COURSE MATERIAL

ON

PRIMAVERA ENTERPRISE PROJECT MANAGEMENT (P6)

KLG SYSTEL
A Knowledge Company

KLG SYSTEL LTD

Plot No. 70A, Sector - 34, Gurgaon - 122 004 Haryana (India) Tel: +91(0)124-4129900 Fax: +91(0)124-4129999	301 Pujit Plaza, Plot.No.67, Sector 11 C.B.D – Belapur, Navi Mumbai 400 614 Tel: +91-22-40916777 Fax: +91-22-27576461	4th Floor, Golden Tower, 260-262, Royapettah High Road, Royapettah, Chennai - 600014 Tel: +91-44-45510043/53 Fax: +91-44-28528170	104 B, 105, 106, 107, First Floor, H.M. Geneva House 14, Cunigham Road, Bangalore-560052 Tel: +91-80- 41479151-52	46/31/1, Gariahat Road, 4th Floor, Ballygunge, New AC Market, Kolkata - 700019 Tel: +91-33-24647465 /5257/5259 Fax:+91-33-24645258

INDEX

A. INTRODUCTION TO PROJECT MANAGEMENT

WHAT IS PROJECT MANAGEMENT?

Project management is the application of knowledge, skills, tools, and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project. Meeting or exceeding stakeholder needs and expectations invariably involves balancing competing demands among:

- Scope, time, cost, and quality.
- Stakeholders with differing needs and expectations.
- Identified requirements (needs) and unidentified requirements (expectations).

The term project management is sometimes used to describe an organizational approach to the management of ongoing operations. This approach, more properly called management by projects, treats many aspects of ongoing operations as projects in order to apply project management to them. Although an understanding of project management is obviously critical to an organization that is managing by projects.

PROJECT MANAGEMENT KNOWLEDGE AREAS

The Project Management Knowledge Areas describes project management knowledge and practice in terms of its component processes. These processes have been organized into nine knowledge areas:-

Project Integration Management describes the processes required to ensure that the various elements of the project are properly coordinated. It consists of project plan development, project plan execution, and overall change control.
Project Scope Management describes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. It consists of initiation, scope planning, scope definition, scope verification, and scope change control.
Project Time Management describes the processes required to ensure timely completion of the project. It consists of activity definition, activity sequencing, activity duration estimating, schedule development, and schedule control.
Project Cost Management describes the processes required to ensure that the project is completed within the approved budget. It consists of resource planning, cost estimating, cost budgeting, and cost control.
Project Quality Management describes the processes required to ensure that the project will satisfy the needs for which it was undertaken. It consists of quality planning, quality assurance, and quality control.
Project Human Resource Management describes the processes required to make the most effective use of the people involved with the project. It consists of organizational planning, staff acquisition, and team development.
Project Communications Management describes the processes required to ensure timely and appropriate generation, collection, dissemination, storage, and ultimate disposition of project information. It consists of communications planning, information distribution, performance reporting, and administrative closure.
Project Risk Management describes the processes concerned with identifying, analyzing, and responding to project risk. It consists of risk identification, risk quantification, risk response development, and risk response control.
Project Procurement Management describes the processes required to acquire goods and services from outside the performing organization. It consists of procurement planning, solicitation planning, solicitation, source selection, contract administration, and contract close-out.

PROJECT PROCESSES

Projects are composed of processes. A process is "a series of actions bringing about a result". Project processes are performed by people and generally fall into one of two major categories:

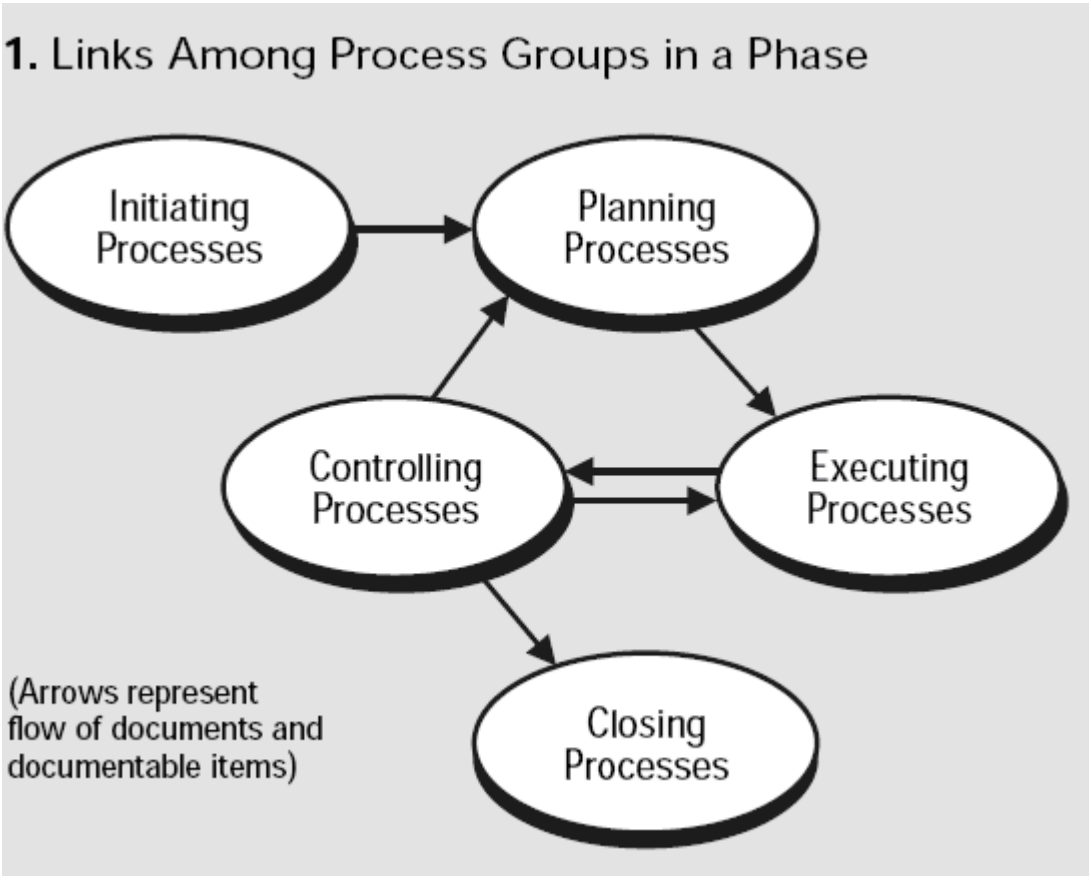
- **Project management processes** are concerned with describing and organizing the work of the project.
- **Product-oriented processes** are concerned with specifying and creating the project product. Product-oriented processes are typically defined by the project life and vary by application area.

Project management processes and product-oriented processes overlap and interact throughout the project

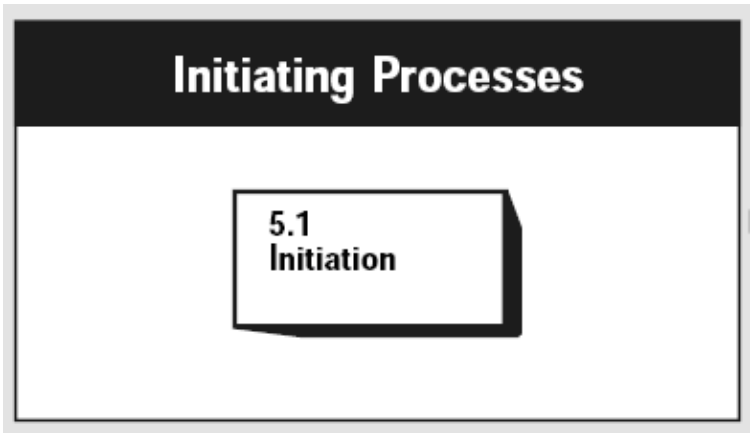
PROCESS GROUPS

Project management processes can be organized into five groups of one or more processes each:

- **Initiating processes:** recognizing that a project or phase should begin and committing to do so.
- **Planning processes:** devising and maintaining a workable scheme to accomplish the business need that the project was undertaken to address.
- **Executing processes:** coordinating people and other resources to carry out the plan.
- **Controlling processes**: ensuring that project objectives are met by monitoring and measuring progress and taking corrective action when necessary.
- **Closing processes:** formalizing acceptance of the project or phase and bringing it to an orderly end.



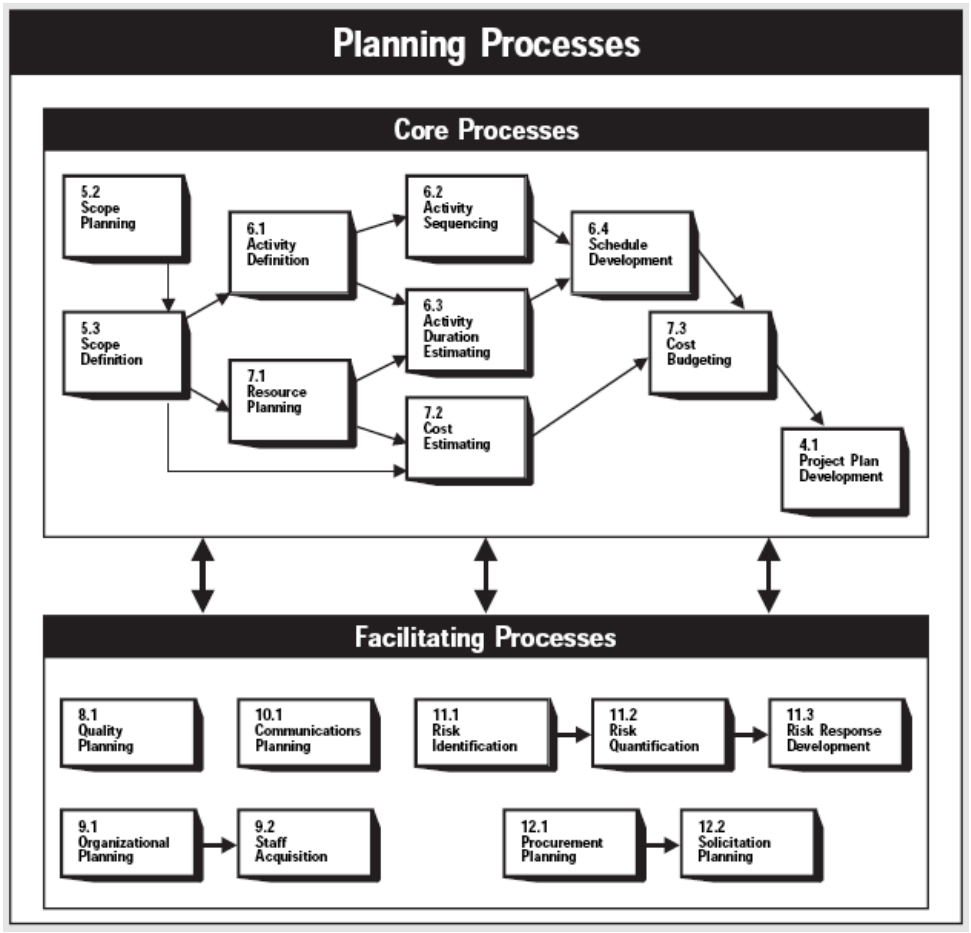
PROCESS INTERACTIONS



To The Planning Process

From The Initiating Process

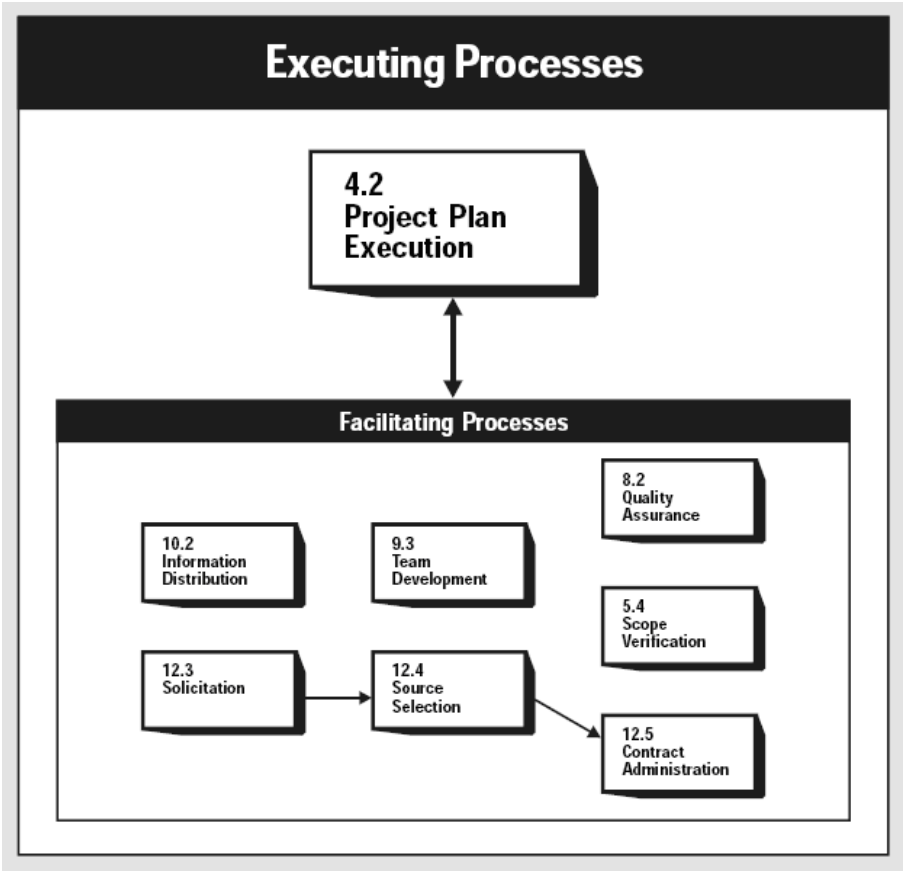
From The Controlling Process



To The Executing Process

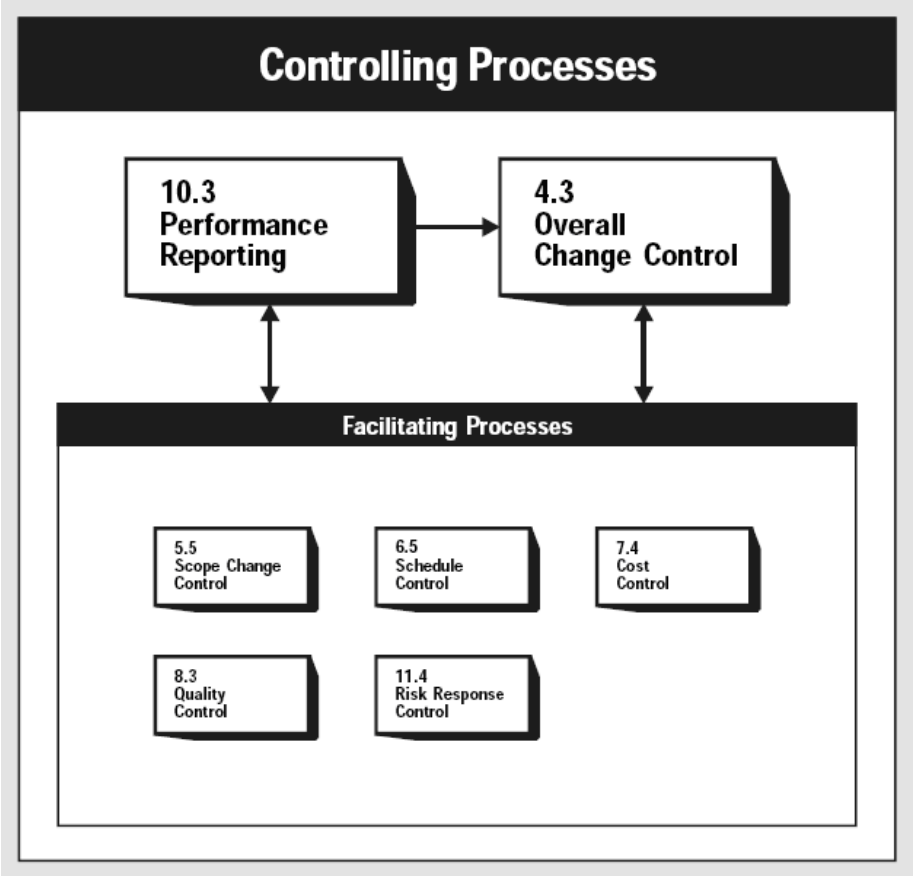
From The Planning Process

From The Controlling Process



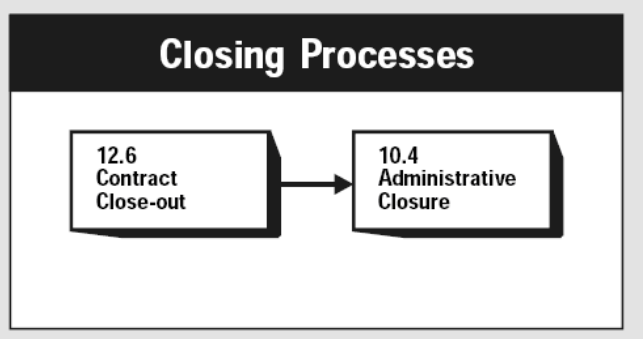
To The Controlling Process

From The Executing Process



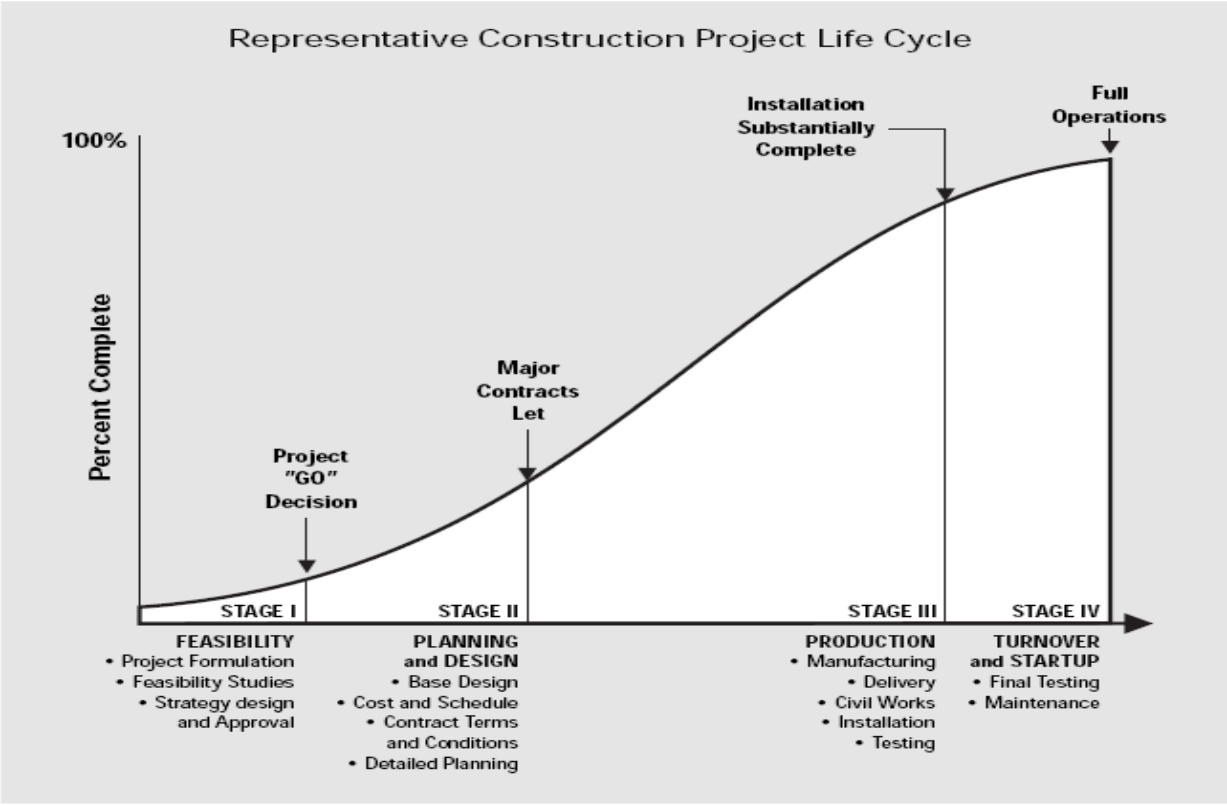
To The Planning Process

From The Controlling Process

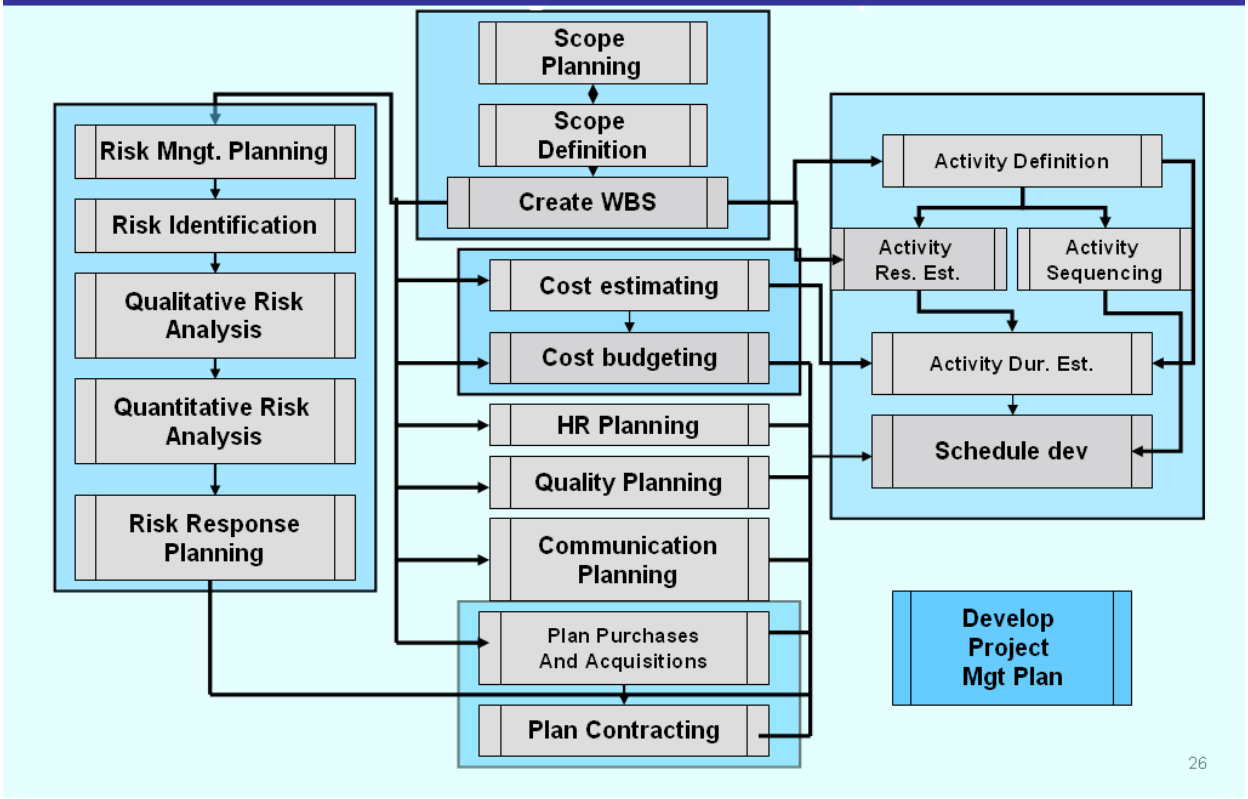


PROJECT PHASES AND THE PROJECT LIFE CYCLE

Because projects are unique undertakings, they involve a degree of uncertainty. Organizations performing projects will usually divide each project into several project phases to provide better management control and appropriate links to the ongoing operations of the performing organization. Collectively, the project phases are known as the project life cycle.



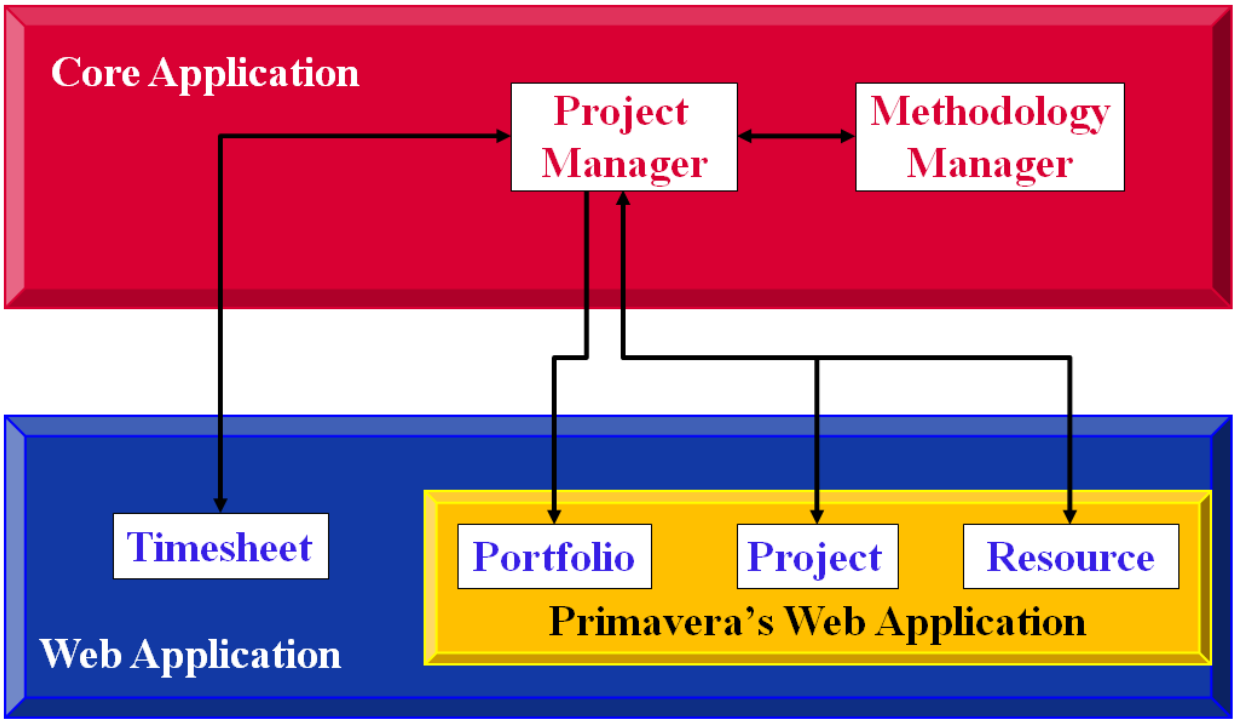
Planning Process Group



Key planning outputs

■ Scope definition	■ Detailed Project Scope Statement
■ Create WBS	■ WBS
■ Cost Estimating / Cost budgeting	■ Cost Baseline, supporting details
■ Activity def/sequencing/activity res est/ activity duration est/ schedule dev	■ Project Schedule/Baseline
■ Risk Mgt plan/ Risk identif/ Qly risk asst/ Qt risk asst/ risk response planning	■ Risk strategy/Risk plan
■ Quality planning	■ Quality plan/metrics
■ Communication planning	■ Communication plan
■ HR Planning	■Responsibility Assignment Matrix
■ Procurement	■ Make or buy decision, contract SOW, Bid documents, evaluation criteria

B. INTRODUCTION TO PRIMAVERA ENTERPRISE SUITE PRODUCTS



PROJECT MANAGEMENT (PM)

It is a multiuser, multi-project system with scheduling and resource control capabilities supporting multi-tiered project hierarchies, resource scheduling with a focus on roles and skills, recording of actual data, customizable views, and user-definable data.

It is ideal for organizations that need to simultaneously manage multiple projects and support multiuser access across a department or the entire organization. It supports an enterprise project structure (EPS) with an unlimited number of projects, activities, baselines, resources, work breakdown structures (WBS), organizational breakdown structures (OBS), user-defined codes, and critical-path-method (CPM) scheduling and resource leveling.

In addition, the module provides integrated risk management, issue tracking, and management by threshold. The tracking feature enables users to perform dynamic cross-project rollups of cost, schedule, and earned value. Project work products and documents can be assigned to activities and managed centrally. The Report Wizard creates customized reports that extract specific data from its database.

METHODOLOGY MANAGEMENT (MM)

The Methodology Management module is a system for authoring and storing methodologies, or project plan templates, in a central location. Project managers can select, combine, and tailor methodologies to create custom project plans. These customized methodologies can be imported into the Project Management module using the Project Architect wizard and used as templates for new projects. In this way, your organization can continually improve and refine methodology activities, estimates, and other information with each new project.

TIME SHEETS (TS)

Primavera also provides a Web-based inter-project communication and timekeeping system. As a team-level tool for project participants, Timesheets helps team members focus on the work at hand with a simple cross-project to-do list of their upcoming assignments. It also provides views of project changes and timecards for manager approval. Because team members use this module to enter up-to-the-minute information about their assignments and record time against their workloads, project leaders can make crucial project decisions with the confidence that they have the most current information possible.

PRIMAVERA'S WEB APPLICATION

The Primavera Web application provides browser-based access to project, portfolio, and resource data across the organization. Every web user can create customized dashboards that provide an individualized and focused view of the specific projects and categories of project data that are most relevant to their role in managing project portfolios, projects, and resources. Project Workspaces and Workgroups extend the model of customizable, focused data views by enabling designated project team members to create a uniform team view of data that relates to one specific project or to a subset of activities within a project.

The Primavera Web application provides access to a wide range of data views and features that enable Web users to manage their projects from initial concept review and approval through to completion.

CLAIM DIGGER

Claim Digger provides the capability to compare two projects, or a project and an associated baseline, to determine what data has been added, deleted, or modified from the schedules. Based on the data fields you select for comparison, this feature creates a project plan comparison report in one of three file formats. Claim Digger is automatically installed with the Project Management module.

PROJECT LINK

ProjectLink is a plug-in that enables Microsoft Project (MSP) users to work in the MSP environment while being connected to Primavera's enterprise features. The functionality enables MSP users to open/save projects from/to the Project Management module database from within the MSP application.

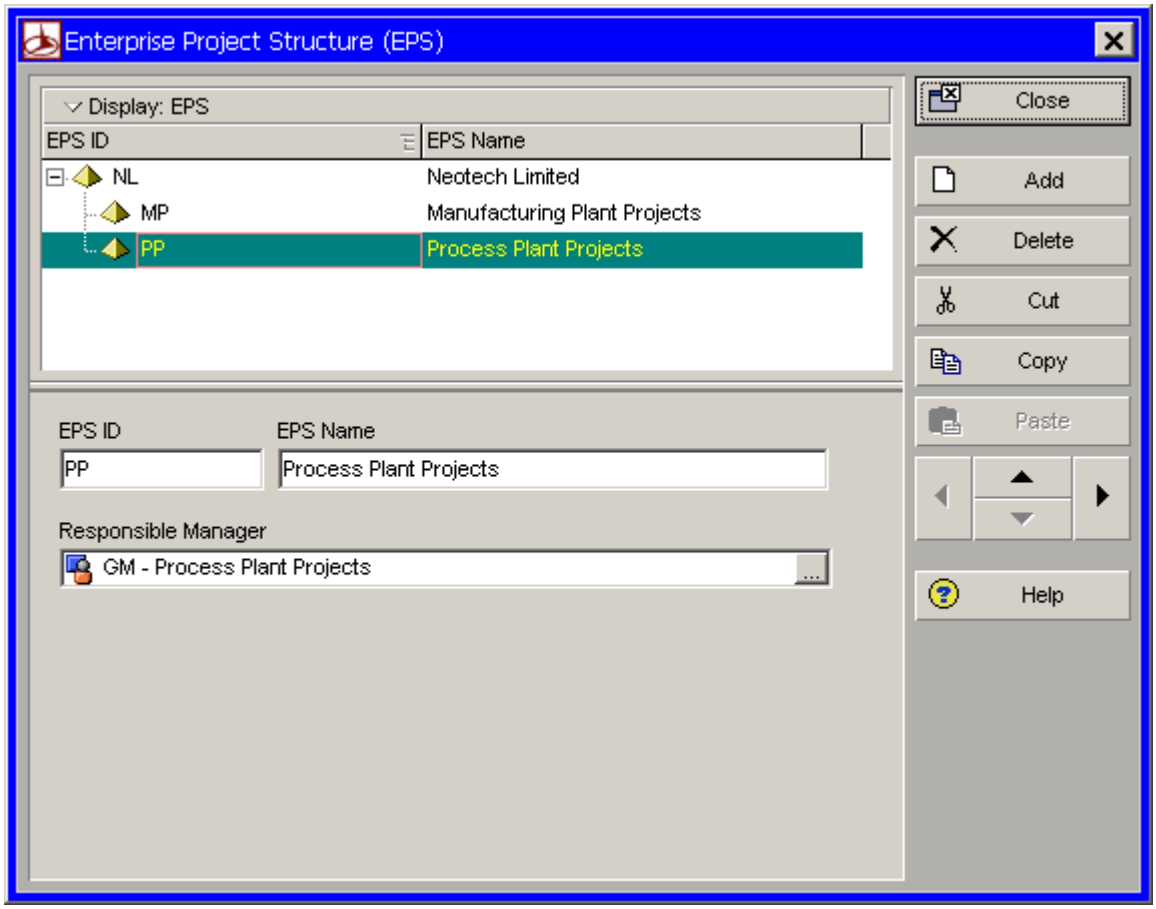
Moreover, MSP users have the ability to invoke Primavera's resource management within the MSP environment. ProjectLink benefits organizations that have a substantial amount of project data stored in MSP but require some users to have the additional functionality and optimized data organization available within Primavera applications.

C. ENTERPRISE PROJECT STRUCTURE (EPS)

Hierarchal structure that identifies the company-wide projects and enables organizing and management of those projects

EPS can be created up to **50 levels**. Maximum character length for an **EPS ID is 20** and for **EPS** Descriptions are **100**.

To create EPS activate Enterprise / Enterprise Project Structure menu.
Create EPS node by clicking on "**Add"** option in the EPS window.
Click on the **"Arrow"** buttons to indent **Left / Right** or to shift **Up / Down**.



Class Exercise:

EPS ID	EPS NAME	LEVEL
NL	NEOTECH LIMITED	1
MP	MANUFACTURING PLANT PROJECTS	2
PP	PROCESS PLANT PROJECTS	2

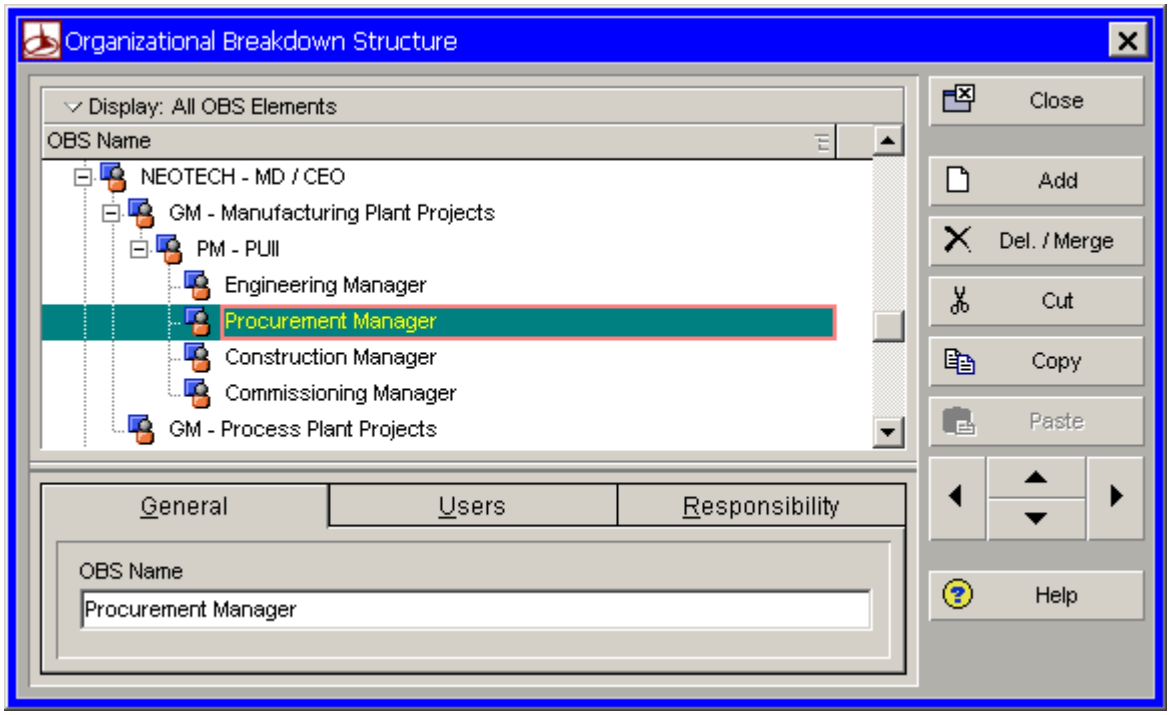
D. ORGANISATIONAL BREAKDOWN STRUCTURE (OBS)

Represents the management responsible at the EPS/Project/WBS. Each manager in the OBS is associated with his / her area of the EPS, either by EPS node or by project, and the WBS of the particular level of hierarchy.

User access and privileges to the EPS/Project/WBS nodes are implemented through OBS.
OBS can be created up to **25 levels**. Maximum character length for an **OBS** element is **100**.

To create OBS activate **Enterprise/OBS** menu.
To add an OBS element click on "**Add"** option in the OBS window.

Note: There can be only one **"Root OBS"** element. Always match the levels of OBS with that of EPS / PROJECTS / WBS



Class Exercise:

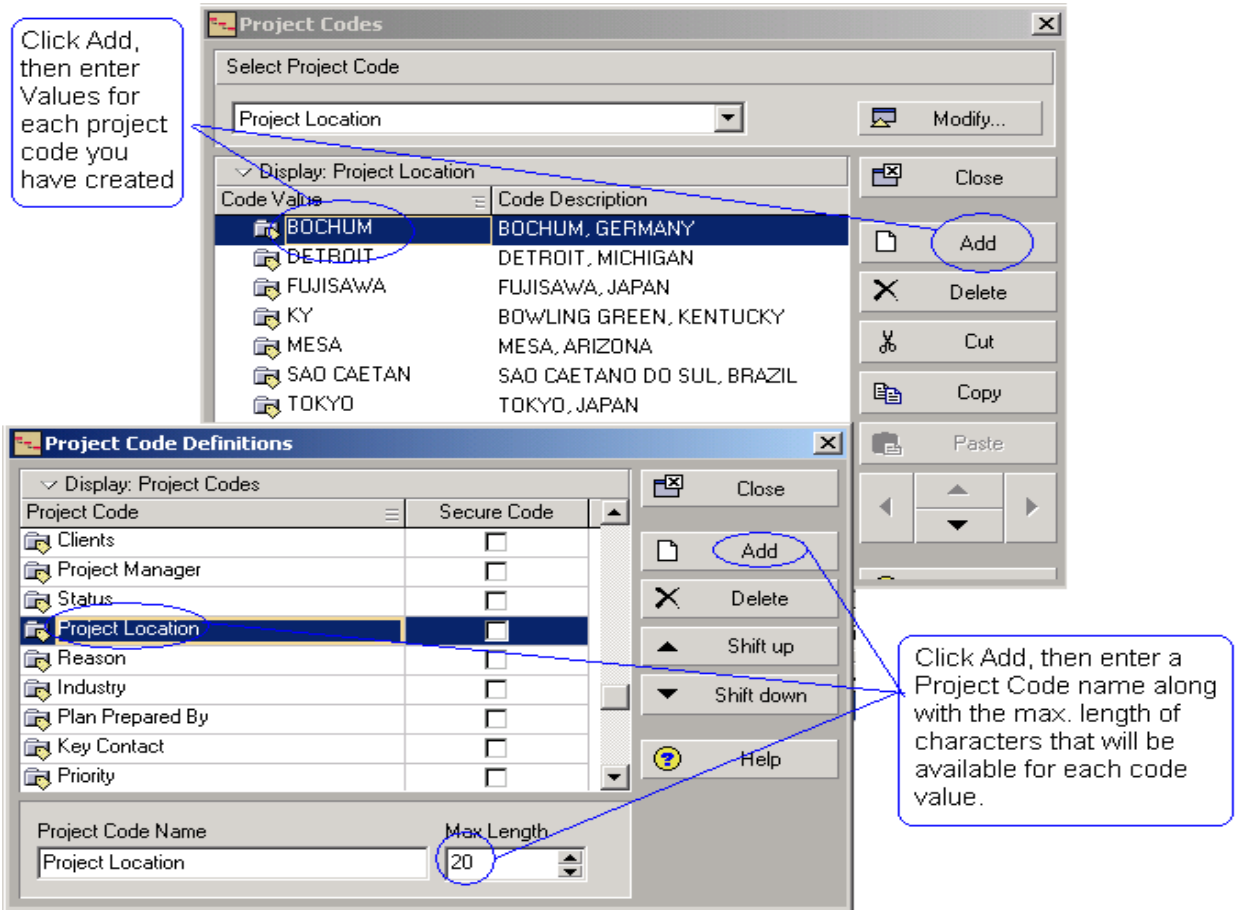
Sr.No.	OBS Description	Level	EPS
1	**MD / CEO**	Level 1	NL
2	GM - Manufacturing	Level 2	MP
3	Project Manager - PUII	Level 3	-
4	Engineering Manager	Level 4	-
5	Procurement Manager	Level 4	-
6	Construction Manager	Level 4	-
7	Commissioning Manager	Level 4	-
7	GM - Process	Level 2	PP

E. PROJECT CODES & VALUES

Set of codes to organize the projects in the EPS in groups according to specific categories. You can then do Filtering, Sorting, Grouping and Reporting to your projects.

Project Code Values can be created up to **25 levels** under each Project Code.

To create project codes activate **Enterprise/Project Codes** menu.
Click on the **"Modify"** button to add Project Codes in the "Project Code Definition" window and close it after adding the project codes
Select the Project Code from the drop-down box and add the Code Values under each code.
Add the Project Codes and their values as given in the table below.
Open **"Projects"** view from HOME page to assign the Project Code Values to any project.



Class Exercise:

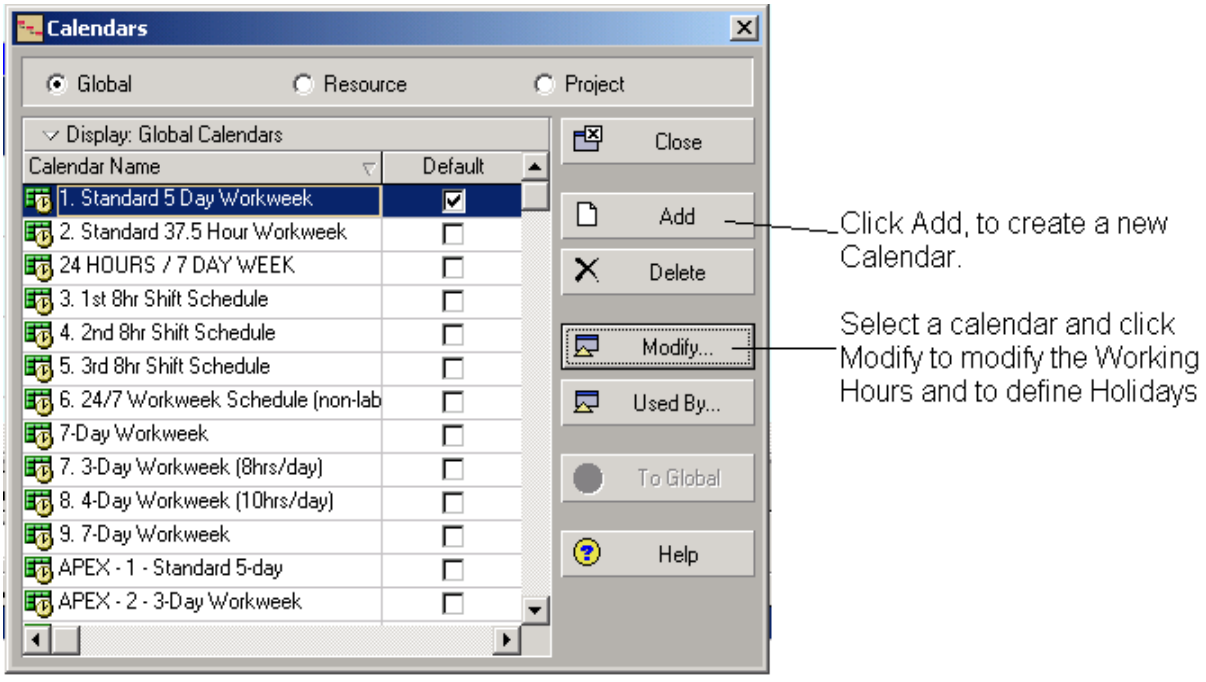
Project Code	Value	Description
PROJECT TYPE	TKY	Turnkey Project
	EPC	EPC Project
	CON	Consultancy Project
	BOO	Build-Own-Operate
	BOOT	Build-Own-Operate -Transfer

LOCATION	CHN	Chennai
	HYD	Hyderabad
	TVD	Trivandrum
	BLR	Bangalore
	MUM	Mumbai
	PUN	Pune

Note:
Maximum character length for any **Project Code is 40**.
Maximum character length for any Project Code Value is 20 and Value Description is 100.

F. GLOBAL & PROJECT CALENDARS

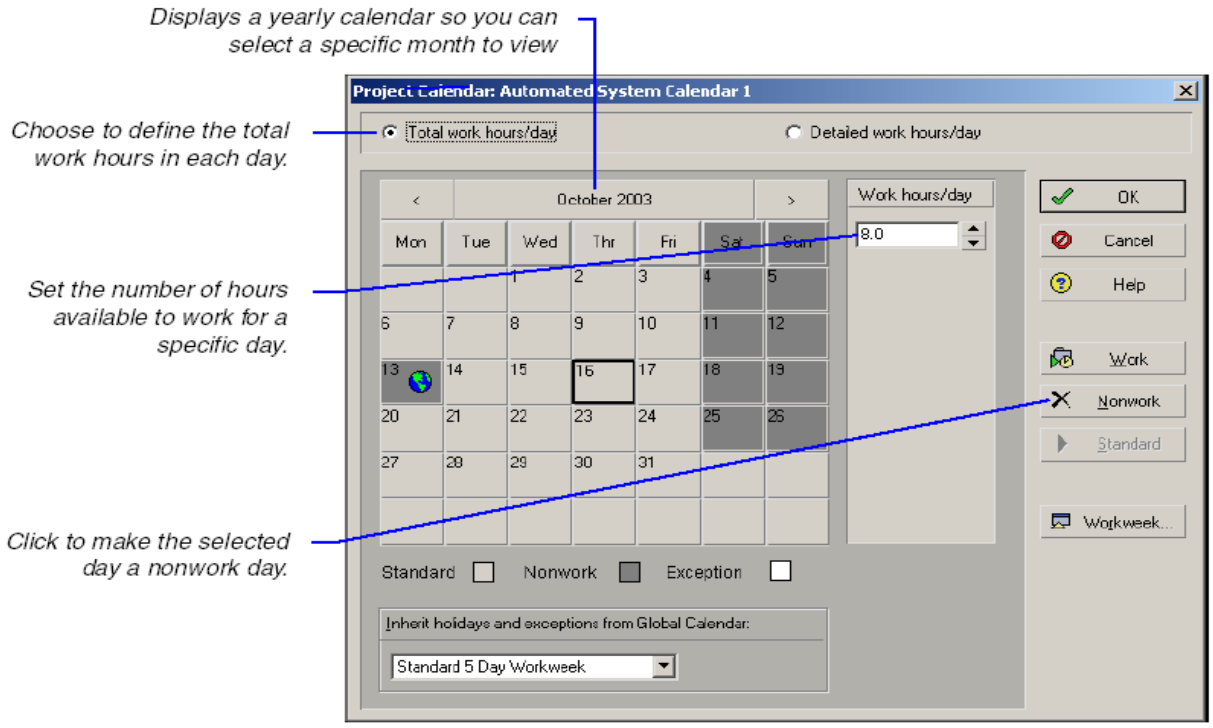
You can create and assign calendars to each resource and each activity. These calendars define the available work hours in each calendar day. You can also specify national holidays, your organization's holidays, project-specific work/non-work days, and resource vacation days. Calendar assignments are used for activity scheduling, tracking, and resource leveling. Whether an activity uses its assigned calendar or the calendar of an assigned resource depends on the activity type you specify.
Three calendar pools are defined: **Global, Resource,** and **Project**. The global calendar pool contains calendars that apply to all projects. The project calendar pool is a separate pool of calendars for each project. The resource calendar pool can be a separate pool of calendars for each resource. You can assign either resource or global calendars to resources, and you can assign either global or project calendars to activities.
You can link resource and project calendars to global calendars. Then, if you make changes to a global calendar, your changes apply to all resource and project calendars that are linked to the modified global calendar.

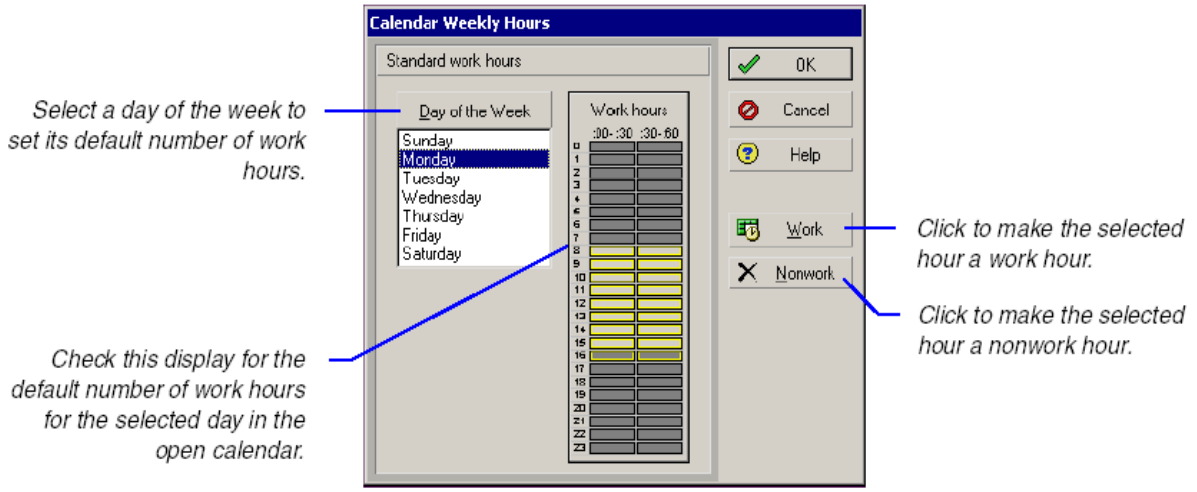


To create project calendar activate **Enterprise / Calendar** menu.
To create project specific calendars opt for **Project**.
Click on **ADD** and select one of the Global Calendars as the template for the new Project Calendar.
Select the working days by clicking on **WORKWEEK** and identify the Work and non-work days.
Click **OK** to confirm the entries.
To assign the calendar to the activities, open activities view from **HOME** page.
Activate activity detail form from the tool bars and click on **General** tab.
Select the activity and assign the relevant activity calendar.

Class Exercise:

Calendar Name	Type	Work Week	Holidays
HO Calendar	Global	5 Day	26th January, 15th August & 2nd October
Site Calendar	Project	6 Day	26th January, 15th August & 2nd October





G. ADDING A PROJECT (Without Using Project Architect)

To create project activate **Enterprise / Projects** and click the **Add** button or.
To create a project activate **File / New** menu.
Select **"Manufacturing Plant Projects"** as the EPS node, under which the project is to be defined.
Give **Project ID "PUII"** and Project name **"PARENTAL UNIT IN INDIA"** and give start date of the project as **3rd Sept 2007**.
Assign responsible OBS as **"Project Manager - PUII"** and click on **FINISH** option.

Unlimited projects can be created under any EPS node. Maximum character length for any **Project ID is 20** and for **Project Name** are **100**.

Assign the following:-

Project Code	**Project Type** = EPC Projects & **Location** = Mumbai
Default Calendar	HO Calendar

H. WORK BREAKDOWN STRUCTURE (WBS)

A WBS is a hierarchal arrangement of the products and services produced during and by a project. The project is the highest level while an individual activity is the lowest level. Each project in the EPS has its own WBS.

WBS can be created up to **50 levels**. Maximum character length for any **WBS Code is 20** and for **WBS Name** are **100**.

Layout:WBS

WBS Code	WBS Name	Total Activities
PUII	PARENTAL UNIT IN INDIA	48
PUII.1	ENGINEERING	23
PUII.1.1	GENERAL	3
PUII.1.2	ARCHITECTURE	4
PUII.1.3	CIVIL	4
PUII.1.4	EQUIPMENT	6
PUII.1.5	PIPING	2
PUII.1.6	ELECTRICAL	2
PUII.1.7	INSTRUMENTATION	2
PUII.2	PROCUREMENT	6
PUII.3	CONSTRUCTION	13
PUII.3.1	GENERAL	1
PUII.3.2	CIVIL	4
PUII.3.3	MECHANICAL	6
PUII.3.3.1	EQUIPMENT	2
PUII.3.3.2	PIPING	2
PUII.3.4	ELECTRICAL	1
PUII.3.5	INSTRUMENTATION	1
PUII.4	COMMISSIONING	6

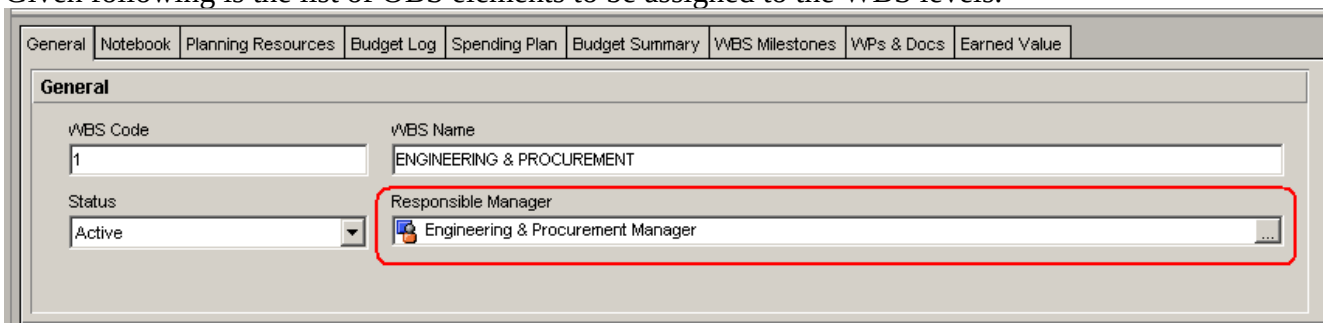
Activate WBS from **HOME** page or from **Project / WBS** menu.
Create WBS Code and Description as given below.
WBS once created can be viewed in Table, Chart View and Gantt Chat format.
Activate **WBS detail form** and select the "**Notebook Items"** to create log information. If the user needs to customize notebook topics, the same can be done by adding notebook topic from **Admin / Admin Categories / Note Book Topics**.

Class Exercise:

WBS Code	WBS Name	Level
PUII	PARENTAL UNIT IN INDIA	1
PUII.1	ENGINEERING	2
PUII.1.1	GENERAL	3
PUII.1.2	ARCHITECTURE	3
PUII.1.3	CIVIL	3
PUII.1.4	EQUIPMENT	3
PUII.1.5	PIPING	3
PUII.1.6	ELECTRICAL	3
PUII.1.7	INSTRUMENTATION	3
PUII.2	PROCUREMENT	2
PUII.3	CONSTRUCTION	2
PUII.3.1	GENERAL	3
PUII.3.2	CIVIL	3
PUII.3.3	MECHANICAL	3
PUII.3.3.1	EQUIPMENT	4
PUII.3.3.2	PIPING	4
PUII.3.4	ELECTRICAL	3
PUII.3.5	INSTRUMENTATION	3
PUII.4	COMMISSIONING	2

ASSIGNING OBS ELEMENT TO WBS:

Click on WBS from **HOME** page.
Click on **General** tab in WBS detail form.
Assign the OBS element to the WBS level by clicking on **"Responsible Manager"** option.
Given following is the list of OBS elements to be assigned to the WBS levels.



Class Exercise:

WBS Code	WBS Name	OBS
PUII	PARENTAL UNIT IN INDIA	Project Manager-PUII
PUII.1	ENGINEERING	Engineering Manager
PUII.1.1	GENERAL	Engineering Manager
PUII.1.2	ARCHITECTURE	Engineering Manager
PUII.1.3	CIVIL	Engineering Manager
PUII.1.4	EQUIPMENT	Engineering Manager
PUII.1.5	PIPING	Engineering Manager
PUII.1.6	ELECTRICAL	Engineering Manager
PUII.1.7	INSTRUMENTATION	Engineering Manager
PUII.2	PROCUREMENT	Procurement Manager
PUII.3	CONSTRUCTION	Construction Manager
PUII.3.1	GENERAL	Construction Manager
PUII.3.2	CIVIL	Construction Manager
PUII.3.3	MECHANICAL	Construction Manager
PUII.3.3.1	EQUIPMENT	Construction Manager
PUII.3.3.2	PIPING	Construction Manager
PUII.3.4	ELECTRICAL	Construction Manager
PUII.3.5	INSTRUMENTATION	Construction Manager
PUII.4	COMMISSIONING	Commissioning Manager

I. BUDGET & ESTABLISHING SPENDING PLAN

You can create budget estimates for each EPS nodes, Project, or WBS level, and then refine them as needed. Use the Budget Log tab on the Projects window to enter the original budget—the total amount you require for the EPS node or project.

The Budget Change Log helps you keep track of budget changes as they occur. The Current Budget (original budget plus approved budget changes) and Proposed Budget fields (original budget plus approved and pending budget amounts) incorporate these changes so you have up-to-date and accurate budget information for each project or EPS node.

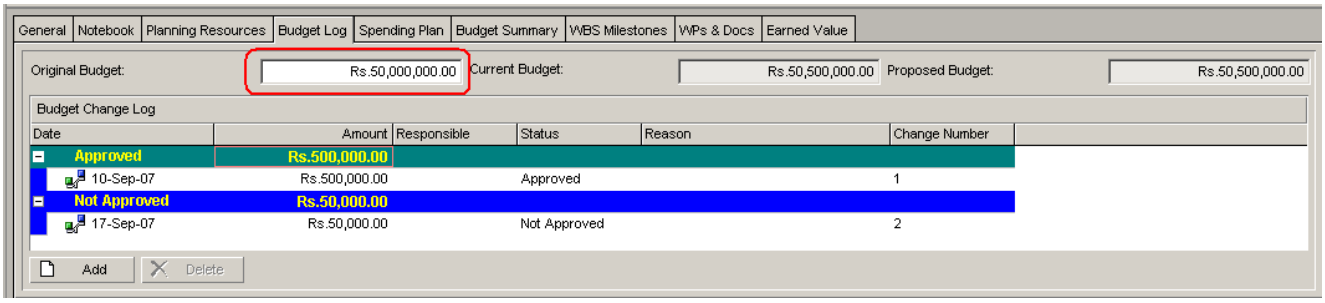
The Spending Plan Tally column shows any amounts previously recorded for lower-level project spending plans. The current variance is the difference between the monthly spending of the EPS node and its projects' tallies. You can type the benefit amount or profit portion of the monthly amounts; the benefit plan is also tallied.

Given following are the steps for establishing Budgets and Spending plan.

Activate "**Projects**" view from **HOME** and select **"Parental Unit In India"** project and assign original budget as listed in the table below.

Class Exercise:

WBS Code	WBS Name	Original Budget
PUII	PARENTAL UNIT IN INDIA	Rs.50,000,000.00
PUII.1	ENGINEERING	Rs.600,000.00
PUII.1.1	GENERAL	Rs.50,000.00
PUII.1.2	ARCHITECTURE	Rs.100,000.00
PUII.1.3	CIVIL	Rs.50,000.00
PUII.1.4	EQUIPMENT	Rs.100,000.00
PUII.1.5	PIPING	Rs.100,000.00
PUII.1.6	ELECTRICAL	Rs.100,000.00
PUII.1.7	INSTRUMENTATION	Rs.100,000.00
PUII.2	PROCUREMENT	Rs.34,400,000.00
PUII.3	CONSTRUCTION	Rs.14,000,000.00
PUII.3.1	GENERAL	Rs.1,000,000.00
PUII.3.2	CIVIL	Rs.2,250,000.00
PUII.3.3	MECHANICAL	Rs.7,000,000.00
PUII.3.3.1	EQUIPMENT	Rs.4,000,000.00
PUII.3.3.2	PIPING	Rs.3,000,000.00
PUII.3.4	ELECTRICAL	Rs.2,000,000.00
PUII.3.5	INSTRUMENTATION	Rs.1,750,000.00
PUII.4	COMMISSIONING	Rs.1,000,000.00



J. ACTIVITY CODES & VALUES

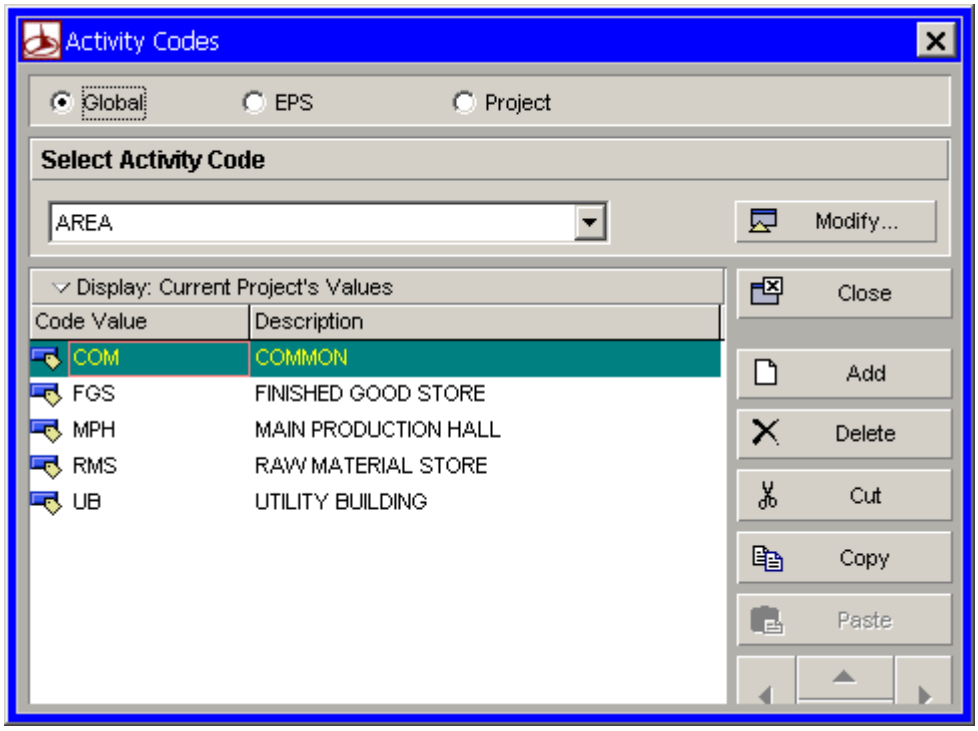
Activity Codes and Values enable you to filter, group, sort, and report activity information according to your organization's unique requirements. For example, if your organization has more than one location, you can create a Location code with values such as Chennai, Mumbai, and Delhi. You can then associate activities with a specific location, such as Chennai.

You can define **three types** of activity codes, **Global** (for all projects in the EPS), **EPS** (for projects within selected EPS) and **Project** (for opened project only). Each activity code can have an unlimited number of values.

Activity Code Values can be created up to **25 levels** under each Activity Code.

Maximum character length for any **Activity Code is 40**.
Maximum character length for any Activity Code Value is **20** and Value Description is **100**.

To create Activity codes activate **Enterprise/Activity Codes** menu.
Select "Global/EPS/Project" type and click on the **"Modify"** button to add Activity Codes in the "Activity Code Definition" window and close it after adding the Activity codes.
Select the Activity Code from the drop-down box and add the Code Values under each code.
Add the Activity Codes and their values as given in the table below.



Class Exercise:

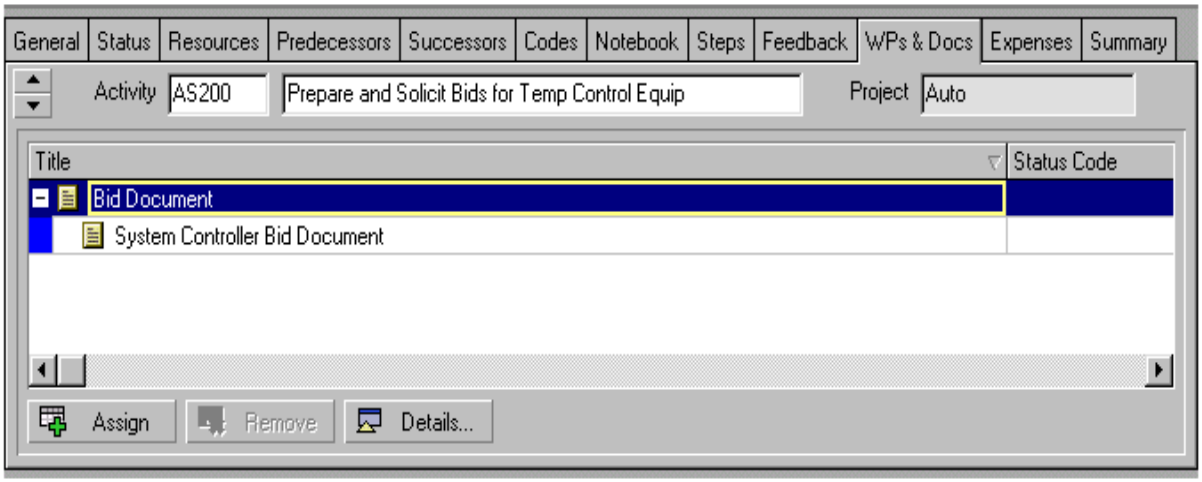
Activity Code	Code Value	Description
AREA	COM	Common
	FGS	Finished Good Store
	MPH	Main Production Hall
	RMS	Raw Material Store
	UB	Utility Building
RESPONSIBILITY	AB	Ambrish Bhatia
	AJ	Anthony Joseph
	AMS	A.M.Sundaram
	JM	James Mathew
	PKS	P.K.Sharma
	PVS	P.V.Sundaram
	SKM	S.K.Mishra
TASK LOCATION	CHE	Chennai
	MUM	Mumbai
	HYD	Hyderabad

K. WORK PRODUCTS & DOCUMENTS

The Work Products and Documents feature enables you to catalog and track all project-related documents and deliverables. This includes guidelines, procedures, standards, plans, design templates, worksheets, and all types of project deliverables. A work product or document can provide standards and guidelines for performing an activity's work, or it can be formally identified as a project standard. A work product or document can also be activity output, such as testing plans and blueprints. You can also use the Work Products and Documents feature to identify project deliverables, documents that will be delivered to the end user or customer at the end of the project.

With the Project Management module, you can assign work products and documents to activities and to work breakdown structure (WBS) elements. During a project's early planning stages, you can assign a work product or document to a WBS element. Later, you can assign the same work product or document to one or more activities as your project's activity details develop.

The Work Products and Documents feature enables you to maintain general information about project documents, such as revision date, location, and author. The actual document files can be stored on a network file server, configuration management system, or Web site, depending on project requirements. You can specify a public or private location for the document files. Specifying a public location enables resources to view the document through Timesheets. Also through Timesheets, when you specify a public location, primary resources can launch the work product or document in its native application to make revisions as needed.



Select WP's & Documents from HOME page or Project / Work Products and Documents menu.
Add a reference document, give an appropriate name, reference number and attach a file to this document.
If file is linked in the public location it will be available to all the users, however if file is linked in private location document won't be available for Progress Reporter users.
Work Product Documents can be assigned to **WBS** and **Activities** only.
To assign WP document to the WBS, open WBS from HOME page, enable WBS detail form, select REF DOC tab and assign the document to the WBS level.

L. ACTIVITIES, RELATIONSHIPS AND SCHEDULING

ACTIVITY

Activities are the fundamental work elements of a project. They are the lowest level of a work breakdown structure (WBS) and, as such, are the smallest subdivision of a project that directly concerns the project manager. Although you can divide activities into steps, an activity's primary resource is typically responsible for managing and tracking the progress of an activity's steps, while the project manager is typically responsible for managing and tracking the progress of the overall activity.

You can define the following information for an activity:
Activity ID and name, which enables you to uniquely identify and describe the activity.
Activity calendars, Activity start and finish dates.
Activity type, duration type, and percent complete type, which are used to specify which calendar applies to an activity; whether an activity is a milestone; how to keep an activity's unit values, duration values, and resource units/time values synchronized; and how to calculate an activity's percent complete.
WBS element and Activity codes, which enable you to classify and categorize activities.
Constraints on the activity scheduled start and finish dates.
Expenses.
Predecessor and successor relationships, which are used to define relationships with other activities.
Work products and documents and deliverables.
Resources and Roles, which enable you to identify skill requirements for staffing the activity.
Notes and feedback, which are used to communicate with the resources working on an activity.
Steps, which divide the activity into smaller units.

ACTIVITY TYPES

Task Dependent
Typically used when the work needs to be accomplished in a given time frame, regardless of the assigned resources' availability.
The activity's resources are scheduled to work according to the activity calendar.
Duration is determined by the assigned calendar's workweek.

Resource Dependent
Typically used when multiple resources assigned to the same activity can work independently.
The activity's resources are scheduled according to their individual resource calendar.
Duration is determined by the availability of the resources assigned to work on the activity.

Level of Effort
Typically used for ongoing tasks dependent on other activities.
Duration is determined by its predecessor/ successor activities.
Clerical work, security guard, meetings, and project management tasks.
Cannot assign constraints.

Start Milestone
Typically used to mark the beginning of a phase or to communicate project deliverables.
Zero duration activity and only has a start date.
Can assign constraints, expenses, work products, and documents.
Cannot assign resources/roles.

Finish Milestone
Typically used to mark the end of a phase or to communicate project deliverables.
Zero duration activity and only has a finish date.
Can assign constraints, expenses, work products, and documents.
Cannot assign resources/roles.

WBS Summary
Typically used to summarize at WBS levels.
The WBS summary activity comprises a group of activities that share a common WBS level.
Cannot assign constraints to WBS summary activities.

ACTIVITY STEPS

Steps allow you to break activities into smaller units and track the completion of those units.
Unlimited number of steps per activity can be created and can be marked as completed.
Steps do not require duration estimates or dates.

Weighted steps enable you to track the progress of an activity based on the number of steps completed. When you mark the Activity Percent Complete Based on Activity Steps checkbox in the Calculations tab in the Projects window, and choose Physical as the activity's percent complete type in the General tab in the Activities window, activity percent complete is updated based on the weight you assign to each activity step.

Activity step templates enable you to define a group of steps common to multiple activities, and then assign the template to activities.

ACTIVITY % COMPLETE TYPE

The way in which the percent complete for the selected activity is determined.

Duration Type : The selected activity's Activity % Complete is tied to its Duration % Complete.
Establishes link between Duration %, Remaining Duration and Actual resource units.

Units Type : The selected activity's Activity % Complete is tied to its Units % Complete.
Establishes link between Actual resource units and Units %.

Physical Type : The selected activity's Activity % Complete is tied to the Physical progress.
No link is established between Physical %, Remaining duration and Actual Resource units.

DURATION TYPE

Setting which allows you to control how P6 synchronizes the Duration, Labor/Non-labor Units and Resource Units/Time for activities so that the following equation is always true:
Duration x Unit/Time = Units

Activity Duration Type	When you change Units, P6 changes..	When you change Duration, P6 changes..	When you change Unit/Time, P6 changes..
Fixed Units/Time	Duration	Units	Duration
Fixed Duration & Units/Time	Units/Time	Units	Units
Fixed Units	Duration	Units/Time	Duration
Fixed Duration & Units	Units/Time	Units/Time	Units

Adding Activities

To add activities click on "**Activities**" in the HOME page or "**Project / Activities**".
Organize the layout based on WBS & SORT by Activity ID.
Add activities to respective WBS level by clicking on ADD on Command Bar Button Text.
For Auto-numbering activities and increment select the project in the "**Projects View**" and select "**Default Tab**" in the detail form and give activity prefix, suffix and increment.

Class Exercise:

Activity ID	Activity Name	Original Duration
PARENTAL UNIT IN INDIA		
ENGINEERING		
GENERAL		
EGGEN01	Kick off meeting	1
EGGEN02	Basic Engineering	10
EGGEN03	Plot Plan	10
ARCHITECTURE		
EGARC01	Main Production Hall Architecture	44
EGARC02	Raw Material Store Architecture	33
EGARC03	Finished Good Store Architecture	22
EGARC04	Utility Buildings Architecture	50
CIVIL		
EGCIV01	Main Production Hall Civil Design	44
EGCIV02	Raw Material Store Civil Design	33
EGCIV03	Finished Good Store Civil Design	22
EGCIV04	Utility Building Civil Design	66
EQUIPMENT		
EGEQP01	Main Production Hall Equipment Layout	30
EGEQP02	Utility Building Equipment Layout	30
EGEQP03	Main Production Hall Equipment Design	22
EGEQP04	Utility Building Equipment Design	22
EGEQP05	Raw Material Store Sleeper Design	15
EGEQP06	Finished Good Store Rack Design	15
PIPING		
EGPIP01	Piping Layout - Main Production Hall	22
EGPIP02	Piping Layout - Utility Building	22
ELECTRICAL		
EGELE01	Single Line Diagrams	66
EGELE02	Electrical Equipment Specs	44
INSTRUMENTATION		
EGINS01	Single Line Diagram	44
EGINS02	Instrument Specs	22
PROCUREMENT		
PREQP01	Supply of main production hall equipment	22
PREQP02	Supply of utility building equipment	22
PRPIP01	Supply of Pipes, Fittings & Valves - MPH	22
PRPIP02	Supply of Pipes, Fittings & Valves - UB	22
PRELE01	Supply of Electrical Equipment & Cables	30
PRINS01	Supply of Instruments & Cables	30

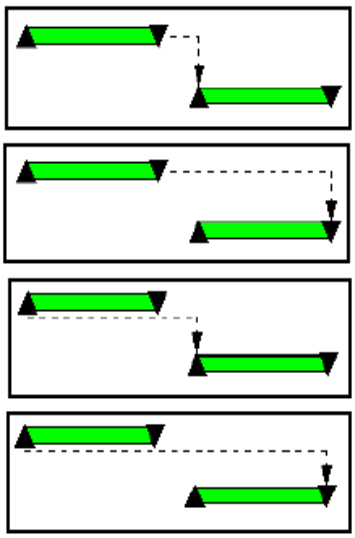
CONSTRUCTION		
GENERAL		
CNGEN01	Mobilization of site	30
CIVIL		
CNCIV01	Civil Work Main Production Hall	80
CNCIV02	Civil Work Raw Material Store	40
CNCIV03	Civil Work Finished Good Store	50
CNCIV04	Civil Work Utility Building	90
MECHANICAL		
CNMEC05	Fabrication & Erection of Racks	20
CNMEC06	Painting	200
EQUIPMENT		
CNMEC01	Main Production Hall Equipment Erection	40
CNMEC02	Utility Building Equipment Erection	35
PIPING		
CNMEC03	Piping Fabrication & Erection - MPH	60
CNMEC04	Piping Fabrication & Erection - UB	80
ELECTRICAL		
CNELE01	Electrical Equipment & Cable Installation	130
INSTRUMENTATION		
CNINS01	Instrument Equipment & Cable Installation	130
COMMISSIONING		
CMCOM01	Receipt of raw material for commissioning	15
CMCOM02	Pre-commissioning of MPH equipment	30
CMCOM03	Pre-commissioning of UB equipment	20
CMCOM04	MPH equipment trial run	20
CMCOM05	UB equipment trial run	15
CMCOM06	Final Commissioning	30

RELATIONSHIPS

A relationship defines how an activity relates to the start or finish of another activity or assignment. Add relationships between activities to create a path through your schedule from the first activity to the last activity. These relationships, which form the logic of the project network, are used together with activity durations to determine schedule dates. An activity can have as many relationships as necessary to model the work that must be done. You can also identify relationships between activities that are in different projects; this type of relationship is referred to as an external relationship.

Relationship Types

- Finish to start
- Finish to finish
- Start to start
- Start to finish



Finish to start. The successor activity can begin only when the predecessor activity completes.

Finish to finish. The finish of the successor activity depends on the finish of the predecessor activity.

Start to start. The start of the successor activity depends on the start of the predecessor activity.

Start to finish. The successor activity cannot finish until the predecessor activity starts.

Select an activity and select its successor from "**Successor**" tab in the activity detail form. Activity details can be enabled from list of toolbars shown on top of the layout.

Class Exercise:

Activity	Successor	Relationship	Lag
EGGEN01	CNGEN01	FS	0
	EGGEN02	FS	0
EGGEN02	EGGEN03	FS	-5
EGGEN03	EGARC01	FS	0
	EGARC02	FS	0
	EGARC03	FS	0
	EGARC04	FS	0
EGARC01	EGCIV01	FS	0
	EGEQP01	FS	5
EGARC02	EGCIV02	FS	0
EGARC03	EGCIV03	FS	0
EGARC04	EGCIV04	FS	0
	EGEQP02	FS	0
EGCIV01	CNCIV01	FS	0
	EGEQP01	FF	0
EGCIV02	CNCIV02	FS	0
	EGEQP05	FF	0
EGCIV03	CNCIV03	FS	0
	EGEQP06	FF	5
EGCIV04	CNCIV04	FS	0
	EGEQP02	FS	0
EGEQP01	EGELE01	FF	10
	EGEQP03	SS	15
EGEQP02	EGELE01	FF	10
	EGEQP04	SS	15
EGEQP03	PREQP01	FS	0
	EGPIP01	FS	0
EGEQP04	PREQP02	FS	0
	EGPIP02	FS	0

EGEQP05	CNCIV02	FF	20
EGEQP06	CNMEC05	FS	0
EGPIP01	PRPIP01	FS	0
EGPIP02	PRPIP02	FS	0
EGELE01	EGELE02	SS	30
	EGINS01	FF	0
EGELE02	PRELE01	FS	-15
EGINS01	EGINS02	SS	30
EGINS02	PRINS01	FS	-15
PREQP01	CNMEC01	FS	0
PREQP02	CNMEC02	FS	0
PRPIP01	CNMEC03	FS	0
PRPIP02	CNMEC04	FS	0
PRELE01	CNELE01	FS	0
PRINS01	CNINS01	FS	0
CNGEN01	CNCIV01	FS	0
	CNCIV02	FS	0
	CNCIV03	FS	0
	CNCIV04	FS	0
CNCIV01	CNMEC01	FS	-15
CNCIV02	CMCOM01	FS	200
CNCIV03	CNMEC05	FS	-10
CNCIV04	CNMEC02	FS	-15
CNMEC01	CNMEC03	FF	30
	CNMEC06	FF	5
CNMEC02	CNMEC04	FF	30
	CNMEC06	FF	5
CNMEC03	CNMEC06	FF	5
CNMEC04	CNMEC06	FF	5
CNMEC05	CNMEC06	FS	0
CNMEC06	CNELE01	FF	-5
	CNINS01	FF	-5
CNELE01	CMCOM02	FS	0
	CMCOM03	FS	0
CNINS01	CMCOM02	FS	0
	CMCOM03	FS	0
CMCOM02	CMCOM04	FS	0
CMCOM03	CMCOM05	FS	0
CMCOM04	CMCOM06	FS	0
CMCOM05	CMCOM06	FS	0
CMCOM06	CMCOM01	SF	-5

Assigning Calendars and Activity Codes

To assign Calendars/Activity Code select the activity and enable activity details.
In activity details click on **Genera/Codes** tab.
Click on **Assign** and select the respective calendars/codes.
Given following is the list of calendars/activity code values to be assigned to the activities.

WBS	Activity ID	Calendar	AREA	SITE	RESPONSIBILITY
PUII.1.1	EGGEN01	HO	COM	CHE	AMS
PUII.1.1	EGGEN02	HO	COM	HYD	AMS
PUII.1.1	EGGEN03	HO	COM	HYD	AMS
PUII.1.2	EGARC01	HO	MPH	HYD	JM
PUII.1.2	EGARC02	HO	RMS	HYD	JM
PUII.1.2	EGARC03	HO	FGS	HYD	JM
PUII.1.2	EGARC04	HO	UB	HYD	JM
PUII.1.3	EGCIV01	HO	MPH	HYD	JM
PUII.1.3	EGCIV02	HO	RMS	HYD	JM
PUII.1.3	EGCIV03	HO	FGS	HYD	JM
PUII.1.3	EGCIV04	HO	UB	HYD	JM
PUII.1.4	EGEQP01	HO	MPH	HYD	PVS
PUII.1.4	EGEQP02	HO	UB	HYD	PVS
PUII.1.4	EGEQP03	HO	MPH	HYD	PVS
PUII.1.4	EGEQP04	HO	UB	HYD	PVS
PUII.1.4	EGEQP05	HO	RMS	HYD	PVS
PUII.1.4	EGEQP06	HO	FGS	HYD	PVS
PUII.1.5	EGPIP01	HO	MPH	HYD	PVS
PUII.1.5	EGPIP02	HO	UB	HYD	PVS
PUII.1.6	EGELE01	HO	COM	HYD	SKM
PUII.1.6	EGELE02	HO	COM	HYD	SKM
PUII.1.7	EGINS01	HO	COM	HYD	SKM
PUII.1.7	EGINS02	HO	COM	HYD	SKM
PUII.2	PREQP01	HO	MPH	CHE	PVS
PUII.2	PREQP02	HO	UB	CHE	PVS
PUII.2	PRPIP01	HO	MPH	CHE	PVS
PUII.2	PRPIP02	HO	UB	CHE	PVS
PUII.2	PRELE01	HO	COM	CHE	SKM
PUII.2	PRINS01	HO	COM	CHE	SKM
PUII.3.1	CNGEN01	SITE	COM	MUM	AJ
PUII.3.2	CNCIV01	SITE	MPH	MUM	AJ
PUII.3.2	CNCIV02	SITE	RMS	MUM	AJ
PUII.3.2	CNCIV03	SITE	FGS	MUM	AJ
PUII.3.2	CNCIV04	SITE	UB	MUM	AJ
PUII.3.3.1	CNMEC01	SITE	MPH	MUM	PKS
PUII.3.3.1	CNMEC02	SITE	UB	MUM	PKS
PUII.3.3.2	CNMEC03	SITE	MPH	MUM	PKS
PUII.3.3.2	CNMEC04	SITE	UB	MUM	PKS
PUII.3.3	CNMEC05	SITE	FGS	MUM	PKS
PUII.3.3	CNMEC06	SITE	COM	MUM	PKS
PUII.3.4	CNELE01	SITE	COM	MUM	SKM
PUII.3.5	CNINS01	SITE	COM	MUM	SKM
PUII.4	CMCOM01	SITE	COM	MUM	AB
PUII.4	CMCOM02	SITE	MPH	MUM	AB
PUII.4	CMCOM03	SITE	UB	MUM	AB
PUII.4	CMCOM04	SITE	MPH	MUM	AB
PUII.4	CMCOM05	SITE	UB	MUM	AB
PUII.4	CMCOM06	SITE	COM	MUM	AB

SCHEDULING

Your project schedule can be calculated one of two ways: when you choose the Scheduling command or, each time you make a change that affect schedule dates.
The Critical Path Method (CPM) scheduling technique is used to calculate project schedules. CPM uses activity durations and relationships between activities to calculate the project schedule.

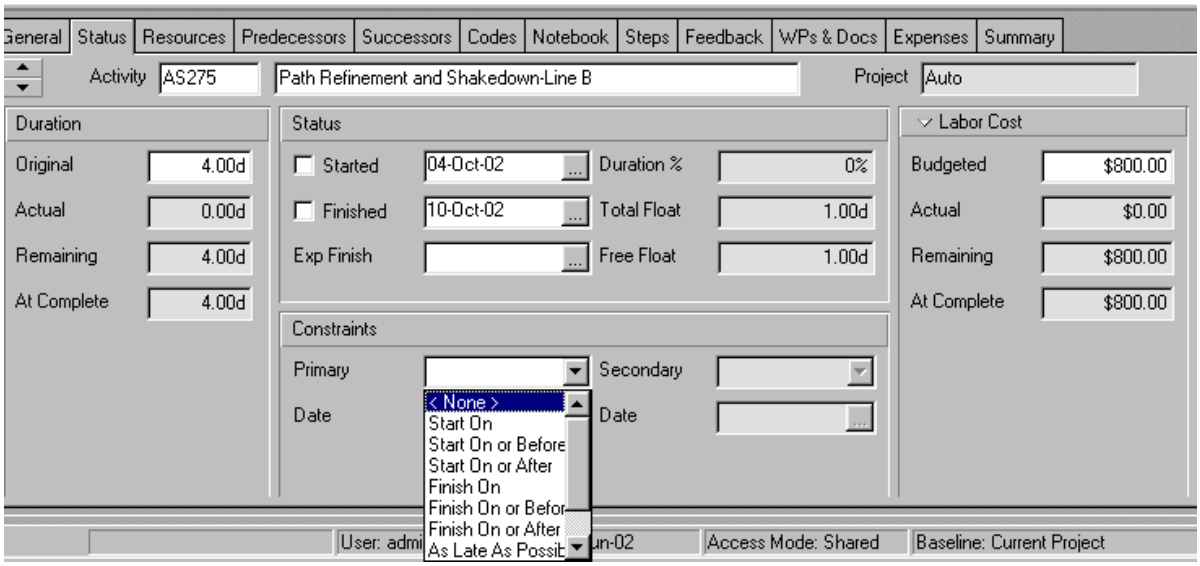
To schedule the project activate **Tools/ Schedule** menu or strike **F9** toggle key.
Select the **Data Date** and click on **Schedule** command.
Schedule the project on **Data Date: 3rd Sept 2007**.
Primavera Enterprise (P6) schedules the project on Critical Path Method and Critical Path for the project is displayed with red colored activity bars.
Primavera Enterprise calculates schedule early dates during forward pass calculation and schedule late dates are calculated during backward pass calculation.
The difference between Late Finish and Early finish dates of an activity is termed as **Total Float**.
Activities with Zero Total Float are identified as critical activities and sequence of activities with Zero Total Float lead to Critical Path or Longest Path of the project.

To check this date activate **Project**s from **HOME** page and click on **Dates** tab.

The project finish date for **PUII** should be **5th Feb 2009.**

M. CONSTRAINTS

Network logic alone cannot reflect all project situations. Sometimes activities must be accomplished according to specific dates rather than on dates determined by other activities in the project. To model dependence on specific dates, assign primary and secondary constraints to activities.



To apply constraints activate **Activity Details**.
In Activity Details enable **Status / Constraints** menu, select the constraint and apply appropriate constraint date.
Schedule the project through **Schedule** command.

CONSTRAINT TYPES

Start Constraints

Start On: A restriction you place on an activity by imposing a start date. The start on constraint can delay an early start or accelerate a late start to satisfy the imposed date. Unlike the mandatory start constraint, which can violate the network logic, this constraint protects it.

Start On or Before: A restriction you impose on an activity that limits the latest date it can start. When calculating a schedule, the start on or before constraint is used in the backward pass only if the calculated late start date will be later than the imposed date. This constraint may decrease total float. It only affects late dates.

Start On or After: A restriction you impose on an activity that limits the earliest time it can begin. When calculating a schedule, the start on or after constraint is used in the forward pass only if the calculated early start date will be earlier than the imposed date. This constraint affects only early dates. The early start date of an activity with a start on or after constraint cannot be earlier than the imposed date, although the network logic may cause the early start to occur later.

Finish Constraints

Finish On: A restriction you place on an activity by imposing a finish date. The finish on constraint can delay an early finish or accelerate a late finish to satisfy the imposed date.

Finish On or Before: A restriction you impose on an activity that limits the latest time it can be finished. The finish on or before constraint affects only late dates. Use this constraint to ensure that the late finish date of an activity is not later than the date you impose.

Finish On or After: A restriction you impose on an activity that limits the earliest time it can complete. The finish on or after constraint reduces float to coordinate parallel activities, ensuring that the finish of an activity is not scheduled before the specified date. It is usually applied to activities that have few predecessors that must finish before the next phase of a project.

Mandatory Constraints

Mandatory Start / Finish: A restriction you impose on an activity that sets its early and late start/finish dates equal to the date you specify. The mandatory early start/finish date is used regardless of its effect on network logic. A mandatory early start/finish date could affect the late dates for all activities that lead to the constrained activity and all early dates for the activities that lead from the constrained activity.

Note : When mandatory constraints are placed on calendar non-work time, the early and late dates are not set equal to each other. The early date is moved forward to the next valid work time and the late date is moved back (earlier) to the first valid work time. This can cause negative float in the schedule.

Late Constraint

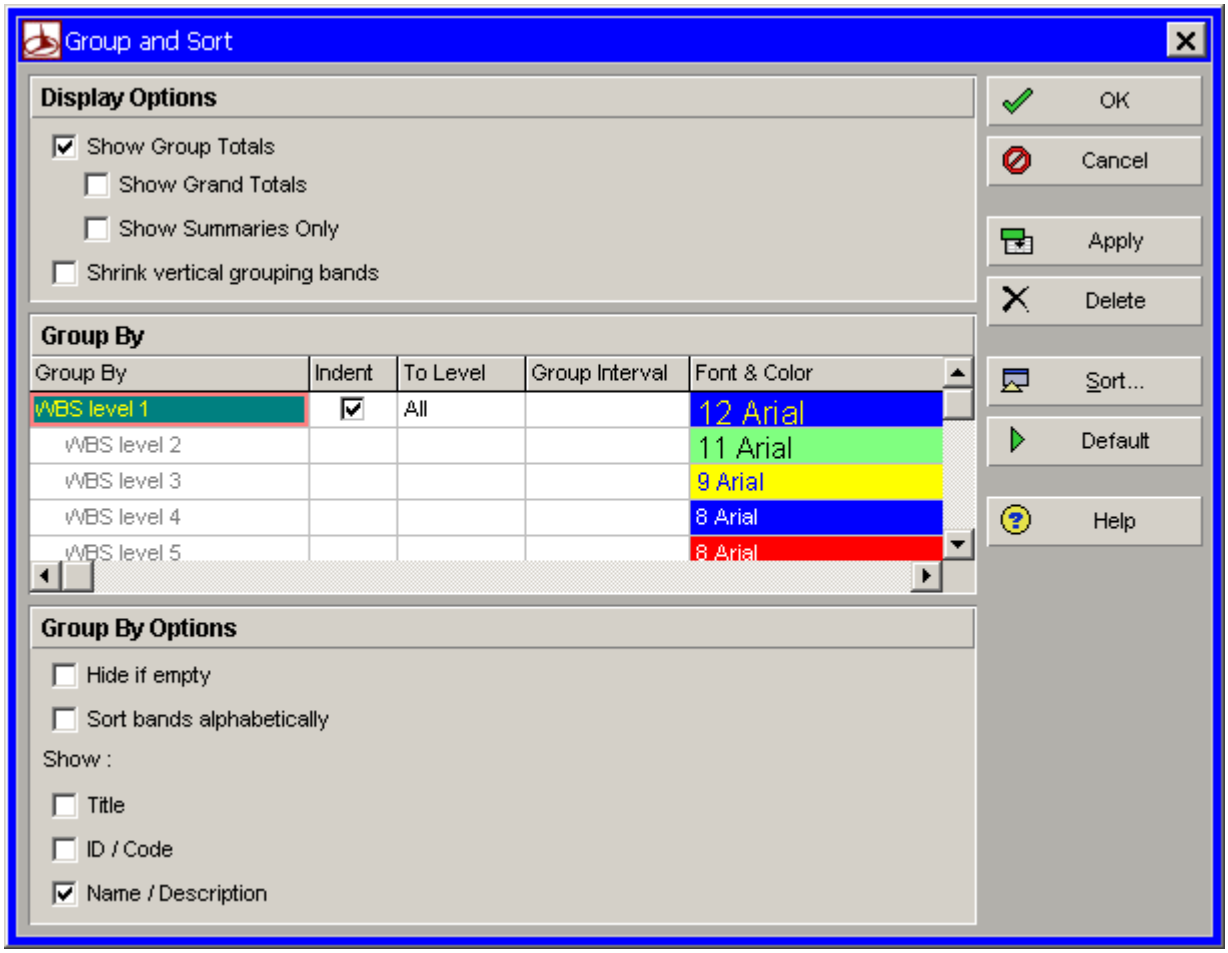
As Late As Possible: A restriction you impose on an activity or work unit with positive float that allows it to start as late as possible without delaying its successors. This constraint sets the early dates as late as possible without affecting successor activities.

N. GROUPING AND FILTERING ACTIVITIES

GROUPING & SORTING

Organize activities by **grouping** one or more data items, like phase, department, responsible person, dates, total float, custom user field, and others. Grouping data enables you to focus on activities that have something in common.
Various hierarchies are available for viewing project data, including the EPS, OBS, and WBS. You can further organize a hierarchical view of data by grouping and sorting activities.
In addition, some fields available for grouping may also have a hierarchy (or number of levels) associated with them. For example, cost accounts may contain several levels of codes. You can specify the number of levels to display in the layout when you group by a hierarchical code.
You can further organize your layout by using **sorting** to arrange the order of activities. If you use both grouping and sorting to organize your layout, the items are grouped first and then sorted.

To **organize** the activities activate **View /Group & Sort** menu.
Show Group Totals: Mark the checkbox to display totals in the grouping bands. Clear the checkbox to hide any totals in the grouping bands.
Show Grand Totals: Mark to the checkbox show a grand total row at the top of the layout.
Show Summaries Only: Mark the checkbox to show summarized grouping bands only. Marking this checkbox causes any details under the grouping bands to be hidden. Clear the checkbox to show grouping bands with details displayed below each group.
Shrink vertical grouping bands: Mark the checkbox to decrease the space taken by indenting levels on the hierarchy. Use this feature to allow additional room for the display of data.



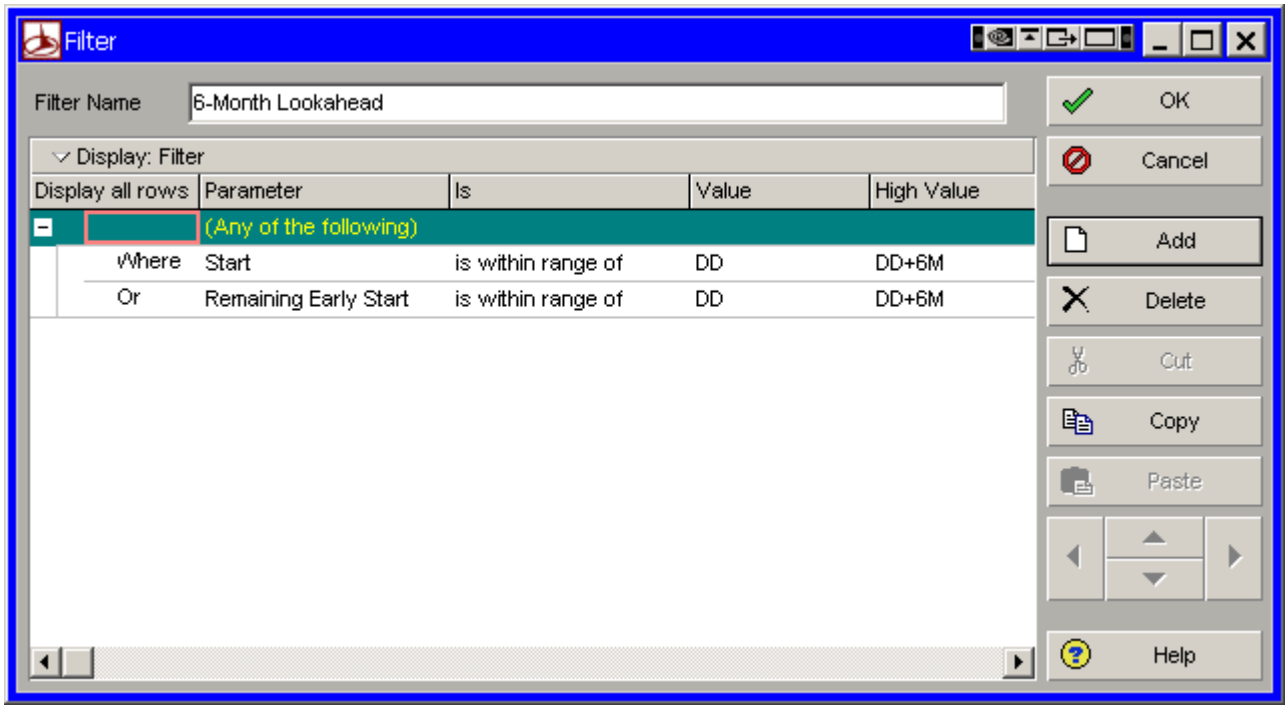
FILTERING

A filter temporarily limits the projects or activities that appear on screen, according to criteria you establish. For example, you can view active projects or activities scheduled to start during the next three weeks. Use the filters supplied or create your own. Apply one or more filters to the layout at any time.

Steps to apply a filter:

Choose Project, Activities, and then choose View, Filters.
Mark the checkbox next to the filter you want to apply.

To preview your changes, click Apply.



Class Exercise:

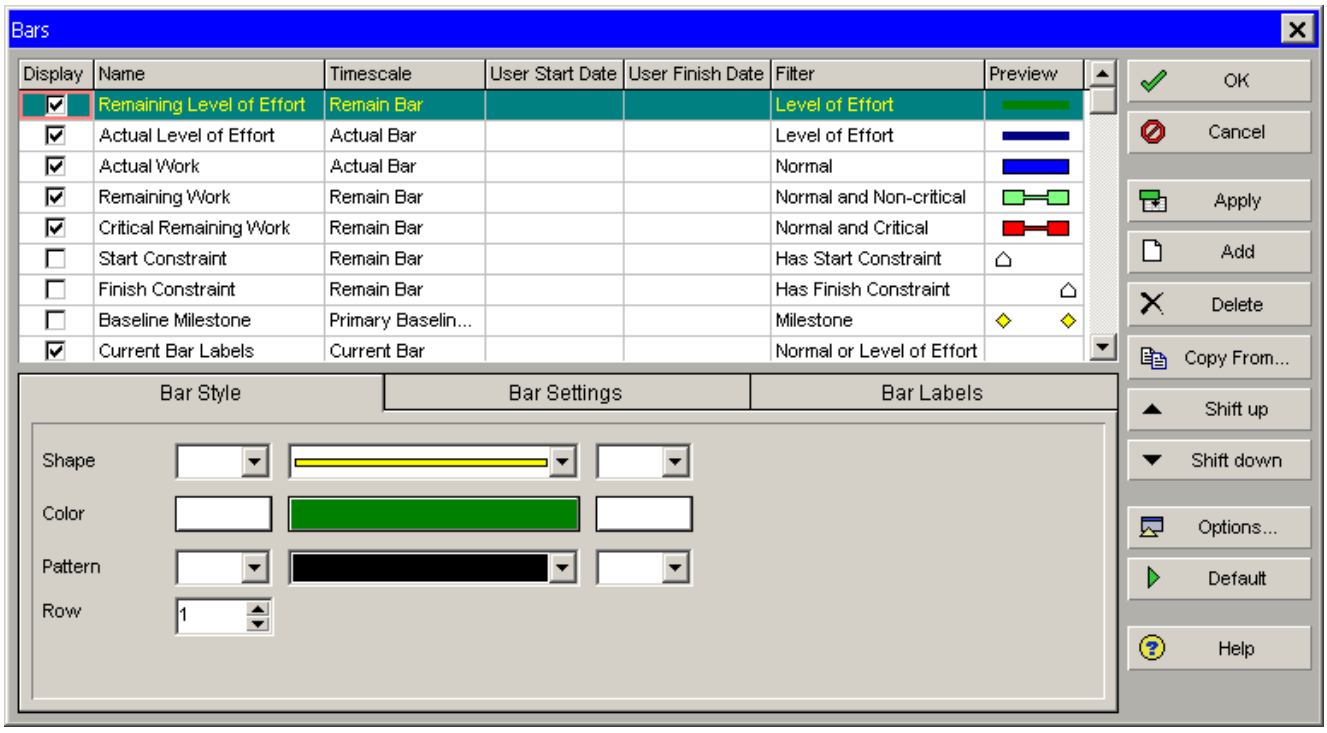
Activate Group & Sort window from the menu and select WBS field in the **"Group by"** Column.
To show summaries for the each WBS element enable **"Show Summaries"** check box.
Select the background color and font for the WBS levels and click OK to confirm the entries.
Layout can be saved by clicking **"Save As"** command, the path for which is shown above.
Group the activities of the project based on activity code **"AREA"** and save the layout.
Group the activities of the project based on activity code **"RESPONSIBILITY"** and save the layout.
Group the activities of the project based on activity code **"SITE"** and save the layout.
Create a filter for **Main Production Hall** activities.
Create a filter for **Utility Building** activities.
Create a filter for activities undergoing in **Chennai**.
Create **2 month look-a-head** filter

O. BARS & LAYOUTS

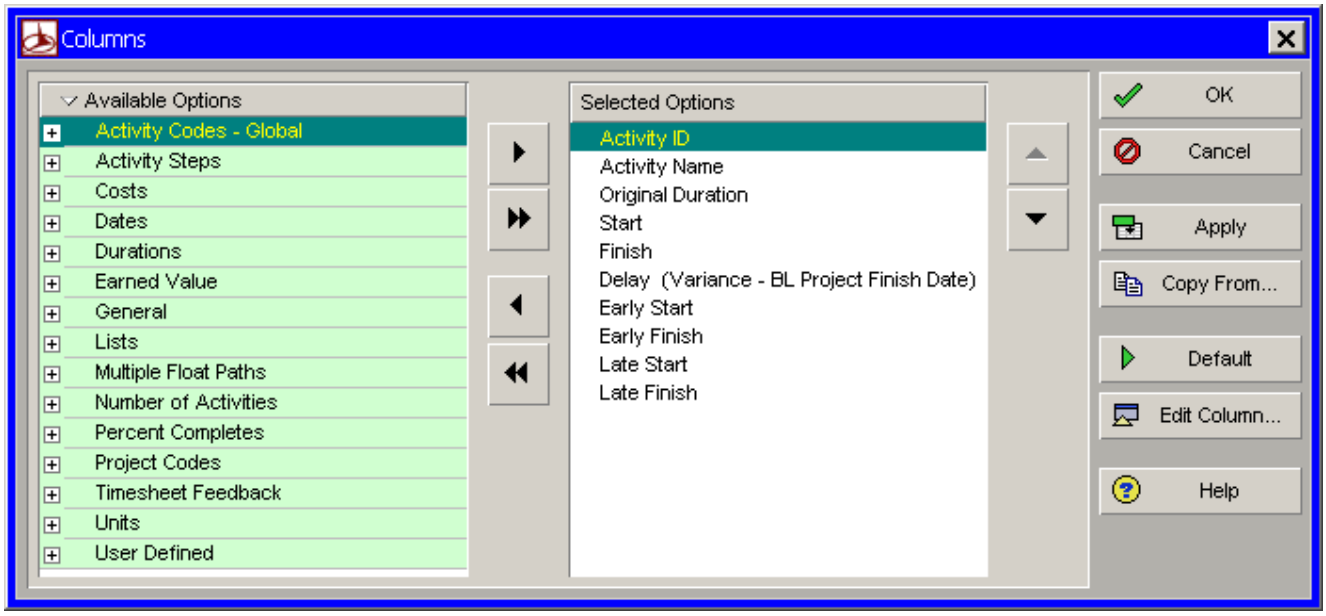
Layouts can be customized by changing bar colors, adding data columns, formatting Time Scale and changing Top and Bottom half of Activities screen.

To customize the project layout following steps can be performed.

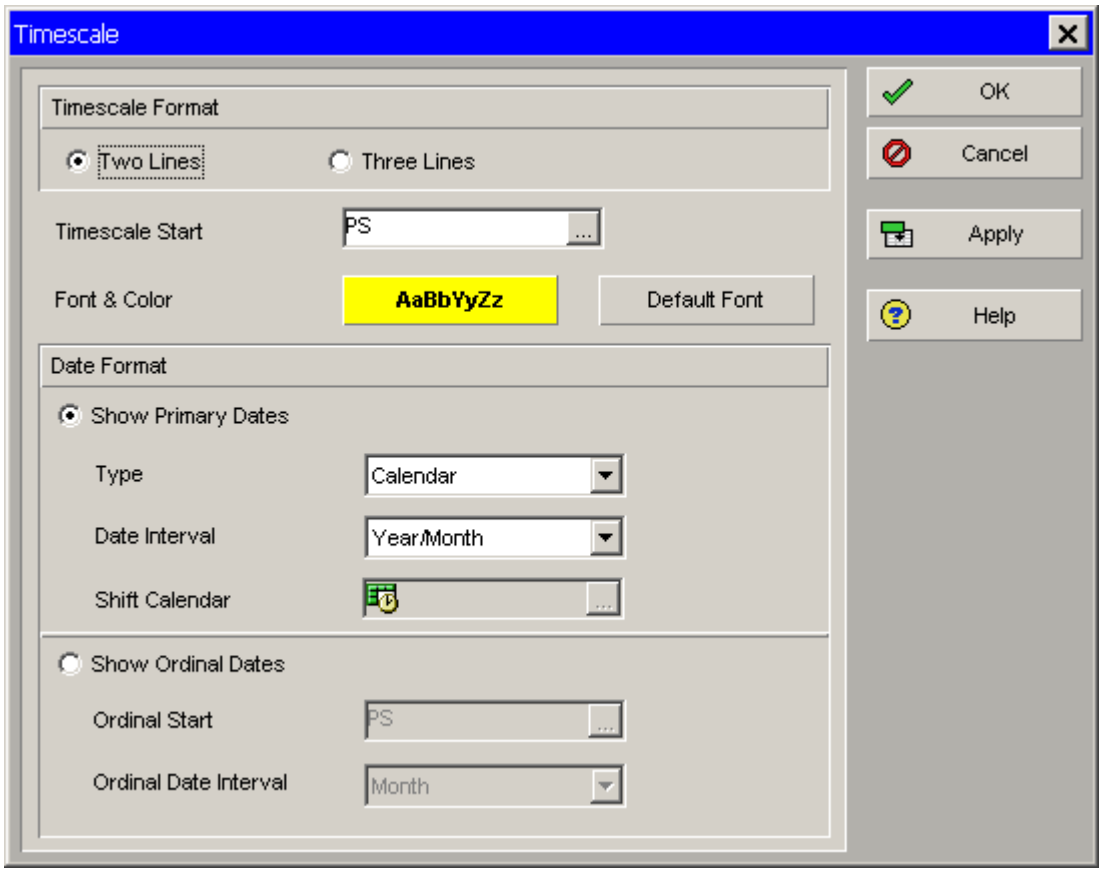
To customize the Activity Bars, activate **View/Bars** menu.



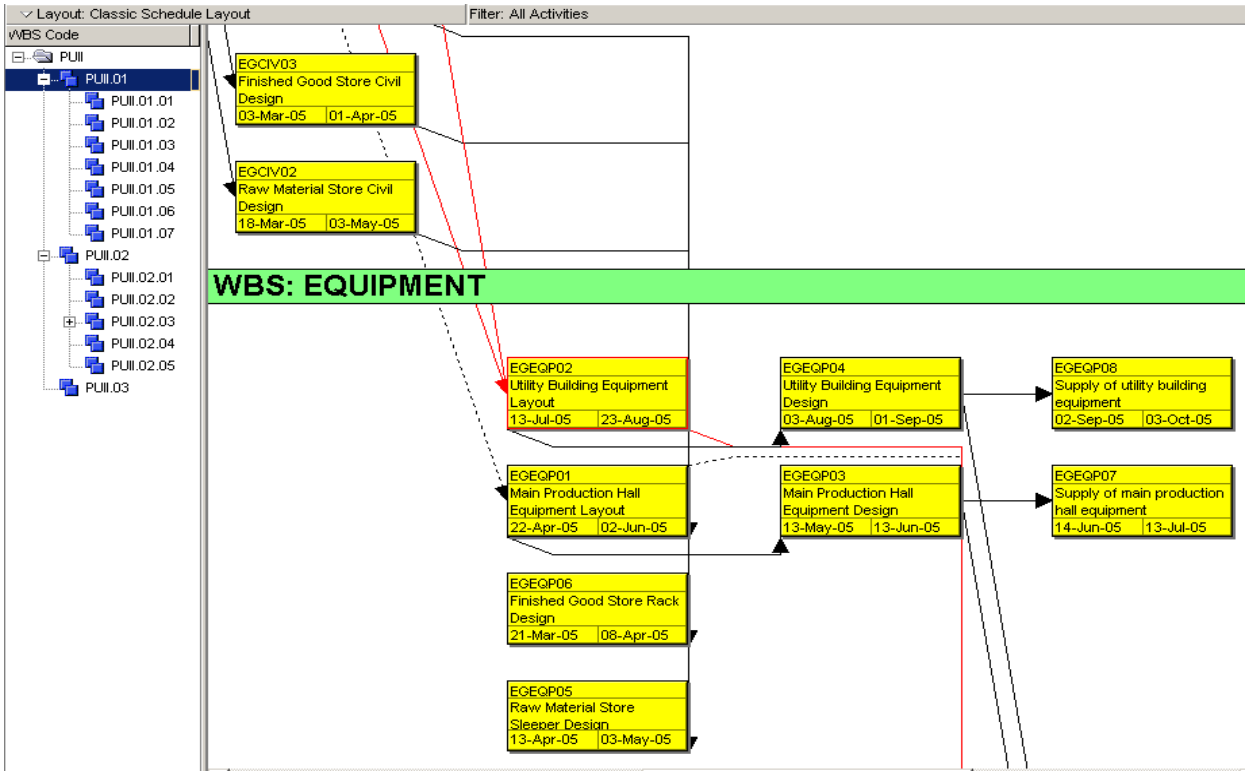
To change the columns in the activities view, activate **View/Columns** menu.



To format Time Scale in activity view, activate **View / Timescale** menu.



To view PERT network, activate **View / Show On Top / Activity Network** menu.



P. RESOURCES, ROLES AND COSTS

RESOURCES

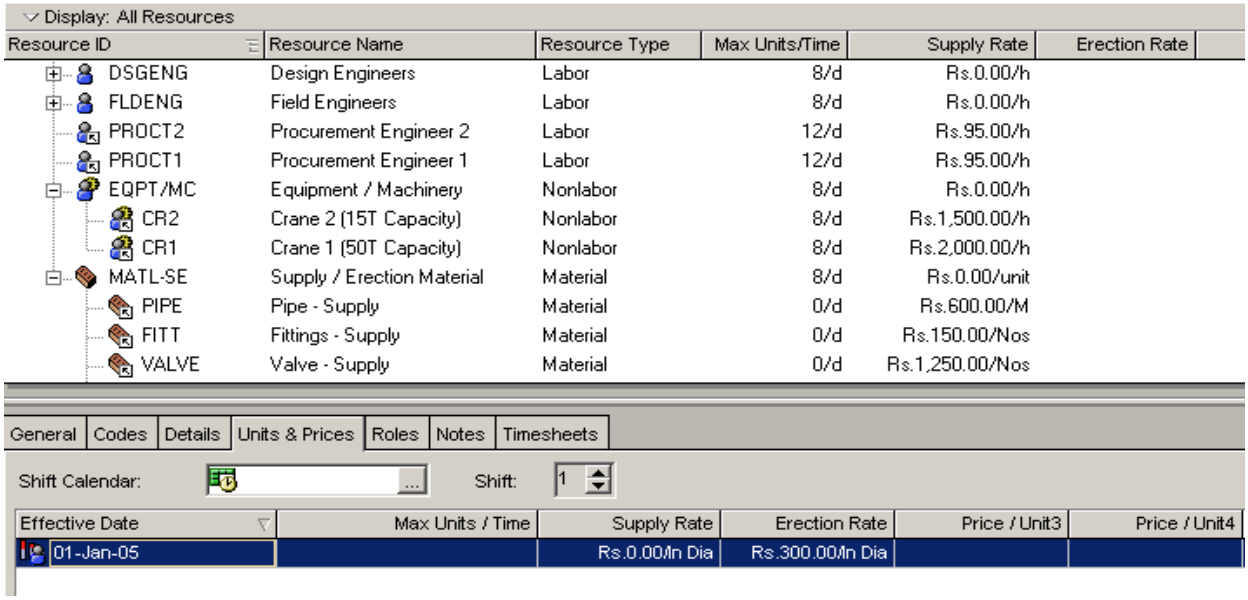
Resources include the personnel and equipment that perform work on activities across all projects. Resources are generally reused between activities and/or projects. In the Project Management module, you can create a resource pool that reflects your organization's resource structure and supports the assignment of resources to activities. The Project Management module also enables you to distinguish between **labor, material, and non-labor resources**. Labor and non-labor resources are always time-based, and material resources, such as consumable items, use a unit of measure you can specify. You can create and assign resource calendars and define a resource's roles, contact information, and time-varying prices. If a resource uses Timesheets, you can also assign a login name and password to the resource.

Define a master list of resources consisting of the resources necessary to complete the projects in your organization. Then, group resources to create an easily accessible pool from which you can draw when assigning resources to a project. For each resource, set availability limits, unit prices, and a calendar to define its standard work time and non-work time, then allocate resources to the activities that require them. To enable grouping and rollups of your resources across the organization, set up resource codes and assign code values.

Resources are different than expenses. While resources can be time-based and generally extend across multiple activities and/or projects, expenses are one-time expenditures for non-reusable items required by activities. The Project Management module does not include expenses when leveling resources.

Primary Resources

The Project Management module allows you to assign primary resources to activities. An activity's primary resource is typically the resource who is responsible for coordinating an activity's work. Using Timesheets, the primary resource also updates the activity's start date, finish date, and expected end date. In addition, if an activity has any material resources, the primary resource may also be responsible for reporting the material resource's units as well. With the exception of material resources, all other resources are responsible for reporting their own hours for assigned activities.



Adding Resources:

To create resource dictionary click on **Resources** from HOME page.
Create a resource pool for **"NEOTECH LIMITED"** by clicking ADD menu.
Add the following resources under **NEOTECH LIMITED** resource pool.
To add new resource, click on **ADD** option.
Give Resource ID and in the detail tab select the resource classification. P6 supports 3 type of resource classifications, namely Labor, Non-Labor and Material resource.
Click on **Units & Prices** tab and give the resource availability and the Price /Time.

Class Exercise:

Resource ID	Resource Name	Unit of Measure	Resource Type	Max Units/Time	Price/Unit
NLRP	Neotech Limited Resource	-	Labor		
DSGENG	Design Engineers	-	Labor		
NLD-21	Parthiban	Hours	Labor	12/d	Rs.80
NLD-22	Vijay	Hours	Labor	12/d	Rs.80
NLD-23	Manas	Hours	Labor	12/d	Rs.80
NLD-24	Milind	Hours	Labor	12/d	Rs.70
NLD-25	Prashant	Hours	Labor	12/d	Rs.70
NLD-26	Kenedy	Hours	Labor	12/d	Rs.70
NLD-27	Domnic	Hours	Labor	12/d	Rs.72
NLD-28	Srinivasan	Hours	Labor	12/d	Rs.72
NLD-29	Joseph	Hours	Labor	12/d	Rs.75
NLD-21	Kannan	Hours	Labor	12/d	Rs.75
NLD-211	Prabhu	Hours	Labor	12/d	Rs.75
FLDENG	Field Engineers	-	Labor		
NLF-31	Shankar	Hours	Labor	14/d	Rs.55
NLF-32	Madhavan	Hours	Labor	14/d	Rs.55
NLF-33	Suresh	Hours	Labor	14/d	Rs.55
NLF-34	Kartik	Hours	Labor	14/d	Rs.58
NLF-35	Kumaran	Hours	Labor	14/d	Rs.58
NLF-36	Selvam	Hours	Labor	14/d	Rs.56
NLF-37	Rajesh	Hours	Labor	14/d	Rs.56
NLF-38	Saravanan	Hours	Labor	14/d	Rs.60
NLF-39	Senthil	Hours	Labor	14/d	Rs.60
NLF-31	James	Hours	Labor	14/d	Rs.60
NLCM-41	Anthony	Hours	Labor	16/d	Rs.100
NLCM-42	Akbar	Hours	Labor	16/d	Rs.100
NLP-11	Sakthivel	Hours	Labor	12/d	Rs.95
NLP-12	Pratish	Hours	Labor	12/d	Rs.95
EQPT/MC	Equipment / Machinery	-	Nonlabor		
CR2	Crane 2 (15T Capacity)	Hours	Nonlabor	8/d	Rs.1,500
CR1	Crane 1 (5T Capacity)	Hours	Nonlabor	8/d	Rs.2,000
SE-MATL	Supply / Erection Material	-	Material		
001	Excavation	M3	Material	1/d	Rs.120
002	PCC	M3	Material	1/d	Rs.210
003	RCC	M3	Material	1/d	Rs.300
PIPE	Pipe - Supply	Meters	Material	1/d	Rs.600

FITT	Fittings - Supply	Numbers	Material	1/d	Rs.150
VALVE	Valve - Supply	Numbers	Material	1/d	Rs.1,250
UBEQPT	UB Equipment - Supply	Numbers	Material	1/d	Rs.16,000
MPHEQPT	MPH Equipment - Supply	Numbers	Material	1/d	Rs.20,000
INSITMS	Instrument Items - Supply	Lump Sum	Material	1/d	Rs.80,000
ELEITMS	Electrical Items - Supply	Lump Sum	Material	1/d	Rs.114,000
PIPFAB	Piping - Fabrication	Inch Dia	Material	1/d	Rs.300
PIPERE	Piping - Erection	Inch Meter	Material	1/d	Rs.200
EQPTERE	Equipment - Erection	Metric Ton	Material	1/d	Rs.500
INSITME	Instrument Items - Erection	Lump Sum	Material	1/d	Rs.28,000
ELEITME	Electrical Items - Erection	Lump Sum	Material	1/d	Rs.30,000

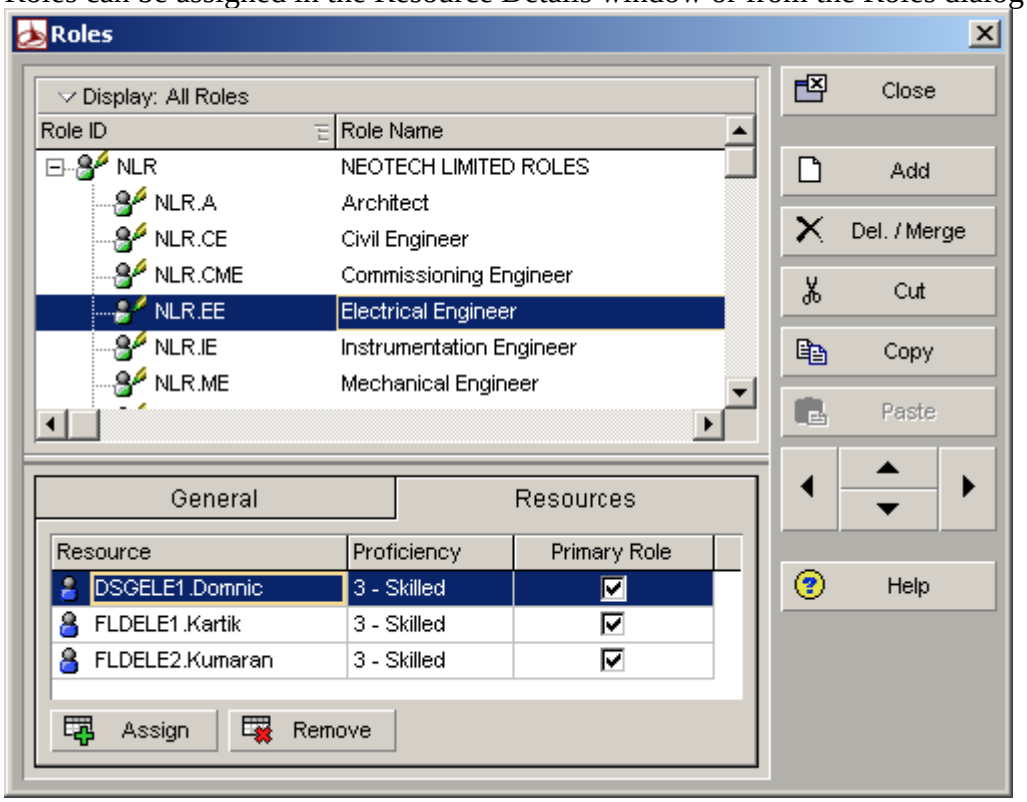
ROLES

Roles are project personnel job titles or skills, such as mechanical engineer, inspector, or carpenter. They represent a type of resource with a certain level of proficiency rather than a specific individual. Roles can also be assigned to specific resources to further identify that resource's skills. For example, a resource may have a role of a engineer and manager.

You can create a set of roles to assign to resources and activities in all projects in the enterprise. You can establish an unlimited number of roles and organize them in a hierarchy for easier management and assignment. The set of roles you assign to an activity defines the activity's skill requirements.

You can temporarily assign roles during the planning stages of the project to see how certain resources affect the schedule. Once you finalize your plans, you can replace the roles with resources that fulfill the role skill levels. Five proficiency levels can be assigned to roles: Master, Expert, Skilled, Proficient and Inexperienced.

Roles can be assigned in the Resource Details window or from the Roles dialog box.



Adding a role:-

Choose Enterprise, Roles.
Click Add.
Click the General tab, and then type a unique ID for the role.
Type the role's name.
Type a description of the role's responsibilities.

Class Exercise:

Role ID	Role Name	Resource ID
NLR	NEOTECH LIMITED ROLES	
NLR.A	Architect	NLD-21 to 23
NLR.CE	Civil Engineer	NLD-24 to 26 NLF-31 to 33
NLR.CME	Commissioning Engineer	NLCM-41 & 42
NLR.EE	Electrical Engineer	NLD-27 NLF-34 & 35
NLR.IE	Instrumentation Engineer	NLD-28 NLF-36 & 37
NLR.ME	Mechanical Engineer	NLD-29 to 211 NLF-38 to 31
NLR.PE	Procurement Engineer	NLP-11 & 12

EXPENSES

Expenses are non-resource costs associated with a project and assigned to a project's activities. They are typically one-time expenditures for non-reusable items. Examples of expenses include materials, facilities, travel, overhead, and training.

You can categorize expenses, indicate a unit of measure for expenses, and specify whether an expense accrues at the start or end of an activity or uniformly over its duration. Each expense has a budgeted cost, actual cost, and estimated remaining cost.

Expenses are not the same as resources. Resources generally extend across multiple activities and/or multiple projects. Examples of resources are personnel and equipment. Unlike resources, expenses are project-specific. The Project Management module does not include expenses when leveling resources. Resource curves are not supported for expenses.

Adding expenses:-

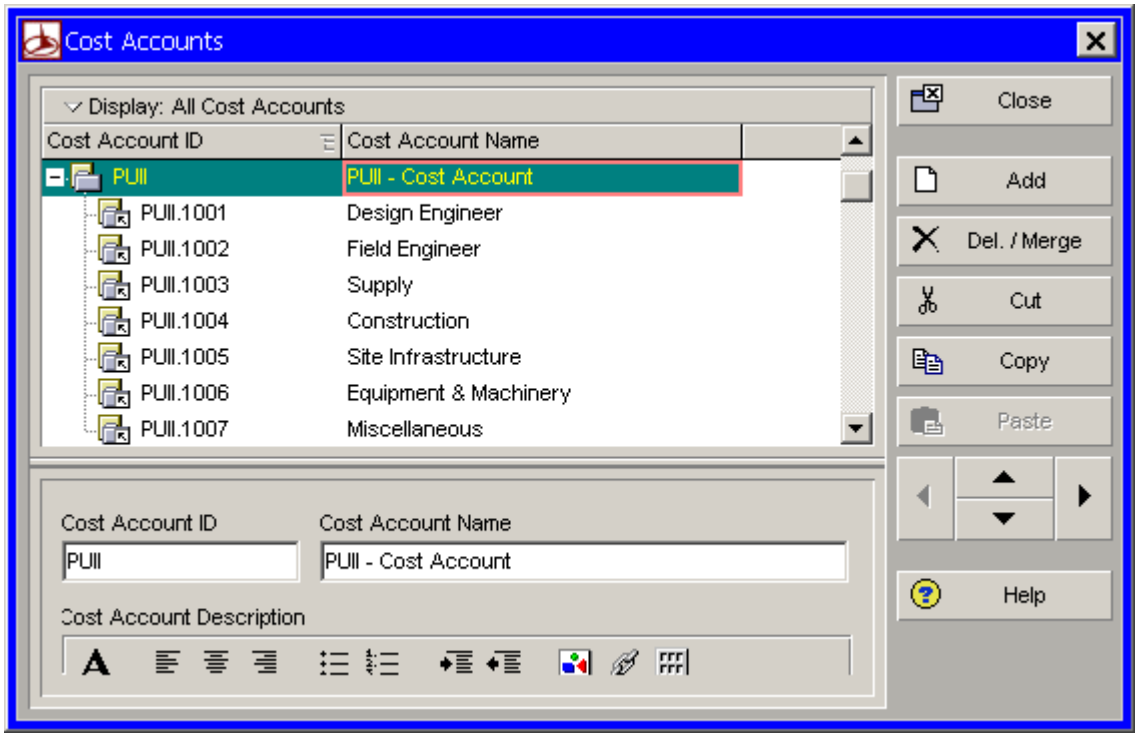
Choose Project, Expenses.
Click Add.
Select the activity to which you want to assign the expense, then click the Select button.
Click the General, Activity, Costs, and Description tabs, and enter details for the expense.

COST ACCOUNTS

You can create cost accounts and associate them with activity resource assignments or expenses in a project. Cost accounts are hierarchical, and they enable you to track activity costs and earned value according to your organization's specific cost account codes.

You can specify a project's default cost account. This cost account is used for resource assignments to activities and project expenses in the open project.
Cost accounts enable one to track Activity Costs and Earned Value throughout the project lifecycle. Cost Accounts are established in a hierarchy available to all projects in the EPS.

Creating a cost account hierarchy:-
Choose Enterprise, Cost Accounts.
Click the Cost Account ID column label to display the cost accounts hierarchy. An outline symbol in the Cost Account ID column label indicates a hierarchy display.
Click Add and type the cost account's ID and Name.
Type a brief description of the cost account.



Class Exercise:

Cost Account ID	Cost Account Name
PUII	PUII - Cost Account
PUII.1001	Design Engineer
PUII.1002	Field Engineer
PUII.1003	Supply
PUII.1004	Construction
PUII.1005	Site Infrastructure
PUII.1006	Equipment & Machinery
PUII.1007	Miscellaneous

Assigning Roles to Resources:

Assign roles to resources from the Roles dialog box:-
Choose Enterprise, Roles, and then select the role you want to assign.
Click the Resources tab, and then click Assign.
Select the resource to which you want to assign the selected role.
Click the Assign button, and then click the Close button.
In the Resources tab, double-click the Proficiency column and select a skill level.
If this is the resource's primary role, mark the Primary Role checkbox.

Assign roles to resources from the Resources window:-

Choose Enterprise, Resources, then select the resource to which you want to assign a role.
Click the Roles tab, and then click Assign.
Select the role you want to assign.
Click the Assign button, and then click the Close button.
In the Roles tab, double-click the Proficiency column and select a skill level.
If this is the resource's primary role, mark the Primary Role checkbox.

Assigning Resources, Expenses & Cost Accounts to activities:

Assigning resources to activities:-

Choose Project, Activities.
Select the activity to which you want to assign a resource.
Display Activity Details, and then click the Resources tab.
Click Add Resource.
Select the resource you want to assign.
Click the Assign button, and then click the Close button.

Adding expenses from the Activities window:-

Choose Project, Activities.
Select the activity that incurs the expense.
Display Activity Details, and then click the Expenses tab.
To display the Expenses tab, click the Layout Options bar and choose Bottom Layout Options. In the Available Tabs section, select Expenses, and then click OK.
Click Add, and then type a name for the expense item.
Double-click in the Cost Account column. Select the cost account you want to assign, and then click the Select button.
Double-click in the Expense Category column. Select the category you want to assign, and then click the Select button.
Double-click the Accrual Type column, and then select the expense's accrual type.
Type the number of budgeted units you expect the selected activity to use.
Type the price of each unit.
The module calculates and displays the expense's budgeted cost (budgeted units * price/unit) in the Budgeted Cost field.
To enter actual expense costs already incurred by the activity, type the cost in the Actual Cost field.
To automatically calculate an expense's actual cost based on the activity's planned completion percentage, mark the Auto Compute Actuals checkbox.
Type the name of the vendor business or organization to which the expense is payable.

Class Exercise: Resource & Cost Account Assignment

Activity ID	Resource Name	Budgeted Units	Cost Account
EGGEN02	Milind	48	1001
	Domnic	32	1001
	Srinivasan	32	1001
	Joshep	40	1001
EGARC01	Parthiban	352	1001
EGARC02	Vijay	198	1001
EGARC03	Vijay	132	1001
EGARC04	Manas	400	1001
EGCIV01	Milind	352	1001
EGCIV02	Prashant	264	1001
EGCIV03	Kenedy	176	1001
EGCIV04	Kenedy	528	1001
EGEQP01	Joshep	240	1001
EGEQP02	Kannan	240	1001
EGEQP03	Joshep	176	1001
EGEQP04	Kannan	176	1001
EGEQP05	Prabhu	120	1001
EGEQP06	Prabhu	120	1001
EGPIP01	Joshep	176	1001
EGPIP02	Kannan	176	1001
EGELE01	Domnic	528	1001
EGELE02	Domnic	352	1001
EGINS01	Srinivasan	352	1001
EGINS02	Srinivasan	176	1001
PRELE01	Pratish	240	1001
	Electrical Items - Supply	1	1003
PREQP01	Pratish	176	1001
	MPH Equipment - Supply	10	1003
PREQP02	Sakthivel	176	1001
	UB Equipment - Supply	6	1003
PRINS01	Sakthivel	240	1001
	Instrument Items - Supply	1	1003
PRPIP01	Pratish	176	1001
	Pipe - Supply	32000	1003
	Fittings - Supply	600	1003
	Valve - Supply	135	1003
PRPIP02	Sakthivel	176	1001
	Pipe - Supply	25000	1003
	Fittings - Supply	420	1003
	Valve - Supply	95	1003
CNCIV01	Shankar	640	1002
	Excavation	150	1004
	PCC	20	1004
	RCC	130	1004
CNCIV02	Madhavan	320	1002
	Excavation	80	1004
	PCC	15	1004
	RCC	70	1004

CNCIV03	Madhavan	400	1002
	Excavation	120	1004
	PCC	25	1004
	RCC	105	1004
CNCIV04	Suresh	720	1002
	Excavation	200	1004
	PCC	40	1004
	RCC	180	1004
CNMEC05	James	160	1002
CNMEC06	James	1600	1002
CNMEC01	Crane 1 (50T Capacity)	320	1006
	Equipment - Erection	80	1004
	Saravanan	320	1002
CNMEC02	Crane 1 (50T Capacity)	280	1006
	Equipment - Erection	45	1004
	Senthil	280	1002
CNMEC03	Crane 2 (15T Capacity)	480	1006
	Saravanan	480	1002
	Piping - Fabrication	1200	1004
	Piping - Erection	33500	1004
CNMEC04	Piping - Erection	26300	1004
	Piping - Fabrication	920	1004
	Senthil	640	1002
	Crane 2 (15T Capacity)	640	1006
CNELE01	Kartik	1040	1002
	Kumaran	1040	1002
	Electrical Items - Erection	1	1004
CNINS01	Instrument Items - Erection	1	1004
	Selvam	1040	1002
	Rajesh	1040	1002
CMCOM01	Anthony	120	1002
CMCOM02	Anthony	240	1002
CMCOM03	Akbar	160	1002
CMCOM04	Anthony	160	1002
CMCOM05	Akbar	120	1002
CMCOM06	Anthony	240	1002
CMCOM06	Akbar	240	1002

Class Exercise: Expense Assignment

Activity ID	Expense Item	Expense Category	Budgeted Cost	Accrual Type	Cost Account
EGGEN3	Plotter	Equipment	Rs.4,500	Uniform over Activity	PUII.17
EGGEN1	Consulting	Legal & Professional	Rs.10,000	Uniform over Activity	PUII.17
CNGEN1	Site Office	Facilities	Rs.35,000	Uniform over Activity	PUII.15
CMCOM6	Document	Testing & Reports	Rs.30,000	Uniform over Activity	PUII.17
CMCOM1	Transport	Shipping / Transport	Rs.15,000	Uniform over Activity	PUII.17

RESOURCE CURVES

Resource/cost distribution curves enable you to specify how you want resource units or costs spread over the duration of an activity. Resource units and costs are distributed evenly during an activity unless you specify nonlinear distribution using curves.

You can assign a resource distribution curve to any resource or role assignment on activities with a duration type of Fixed Duration and Units/Time or Fixed Duration & Units. Assign the appropriate curve to a resource or role assignment by selecting a curve in the Curve column in the Resource Assignments window. You can also assign a resource curve in the Resources tab in the Activity Details.

If timesheet data exists for the actuals, curves are ignored for the actuals and are spread using the timesheet data. Activities with timesheet data continue to spread the remaining units using the curve.

In order to use curves to calculate the Actual Units/Cost and EV Units/Costs, the new project setting that uses duration percent complete to calculate actuals should be marked.

Notes:
Resource curves do not support expenses. The Accrual Type will continue to spread the expenses.
Resource lag is taken into consideration. The curve should begin on the "lagged start date."
Resource curves are reflected in the Resource Usage Profile and Resource Usage Spreadsheet.

Adding a resource curve:-

Choose Enterprise, Resource Curves.
Click Add.
Select an existing curve from which to copy the curve value percentages, then click Select.
Type a name for the new resource curve. You can type up to 6 alphanumeric characters. You must enter a resource curve name.
Click Modify to define the curve's distribution. Edit the curve value percentages to create a curve that indicates how your costs/units should distribute over time. Curves are defined by 21 points (5% intervals from to 1).
Click Prorate to make the total of the distribution values equal to 1% while maintaining the shape you specified.
Click OK, and then click Close.
Note: You can define an unlimited number of global resource curves.

Assigning a curve to a resource or role assignment:-

You can assign a resource distribution curve to any resource or role assignment on activities with a duration type of Fixed Duration and Units/Time or Fixed Duration & Units. Resource usage and costs are distributed evenly during an activity unless you specify nonlinear distribution using curves.
Choose Project, Resource Assignments.
Select the resource/role assignment to which you want to assign a resource curve.
Double-click in the Curve column and select the curve you want to assign to the resource/role assignment, and then click Select.

To display the Curve column, click the Display Options bar, then choose Columns, Customize.
Select Curve from the General group and click to add the column to the Selected Options.

VIEWING RESOURCE & COST PROFILE / SPREADSHEETS

Resource Usage Profile/Spreadsheet:

Use the Resource Usage Profile/Spreadsheet to analyze quantity or cost usage for resources or roles. You can view a resource's or role's cost and quantity data for a specific project or for all projects across the enterprise (total allocation).
Define the Profile/Spreadsheet to specify whether you want to display cost or quantity information and set the timescale for displaying data values. Choose to display vertical bars to represent costs or units allocated to your resources for each time period, and include cumulative curves/units to represent accumulated units and costs over time.

Use the Resource Usage Profile/Spreadsheets to:-

Determine how many hours each resource is scheduled to work.
Identify overloaded resources.
Track expenditures per time period.
Determine resource usage by late dates.
Display a "banana" curve to compare early and late dates.
Display different colors or patterns on the histogram bars when showing the stacked histogram.
In addition to customizing data, you can customize the look of the profile by specifying display options, for example, bar color, background line type, or averaging. You can also save a customized profile so that you can always access the same set of activity information or share the Resource Usage Profile with someone else.
The Resource Usage Profile is available only in the bottom layout of the Activities window. The bottom layout window is divided into two panes.
The left pane lists all the resources or roles stored in the hierarchy, depending on your current view. In the stacked histogram view, the left pane lists all the resource or role filter/group names in the hierarchy.
The right pane displays the values for the activities assigned to each resource or role in the histogram, or resource or role filter/group name in the stacked histogram.

Note:
If you do not want the resource unit/cost values spread evenly, use resource curves to distribute those values nonlinearly. The Resource Usage Profile reflects the resource curves.
When displaying units, bars do not display for summary rows if your selection contains mixed units of measure or a mixture of labor/non-labor and material type resources.
Bars and cumulative curves with negative values do not display in the profile. You can view the negative values in the profile details. Double-click in the profile area to view the profile details.

Activity Usage Profile/Spreadsheet:

Use the Activity Usage Profile/Spreadsheet to view cost or unit values for activities in the open project over time according to a timescale you specify. The Activity Usage Profile/Spreadsheet displays resource allocations for all activities or for the activities you select in the Activity Table, Activity Usage Spreadsheet, Gantt chart, or the Activity Network.

The Activity Usage Profile/Spreadsheet can display labor, non-labor, material, and expense costs and labor and non-labor units allocated to the activities in your project over time. Costs and units allocated to activities for each period in the timescale are represented as vertical bars. You can also display curves for charting cumulative costs or units over time.

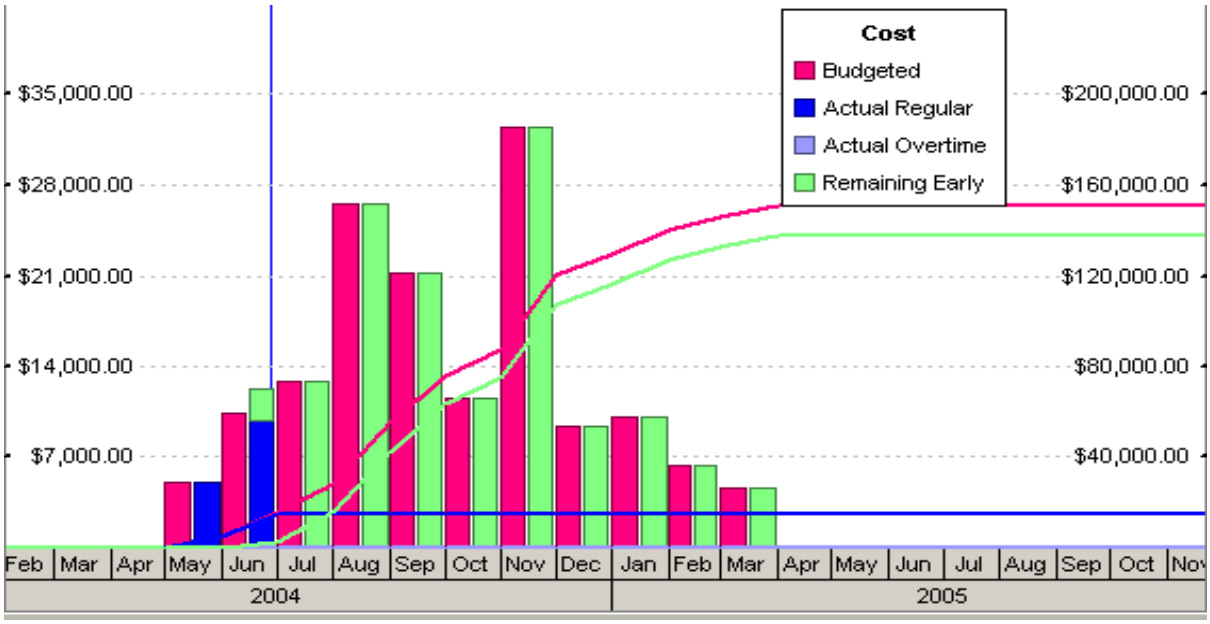
You can customize the Activity Usage Profile/Spreadsheet to:

Specify the type of information you want to display.
Change the timescale.
Customize the bars and background.
Save any of these changes so that you can always access the same set of activity information, or share your Activity Usage Profile with someone else.
You can filter the Activity Usage Profile to include all activities displayed in the top layout, or to include only the activities you select in the top layout. You can also filter the top layout to display only those activities that correspond to the time period you select in the bottom layout.

Tip

If you apply activity filters to the Activity Table, Gantt Chart, Activity Usage Spreadsheet, or the Activity Network, these filters also apply to the Activity Usage Profile.

Resource Units per day = Budgeted Quantity / Original Duration



RESOURCE LEVELLING

Resource leveling is a process that helps you ensure that sufficient resources are available to perform the activities in your project according to the plan. During resource leveling, an activity is only scheduled to occur when its resource demands can be met. To accomplish this, tasks may be delayed to resolve resource availability conflicts.

Typically, you level during the **forward pass** through a project. This determines the earliest dates to schedule an activity when sufficient resources will be available to perform the task.
If forward leveling delays the project's early finish date, late dates remain unchanged unless you clear the checkbox to preserve scheduled early and late dates in the Level Resources dialog box. In this case, a **backward pass** recalculates late dates.

Tip:
While resource leveling provides one way to resolve resource conflicts, you may also want to consider alternative solutions, such as changing activity relationships or reallocating resources.

Note
The maximum amount of work that a resource is capable of doing for a given time period is defined by the resource's Max Units/Time value in the Units & Prices tab of Resource Details.
Leveling is disabled when no projects are open.
Resource curves are not used when leveling.

To Level resources:-

Choose Tools, Level Resources.
Mark the Consider Assignments in Other Projects With Priority Equal/Higher Than checkbox and specify a priority number if you want to consider other project assignments when determining whether a resource is over allocated.
Mark the Preserve Scheduled Early and Late Dates checkbox to preserve the early and late dates that were calculated during project scheduling.
Mark the Level All Resources checkbox to level all the resources within the project. To level specific resources, clear the Level All Resources checkbox and click Select Resources to choose the resources that you want to include in the leveling run.

Specify leveling priorities.
Mark the Log to file checkbox to record your leveling results in a log file, and then click to specify a filename and location.
Click Level.

Tip: To display and/or use the resource leveling defaults, click Default.

Note: Resource curves are not used when leveling.

Class Exercise:

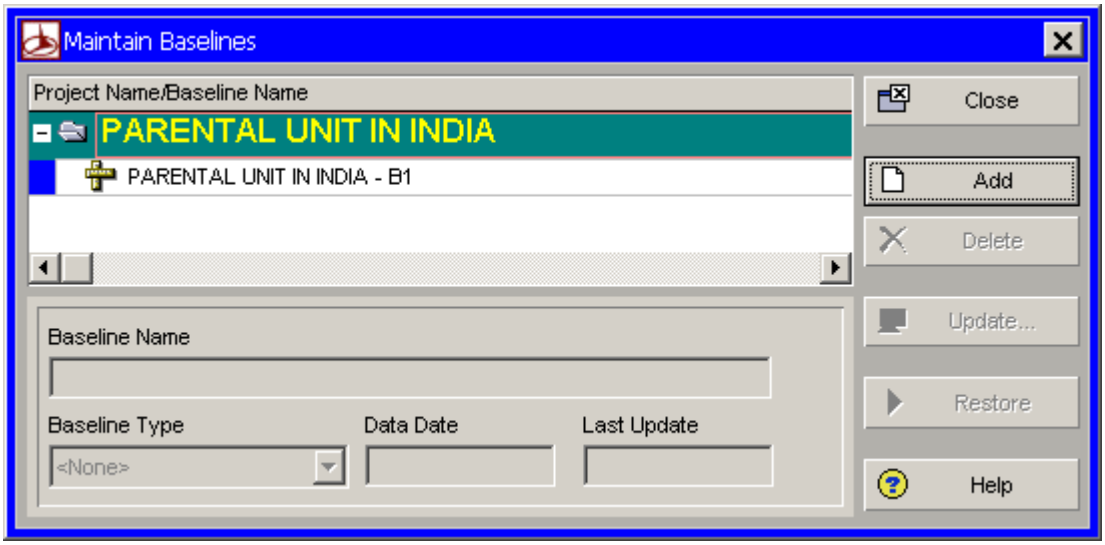
Go to Resource Assignments window and perform the following:-

1. Group and Sort by "Resource ID and Name"
2. Add only "Activity ID" and "Budgeted Units" column and remove the others.
3. Change the timescale on spreadsheet to "Month/Week".
4. Modify the budgeted units in the spreadsheet as per the table below.

Resource	Activity ID	Month	Week	New Budgeted Units	Previous Budgeted Units
Crane 1	CNMEC01	May 2008	4th	40	48
			5th	16	8
Instrument Item - Supply	PRINS01	April 2008	4th & 5th	0	0.2 & 0.2
		May 2008	2nd	0.5	0.2
		May 2008	3rd & 4th	0	0.2 & 0.2
		May 2008	5th	0.5	0.2
Electrical Item - Supply	PRELE01	April 2008	4th & 5th	0	0.2 & 0.2
		May 2008	2nd	0.5	0.2
		May 2008	3rd & 4th	0	0.2 & 0.2
		May 2008	5th	0.5	0.2

Q. BASELINE PLAN

A Baseline is a complete copy of a project plan that you can compare to the current schedule to evaluate progress. Before updating a schedule for the first time create a baseline. It provides a target against which one can track a project's cost, schedule and performance. Up to three baselines can be compared at once. Baseline projects do not exist as separate project to access. 5 baselines can be created for each project.



Creating a baseline:-

Open the projects for which you want to create a baseline.
Choose Project, Maintain baselines, if more than one project is open, and select the project for which you want to create a baseline.
If you want to copy the current project as a new baseline, you can select multiple projects; a baseline will be created for all selected projects. If you want to convert another project to a baseline, you can select only one project.
Click Add and choose to save a copy of the current project as a new baseline or convert another project into a baseline of the current project, then click OK.
If you choose to convert another project, select the project in the Select Project dialog box, then click the Select button.

Tip
Before converting a project to a baseline, if you still want to have access to the original project, you should make a copy of it. Once you convert a project to a baseline, it is no longer available in the project hierarchy. You can restore a baseline, making it available again as a separate project in the project hierarchy.

Notes:
When you save a copy of the current project as a new baseline, the baseline title uses the project name and a suffix of -Bx, where x equals 1 for the first baseline you save for a project, 2 for the second, and so on. You can change the baseline name.
When you choose to convert another project to a baseline, the project you want to convert cannot be open or have baselines assigned to it. The converted project's name is used as the baseline name.

Assigning a baseline:-

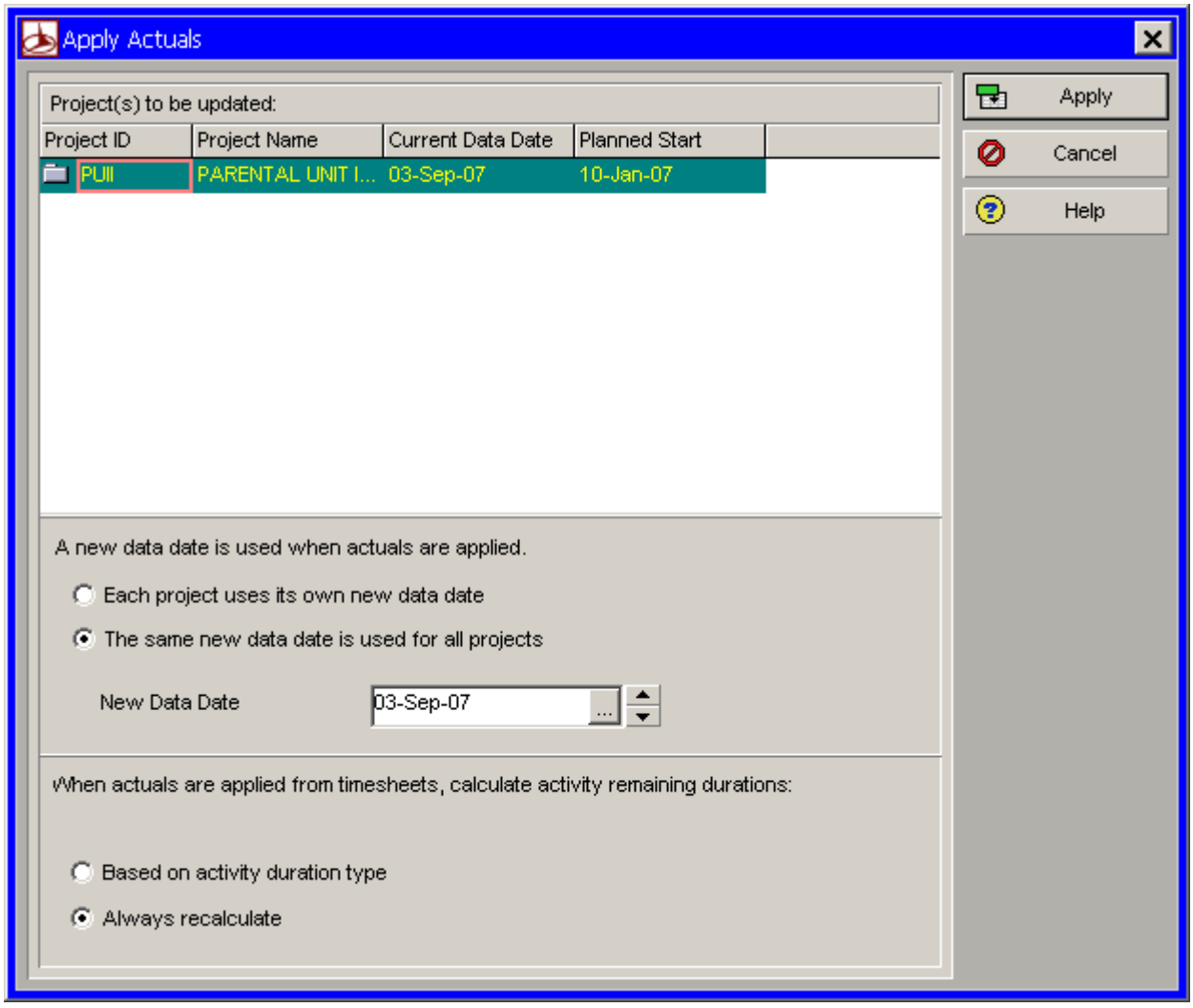
Use the Assign Baselines dialog to assign project, primary, secondary, and tertiary baselines to a project from Project/Assign Baseline.
Project: Lists all open projects. Select the project to which you want to assign baselines.
Project Baseline: Lists the available baselines for the selected project. Select the baseline to use as the project baseline. If a baseline does not exist, the current project is the default value.

User Baselines
Primary: Select the primary baseline from the list of available baselines. If a baseline does not exist, the current project is the default value.
Secondary: Select the second baseline from the list of available baselines. A second baseline is not required.
Tertiary: Select the tertiary baseline from the list of available baselines. A tertiary baseline is not required.

OK: Click to assign the selected baselines to the selected project.
Cancel: Closes the dialog without saving your changes.

R. MONITORING THE CURRENT SCHEDULE

Auto Applying actual



Use the Apply Actuals dialog box to update or apply actuals to open projects from Tools/Apply Actuals….

Project(s) to be updated: Lists the currently open projects to which actuals can be applied. The table lists Project ID, Project Name, Current Data Date, and Planned Start date.
A new data date is used when actuals are applied: Specify whether each project uses its own new data date or if the same new data date is used for all projects.
New Data Date: If you choose to apply the same new data date for all projects, select the date up to which you want to apply the default project's actuals. Click Browse to select a new date or click the arrows to browse for a new date according to timesheet end dates.
When actuals are applied from timesheets, calculate activity remaining durations: Specify whether to recalculate the remaining duration based on the activity duration type or to always recalculate. If you choose to always recalculate, all activities are treated as Fixed Units and Fixed Units/Time.
Apply: Applies actuals to the open projects and updates the current data date.

Updating the schedule:-

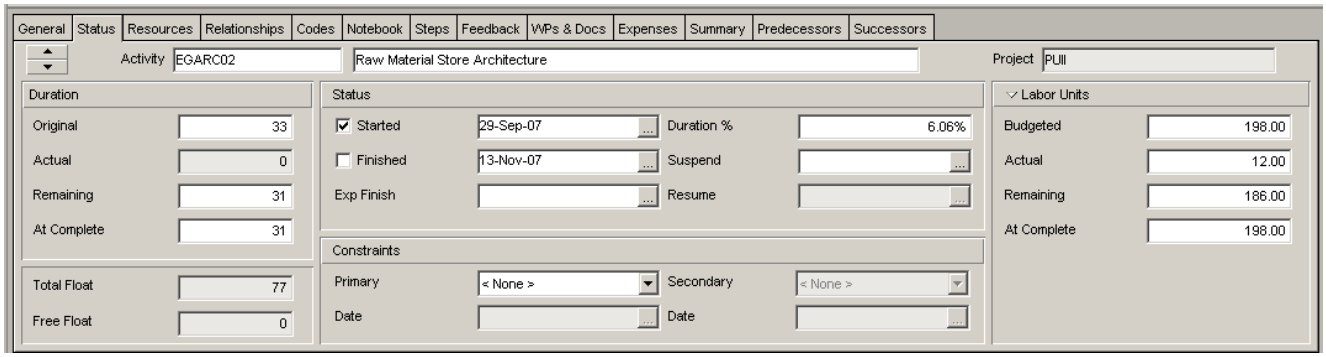
Choose from several ways of updating your schedule. You can update progress for all activities and resources as a whole; update activities and resources individually; or use a combination of the two methods.
If your project is progressing exactly as planned, or if you only need to estimate progress, simply specify the data date or "as-of" date and allow the module to determine which activities have progressed and how much, calculate the remaining durations of activities that have started, and set the remaining durations of activities that have completed to zero.
If your project is not progressing as planned-many activities are starting out-of-sequence, activities are taking more or less time to complete than originally planned, actual resource use is exceeding planned use update activities and resources individually. This will help you forecast the effects of unforeseen circumstances, so that you can take appropriate corrective action.
Most projects contain some activities that progress as planned and some which do not. In this case, combine the two updating methods. Calculate your project as if it is progressing exactly as planned, and then individually update those activities and resources that have deviated from the plan.

Manually Applying Actual

Activities, which are not progressing as per plan, can be statused separately from Activity Details. Select the activity to be statused and activate activity details from Display options.

Activate **Status** tab from activity detail and give Start Date and Finish Date if activity is 1% complete.
Started: Mark to indicate that the selected activity has started. The field beside this checkbox displays the activity's planned start date. If the selected activity has started or is complete, this field displays the activity's actual start date.
Finished: Mark to indicate that the selected activity is complete. The field beside this checkbox displays the activity's remaining finish date. If the selected activity is complete, this field displays the activity's actual finish date.
Exp Finish: The date the activity's primary resource expects the activity to end. Only the primary resource can edit this date.
When you add an Expected Finish date, the calendar defaults to the date and time of the activity's Early Finish date.
When you edit an Expected Finish date, the calendar defaults to the date and time that is currently in the Exp Finish field.

%: If the selected activity's percent complete type is set to Duration, the selected activity's duration percent complete is calculated from the original and remaining duration.
If the selected activity's percent complete type is set to Units, this field displays the selected activity's unit percent complete, as calculated from the actual and remaining units.
If the selected activity's percent complete type is set to Physical, this field displays the selected activity's physical percent complete, which is manually entered.
Note: The activity must be started to edit the % field.
Suspend: Enter the date on which the activity's progress stopped. The activity must be started to enter a Suspend date.
Resume: Enter the date on which the suspended activity's progress resumed.



Class Exercise: Given following is the status of activities as of **1st October 2007**.

Activity ID	Actual Start	Actual Finish	% Complete
EGGEN1	4-Sept-07	4-Sept-07	100%
EGGEN2	5-Sept-07	17-Sept-07	100%
EGGEN3	11-Sept-07	28-Sept-07	100%
EGARC1	29-Sept-07	-	6.82%
EGARC2	29-Sept-07	-	6.06%
CNGEN1	5-Sept-07	-	86.67%

Class Exercise: Given following are the actual man-hours spent on the above activities.

Activity ID	Resource Name	Actual Regular Units	Actual Overtime Units
EGGEN2	Milind	48	8
	Domnic	32	8
	Srinivasan	32	8
	Joseph	40	8
EGARC1	Parthiban	24	8
EGARC2	Vijay	12	0

Class Exercise: Given following are the expenses occurred till **1st October 2007**

Activity ID	Expense Item	Expense Category	Actual Cost
EGGEN3	Plotter	Equipment	Rs.2,800
EGGEN1	Consulting	Legal & Professional	Rs.8,250
CNGEN1	Site Office	Facilities	Rs.26,700

After updating the project for the above status, schedule the project on **1st October 2007**.
1st October 2007 is the date on which progress of project has been collected and updated.

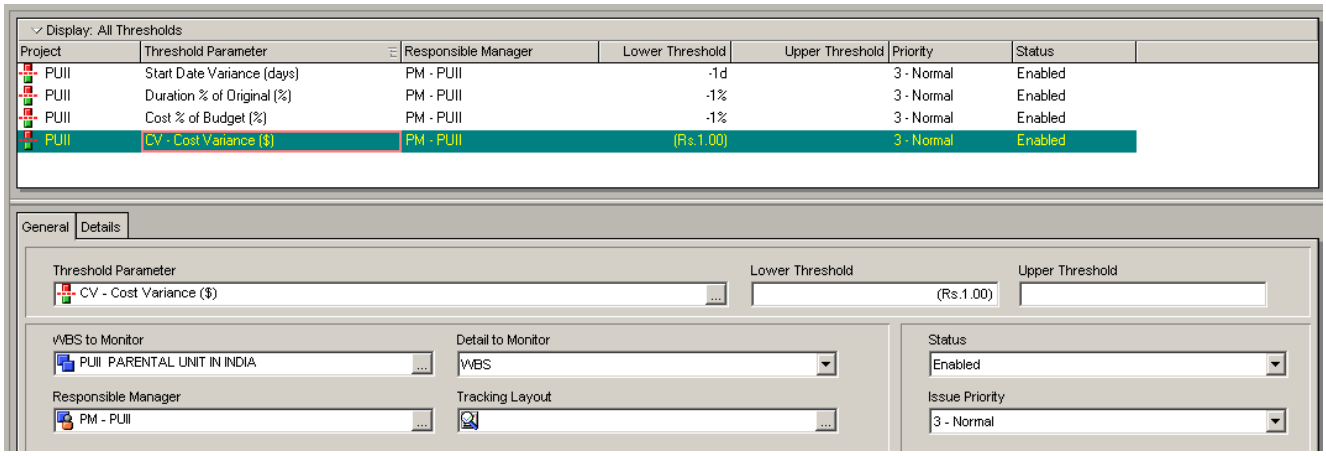
S. THRESHOLD MONITORING AND ISSUES

THRESHOLDS

Use thresholds as a project management technique. You can create a threshold by selecting a parameter, such as start date variance; setting lower and upper values for the threshold; and applying the threshold to a specific work breakdown structure (WBS) element, or area, of your project plan.

When you define a threshold for a WBS element, you can specify the level of detail by which you want to monitor the WBS element. You can monitor the threshold at the activity level, and you can monitor the threshold at the WBS level. If you monitor a threshold at the activity level, issues are generated for each activity that violates the threshold. If you monitor a threshold at the WBS level, each activity contained in the specified WBS element is tested, and then all issues are summarized to the WBS element, rather than each activity.

After you define a threshold, you can monitor it to identify any issues associated with it. For example, you may set a threshold using the Total Float parameter. If the lower threshold value is 1d and the upper threshold value is 1d, an issue is generated for any activities that have a total float less than or equal to 1d or more than or equal to 1d. You can assign a person to be responsible for issues generated by the threshold. You can also specify threshold tracking layouts and assign priority levels to thresholds. A threshold's tracking layout assignment identifies the tracking layout that best displays the threshold problem area.



To add a threshold:

Choose Project, Thresholds. Click Add.
To specify a threshold parameter, in the Threshold Parameter field on the General tab. Select the parameter, then click the Select button.
In the Lower Threshold and/or Upper Threshold fields, type a numeric value.
To identify issues, project data is evaluated using a less than or equal to algorithm for the lower threshold value and a greater than or equal to algorithm for the upper threshold value. For example, to generate a Start Date Variance issue if an activity starts one or more days early or three or more days late, you would specify a lower threshold of –1 and an upper threshold of 3.
To select the work breakdown structure (WBS) element you want to monitor for the new threshold, in the WBS to monitor field. Select the element, and then click the Select button.
In the Detail to Monitor field, select the level at which you want to monitor the WBS element. When Detail to monitor is set to Activity, the threshold monitor will review activities belonging to the WBS element you specified, as well as the activities for all of its child WBS elements.

To assign responsibility for the threshold's issues to a member of the OBS structure, in the Responsible Manager field. Select the name of the manager, and then click the Select button.
To associate a tracking layout with the threshold's issues, in the Tracking Layout field. Select the layout, and then click the Select button.
To assign a priority level to issues generated by the selected threshold, in the Issue Priority field, select a priority level.
To specify the time-period during which you want to monitor the threshold, in the Monitor Time Window area From Date and To Date fields. To specify a custom date, click the date in the calendar window, then click the Select button.

The From Date and To Date values define a window in time for this threshold. Any activities/WBS elements whose start dates exceed the To Date or whose finish dates precede the From Date will not be reviewed by the threshold monitor and, therefore, will not generate any issues

Class Exercise:

Give the following threshold parameter for generating issues on Start Date Variance.

Threshold Parameter	WBS	Details to Monitor	Lower Threshold	Upper Threshold
Start date variance	PUII	Activities	-1	

Give the following threshold parameter for generating issues on Total Float.

Threshold Parameter	WBS	Details to Monitor	Lower Threshold	Upper Threshold
Total Float	PUII	Activities	1	1

Give the following threshold parameter for generating issues on Finish Date Variance.

Threshold Parameter	WBS	Details to Monitor	Lower Threshold	Upper Threshold
Finish date variance	PUII	Activities	-1	

Give the following threshold parameter for generating issues on Cost Variance.

Threshold Parameter	WBS	Details to Monitor	Lower Threshold	Upper Threshold
Cost variance	PUII	Activities	(Rs.1.)	

Give the following threshold parameter for generating issues on Schedule Variance.

Threshold Parameter	WBS	Details to Monitor	Lower Threshold	Upper Threshold
Schedule variance	PUII	Activities	(Rs.1.)	

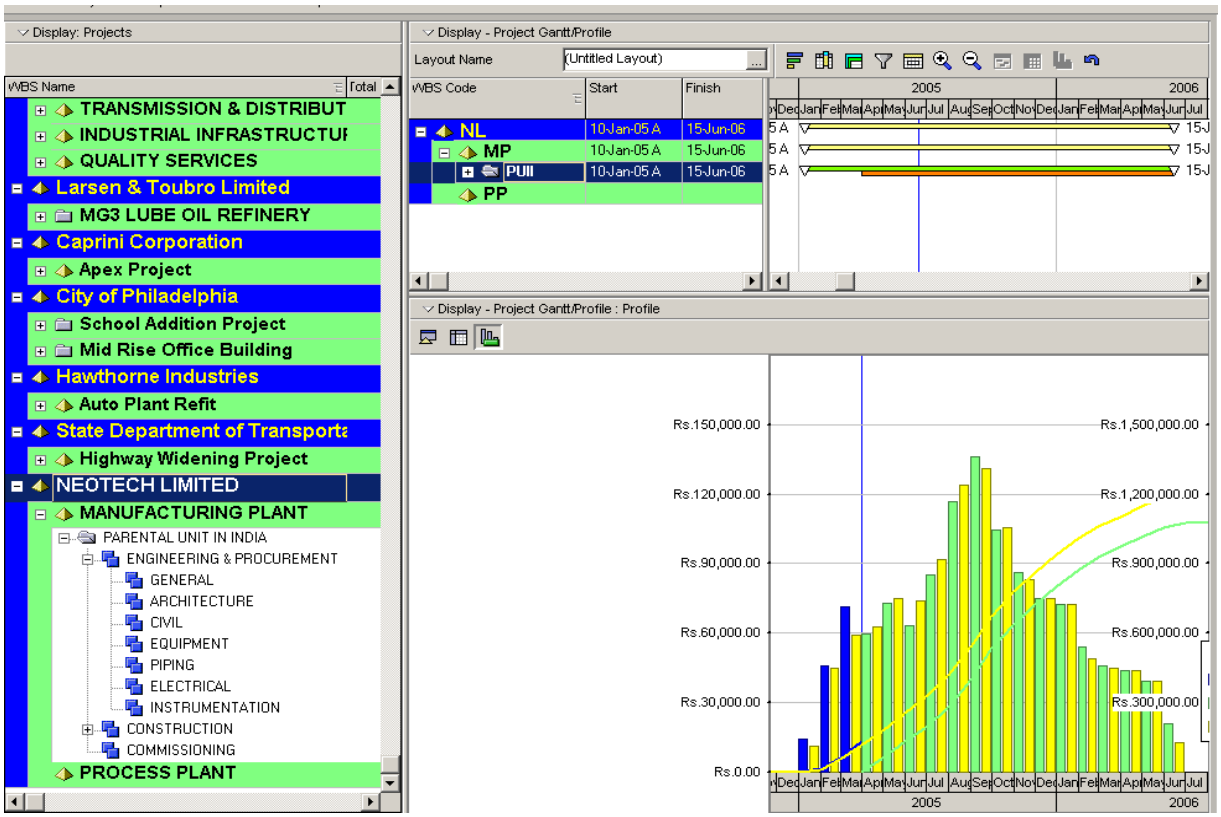
ISSUES

Issues are known problems within a project plan that require attention or corrective action. You can manually create issues and you can generate issues automatically by defining project thresholds. You can associate these issues with work breakdown structure (WBS) elements, activities, or resources.
When you add an issue, you can assign a priority level, tracking layout, and responsible manager to the issue. An issue's tracking layout assignment is helpful when you want to quickly open the tracking layout that best displays the problem area. An issue's responsible manager assignment identifies the person responsible for addressing the issue. You can record historical details for the issue and e-mail issue details, along with your notes and the issue's history, to any member of the project's staff.
In addition to these features, an Issue Navigator feature enables you to select a current issue and navigate to specific areas of the module to view different issue details quickly.

Generate Issues from a specific threshold:
Choose Project, Thresholds. Select the threshold you want to monitor. Click Monitor, and then click yes.
Note: If you monitor a threshold whose status is disabled, no issues are generated.

T. PROJECT TRACKING AND REPORTS

The tracking features assist you in performing schedule, cost, and resource analyses by enabling you to access, display, and manipulate project data in a variety of formats. Review summarized or live project data at various levels of detail. The Tracking window always displays summarized data for closed projects but also when you choose to open only global data. Note that summarized data are available only for projects that have been summarized in the Primavera Job Service. For open projects, you can display live WBS data.



TRACKING LAYOUTS

You can create four types of tracking layouts: Project Bar Charts, Project Gantt/Profiles, Project Tables, and Resource Analyses. Each of these layout types enable you to survey your project first at a comprehensive level, then at more detailed levels according to the Enterprise Project Structure (EPS), project, work breakdown structure (WBS), organizational breakdown structure (OBS), WBS category, or specific WBS data elements. You can use features such as filtering and grouping to customize the format and level of information you want to include in a tracking layout.

When you create and save a layout, only the presentation options are saved, not the data. This enables you to use the layout with different projects. When you open a layout, you can choose the project for which you want to display information by selecting it in the Project Explorer window on the left. By clicking another item in the Project Explorer window, you can present data for a different EPS element using the same layout.

You can specify whether a layout you create is available to all users (global) or only to a specific user. Tracking layouts can be published to Web sites and imported from and exported to spreadsheet programs. To help you monitor a project's problem areas, you can assign tracking layouts to thresholds and issues.

To open a tracking layout:-
Choose Enterprise, Tracking, then choose View, Layout, Open.
You can also click the Display Options bar in the Layout window and choose Layout, Open.
Select a layout and click OK.

REPORTS

In addition to providing a large library of standard project management reports, two reporting tools are available to access and report information stored in the database: the Report Wizard and the Report Editor.

You can use the Report Wizard to easily create a wide variety of customized reports. The wizard steps you through the process of creating new reports, enabling you to select the category of information and specific data fields to include. You can group, sort, and filter project information and include time-distributed data for units and costs.

The Report Editor is a powerful tool that enables you to create reports that are highly customized. Although you can create customized reports with the Report Wizard, the Report Editor provides the capability to tailor a report more closely to your specific requirements. The Report Editor enables you to group, sort, filter, and roll up project information. You can display time distributions for units and costs and include graphics and HTML links in your reports. You can use the Report Editor to further customize reports you create with the Report Wizard. However, if you modify a wizard report in the Report Editor, when you reopen the report in the wizard, you lose all of the modifications made in the Report Editor.

You can preview and print reports and you can save reports as text or HTML files. If you save a report to a file, you can import the data to a spreadsheet program, e-mail the report, publish the report on a Web site, and/or archive the report.
To view a list of the standard reports, select Tools, Reports, and Reports.
To create a new report with the Report Wizard:-
Choose Tools, Report Wizard. Follow the prompts on each dialog box in the wizard to create the report.

Notes:
To create or edit global reports from the Report Wizard or Report Editor, you must have Edit Global Reports security privileges. To create or edit project reports from the Report Wizard or Report Editor, you must have Edit Project Reports security privileges. You do not require security privileges to view global or project reports.
You can use the Report Editor to further customize reports you create using the wizard. However, if you modify a wizard report in the Report Editor, when you reopen the report in the wizard, you lose all of the modifications made in the Report Editor.

U. PROJECT UTILITIES

EXPORT / IMPORT

All project data is stored in a central database. You can export and import information to and from this database using external files and then share this information with other Primavera Project Management modules, other project management tools (such as Microsoft Project), and your organization's human resource and accounting systems. You can also use external files to archive your projects or create a backup of your database.

You can import the following file formats:

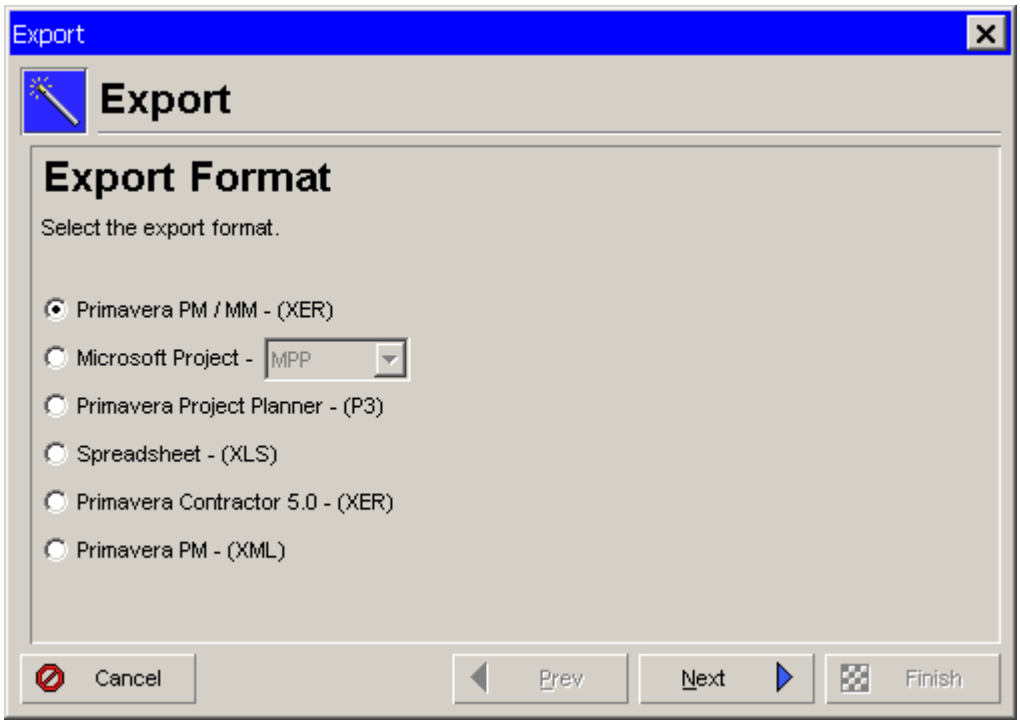
- Primavera's proprietary format (XER) supports all project information developed using the Primavera suite of project management tools.
- XML files that support project information exported from the Project Management module.
- XLS files enable you to import information from spreadsheet applications.
- MPP, MPD, MDB, and MPT files enable you to share information with Microsoft Project. You must have Microsoft Project 98 or later installed on your computer to import an MPP, MPD, MDB, or MPT file.
- MPX format enables you to share information with Microsoft Project, as well as to integrate with other third-party tools.
- P3 format enables you to share project information with Primavera Project Planner version 3.x.

You can export to the following file formats:

- Primavera's proprietary format (XER) supports all project information developed using the Primavera suite of project management tools. The Primavera PM/MM XER enables you to export data for use with the Project Management module, Methodology Management module, and Primavera Web application. The Primavera Contractor 5.0 XER enables you to export data for use with Primavera Contractor 5.0.
- Primavera's Project Management module XML format, which enables you to share project information between Project Management databases.
- XLS files enable you to export information to spreadsheet applications.
- MPP format enables you to share information with Microsoft Project. You must have Microsoft Project 98 or later installed on your computer to export an MPP file.
- MPX format enables you to share information with Microsoft Project, as well as to integrate with other third-party tools.
- Microsoft Project XML format enables you to share information with Microsoft Project 2002. You must have Microsoft Project 2002 or later installed on your computer to export an XML file in Microsoft Project XML format.
- P3 format enables you to share project information with Primavera Project Planner version 3.x.

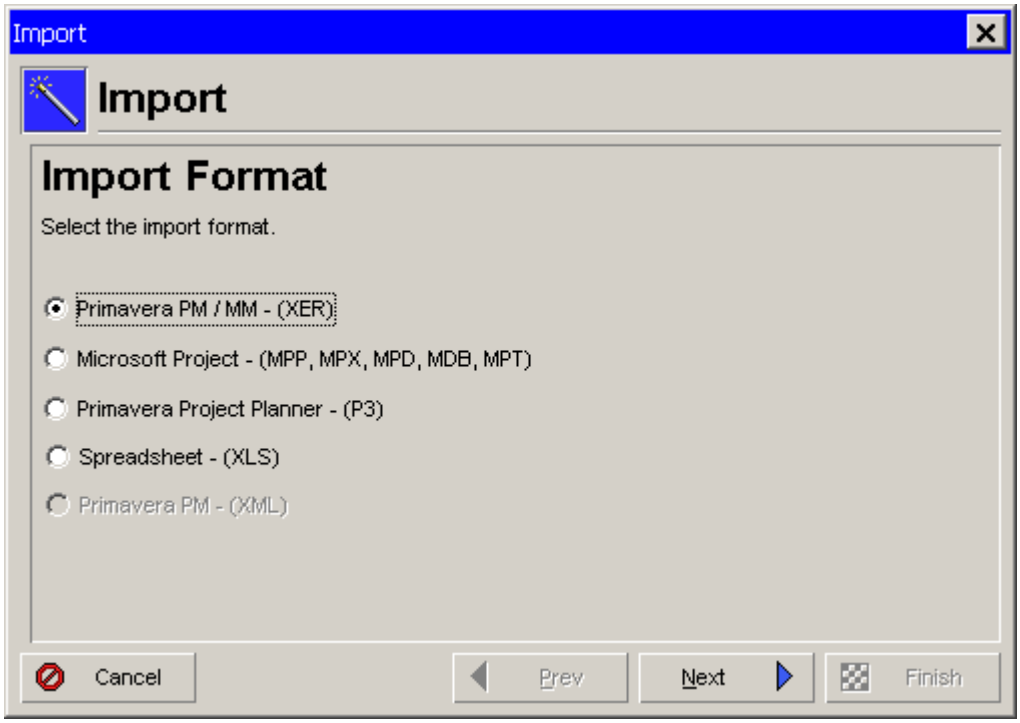
Exporting Projects from P6:

To export projects activate **File / Export** menu.
Projects can be exported into XER, MPX, P3, Contractor (XER), XLS or XML format.
Resources, Expenses, Time sheets and Roles can also be exported from P6 in XER, MPX or TXT format. Users should ensure that the project to be exported should be open.



Importing Projects in P6:

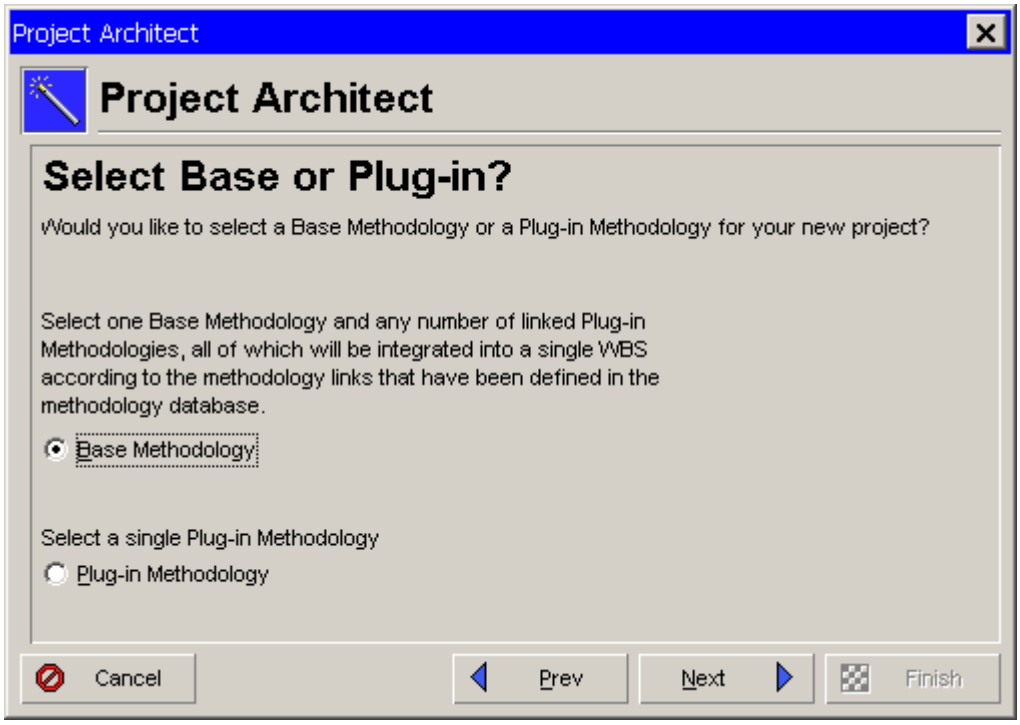
To import project activate **File / Import** menu.
Projects, resources and roles can be imported into P6.
Projects to be imported should be in XER, MPX, P3, Contractor (XER), XLS or XML format.



PROJECT ARCHITECT

The Project Architect wizard helps you select, customize, and import methodologies as pre-built project plans from the Methodology Management module.
Use Project Architect to create a new project plan or to add activities and associated information to an existing project. Because Project Architect copies methodologies from the Methodology Management database, when you customize a methodology, the information you change does not affect the source methodology. When you choose a methodology and tailor it within Project Architect, you can record a rationale for your selections to create a decision history you can refer to later.
In addition to providing access to methodologies, Project Architect also contains a bottom-up estimation feature that enables you to estimate resource units and costs for your methodology selections. Project Architect bases this estimate on project size and complexity factors that you specify during the architect process. This allows you to estimate work effort and cost before creating or adding a project.
After you select and customize the methodologies you want to import, Project Architect displays detailed summaries of the project plan you developed, including a list of information you removed. You can return to a previous window and make additional changes before importing the project.

To activate go to **File / Project Architect** menu



SEND PROJECT

To Export and email a project, Open the project you want to export and email. Choose File, Send Project.

The application creates an XER export file, automatically opens your email system, and attaches the XER file to the body of the email message. The subject line of the email is automatically populated with the name of the project.

Enter the email address and send the email.

CHECK IN / CHECK OUT

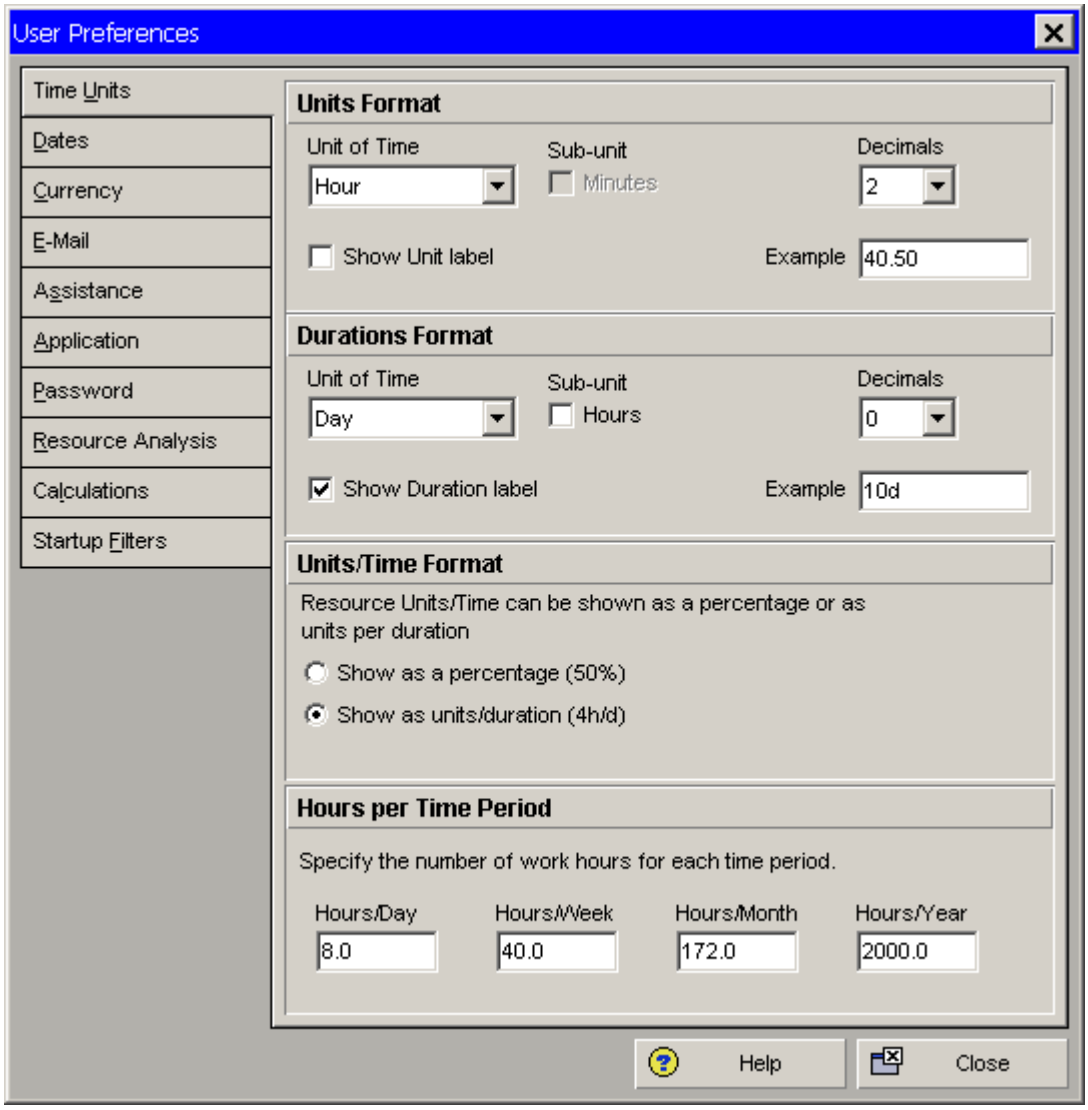
You can "check out" projects so that they can be worked on remotely. Once a project is checked out, it can no longer be modified until it has been checked in. In addition to checking in the project, you may replace the existing project with the remote copy of the project by using the Import wizard.

Choose File, Check In / Check Out to perform the above.

USER PREFERENCES

Use the User Preferences dialog box to specify your settings and preferences which includes how to display time, date, and currency information. You can also set options to send e-mail, specify startup options, and change your password.

To define user preferences:-
Choose Edit, User Preferences.

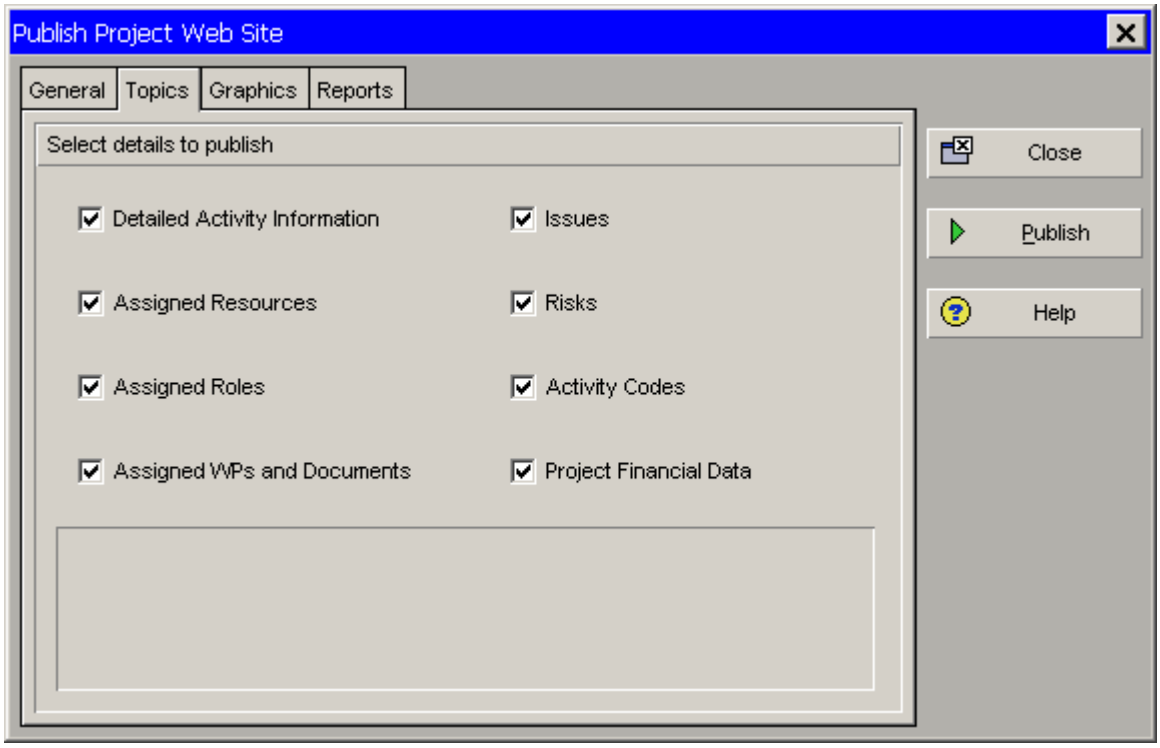


Click the Time Units tab and define how to display time information.
Click the Dates tab and specify a format for dates.
Click the Currency tab and select a view currency. Also, specify how to format currency data.

Click the E-Mail tab and enter your e-mail settings.
Click the Assistance tab and specify which wizards to use.
Click the Application tab and set your startup options. You can also select how you want labels on grouping bands to display.
Click the Password tab and modify your password.
If the Project Management module is running in LDAP authentication mode, password management is handled through the directory server. You cannot change your password through the module and the Password tab does not appear in the User Preferences dialog box.
Click the Resource Analysis tab. Define the parameters for viewing all project data in the Resource Usage profile and how to display and calculate time-distributed data.
Click the Calculations tab and choose how you want the units, duration, and units/time calculated when adding or removing multiple resource assignments on activities.
For Oracle or SQL Server installations, click the Startup Filters tab and choose to display current project data or all data in the enterprise.

PUBLISHING PROJECT WEB SITE

To facilitate communicating project data in a company with offices local or worldwide, you can publish project plans in HTML format using the Project Web Site Publisher. Transfer these documents to either the World Wide Web (using FTP) or your office intranet, and view them using an Internet browser. The documents contain hypertext links, or jumps, to other pages in the structure, allowing you to move between projects and reports and from page to page within a report. When publishing a project Web site, you control the level of detail published in terms of activity information and personal information for resources, as well as which project reports you want to include in the Web site.

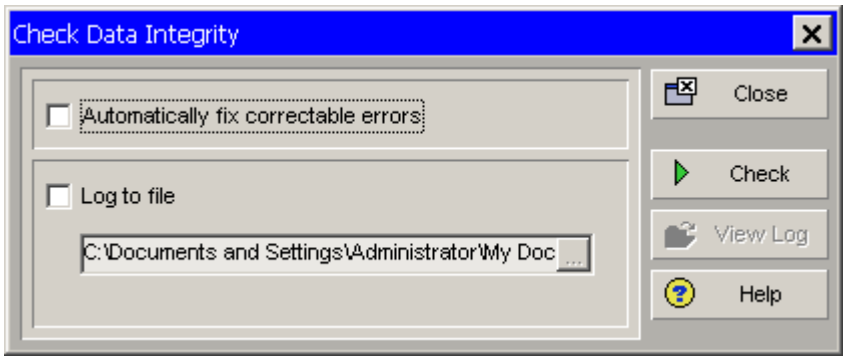


To publish projects as Web sites:-
Before you publish a project as a Web site for the first time, you may want to create a new folder on your computer or network or verify that the existing folder you want to use is empty.
Open the project you want to publish.
Choose Tools, Publish, Project Web Site.

Click the General tab.
In the Web Site Name field, type the title of the Web site.
In the Web Site Description field, type a description of the Web site. This description appears on the Web site's initial page.
In the Publish Directory field, type the full path for the folder in which you want to save the project's Web site files, or click and select the location.
Click Edit Scheme to modify the specified scheme or select another scheme.
Click the Topics tab and mark the appropriate checkboxes to specify the project information you want to publish on the project's Web site.
The checkboxes determine what Activity Details are available on the project Web site. If you clear all checkboxes, then the General activity information option is automatically selected because at least one type of activity detail information must be included in the Web site.
Click the Graphics tab and specify which activity or tracking layouts to include as graphical reports in the Web site.
Click the Reports tab and specify which reports to include in the Web site.
Click Publish.
If the folder you selected contains older Web site files or other files, a message warns you that those files will be deleted. Choose Yes to continue or No to cancel.

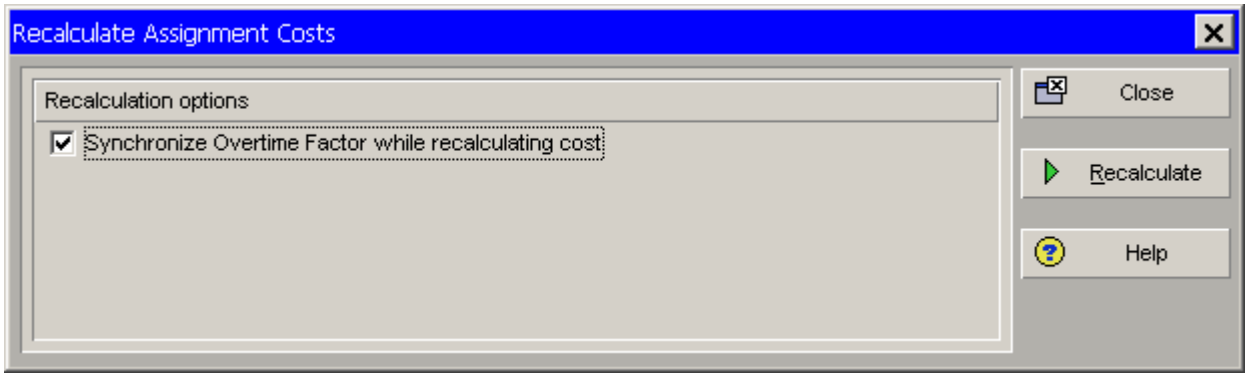
CHECK PROJECT INTEGRITY

Use the Check Data Integrity dialog box to identify and/or correct errors and inconsistent information in the open projects.
Automatically fix correctable errors: Mark to automatically fix inconsistent information that it finds.
Log to file: Mark to save and view the results of the data integrity check to a log file (.txt). Enter the name of the file in which you want to save the results of your data integrity check. Click Browse to select a new file.
Check: Identifies and/or corrects inconsistent information in the open projects, depending on the options you select.
View Log: Displays details about your data integrity check.



RECALCULATE RESOURCE COST

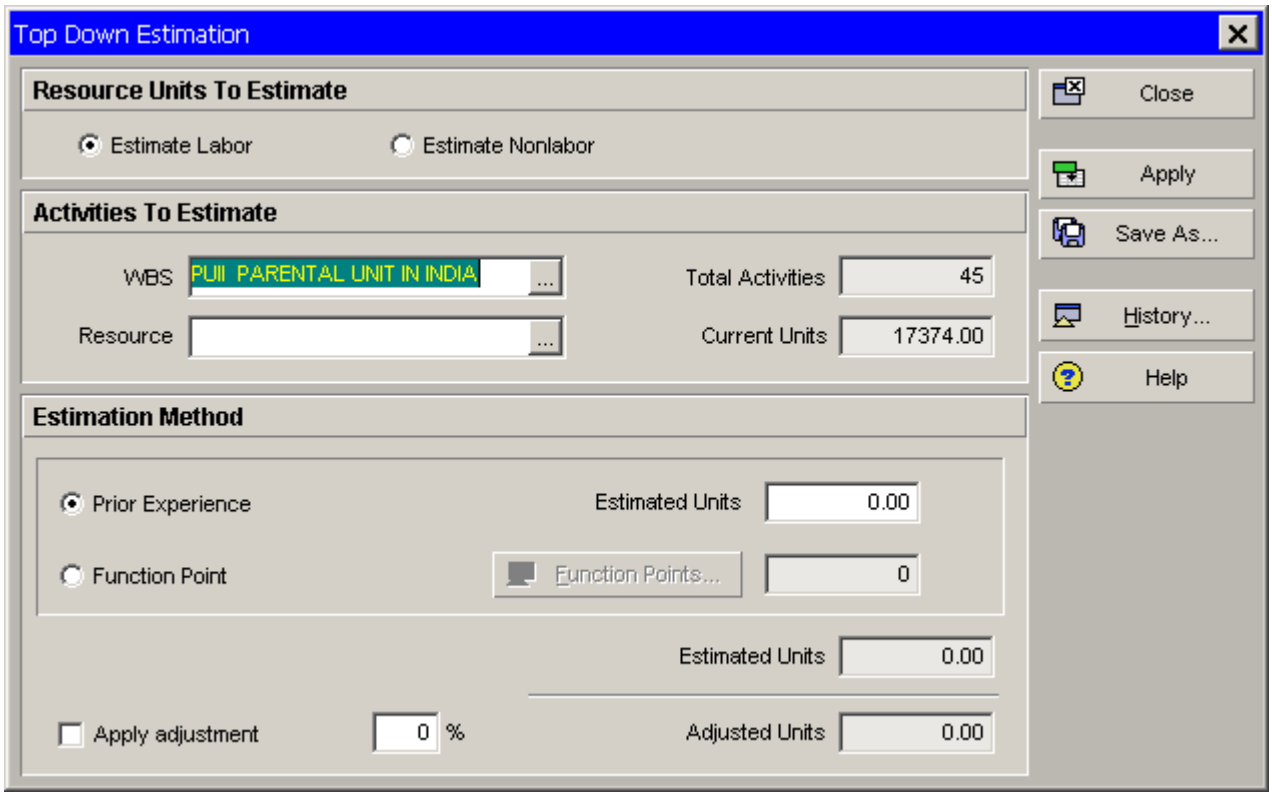
Use the Recalculate Resource Costs dialog box to update resource costs for activities in the open project.
Synchronize Overtime Factor while recalculating cost: Mark to also include the overtime factor for the resource when recalculating cost.
Recalculate: Recalculates resource prices.



TOP DOWN ESTIMATION

Estimation is a convenient way to set up the initial planned effort for activities in a project plan and to calculate a ballpark figure for cost and time.
The Top-Down Estimation feature enables you to apply labor, non-labor, and material resource units to WBS elements and activities in a top-down manner using estimation weights.
You can limit the scope of your estimate according to work breakdown structure (WBS) element and resource.
After you develop a top-down estimate, save the estimate for later reference, or apply the estimate to the project. If you apply an estimate, Project Manager updates budgeted labor/non-labor units for all activities and activity resource assignments that fall within the estimation scope you specify.
Top-down estimations do not affect project expenses.

Note: To perform top-down estimation, you must first assign estimation weights to WBS elements and activities.



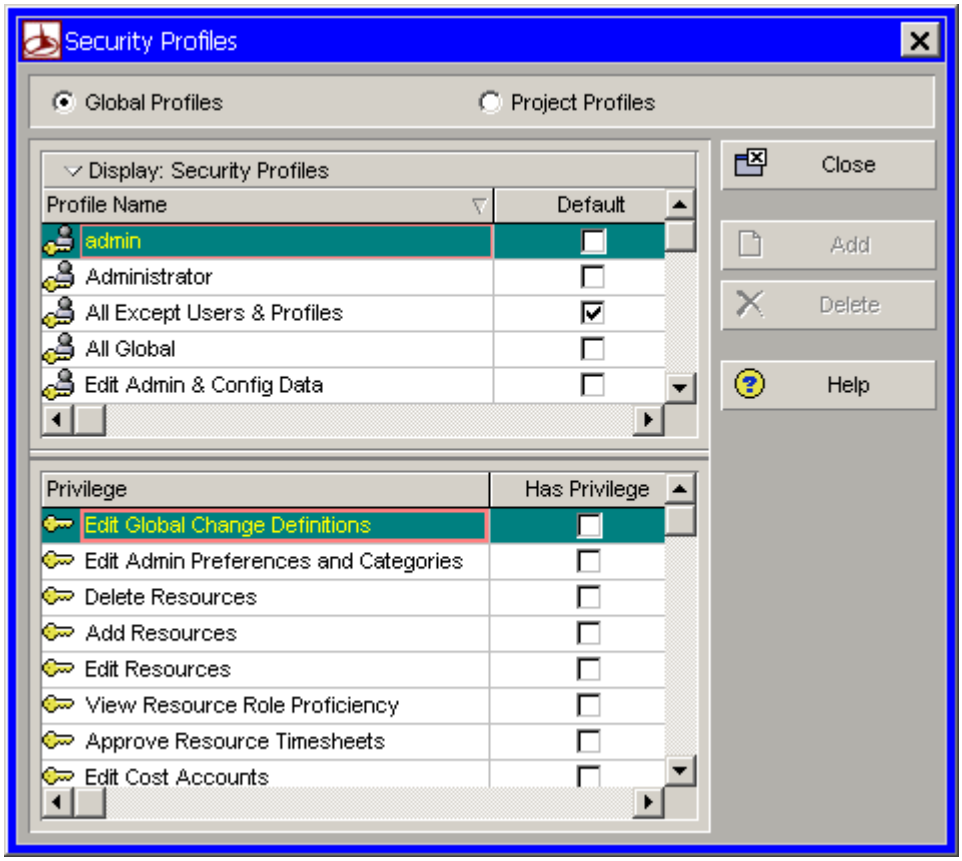
V. ADMINISTRATIVE FUNCTIONALITIES OF P6

Administrative functionalities of P6 enable to define users and assign security profiles, admin preferences, admin categories and currencies.

USERS & SECURITY PROFILES

Security profiles determine a user's level of access to project information. The security profiles include both global profiles and project profiles. A global profile determines the user's access to application-wide information. A project profile determines the user's level of access to each project within the enterprise project structure (EPS). When you assign a project profile to a user, you also associate the project profile with an OBS element/responsible manager. The user's access privileges, as defined in the project profile, will then apply only to those elements of the EPS that are assigned to the OBS element/responsible manager you selected.

To define application users activate **Admin/Users** menu.
Click on ADD to add users.
Click on “General” tab to give log-in name and password for the new application user.
Click on “Global Access” tab for assigning Global Security profile to the application user.
Click on “Project Access” tab and assign the responsible OBS to the application user.
To define security profiles activate **Admin/Security Profiles**.
Application administrators can define Global and Security and profiles and assign the same to the application users
To add new global profile click on ADD and grant the privileges by enabling the check boxes.
Depending on Privilege, global profile allows or prevents the application users from editing Global information.
Depending on Privilege, Project Profile allows or prevents the application users from editing project information.

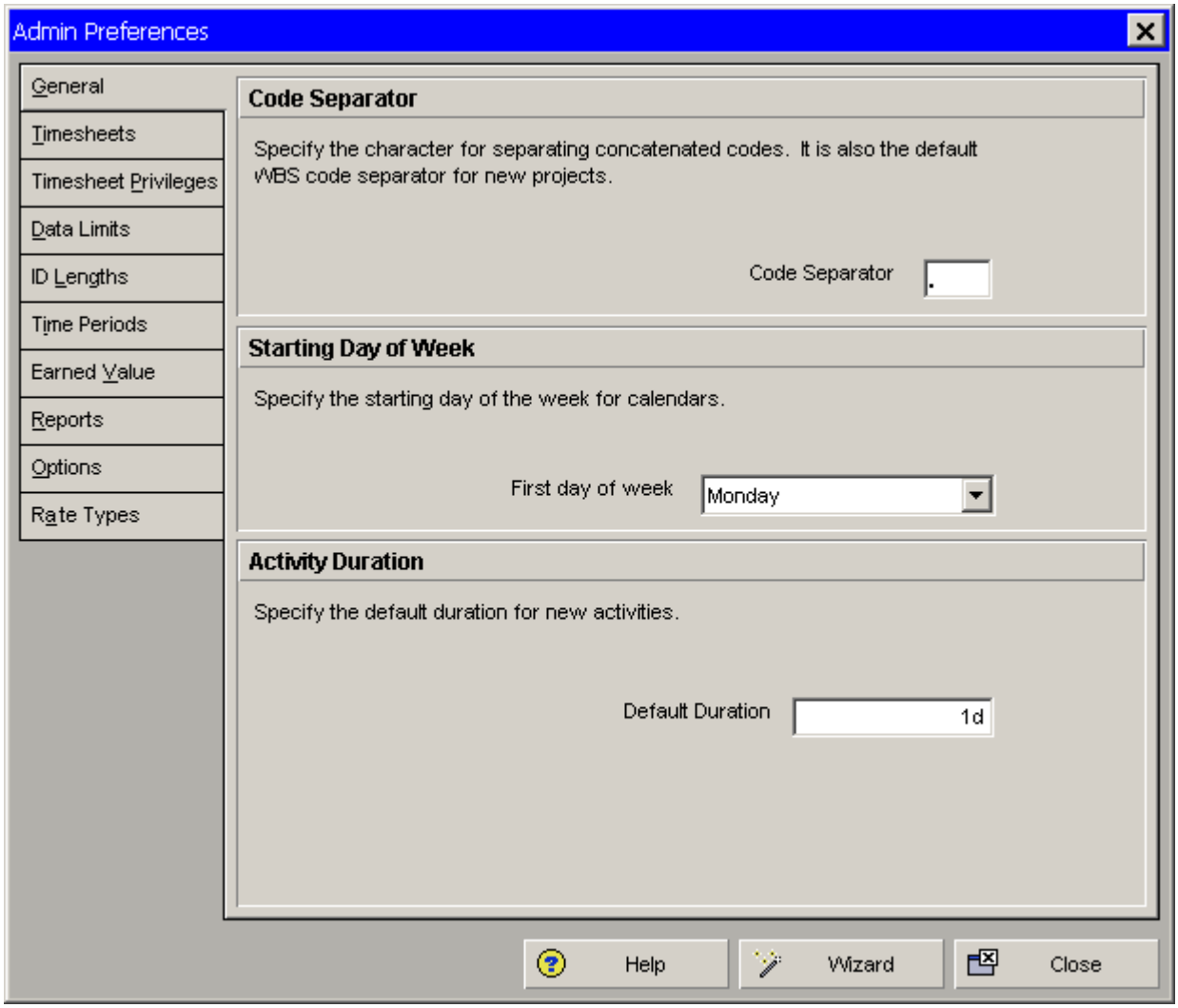


ADMIN PREFERENCES

To activate Admin Preferences click on **Admin/Admin Preferences** menu.
Click on “Data Limits” tab to specify maximum number of levels for trees.
Maximum number of levels for EPS and WBS trees is 5 and for OBS, RBS, Cost Account code, Activity Code the maximum number of levels is 25.
Maximum number of activity codes per project is 5 and maximum number of baselines that can be stored for project is 5.
Maximum number of characters for Activity ID, WBS ID, Cost Account ID and Resource ID are 2.
Users can define currency options by clicking on “Currency” tab.
User defined fields for the subject areas can be defined by clicking on “User Fields” tab.
Hours per Time Period and Time Period Abbreviations can be set by clicking on “Time Periods” tab.
Hours to day, hours to week, hours to month and hours to year conversions are based on the values specified in the Hours/Time period option.

General

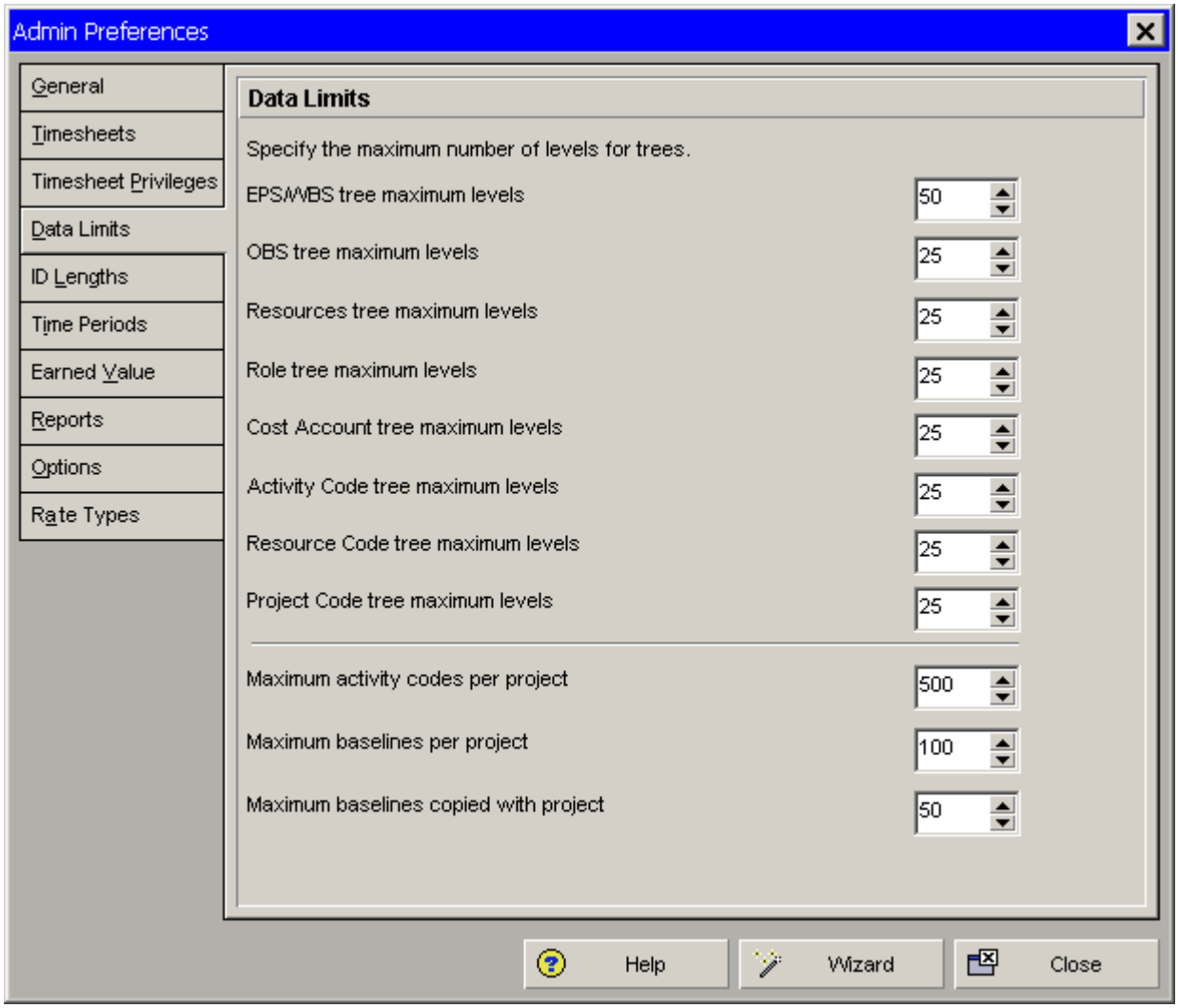
The General tab enables you to specify general default options, such as the weekday on which the calendar week begins. You can also specify the character that separates cost account codes to indicate hierarchy levels and the default duration for new activities.



Code Separator: The character that separates cost account and activity codes to indicate hierarchy levels. You can type a new character.
Starting Day of Week: The first day of the week for global, project, and resource calendars. You can select a new weekday.
Activity Duration: The default duration for activities in all projects. You can type a new duration.

Data Limits

Use data limit tab to specify the maximum number of levels for hierarchical structures.
One can also specify the maximum number of baselines and activity codes that can be included in a project.
New settings apply only when adding new elements or editing existing elements.

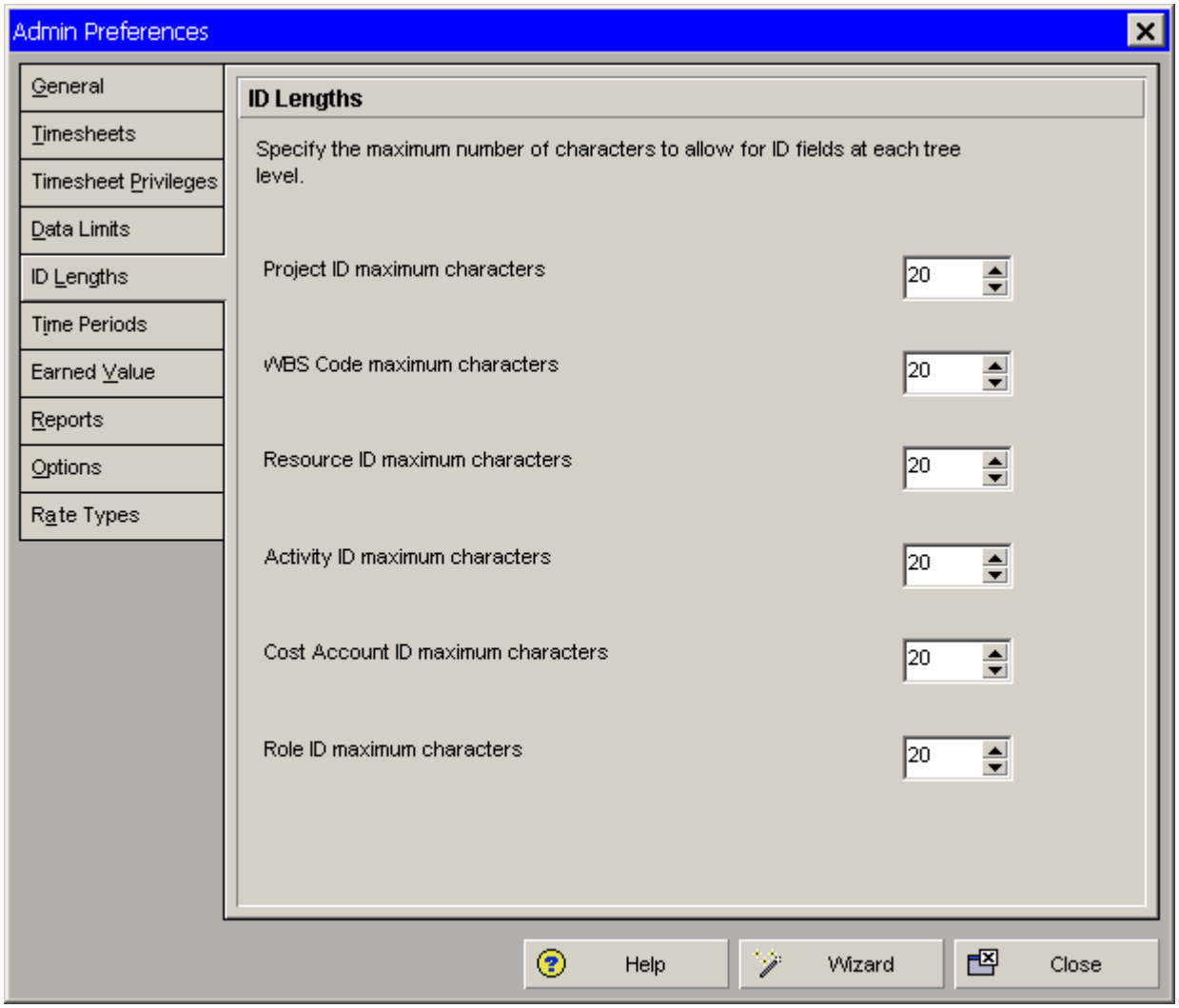


ID Lengths

Use the ID lengths to specify the maximum number of characters for ID's and Codes.

The ID Lengths tab enables you to specify the maximum number of characters for codes, from 1 to 20.
Project ID maximum characters: Specify the maximum number of characters for project IDs.
WBS Code maximum characters: Specify the maximum number of characters for work breakdown structure (WBS) codes.

Resource ID maximum characters: Specify the maximum number of characters for resource IDs.
Activity ID maximum characters: Specify the maximum number of characters for activity IDs.
Cost Account ID maximum characters: Specify the maximum number of characters for cost account codes.
Role ID maximum characters: Specify the maximum number of characters for role IDs



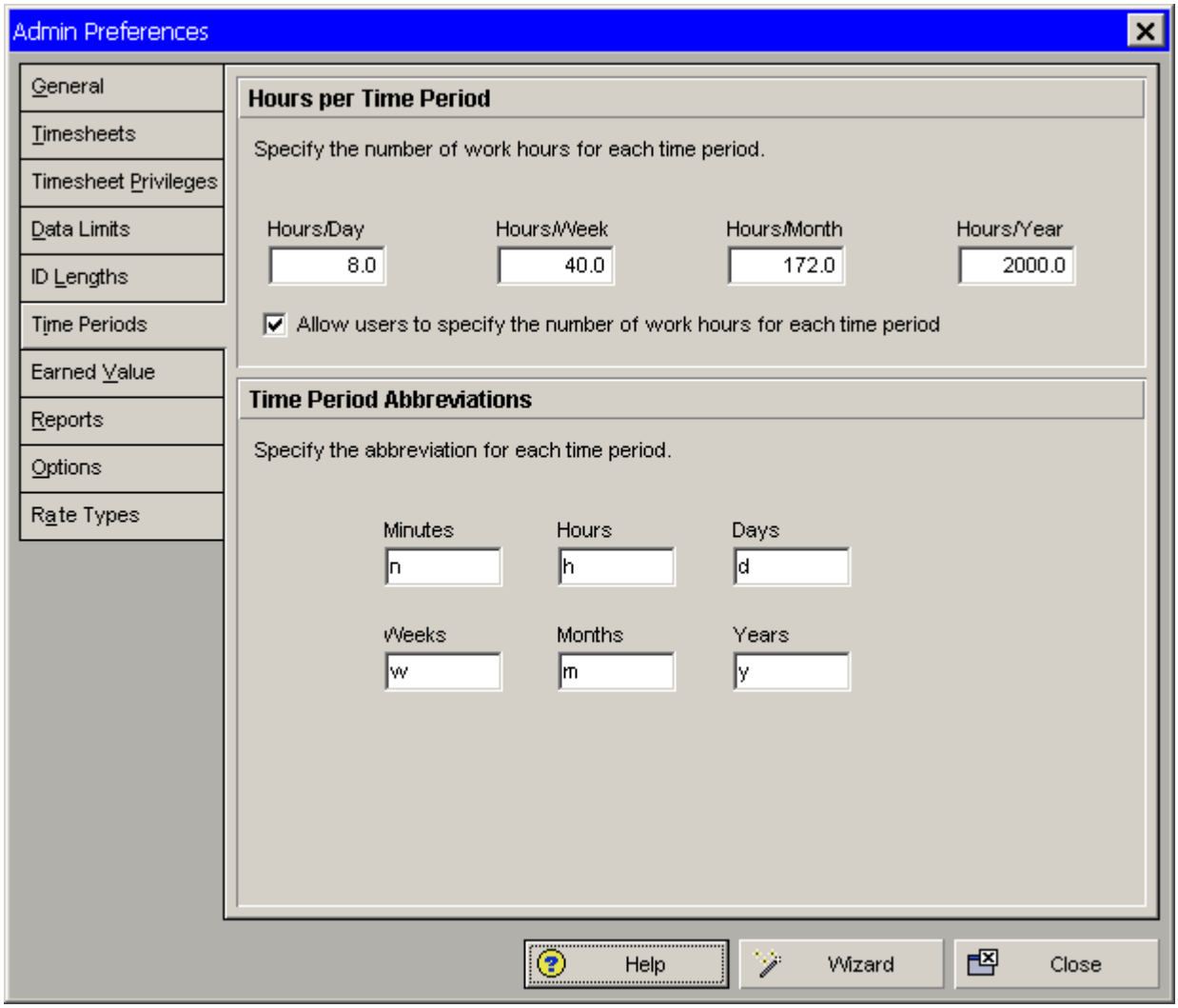
Time Periods

Primavera calculates and stores time unit values in hourly increments. However, through User Preferences, each user can choose to display time unit values as hours, days, weeks, months, or years. When a user displays data in time unit fields in increments other than hours, the Project Management module converts the data based on the Hours per Time Period settings. Conversely, if a user enters time units in increments other than hours, the Hours per Time Period settings are used to convert these input values to hours for database calculation and storage.

As an administrator, you can specify the conversion factors or you can allow users to specify the conversion factors. If you want to specify the conversion factors, enter the number of hours to use as a conversion factor in each field. If you want users to specify the conversion factors, mark the 'Allow users to specify the number of work hours for each time period' checkbox.

Allow users to specify the number of work hours for each time period: If you do not select this option, the Hours per Time Period settings you specify here are used as conversion factors. If you

do select this option, the Hours per Time Period the user specifies in User Preferences are used as conversion factors.



Earned Value

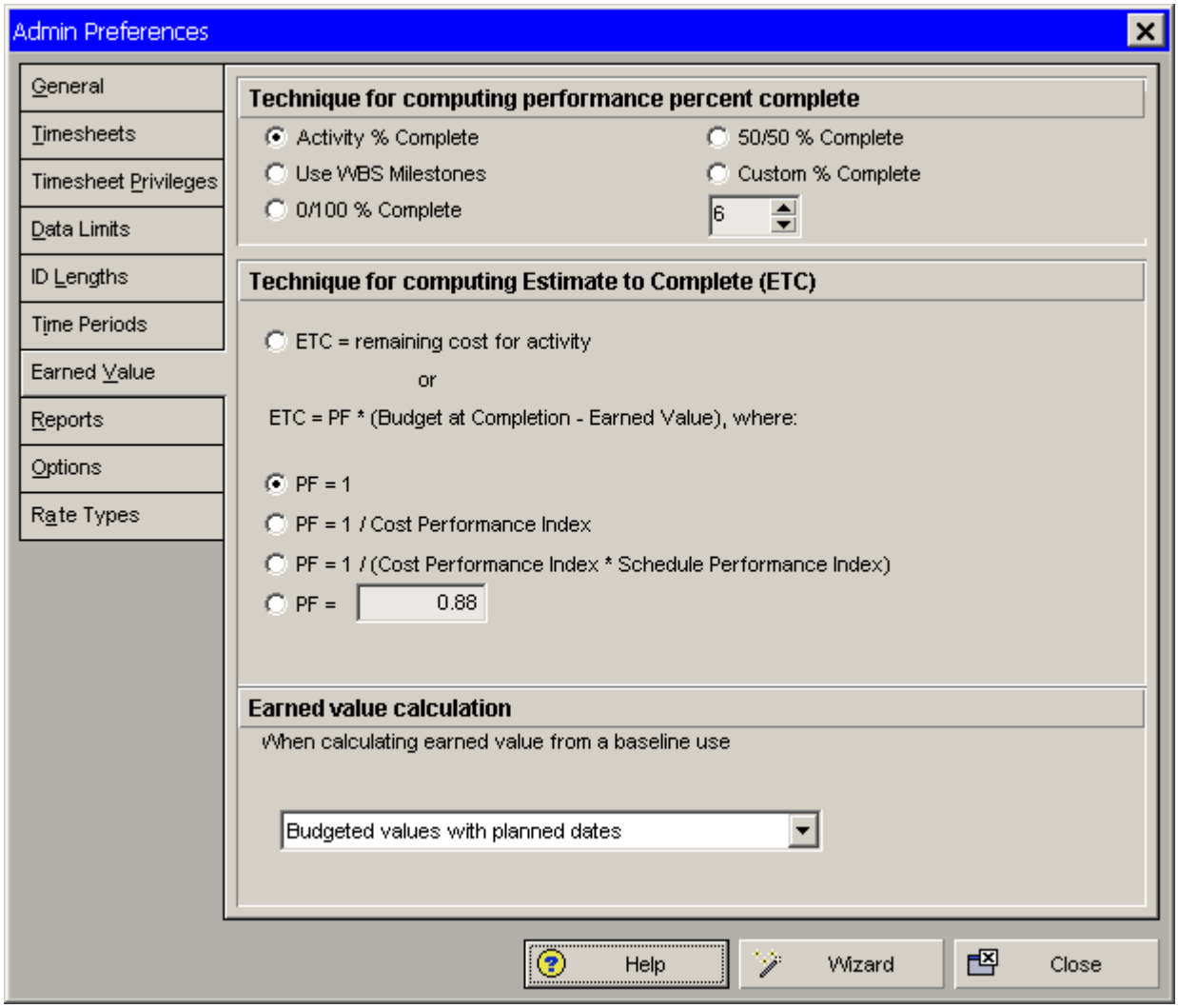
The Earned Value tab enables you to specify default settings for calculating earned value.

Technique for computing performance percent complete
Activity % Complete: Choose to calculate earned value according to current activity completion percentages.
Use WBS Milestones: Choose to calculate earned value by defining milestones at the WBS level and assigning a level of significance or weight to each of them. As progress occurs and you mark each milestone complete, the WBS element's performance percent complete is calculated based on the weight of the milestone.
0/100 % Complete: Choose to calculate earned value as 100 percent only after the activity ends.
50/50 % Complete: Choose to calculate earned value as 50 percent after the activity starts and until the activity ends. After the activity ends, the activity's earned value is 100 percent.
Custom % Complete: Choose to calculate earned value as a percentage you specify. This percentage applies after the activity starts and until the activity ends. After the activity ends, the activity's earned value is 100 percent.

Technique for computing Estimate To Complete (ETC)

ETC = remaining cost for activity: Choose to calculate Estimate To Complete (ETC) values as the remaining cost to complete an activity (ETC = remaining duration of activity * applicable resource rates).
ETC = PF * (Budget at Completion – Earned Value Cost), where
PF = 1: Choose to calculate Estimate To Complete (ETC) values as a Performance Factor (PF) of 1 multiplied by Budget At Completion (BAC) less Earned Value Cost .
PF = 1/Cost Performance Index: Choose to calculate Estimate To Complete (ETC) values as a Performance Factor (PF) of 1 divided by the Cost Performance Index (CPI) .
PF = 1/ (Cost Performance Index * Schedule Performance Index): Choose to calculate Estimate To Complete (ETC) values as a Performance Factor (PF) of 1 divided by the product of the Cost Performance Index (CPI) and Schedule Performance Index (SPI) .
PF =: Choose to calculate Estimate To Complete (ETC) values as a Performance Factor (PF) you specify multiplied by Budget At Completion (BAC) less Earned Value Cost. If you choose this option, type a factor in the PF field.
Earned value calculation

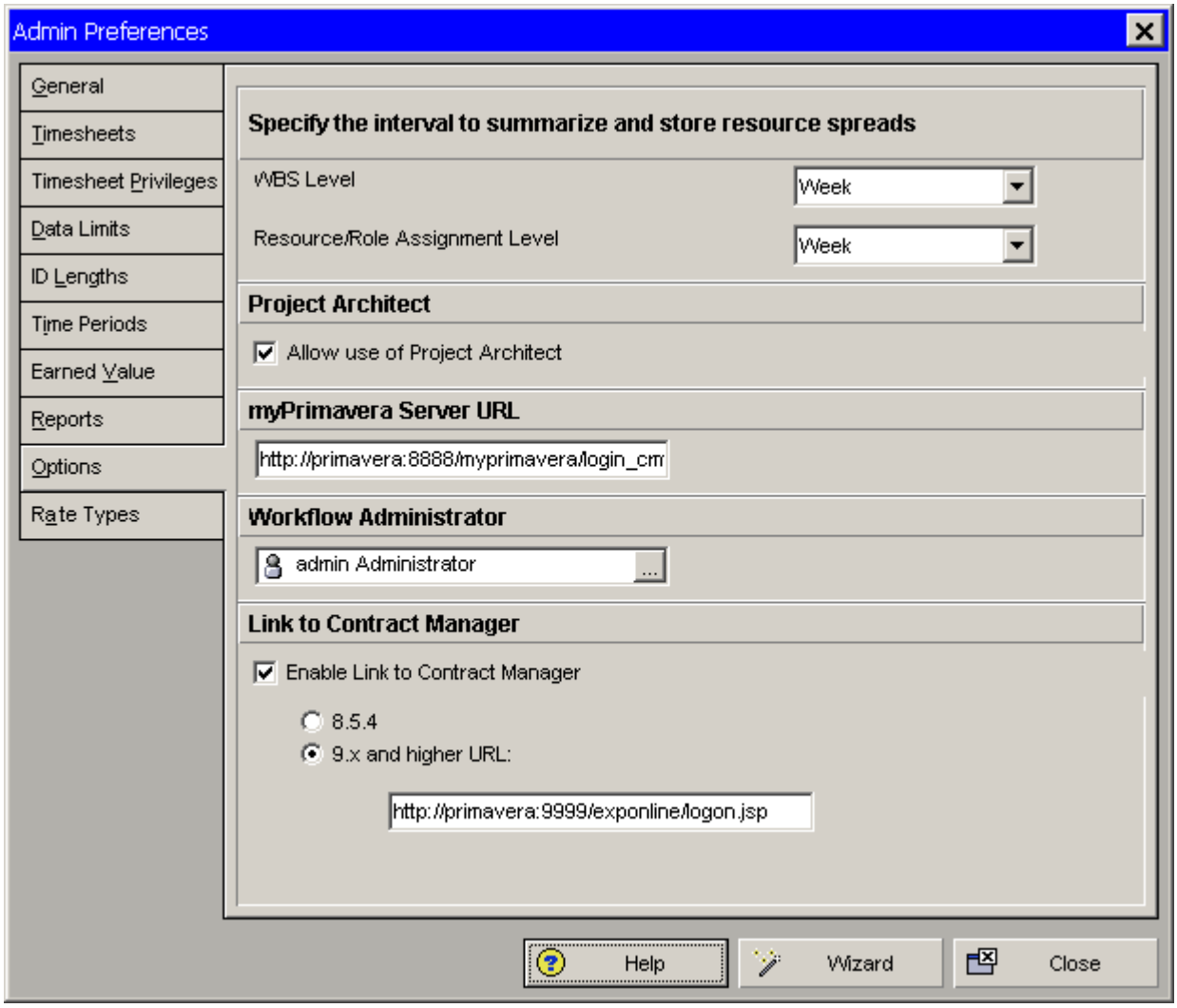
When calculating earned value from a baseline use
Choose to use the project or primary baseline's At Completion values and current dates, budgeted values with planned dates, or budgeted values with current dates when calculating earned value from a baseline.
The current dates options use the Start/Finish dates for an activity or resource assignment.



Options

Specify the interval to summarize and store resource spreads

WBS Level: Choose the time interval, such as week or month, for storing summarized activity data.
Resource/Role Assignment Level: Choose the time interval, such as week or month, for storing summarized resource data.
Project Architect
Allow use of Project Architect: Mark to enable users to import methodologies using the Project Architect wizard.
myPrimavera Server URL: Type the URL to the Primavera Web application server. This enables users to launch collaboration documents.



Link to Contract Manager: To set up access to Contract Manager (formerly known as Expedition), mark the Enable Link to Contract Manager checkbox, then choose the Contract Manager/Expedition product version you are connecting to. For version 9.x and higher, type the URL and port number to the Contract Manager web server. For HTTP, the default port number is 80, but you do not have to enter it. If you are not going to use port 80, you must enter the port number. For example: http://10.12.14.168:110. address). For example: http://10.12.14.168:110. For https, the default port number is 443. You must always enter the port number, including the default port number, at the end of the URL. For example: https://10.12.14.189:443.

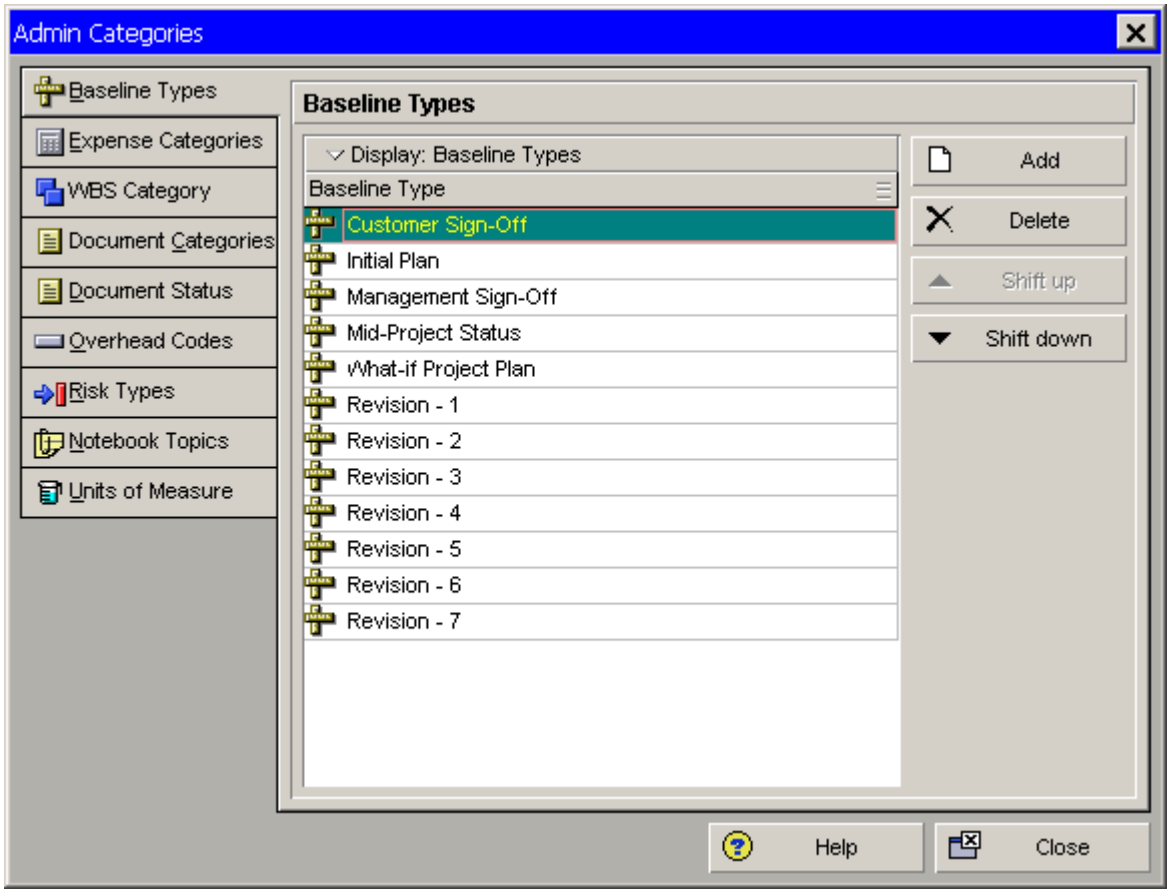
Workflow Administrator: Click to select the Web user responsible for administrative tasks related to workflow templates in the Primavera Web application, which are used for project requests and process requests. For example, the administrator is responsible for advancing requests that do not have at least one valid reviewer assigned. This could occur during a project request workflow if all reviewers assigned to a request template were removed as Primavera users. The administrator would then need to advance the request so that the review process is not stalled.

ADMIN CATEGORIES

Your organization can define a series of application-wide parameters and values that apply to all projects. Your organization can use these settings to customize your projects to meet specific project management requirements and standards. While all users can view these settings, a user must have special security privileges to edit them.
The project controls coordinator uses the Admin Categories dialog box to define standard categories and values you can apply across all projects, including custom categories and category values for projects, resources, and WBS elements.

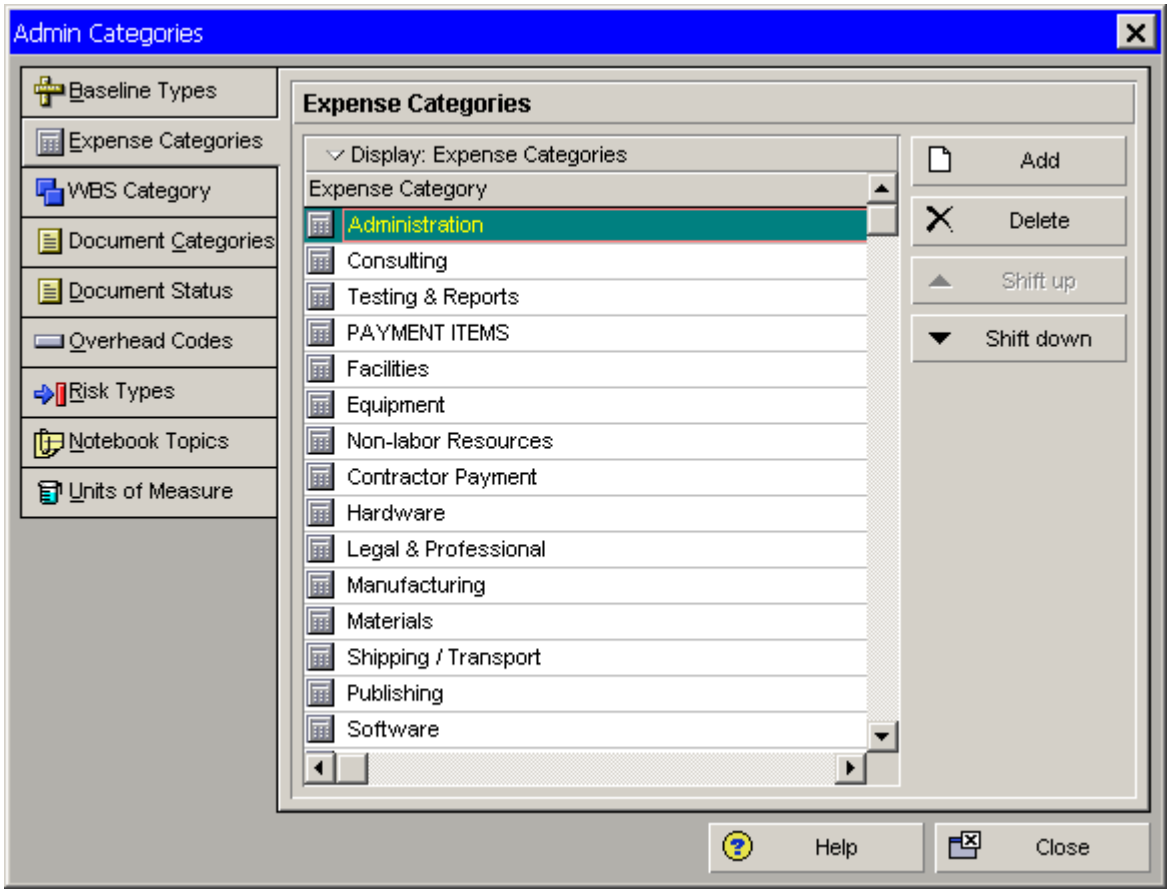
Baseline Types

Use to create, edit and delete baseline types. Baseline types enable to categorize and standardize baselines across projects.



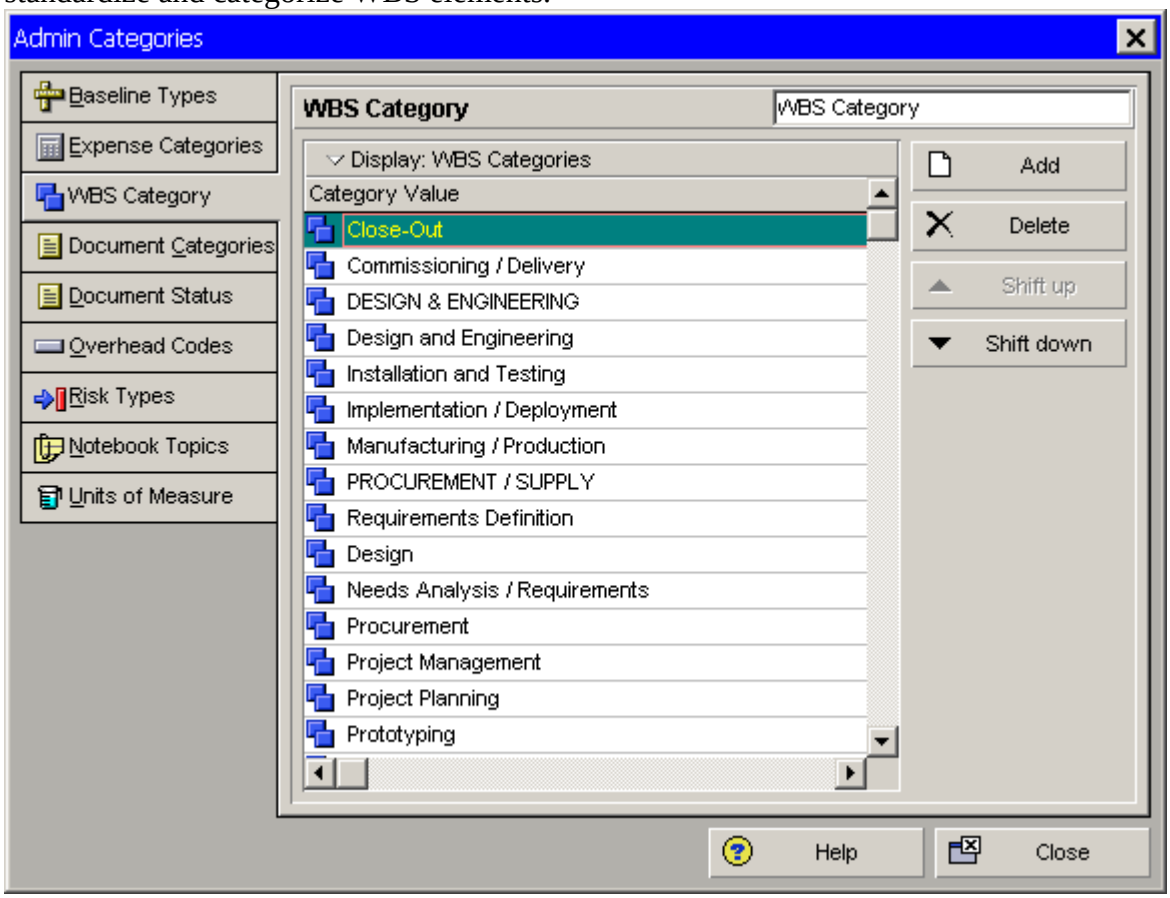
Expense Categories

Use to create, edit and delete expense categories. Expense categories can be used to categorize and standardize project expenses, and to organize and maintain expense information.



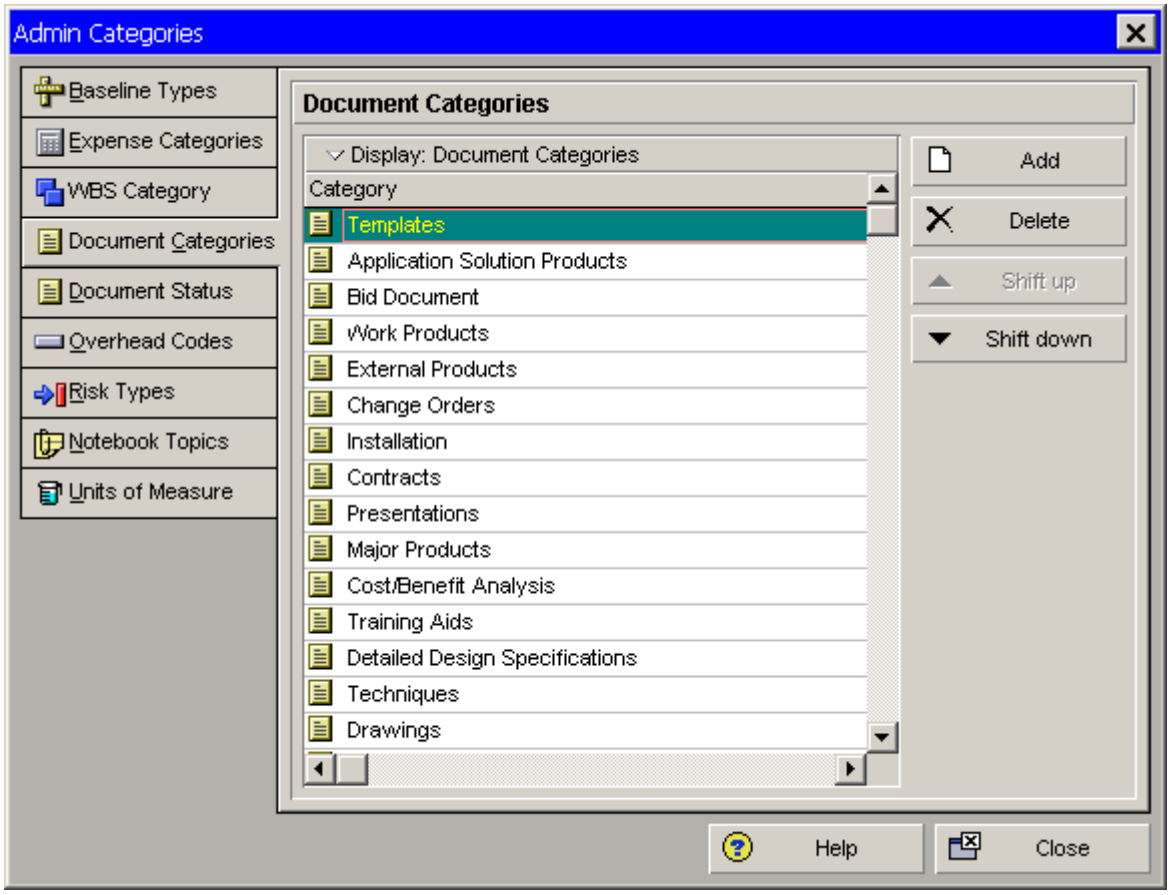
WBS Category

Create a WBS category and create, edit, and delete WBS category values. Use this category to standardize and categorize WBS elements.



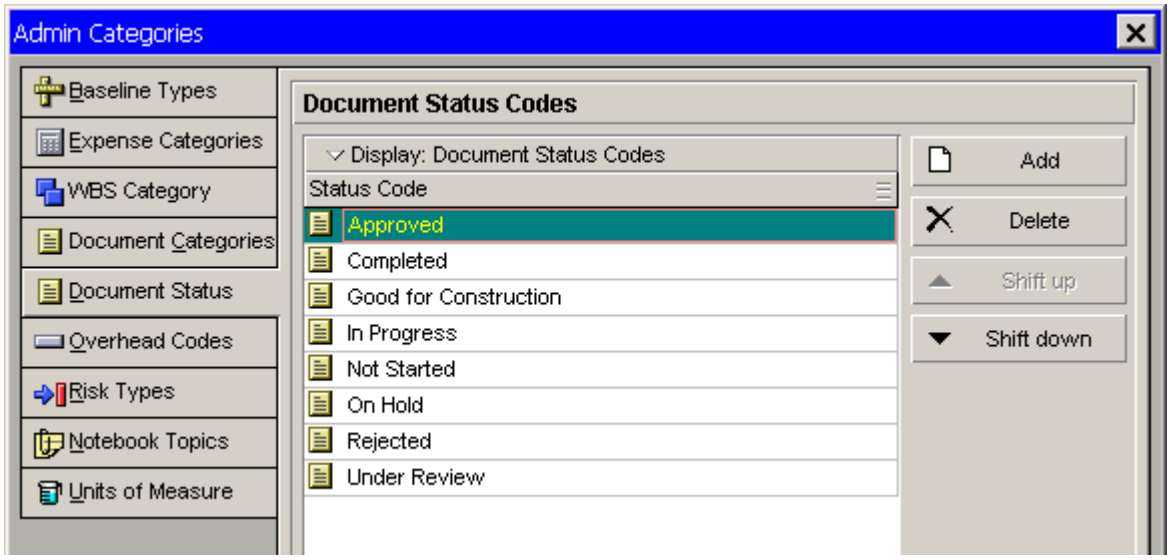
Document Category

Create, edit, and delete categories for work products and documents. Use these categories to standardize and categorize work products and documents, and organize and maintain work product and document information.



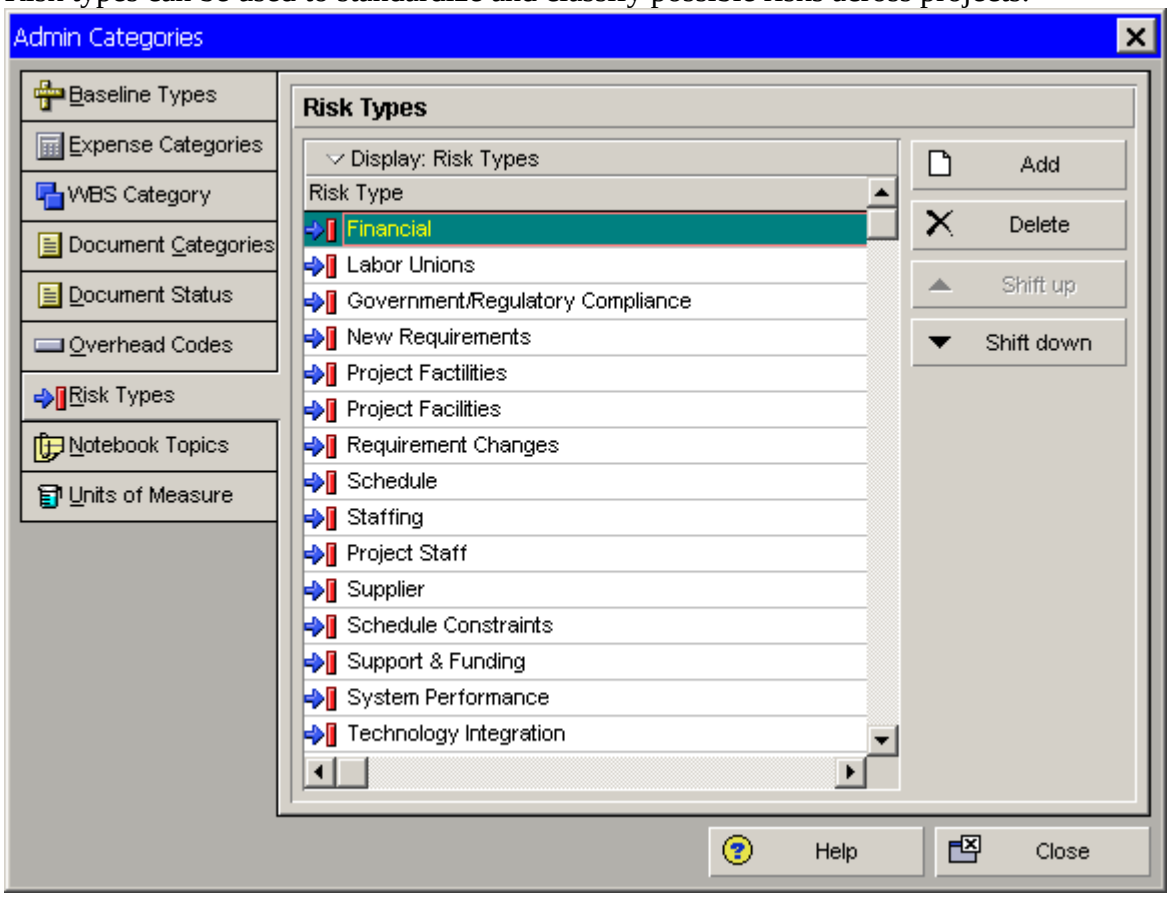
Document Status

Create, edit, and delete document status types. Use these status types to identify the current status of work products and documents within a project.

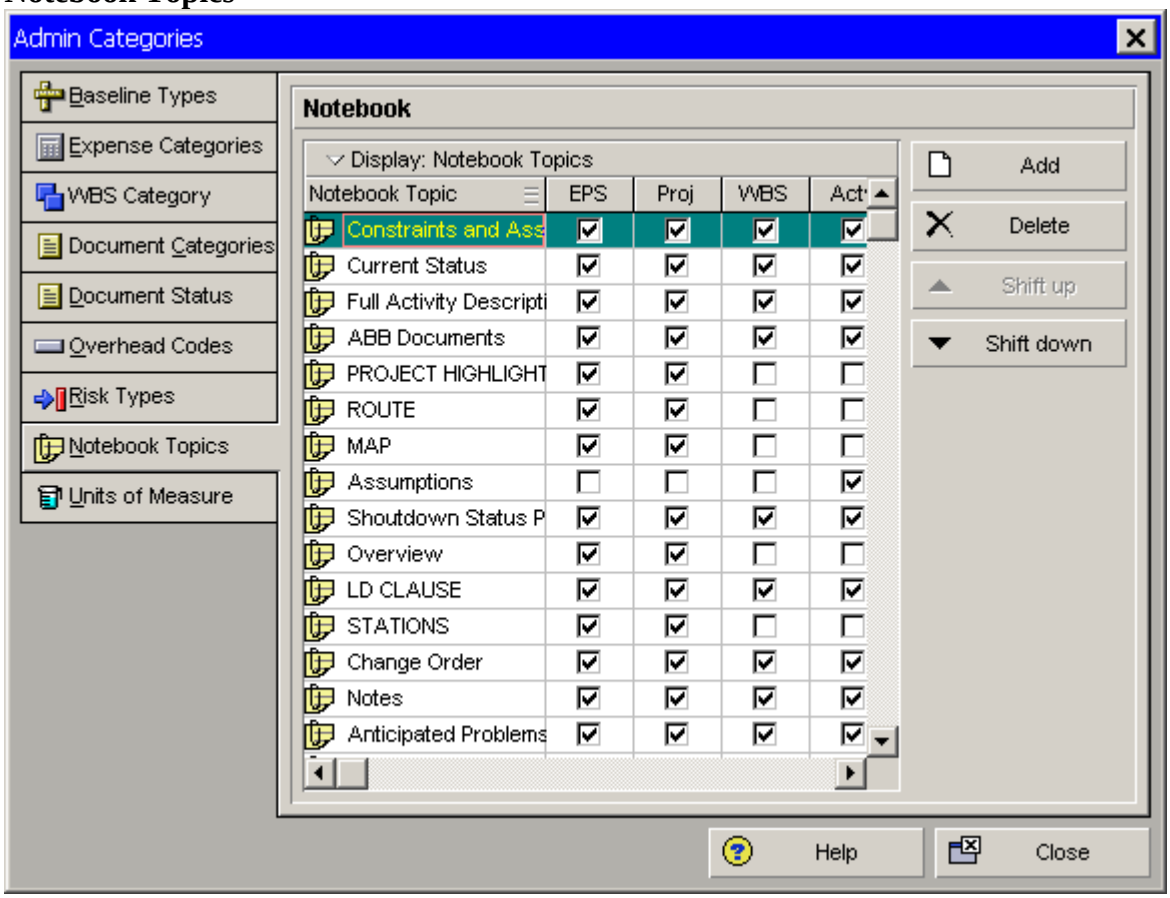


Risk Types

Can create, edit and delete risk types or categories of possible risk types.
Risk types can be used to standardize and classify possible risks across projects.



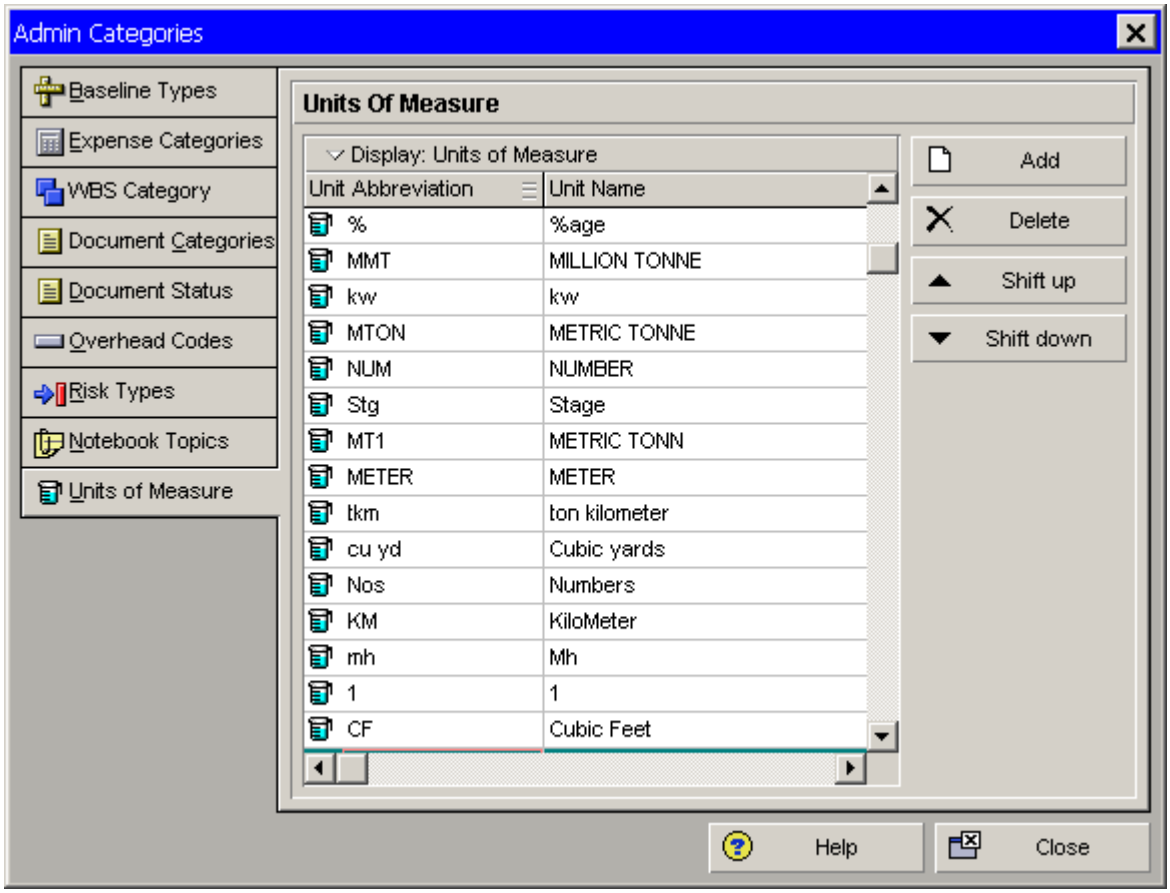
Notebook Topics



To create, edit and delete notebook topics. Typically consists of instructions or descriptions for performing an activity. However notebook topics can also be assigned at EPS, Project and WBS levels.

Units of Measure

To define a unit of measure for material type resources.



FINANCIAL PERIODS

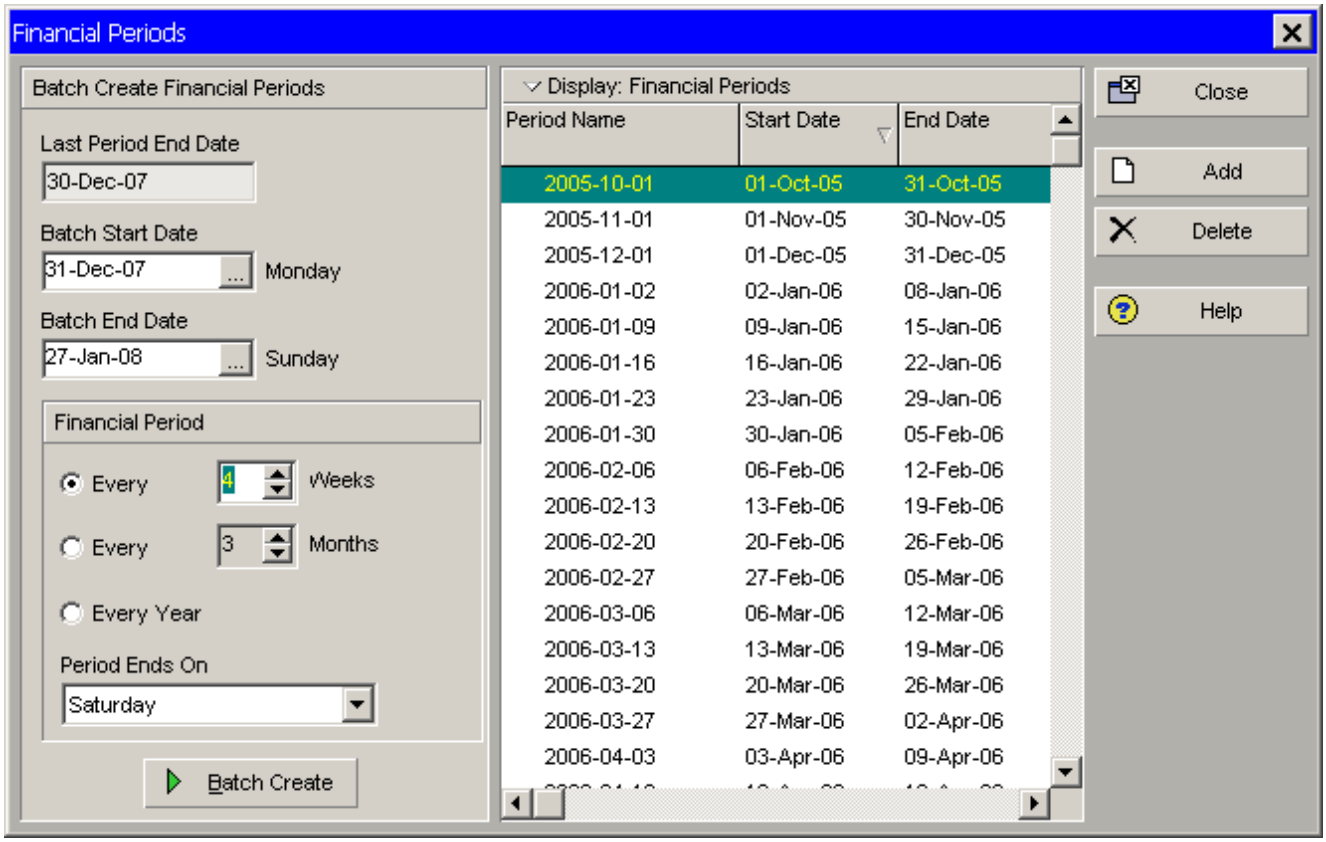
Use the Financial Periods dialog box to define global customized financial periods. Users can store a project's period performance (past period actuals) for any predefined period contained in the Financial Periods dialog box.

The columns, fields, and buttons contained in the Financial Periods dialog box are described below.

Period Name: A unique identifier for the period. When you create a new financial period, the name defaults to the start and end dates for the period. Click on the name to edit.
Start Date: The period start date you specified in the Select Financial Period Timescale dialog box.
End Date: The period end date you specified in the Select Financial Period Timescale dialog box.
Add: Click to open the Select Financial Period Timescale dialog box in which you can specify the start and end date of the new period. When the dialog opens, the default start date is the day after the previous period's end date; the default end date is seven days later.
Note: The Start Date and End Date of a period cannot overlap the Start Date or End Date of any existing period.

Batch Create Financial Periods

Last Period End Date: Displays the latest period end date contained in the dictionary. This field is read-only.
Batch Start Date: Select the date on which you want the financial period batch to start. The module will adjust the date in this field (if necessary) after you create the batch depending on your selections in the Financial Period section.
Batch End Date: Select the date on which you want the financial period batch to end. The module will adjust the date in this field (if necessary) after you create the batch depending on your selections in the Financial Period section.
Financial Period: Select to make each financial period in the batch Every n Weeks or Every n Months long (where n is the number of weeks or months); or, select Every Year to make each period one year long.
Period Ends On: If you selected Every n Weeks, choose the day of the week you want each financial period to end on. If you selected Every n Months, this field is disabled. (The end date for each monthly period is the last day of the month.) If you selected Every Year, select the month you want the financial period batch to end on.
Batch Create: Creates the financial periods based on your selections.



Notes
All periods start at midnight and end at 11:59 PM. The end date must be at least one day later than the start date; therefore, the shortest financial period you can create is two days long. For example, if you create a financial period with a Start Date of July 1, 2007, and an End Date of July 2, 2007, the period begins at midnight on July 1st and ends at 11:59 PM on July 2nd.
You must have the Edit Financial Period Dates global privilege to add, edit, or delete financial periods in the Financial Period dictionary.
You cannot modify the start and end dates of a financial period after it is created. To modify the start and end dates of a period, you must delete the financial period, then create a new period with the desired dates.

CURRIENCIES

Specify the monetary unit or base currency used to store cost data for all projects in the database, as well as the monetary unit or view currency used to display cost data in windows and dialog boxes.