start (SS) or Finish-to-Finish (FF) relationship with the milestone.

Suspend and resume dates

- ▶ In P3, a suspend date indicates that an activity is suspended at the end of the specified day. In P6 Professional, a suspend date indicates that an activity is suspended at the beginning of the specified day. Due to this discrepancy, actual and remaining durations are affected for daily projects. Hourly projects are not affected.

For example, an activity suspend date of 05OCT04 (end of the day) in P3 will import to P6 Professional as 05OCT04 (the beginning of the day). In P6 Professional, the actual duration for the activity will be one day shorter than it was in P3 because P3 progresses the work through the suspend date (while <0P_PrdName_P6_Client> suspends progress at the beginning of the day).

Custom data items

- ▶ P3 custom data items (CDIs) are converted to the following user-defined fields in P6 Professional.

P3 Custom Data Item Type	P6 Professional Activity User Field	P6 Professional Resource User Field
Character (C)	User Text	User Text
Start (S)	User Start Date	User Start Date
Finish (F)	User End Date	User End Date
Numeric (N)	User Integer	User Integer
Precision (P)	User Number	User Number

- ▶ If a user-defined field already exists in P6 Professional with the same name as a custom data item in P3, the data type of the user-defined field and the custom data item must match to import the custom data item value assignments. For example, if Purchase Order is a character CDI in P3 and an integer in P6 Professional, the data in P3 will not import into P6 Professional.
- ▶ User-defined fields are global and are accessible to all projects in P6 Professional. You can display converted activity custom data items as columns in P6 Professional Activity Table. In the Activities window (with an Activity Table or Gantt Chart displayed on top), click the Layout options bar, then choose Columns. Select the appropriate user-defined fields from the list of Available Options and add them to the layout.

You can also display your converted resource custom data items as columns in P6 Professional. In the Activities window, click the Layout options bar, then choose Show on Bottom, Activity Details. Click the Resources tab to display resource information. Right-click in the column area, and choose Customize Resource Columns. Select the appropriate user-defined fields from the list of Available Options and add them to the table.

Cost accounts

- ▶ Cost accounts and cost account assignments are converted from P3 to P6 Professional. Cost accounts are global across all projects in P6 Professional. A sample cost account hierarchy is provided when you install P6 Professional (if you install sample data). When you import a project, P6 Professional creates a branch for the project cost accounts, and the project name is added to the beginning of each cost account. The conversion appends the cost category in P3 to the end of the cost account in P6 Professional. For example, cost account 11101 in category L from P3 project APEX creates the following cost account hierarchy in P6 Professional:

- ▶ APEX
 - APEX.11101
 - APEX.11101.L

If duplicate cost accounts are encountered when you import a P3 project, you can choose how to resolve each conflict by modifying the import configurations in the Import wizard.

Calendars

- ▶ P6 Professional supports global, resource, and project calendars. Global calendars in P6 Professional apply to all projects. Sample global calendars are provided with P6 Professional. All activity calendars from P3 import as global calendars in P6 Professional, so they are available to all projects. Resource calendars from P3 are converted to shared resource calendars in P6 Professional.

P6 Professional does not support the ability to designate repeating holidays. If you convert a daily P3 project, the repeating holidays from the P3 project are applied directly to the global calendars in P6 Professional. For example, if July 4 is a repeating holiday in P3, it is designated by P6 Professional as a nonworkday in the global calendars for each applicable date from the project start date to the project finish date.

Constraints

- ▶ P6 Professional supports two constraints per activity. Review the following conversion table:

P3 Constraint Type:	P6 Professional Constraint Type:
Early Start (start no earlier than)	Start On or After
Late Start (start no later than)	Start On or Before
Early Finish (finish no earlier than)	Finish On or After
Late Finish (finish no later than)	Finish On or Before
Start On	Start On
Expected Finish	Expected Finish Date

Mandatory Start	Mandatory Start
Mandatory Finish	Mandatory Finish
Zero Total Float	Not Converted
Zero Free Float	As Late As Possible

Scheduling options

- ▶ The following scheduling options convert to P6 Professional:

P3:	P6 Professional:
Show open ends as (Critical or Noncritical)	Make open-ended activities critical
When scheduling activities apply (Retained logic or Progress override)	When scheduling progressed activities use (Retained Logic, Progress Override, or Actual Dates)
Calculate start-to-start lag from (Actual start or Early start)	Calculate start-to-start lag from (Early Start or Actual Start)
Calculate total float as (Most critical, Start float, or Finish float)	Compute Total Float as (Start float, Finish float, or Smallest of start float and finish float)
<ul style="list-style-type: none"> ▶ In P3, relationship lag is always calculated using the predecessor calendar. An advanced scheduling option in P6 Professional enables you to choose the calendar you want to use. This setting will default to predecessor calendar for imported P3 projects. ▶ In P6 Professional, float calculations for subprojects converted as individual projects are always based on the finish date of each individual project. ▶ P6 Professional always rolls up resources assigned to an activity, which then determine the activity's durations and schedule dates. 	

Autocost rules

- ▶ P3 provides automatic resource/cost calculation rules by which it calculates costs and estimates resource use when you update activities. These rules convert to P6 Professional. See **Using Autocost** (on page 47) for more detailed information.

P6 Professional Conversion Considerations

The Import wizard makes the conversion of data from P3 to P6 Professional as simple as possible. Logical assumptions are made about mapping data and options to give you the results you expect once in P6 Professional, while also eliminating most of the preparation work. To take full advantage of P6 Professional's organizational features, however, it is best to set up some global data structures in P6 Professional before you run the Import wizard. You should also optimize your database if necessary.

Project structure

- ▶ The first structure you should establish is the enterprise project structure (EPS). The EPS is a hierarchy that is used to organize and manage the projects in your organization. During the import process, you are prompted to select a location in the EPS for the projects being imported. See **Setting Up the EPS** (on page 86) for more information.

Resource hierarchy

- ▶ The resource hierarchy represents the people, materials, and/or equipment used to perform work on activities. It includes the resources across all projects in the organization. During the import process, you are prompted to select a location in the resource hierarchy for the resources being imported. See **Setting Up Resources** (on page 88) for more information.

Notebook topics

- ▶ P6 Professional provides notebooks, similar to P3's logs, which you can use to record information about a specific project, WBS, or activity. For example, describe processes, attach site or equipment pictures, and record change decisions, comments, and/or lessons learned. Predefined topics enable you to categorize the information. Activity logs from P3 are converted to notebooks in P6 Professional. During the import process, you are prompted to create a new notebook topic for these converted logs, or you can choose a predefined topic. Choose Admin, Admin Categories, Notebook Topics in P6 Professional.

Setting Up the EPS

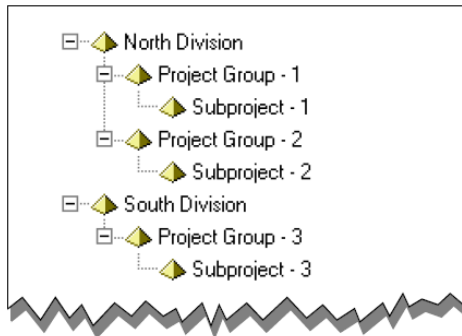
In P6 Professional, you organize your projects in a hierarchy called the enterprise project structure (EPS). The EPS consists of nodes, subdivided into as many levels as necessary to parallel a company's reporting and work needs. Projects exist at the lowest level of any given node; each node can contain multiple projects. Every project in the organization must be included in the EPS.

You can view schedule data by EPS, roll up data to any node, allocate and review budget information, as well as customize the columns of data shown. The EPS also enables you to evaluate resource use across all projects and report on summary or detailed data.

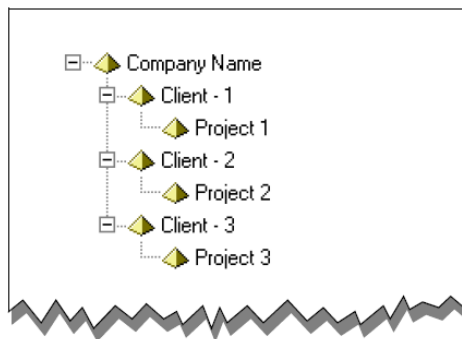
It is best to set up a basic EPS before you convert projects from P3. During the import process, you are prompted to select a location in the EPS for the projects being imported.

The number of EPS levels and their structure depend on the scope of your projects and how you want to summarize data. Nodes at the high level might represent divisions within your company, project phases, or site locations. Multiple levels enable you to manage projects separately while retaining the ability to roll up and summarize data to higher levels. Multiple levels are also useful in organizations that require projects in varying geographical locations.

When converting projects from P3, you might want to structure the EPS based on your current project group/subproject structure. For example, you could set up a simple EPS, as shown in the following figure, where each golden pyramid icon indicates an EPS node.



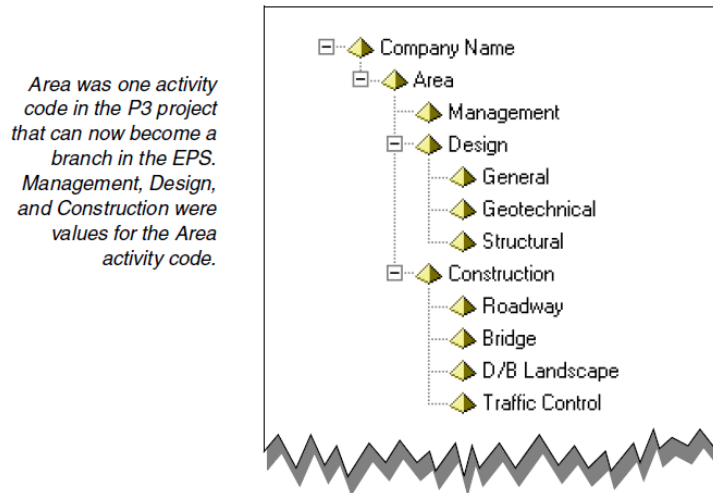
Or, you could organize the EPS according to projects by client, as shown in the next example.



You could also take the opportunity to work with each area of the organization to define requirements, some basic information, and standards for projects. For example, requirements might dictate that the EPS support

- ▶ simple, repeatable, and efficient data management
- ▶ accurate data summaries (roll up)
- ▶ organizational-wide and project reporting
- ▶ accountability by project
- ▶ financial reporting

You could create a hierarchy based on your company's needs and use it to structure projects. Take advantage of the EPS's multiple levels to expand on P3's two-level flat structure. For example, you can review your existing P3 project codes and activity codes and build the EPS based on them. The following example shows a more detailed EPS.



Set up the EPS

In P6 Professional, choose Enterprise, Enterprise Project Structure. You must define at least one root level node; however, you can use more than one root level node to distinguish between different branches of the EPS. For example, you could separate new projects versus converted P3 projects or open projects versus closed projects. Use the EPS dialog box to define these nodes.

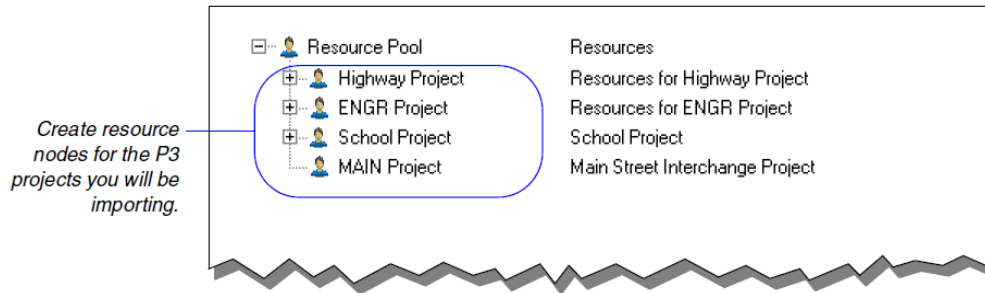
Setting Up Resources

The resource hierarchy in P6 Professional enables you to organize resources into meaningful groups. All resources for all projects across your company must be defined in the resource hierarchy. The following is from a sample P6 Professional Resources window:

You can define resources using specific or generic names. For example, "George" is specific, whereas "Accountants" is generic.

Resource ID	Resource Name	Resource Type	Unit of Measure	Primary Role	Default Unit
Resource Pool	Resource	Labor			
Management	Management	Labor			
Schedulers	Project Managers	Labor			
PE3	Planning Engineer	Labor			
Exec	Executive	Labor			
Inspectors	Inspectors	Labor			
Accountants	Accountants	Labor			
PMs	Project Managers	Labor			
Supers	Superintendents	Labor			
Design Engineers	Design Engineering Department	Labor			
Purchasing	Purchasing Department	Labor			
IS	Information Systems Department	Labor			
Construct	Construction Department	Labor			
Construct Labor	Labor Resources	Labor			
Elev Inst	Elevator Installer	Labor		Trades	
Electrician	Electrician	Labor		Trades	
Plumber	Plumber	Labor		Trades	
Painter	Painter	Labor		Trades	
Rough Carp	Rough Carpenter	Labor		Trades	
Hvac Tech	Heating Ventilation & AC Technician	Labor		Trades	
Mech Inst	Mechanical	Labor		Trades	
100R Crane 100R Crane	100R Crane 100R Crane	Labor			
Construct Non Labor	Nonlabor Resources	Nonlabor			

Although the import process automatically creates a root node specifically for the resources being converted, you might want to set up a basic structure before you import projects from P3. After you have converted projects, you can fine-tune the resource hierarchical structure, if necessary. For example, you can define resource nodes for each project you are importing from P3 and then modify the structure later to add appropriate nodes, such as department, and move the resources into them.



Set up the resource hierarchy

In P6 Professional, choose Enterprise, Resources. Select the resource immediately above and at the same level as the one you want to add, then click Add. In the Resource wizard, specify a resource ID and name for the node/resource. You can click Finish at this point, or specify additional details using the Resource wizard.

Display: All Resources

Resource ID	Resource Name	Resource Type	Unit of Measure	Primary Role	Default Units / Time
Resource Pool	Resources	Labor			8/d
Management	Management	Labor			8/d
Design Engineers	Design Engineering Department	Labor			8/d
Purchasing	Purchasing Department	Labor			8/d
IS	Information Systems Department	Labor			8/d
Construct	Construction Department	Labor			8/d
Highway Project	Resources for Highway Project	Labor			0/d
ENGR Project	Resources for ENGR Project	Labor			0/d
School	School Project	Labor			8/d

General Codes Details Units & Prices Roles Notes

Resource ID: Design Engineers Resource Name: Design Engineering Department

Employee ID: Title:

E-Mail Address: Office Phone: ☒ Active

At this point, you are ready to begin importing P3 projects to P6 Professional. Read the following section for detailed steps.

Importing P3 Projects to P6 Professional

In This Section

Running the Import Wizard	91
How P6 Professional Converts P3 Data	99
Advanced Conversion Options.....	100
Before and After Conversion Example	102

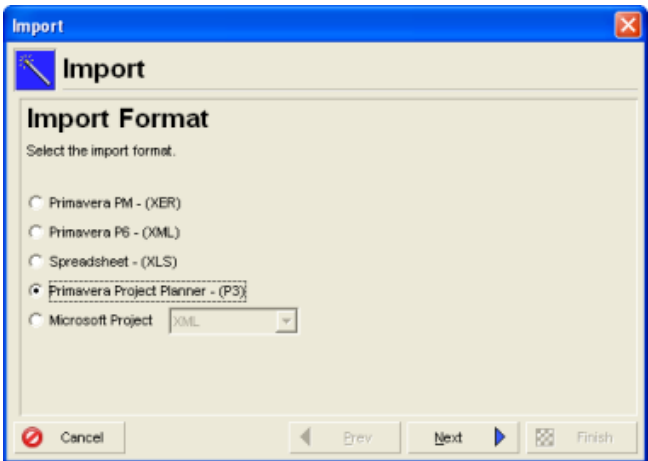
Running the Import Wizard

The Import wizard guides you through the steps for importing P3 3.x projects into P6 Professional.

To take advantage of the features described in this guide, you must have both P3 and P6 Professional on the same Windows PC, installed in either order.

Select import type

Launch P6 Professional. In P6 Professional, choose File, Import. Choose Primavera Project Planner - (P3). Click Next.



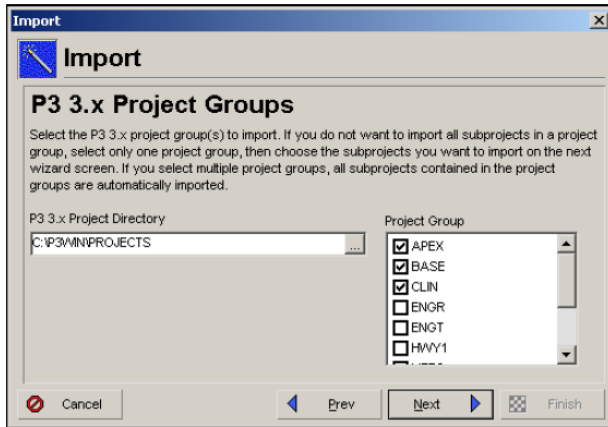
Choose project groups to import

When converting P3 projects to P6 Professional, the existing P3 projects remain intact. The projects cannot be open in P3. You can import multiple project groups (master projects) simultaneously or import project groups individually. You should select multiple project groups only when you want to import all subprojects contained in those projects. You should import project groups individually when you want to specify the subprojects to import.

Note: The import wizard displays different screens and options when you import a single project group versus multiple project groups. Determine if you want to import single or multiple project groups, then follow the corresponding instructions detailed in this section.

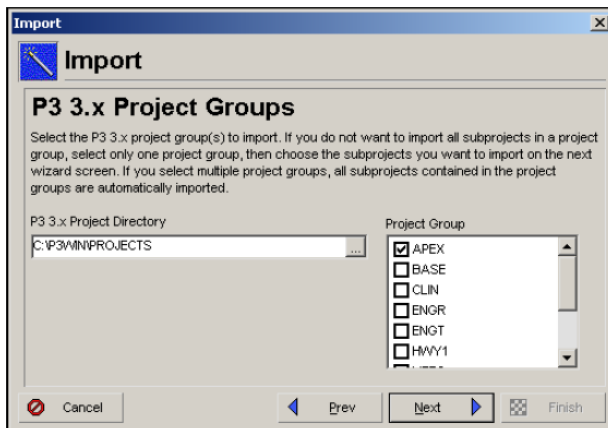
To import multiple project groups:

In the P3 3.x Project Directory field, click the Browse button to select the location of the projects you want to import, then select the project groups to import. Click Next and skip to the next subsection, "Specify import project options."



To import a single project group:

In the P3 3.x Project Directory field, click the Browse button to select the location of the projects you want to import, then select the project group to import. Click Next.



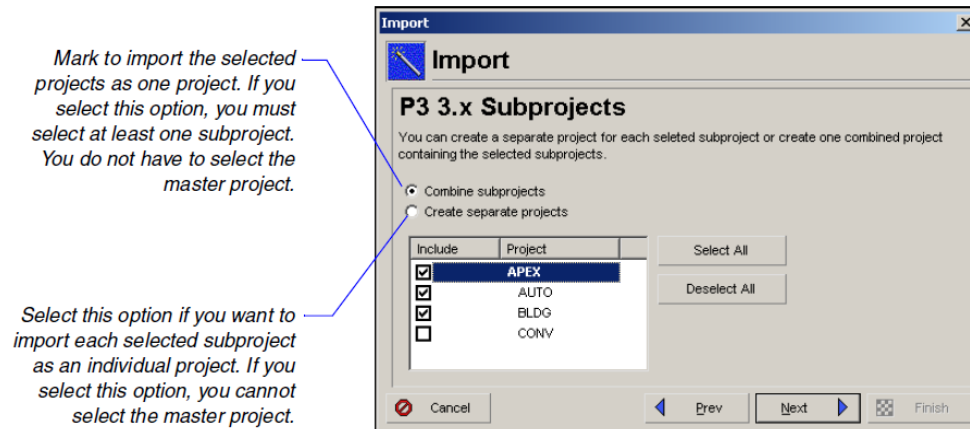
The selected project group (master project and its associated subprojects) is displayed on the next wizard screen. By default, all projects (master project and subprojects) are selected for import. Clear the checkbox next to each project you do not want to import. You do not have to import the master project.

Choose to combine subprojects or create separate projects for each selected subproject. Mark the Combine subprojects option if you want to import the selected projects as one project rather than separating them into individual projects. For example, in P3 3.x, the project group APEX contains three projects, AUTO, BLDG, and CONV (as shown in the following figure). If you select the Combine subprojects option, P6 Professional imports one project named APEX.

Note: If the project group contains subprojects and you choose to combine subprojects, you must select at least one subproject.

Mark the Create separate projects option if you want to import each selected subproject as an individual project. If you select this option, you can not import the master project. For example, in P3 3.x, the project group APEX contains three subprojects, AUTO, BLDG, and CONV. This group is converted to three individual projects (APEX is not converted). Before the import, create an EPS node to select as the location for the converted projects.

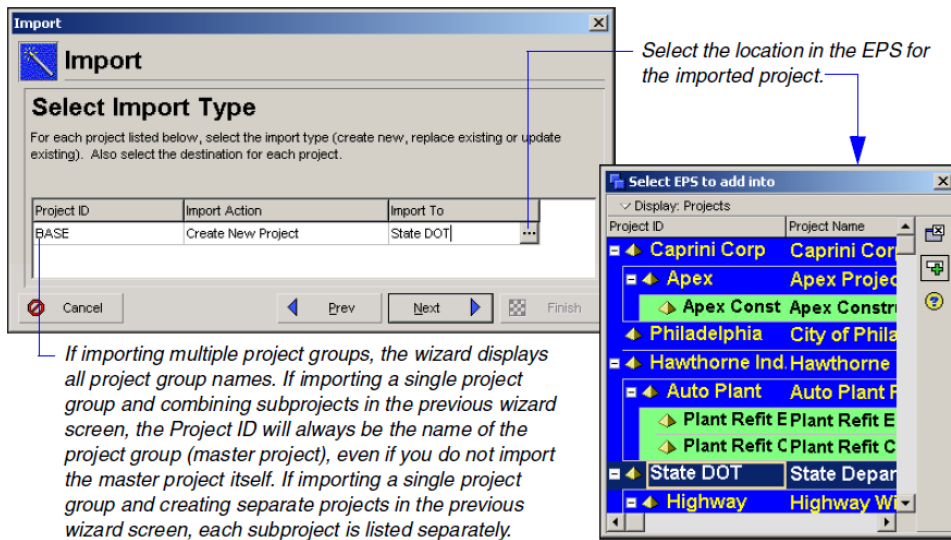
Note: If the master project contains activities that you must retain in P6 Professional, you can only retain them by choosing the Combine subprojects option.



Specify import project options

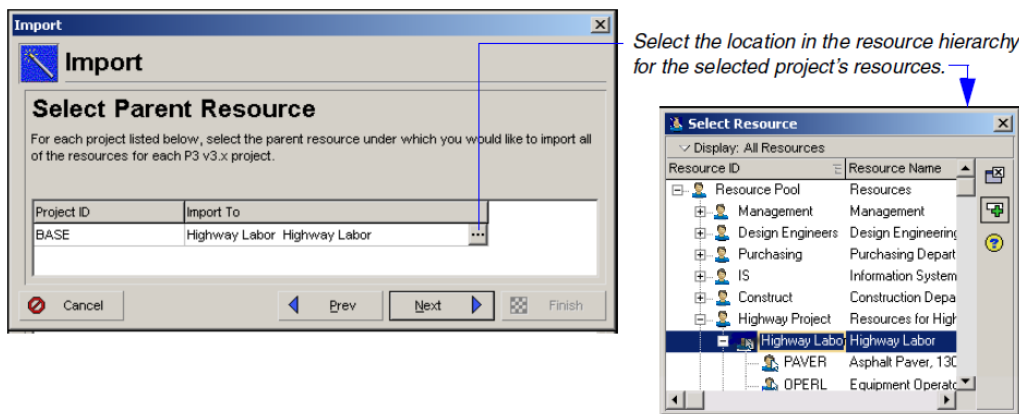
Choose how the P3 projects should be imported. Beside each project name, click the Import Action field, then click the down arrow to select the type of import. Choose the Create New Projects option when moving your P3 projects to P6 Professional. A new project is created in P6 Professional.

Click the Browse button in the Import To field to select the level of the EPS at which the project should be imported. To keep your projects organized, it is best to set up a basic EPS before you import projects, as discussed earlier in this chapter.



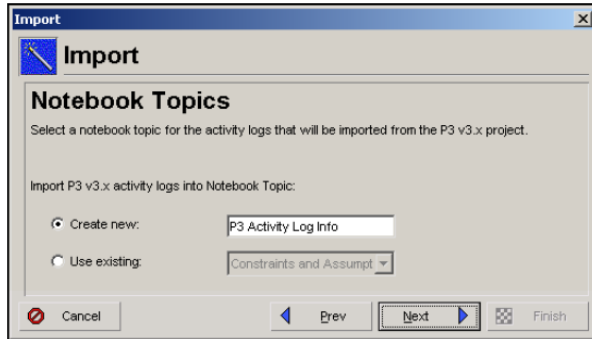
Select location for resources

For each project, select the level of the hierarchy at which resources should be imported. Click in the Import To field, then click the Browse button. Select the resource under which to place all resources from the P3 project. To better organize your resources, it is best to set up a basic resource hierarchy before you import projects, as discussed in a previous topic. If you leave the field blank, P6 Professional creates a root node named after the P3 project.



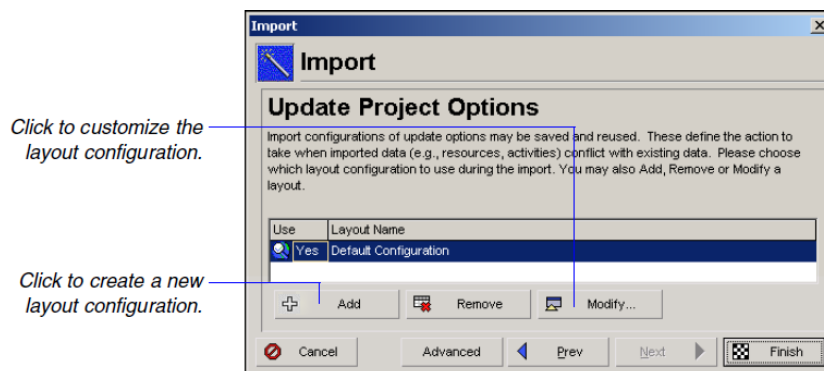
Select location for activity logs

P3 3.x activity logs are converted to notes in P6 Professional. Notebook topics are predefined categories that help to organize your project notes. Choose to create a new notebook topic for the notes, or select from the existing list of notebook topics. To display notes in the Activities window, click the Layout Options bar, then choose Show on Bottom, Activity Details. Click the Notebook tab.



Choose update project options

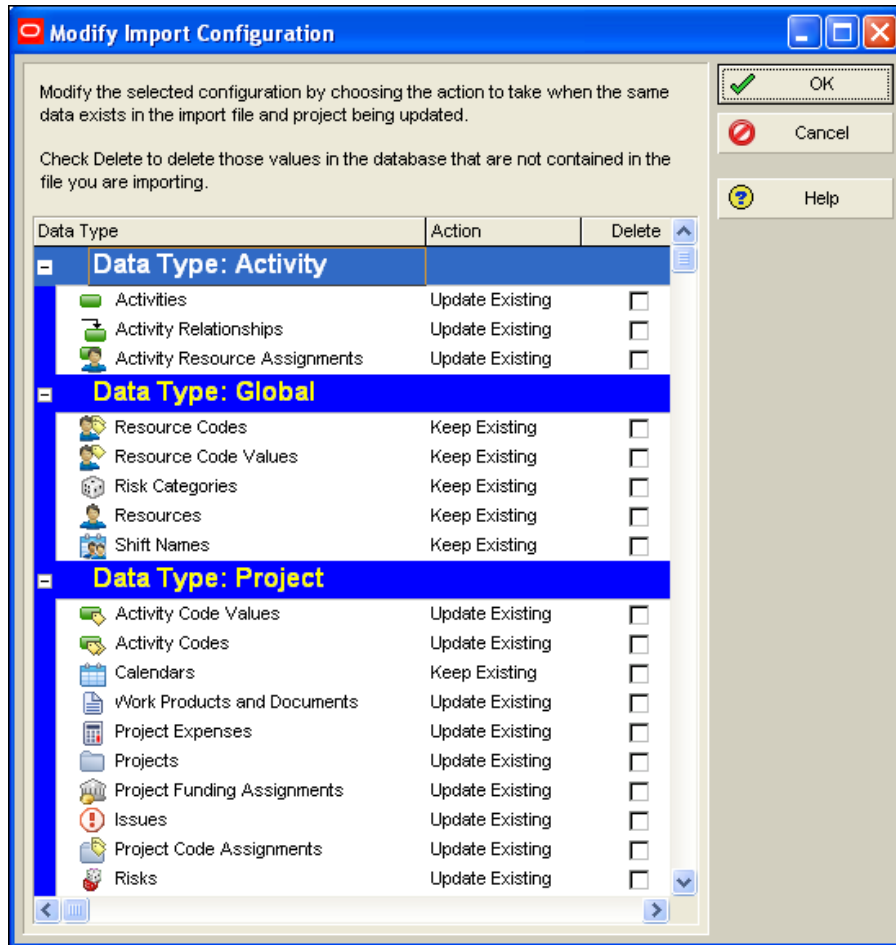
Select a layout configuration to use when importing project data. The options specified in the layout determine how to handle data in the import file that matches data in the database. You can create and save several different configurations; however, only one can be used to import the file. Select Yes in the Use field next to the configuration you want to use. To create new P6 Professional projects from your P3 projects, accept the default configuration.



Modifying a Layout Configuration

The options specified in a layout configuration determine how data is updated when projects are imported and duplicate data exists. To modify these options, select the layout in the Update Project Options dialog box, then click Modify.

In the Data Type: Activity section, shown below, you would mark to delete relationships to external projects, activities, activity relationships, and activity resource assignments that are in the project being updated, but are not included in the import file. Know too, also relating to the same section of the figure, that importing activities, their relationships, and their resource assignments is dependent on one another. For example, if you choose to update one of these items, all three are updated automatically.



The Modify Import Configuration dialog box lists the data types for which you can set options. Mark the Delete checkbox next to a data item to remove data that exists in the project you are updating but is not included in the file you are importing. For example, if several activities are defined in the project you are updating, but are not included in the file to be imported, mark the checkbox in the Delete column to remove the activities from the project being updated.

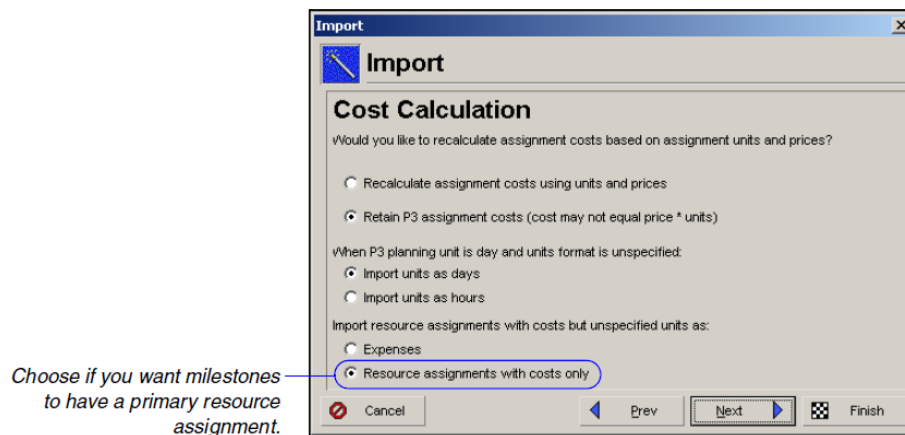
Note: The Delete field does not apply to most data items including all Global data types.

Select one of the following in the Action field to indicate how the data type is updated:

- ▶ **Keep Existing** - Retains data in the existing project and does not overwrite it with the updated data; adds new data if the record does not exist.
- ▶ **Update Existing** - Overwrites data in the existing project with updated data; adds new data if the record does not exist.
- ▶ **Insert New** - Retains data in the existing project and adds any new data items. For example, if a new calendar was added in the P3 3.x file, but you do not want to change the existing calendars, choose Insert New to add the new calendar to the existing project.
- ▶ **Do Not Import** - Retains data in the existing project and does not import the updated data.

Calculate cost values

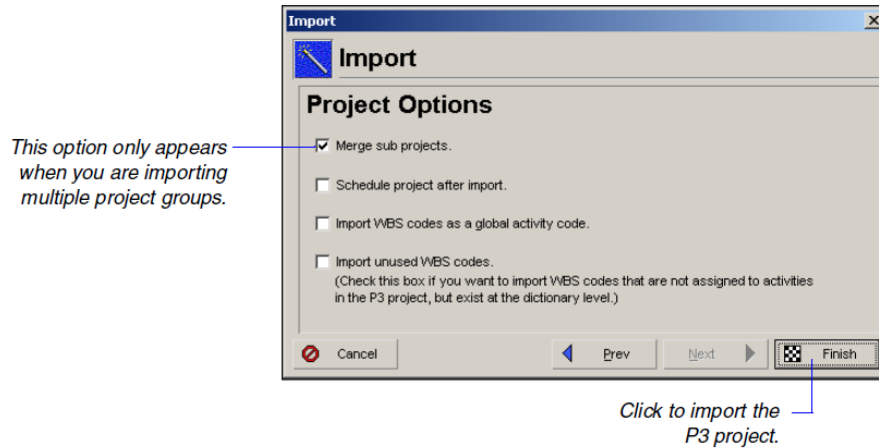
Click Advanced in the Update Project Options dialog box to display options specific to existing P3 projects regarding how you want to handle costs in P6 Professional.



- ▶ Indicate whether you want P6 Professional to recalculate the cost values from the unit prices and assigned resource quantities. See **P3 Conversion Considerations** (on page 75) for more detailed information.
- ▶ When importing a daily project that has resources with a blank unit of measure in P3, choose to convert the resource assignments in days or hours. If you choose hours, P6 Professional retains the resource values as-is. If you choose days, P6 Professional multiplies all resource values by a factor of eight (assuming 8 hr/day). You can change the multiplier in the PRMCONVERT.INI file. See **Advanced Conversion Options** (on page 100) for more information.
- ▶ Choose whether to import resource assignments that only have cost information (no quantity information) associated with them as expenses or as resource assignments with a budgeted cost.

Choose additional project options

Use the Project Options dialog box to specify the following additional options. Click Finish to begin the import process.



- ▶ **Merge sub projects** Decide whether the projects within the project group should be converted as individual projects or combined into one large project. Most likely, you will want to keep your subprojects as individual projects so you can leave this option blank. Marking this setting imports a project group as one project rather than separating it into individual projects. For example, in P3, the project group APEX contains three projects, AUTO, BLDG, and CONV. Merging the subprojects imports only one project named APEX with all activities under that project.

Notes:

- Projects are merged automatically when your Import Type is either Update Existing Project or Replace Existing Project.
 - When you merge subprojects, all activity codes convert to P6 Professional as project activity codes. Otherwise, they convert as global activity codes.
-
- ▶ **Schedule project after import** When the import process is complete, you can automatically calculate the schedule. Leave this setting blank to not calculate the schedule automatically, especially if you want to review or retain the dates that you imported from P3.
 - ▶ **Import WBS codes as a global activity code** Mark this setting to import the WBS codes from P3 into P6 Professional as global activity codes assigned to the activities. The global activity code name created, P3 WBS - Proj, where Proj is the name of the project group in P3, will store the WBS values.
 - ▶ **Import unused WBS codes** Mark this setting to keep all the WBS codes within each project, even if they are not assigned to any activities. For unassigned WBS codes, P6 Professional will create a WBS root node with one level beneath it and name it PROJ.UNASSIGNED.

How P6 Professional Converts P3 Data

Most data is converted directly from P3 to P6 Professional. This topic explains how data is handled when it is imported and a direct match does not exist; it also identifies data that is not converted. See *Data not converted*, below, for additional cases.

- ▶ **Durations, float, and lag** All time-based calculations in P6 Professional are based on hourly units. When converting a daily project, P6 Professional multiplies activity durations, total float, free float, and relationship lag by a factor of eight (assuming 8 hours/day). If your projects are based on a different rate, such as ten hrs/day, you can change the daily multiplier in the PRMCONVERT.INI file. See **Advanced Conversion Options** (on page 100) for more detailed information.

Note: The duration, float, and lag information does not apply to hourly projects.

- ▶ **WBS codes** In P6 Professional, a WBS must exist and all activities must be assigned to a WBS code. If the imported P3 project uses a WBS, it is converted. If no WBS exists, P6 Professional creates a WBS root node and names it PROJ, where PROJ is the P3 project name. All activities are assigned to this WBS code.

Because P6 Professional uses the WBS to define a project structure, you should not assign the same WBS code to different activities across projects within a project group in P3. For example, if activity CS300 is part of the Conveyor System project, it should not be assigned a WBS code that belongs to the Automation System project. If the conversion program encounters this situation, it duplicates the assigned codes in both projects. To distinguish the projects, the program and project names are added as a prefix to the WBS code structure. For example, for the APEX project, APEX.CONV.AM.01 and APEX.AUTO.AM.01 would be included as branches in the WBS.

- ▶ **Target projects** You can convert target projects just as you would any other project; however, the target designators are not converted. To designate a target project in P6 Professional, choose Project, Maintain Baselines. Click Add and choose Convert Another Project to a New Baseline of the Current Project. Select the converted target project as the baseline for the current project.

Data not converted

This section lists the data items that are not converted from P3 to P6 Professional.

- ▶ **Layouts, filters, and Global Change, report, and graphic specifications** Layouts, filters, and Global Change and report/graphic specifications are not converted with the project; however, sample data is provided for these items in P6 Professional.
- ▶ **Access rights** Access rights are not converted in P6 Professional. Your system administrator must set up global and project profiles that determine privileges.

- ▶ **Financial periods and past period actuals** In P6 Professional, financial periods are global. Financial periods and past period actual data are not converted to P6 Professional because financial periods are project-specific in P3. Choose Admin, Financial Periods, to define financial periods in P6 Professional. After you define financial periods choose Tools, Store Period Performance, to store past period actuals per financial period.
- ▶ **Leveling options and leveling priorities** Choose Tools, Level Resources, to set options for leveling in P6 Professional.
- ▶ **Aliases** Aliases are not converted in P6 Professional. If you want to include the P3 alias code in P6 Professional, you can create a new activity code in P3 to represent the combined codes. Next, run a global change statement that assigns the combined codes to the new activity code. In P6 Professional, you can create activity codes and arrange them hierarchically, to represent the alias from P3.
- ▶ **Webster time data** Time data entered through Webster is not supported in P6 Professional. The actual values from Webster are imported into P6 Professional as a lump sum value.

Advanced Conversion Options

The Conversion utility provides additional options that you can set in an .INI file. You can also use command-line parameters to convert multiple projects at one time.

The PRMCONVERT.INI file is created in your local Windows folder the first time an import is run. Add or modify any of the following options to the file:

[Settings]

NoUI=[0,1] Choose 1 to remove the GUI screens when using command line conversions. For example, if you are using a batch file to perform many conversions, and you do not want any GUI to show, select 1. The default setting is 0.

DailyMultiplier=[#] Select an integer to use as a multiplier when importing daily P3 3.x projects. The default multiplier is 8. For example, if a duration is one day in P3 and the daily multiplier is set to 12, the duration in P6 Professional will be 12 hours. Similarly, if the resource unit of measure is something other than hours such as, day or d, then P6 Professional assumes the resource assignment is in days and multiplies all resource values by this daily multiplier. It is recommended that this value matches the value in Admin Preferences.

[WBS]

AutoSelect=[0,1] Choose 1 to enable the import process to attempt to match the WBS with the project hierarchy structure. A unique WBS branch will be created for each project within the project group. The default setting is 1.

WbsAsActCode=[0,1] Choose 1 to enable the import process to import all WBS codes as a global activity code. The global activity code name created, P3 WBS - Proj, where Proj is the name of the project group in P3, will store the WBS values. If this option is set to 0, the WBS will import to the WBS structure in P6 Professional. The default setting is 0.

[Resource Units]

The conversion process uses the unit of measure for resources in P3 3.x to determine whether to categorize a resource in P6 Professional as labor, nonlabor, or material. If a resource in P3 contains one of the following units of measure, it is converted as a labor resource in P6 Professional: h, h., hr, hr., hrs, hrs., hour, d, d., day, days, w, w., wk, wk., wks, wks., week, m, m., mnth, y, y., yr, yr., yrs, yrs., year, md, md., mds, mds., mh, mh., mhs, mhs.

If a resource in P3 contains one of the following units of measure, it is converted as a material resource in P6 Professional: feet, ft, ft., sqft, cyds, cyd, cyd., yard, yrd, yrd., yds, yd, yd., yds, yds., inch, ton, tons, in, in., lf, lnft, lft, ea, each, unit, u.

All other resources are converted as nonlabor. The unit of measure conversion is not case-sensitive.

Labor=[unit of measure] Specify unit of measure strings to add to the default labor list; use commas to separate each string.

NonLabor=[unit of measure] Specify unit of measure strings to add to the default nonlabor list; use commas to separate each string.

Material=[unit of measure] Specify unit of measure strings to add to the default material list; use commas to separate each string.

In the following example, a1, test, and bbb will be added to the default labor list above, hrs and hr. will be removed from it and added to the nonlabor list, and lb, lbs will be added to the default material list:

[Resource Units]

Labor=a1,test,bbb

NonLabor=hrs,hr.

Material=lb,lbs

BlankIsLabor=[0,1,2] Set to 0 to convert blank resource unit of measure fields to nonlabor resources in P6 Professional; set to 1 to convert blank resource unit of measure fields to labor resources; set to 2 to convert blank resource unit of measure fields to material resources. The default setting is 1.

HourlyAdd=[comma-delimited string] Specify resource unit strings to be added to the default list of units treated as hourly.

HourlyRemove=[comma-delimited string] Specify resource unit strings to be removed from the default list of units treated as hourly.

DailyAdd=[comma-delimited string] Specify resource unit strings to be added to the default list of units treated as daily.

DailyRemove=[comma-delimited string] Specify resource unit strings to be removed from the default list of units treated as daily.

In the following example, the unit strings a1, test, and bbb are treated as hourly units:

[Resource Units]

HourlyAdd=a1,test,bbb

The default string for Hourly = h,h.,hr,hr.,hrs,hrs.,hour,mh,mh.,mhs,mhs.,rh,rh.,rhs,rhs.,ph,ph.,phs,phs.

The default string for Daily = d,d.,day,days,md,md.,mds,mds.,rd,rd.,rds,rds.,pd,pd.,pds,pds.

[UOM Mapping]

UOM1=unit of measure=unit of measure string Specify the units of measure used in P3 that are equivalent to the unit of measure specified in the Admin Categories in P6 Professional.

In the following example, all abbreviations of cubic yard listed in the unit of measure string will convert to the standard cubic yard (cu. yard) unit of measure defined in P6 Professional:

[UOM Mapping]

UOM1 =cu. yard=cy, cuyd, cuy, kf

Before and After Conversion Example

After the conversion, you should validate your import results. This section takes a sample project from P3 and uses the Import wizard to convert it to P6 Professional. You can see what happens to the data such as activity codes, resources, WBS, and custom data items once moved to P6 Professional. The sample project being imported is called P-3 Main Street Interchange Project and involves the road construction of an interchange.

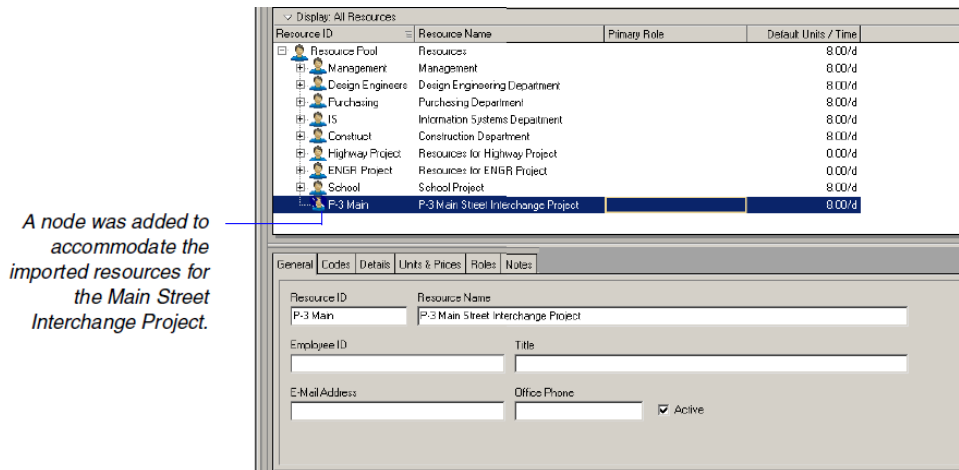
See the checklists outlined in *Planning for Conversion* (on page 75) before converting the project.

Review the EPS before conversion

Before the P3 project is converted, review the EPS by choosing Enterprise, Enterprise Project Structure to be sure that it includes a node in the structure for the imported project. For our example, the P3-Main node was added for the Main Street Interchange Project under the State DOT branch of the EPS.

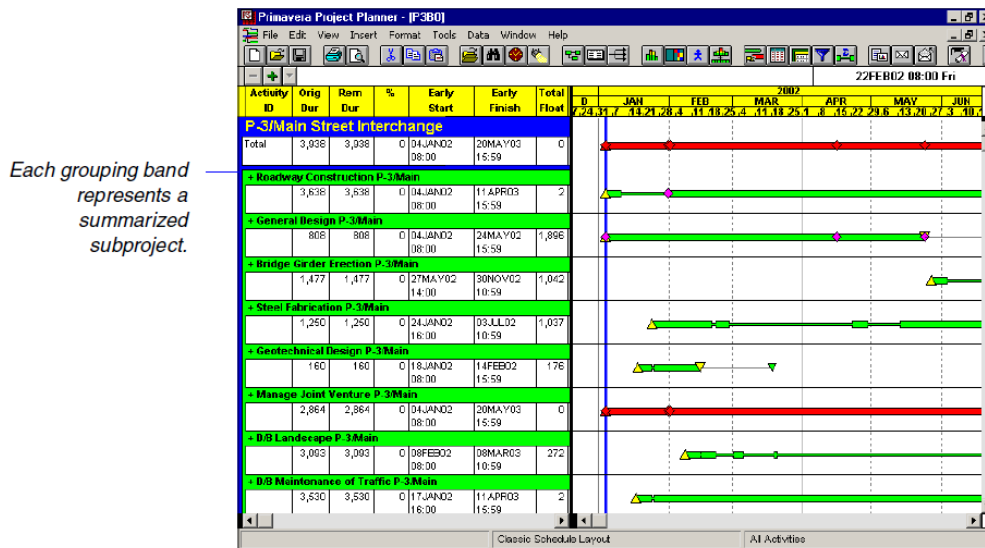
Review the resource hierarchy in P6 Professional before conversion

Similar to the EPS, review the resource hierarchy in P6 Professional to confirm the location for the imported resources. The quickest method is to simply add a new node specifically for the imported project's resources. Later after the conversion, you can move the resources into the appropriate branches for a global resource hierarchy.



Review the project in P3 before conversion

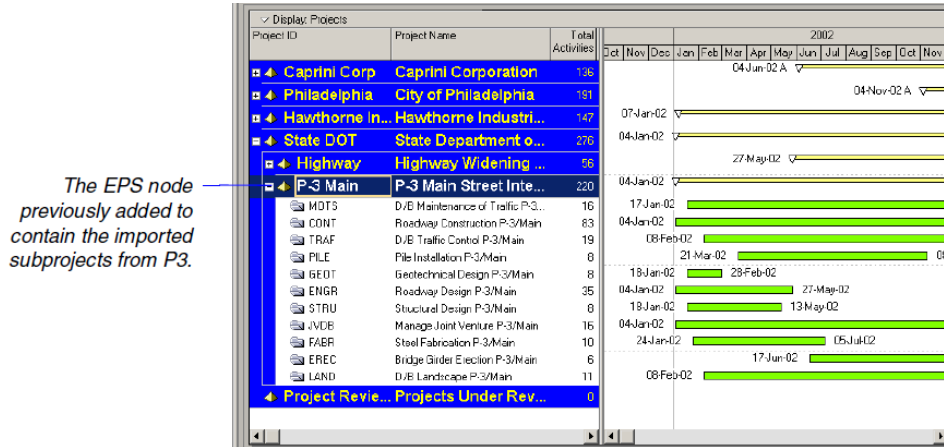
The Main Street Interchange Project in P3 is an hourly project that consists of 11 subprojects. Because the project is planned in hours, all durations, lag, and resource assignments will convert as-is.



Review the EPS after conversion

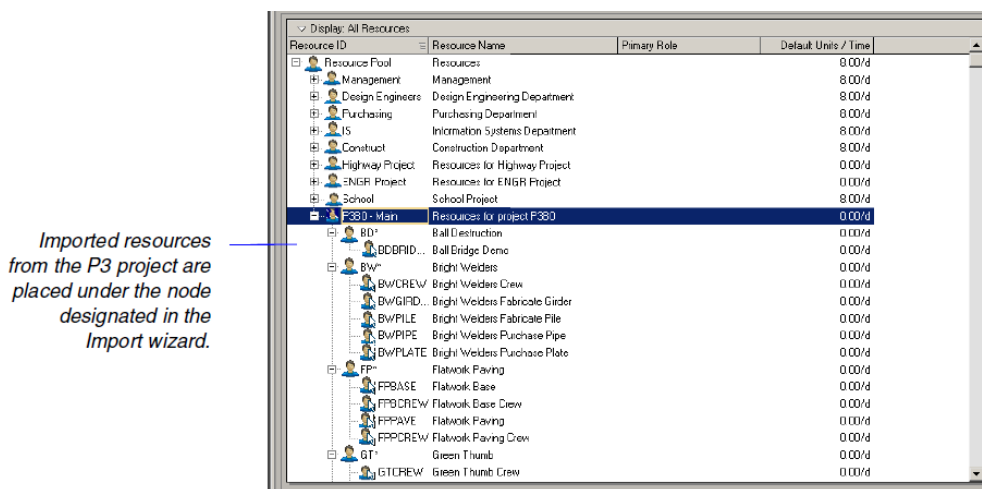
The following figure shows the Projects window in P6 Professional after importing the P3 project. During the conversion, you marked the option to create separate projects so each subproject imported as a separate project. In P6 Professional, you must open the projects before you can see data or activity bars. Choose File, Open, and select the EPS node that contains the imported projects to open them all at once, then click Open.

- ▶ *Did the project start and finish dates convert correctly?* If you converted a daily project, confirm that the start and finish dates were converted.
- ▶ *Are the project code assignments correct?* In the Projects Window, select the Codes tab in the Project Details to check the project code assignments for each project.



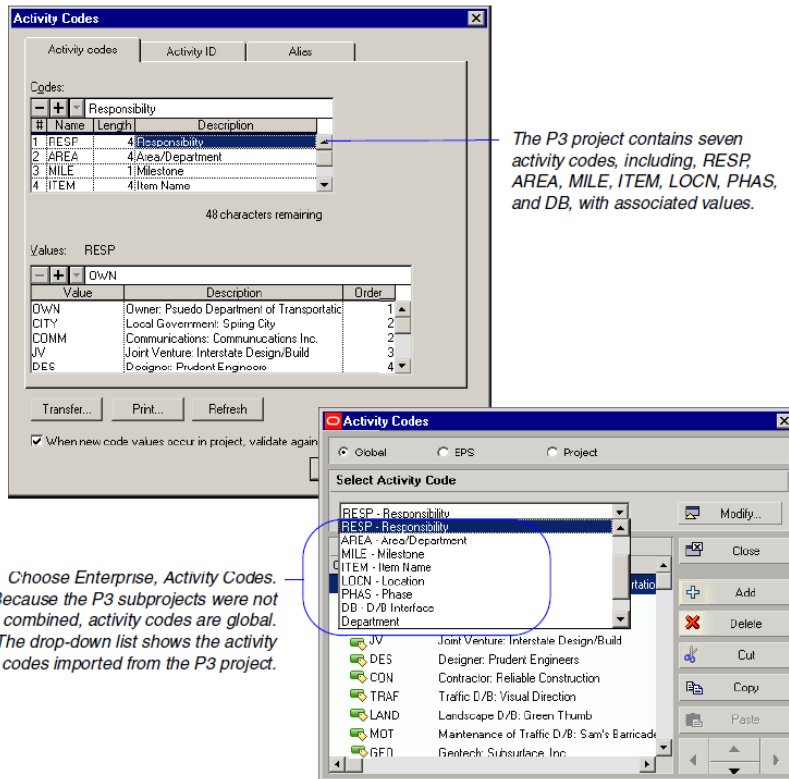
Review the resource hierarchy after conversion

During the import process, the resources from the Main Street Interchange Project were placed under the node in the resource hierarchy that was added specifically for them. The hierarchical structure from P3 is retained.



Review activity codes

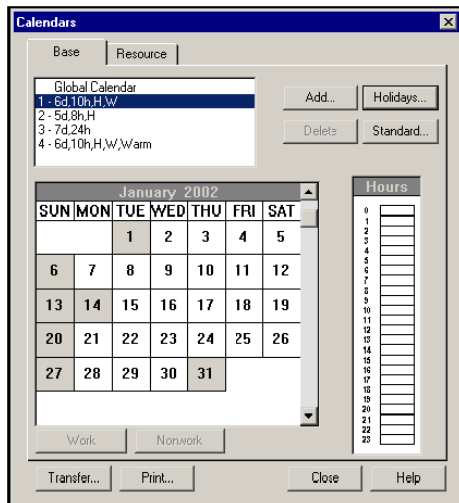
Since subprojects were not combined during Import, all activity codes from P3 are imported as global activity codes in P6 Professional. To verify the activity code values are assigned to the activities in P6 Professional, use the Group and Sort By feature to organize the Activity View by the imported activity codes. The following figures show the Activity Codes Dictionary from P3 and P6 Professional.



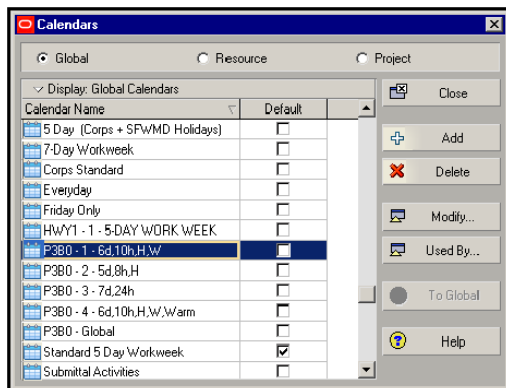
Review calendars

All P3 base calendars convert to global calendars in P6 Professional, as shown in the following figure. After import, determine if P6 Professional created new activity or resource calendars. If so, confirm that the number of hours/day was set properly on each calendar.

The project in P3 has four base calendars in addition to the Global calendar:

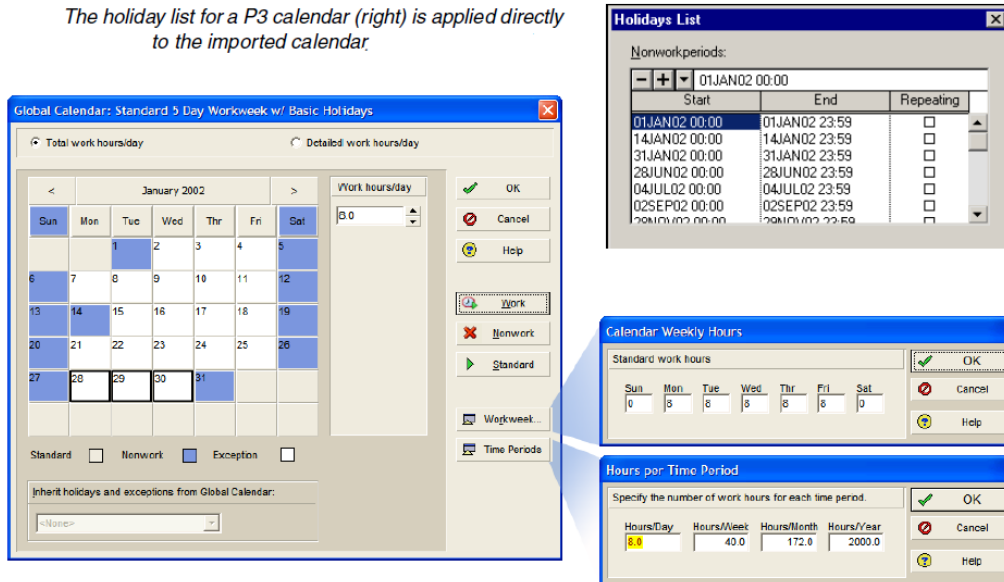


In P6 Professional, all converted calendar names show their P3 project name as a prefix (P3B0):



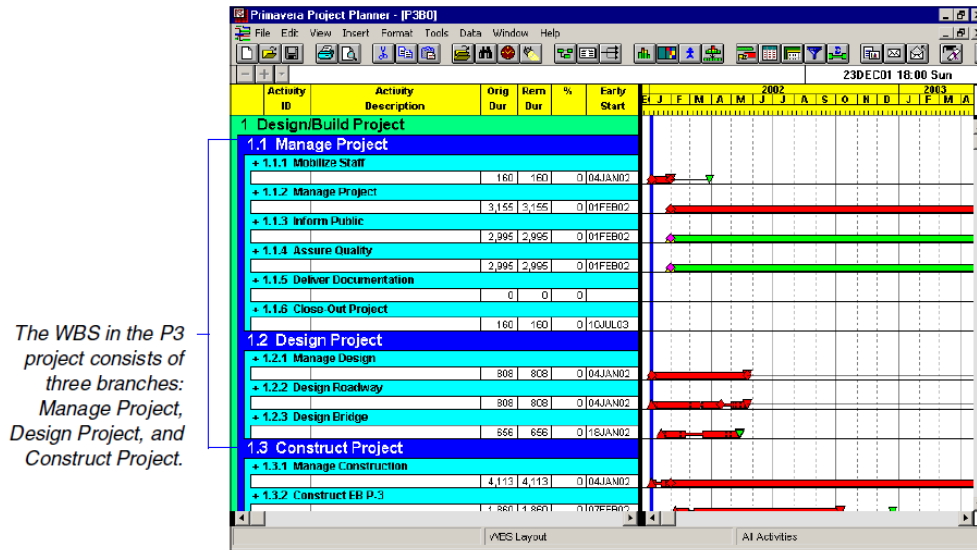
The holiday list from each P3 calendar is applied directly to the associated calendar in P6 Professional.

The holiday list for a P3 calendar (right) is applied directly to the imported calendar.



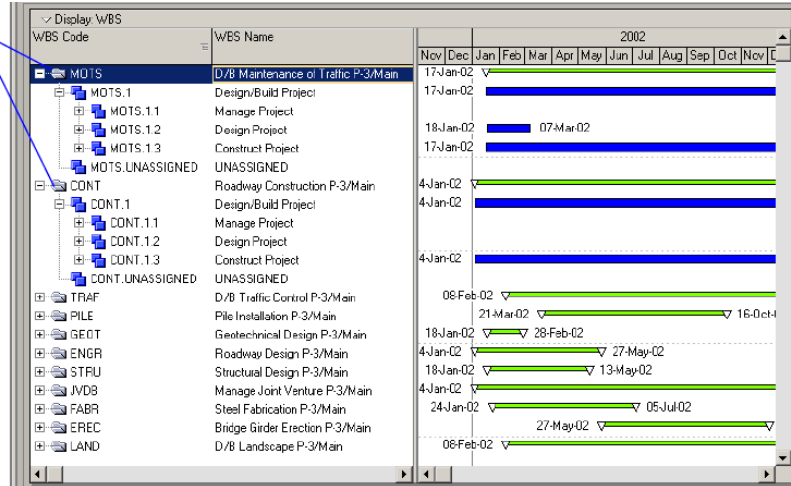
Review the WBS

The WBS from your P3 project is converted to P6 Professional. The following figure shows the sample project's WBS in P3.

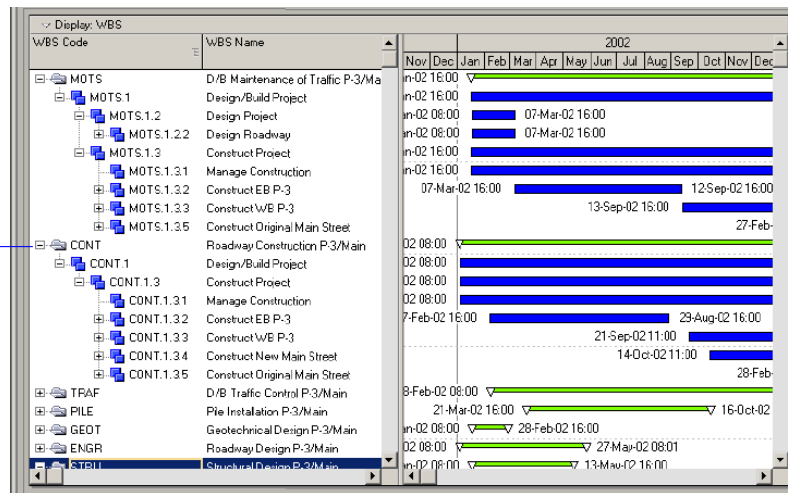


Each converted subproject in P6 Professional uses the entire WBS from the P3 project if you chose to import unused WBS codes in the Import wizard. If you cleared the checkbox to import unused WBS codes during import, then only those WBS nodes that are used for each subproject are converted.

Choose Project, WBS to display the WBS. The same branches are used for each subproject.



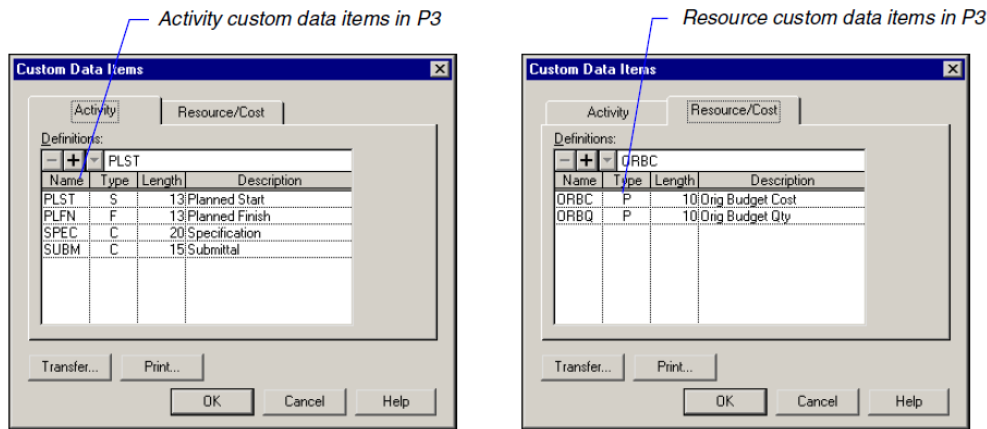
Because this subproject doesn't use the WBS branch, 1.2 Design Project, it is not converted.



You can use the Group and Sort feature to group the Activities Window by WBS to confirm that the activities have retained their WBS assignments.

Review custom data items

P3 custom data items are converted to user-defined fields (UDFs) in P6 Professional. The sample P3 project has four activity custom data items and two resource custom data items.

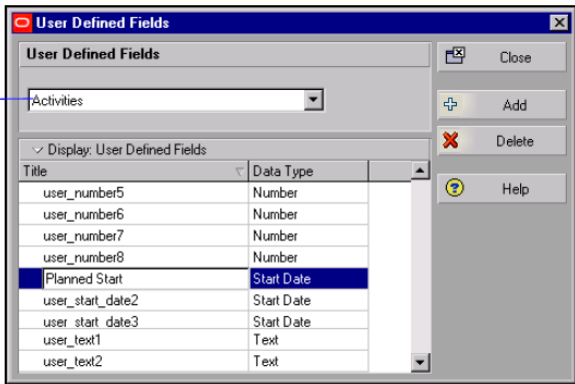


See the table in **P3 Conversion Considerations** (on page 75) for all custom data item conversions.

The type of custom data item determines how it converts to P6 Professional. For example, PLST is a Start (S) type and PLFN is a Finish (F) type; these custom data items convert to a User Start Date and a User End Date in P6 Professional.

Note: If you combine subprojects when importing, some UDFs will not import if there are UDFs with the same Title but different Data Types. For example, assume Project 1 has a UDF named Purchase Order Number with a Data Type of Number; Project 2 also has a UDF named Purchase Order Number but the Data Type is Integer. Only one of these UDFs will be imported.

Choose the Activities subject area, then select user_start_date1 and type a title for the converted custom data item and any others.



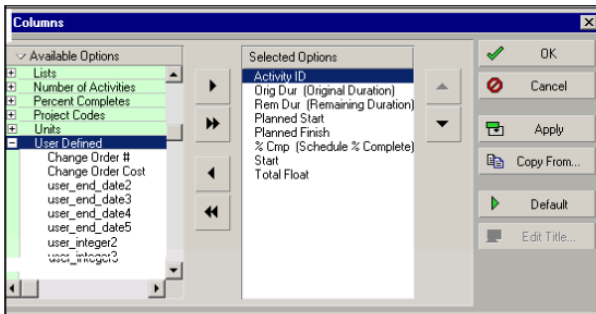
- ▶ Did the custom data item from P3 convert to the user defined fields in P6 Professional? Choose Enterprise, User Defined Fields to view the user defined fields that have been converted.

- Are the proper values assigned to the activities and resource assignments? You can display user defined fields as columns in the Activity Table to make sure their values are properly assigned to activities and resource assignments.

Planned Start and Planned Finish are custom data items imported from the P3 project as user-defined fields in P6 Professional:

Layout: Classic Schedule Layout							Filter: All Activities											
Activity ID	Orig Dur	Rem Dur	% Cmp	Planned Start	Planned Finish	S												
Root...	2716h	2716h	0%	04-Jan-02 08:00	11-Apr-03 16:00	0												
001020	40h	40h	0%	04-Jan-02 08:00	10-Jan-02 16:00	0												
001030	3420h	3420h	0%	31-Jan-02 16:00	11-Apr-03 16:00	0												
001040	0h	0h	0%	31-Jan-02 16:00		0												
001045	3420h	3420h	0%	31-Jan-02 16:00	11-Apr-03 16:00	0												
001050	3420h	3420h	0%	31-Jan-02 16:00	11-Apr-03 16:00	0												
001055	3420h	3420h	0%	31-Jan-02 16:00	11-Apr-03 16:00	0												
001100	20h	20h	0%	07-Feb-02 16:00	11-Feb-02 11:00	0												
001140	20h	20h	0%	07-Feb-02 16:00	11-Feb-02 11:00	0												
001110	50h	50h	0%	11-Feb-02 11:00	16-Feb-02 11:00	1												

In the Columns dialog box, choose Planned Start and Planned Finish from the User Defined category and click the right-arrow to move them to the Selected Options column, as shown below:



Review cost accounts

The Cost Accounts Dictionary and assignments are converted from P3 to P6 Professional. Cost accounts are global across all projects in P6 Professional.

- Are the cost accounts assigned to resources and expenses? Choose Projects, Resource Assignments or Projects, Expenses to validate the cost account assignments in the Resource Assignments Window or the Expenses Window.

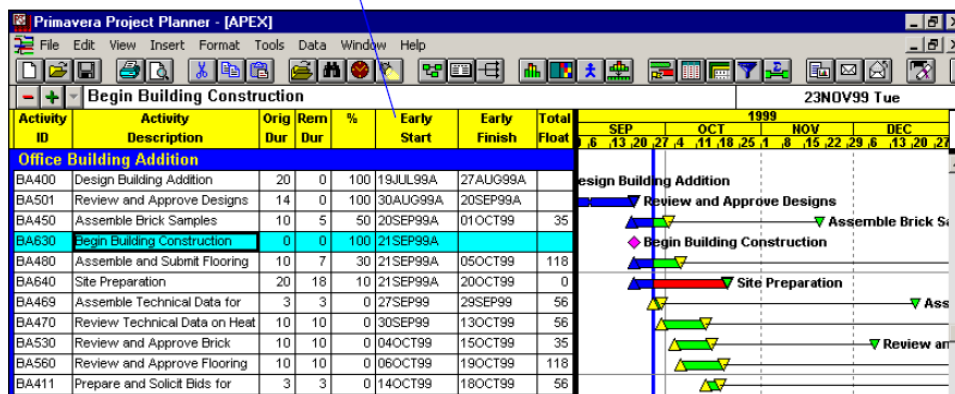
Choose Enterprise, Cost Accounts to review the imported project's cost account structure. The project name is added to the beginning of each cost account. The cost category becomes part of the cost account.

Review activity data

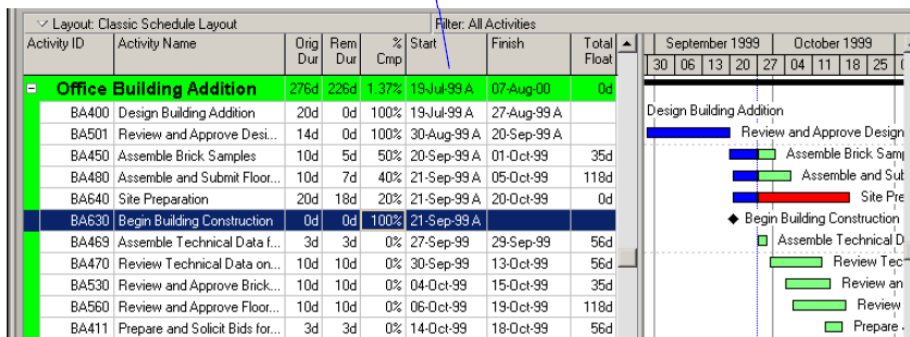
Activities and their associated data are converted from P3 to P6 Professional. The following figure shows a portion of a building addition project in P3 and again after being imported to P6 Professional. Durations, schedule dates, percent complete values, and total float amounts are the same in each product. Contact Oracle customer support for information on available tools you can use to compare some types of P3 and P6 Professional activity data.

- ▶ *Examine the Original Duration and Remaining Duration.* If you imported hourly projects, all durations should be in whole hours. If you imported daily projects, all durations should be in whole days.
- ▶ *Examine the start and finish times after scheduling the project.* For daily projects, the early and late start dates should always be at the beginning of the day; The early and late finish dates should always be at the end of the day. For hourly projects, the early and late start dates should always be at the beginning of the hour; The early and late finish dates should always be at the end of the hour.

Schedule layout from P3



Schedule layout in P6 Professional



Flag activities

P6 Professional converts flag activities as milestones. In P3, a start flag signals the start of an activity or a group of activities. Its early start date is the earliest early start of its predecessors. A start milestone, however, is scheduled and begins on the next workperiod after the finish of its predecessors. The following figures illustrate a start flag activity in P3 and P6 Professional.

In P3:

In P3, Activity BA741 is a start flag. Its early start date is the same as its predecessor's early start date.

The screenshot shows the 'Trace Logic' window in P3. It displays a logic diagram with two activities: BA750 (Brick Exterior Walls) and BA741 (Close-In Phase Begins). BA750 has an early start date of 15MAR00 and an early finish date of 21APR00. BA741 has an early start date of 15MAR00 and an early finish date of 15MAR00. The 'Activity Properties' window for BA741 is open, showing it is a 'Start flag' with an early start date of 15MAR00 and an early finish date of 15MAR00.

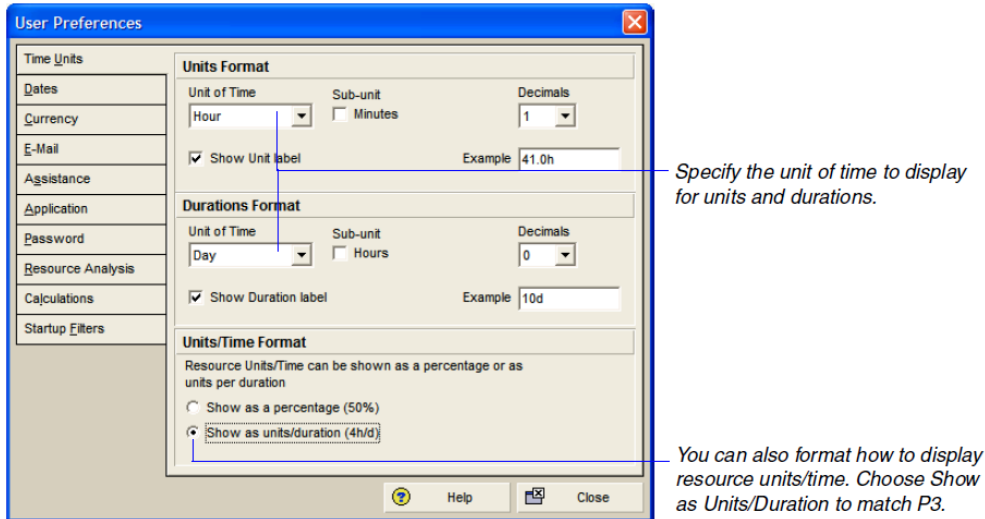
In P6 Professional:

Activity BA741 converts to a start milestone. Its early start date is the first workperiod after its predecessor is scheduled to finish.

The screenshot shows the 'Classic Schedule Layout' window in P6 Professional. It displays a Gantt chart with two activities: BA750 (Brick Exterior Walls) and BA741 (Close-In Phase Begins). BA750 has a duration of 224h and an early start date of 15-Mar-00 08:00. BA741 has a duration of 594h and an early start date of 24-Apr-00 08:00. The 'Activity Properties' window for BA741 is open, showing it is a 'Start Milestone' with a duration of 594h and an early start date of 24-Apr-00 08:00.

Setting Time and Duration Units

In P6 Professional, choose Edit, User Preferences to set the display format of time units and durations. For example, in an hourly project, you should format time units and durations in hours. In a daily project, you will most likely want to display time units and durations in days.



See **P6 Professional Conversion Considerations** (on page 86) for additional information on setting options for converting resource assignments.

Reviewing resource assignments

Resource assignments are also converted from P3 to P6 Professional. Choose Project, Resource Assignments to validate the resource assignments in the Resource Assignments view.

If you choose the project-level setting to allow resources to drive activity dates by default, P6 Professional will roll up resource assignments to determine activity durations and dates, regardless of activity type. With this setting on, if you have a resource assigned whose duration is greater than the activity's duration, the activity dates will not match those in P3. In the following example, the schedule dates and duration for the activity differs because of its assigned resource durations.

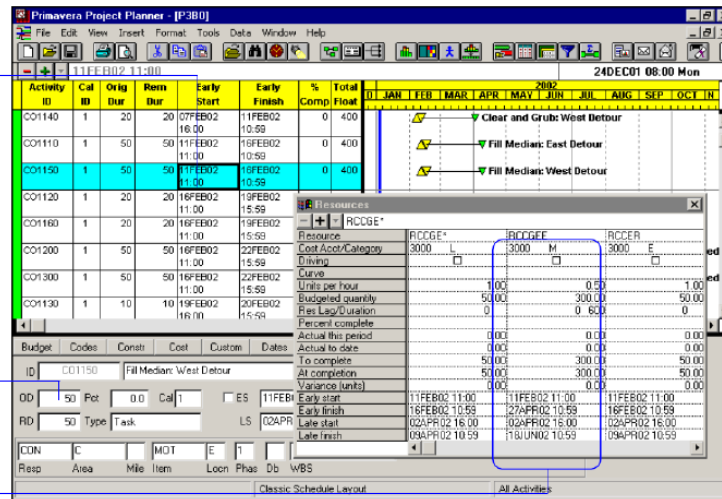
For our example, in the Project Details, Resources tab, mark the Drive activity dates by default option to allow resources to drive the activity dates and durations.

In P3:

In P3, the early dates are scheduled based on the activity's assigned duration and calendar assignment.

Activity duration equals 50 hours.

This assigned resource has a duration of 600 hours and is scheduled to finish on 27APR02.



In P6 Professional:

The activity's duration and start and finish dates are based on its assigned resources. The longest duration of the resources, 600 hours, is used as the activity's duration.

