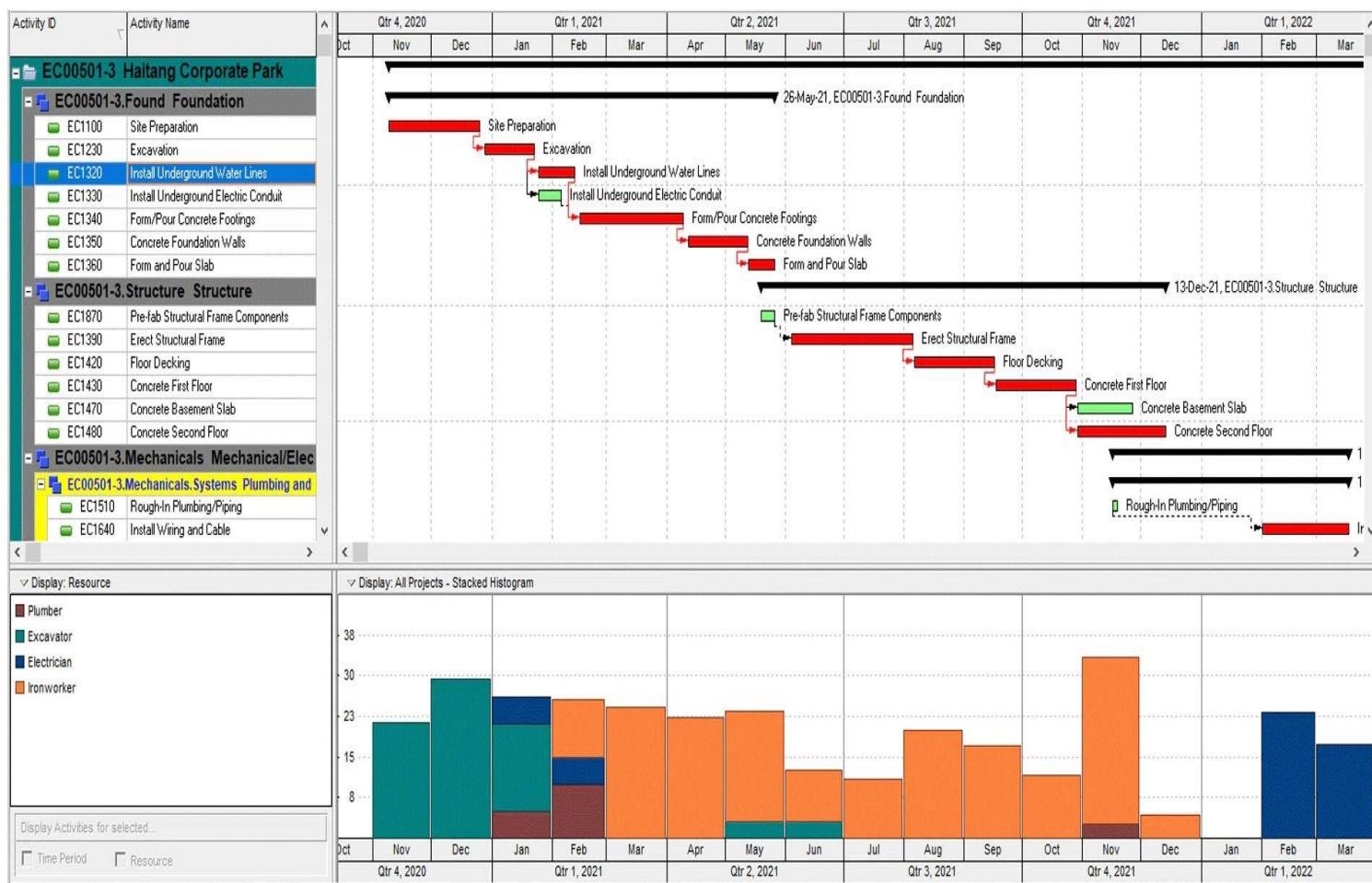


Project Planning & Scheduling Using Primavera P6

JAN- 2 0 2 6

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Primavera P6 Professional



Topics

- Project Management Overview
- Create New a Project
- Create a Project Calendars
- Creating a Work Breakdown Structure
- Adding Activities
- Creating Relationships
- Activities Duration
- Scheduling
- Formatting Schedule Data

Topics

- Currencies
- Unite of Measure
- Define Resources
- Assigning Resources and Quantities
- Aggregating Resources
- Optimizing the Project Plan
- Baseling the Project Plan
- Project Execution and Control
- Reporting

What Is Primavera P6 use in?

- ❖ Planning, Monitoring and Controlling Projects and Programs
- ❖ Scheduling, Budget estimation, Cost control, Resource Management
- ❖ Standalone & Cloud Based

What's Project

Project is a **temporary** endeavor undertaken to create a **unique** product, service, or result.

Examples:

- **The Provision of Consultancy services**
- **The construction of a building or bridge**

- **a project is a set of objectives has a definite beginning and end to achieve specific goals in specific timeline and with specific budgets .**



المشروع هو سلسلة من الأنشطة أو المهام لها أهداف محددة، يجب أن يُنجذب ضمن مواصفات محددة وله وقت محدد وله تمويل محدد ويستغل موارد مختلفة من مواد وعمالة ومعدات، ويُعتبر المشروع ناجحاً إذا تم في أقصر وقت وبأقل تكلفة وأفضل جودة.

Project Management Definitions

- **Project Management** is the application of **knowledge, skills, tools, and techniques** to project activities to meet project requirements.
- إدارة المشاريع هي تطبيق المعرفة، والمهارات، والأدوات، والتقنيات – على أنشطة المشروع من أجل تحقيق متطلباته وأهدافه.
- **Project Management Life Cycle** – A sequence of phases that defines the overall process from the beginning to the end of a project.

PROJECT MANAGEMENT



Scheduling



PLANNING

DELIVERING

Reviewing



Resourcing

Monitoring

Teamwork



Quality Control

Co-ordination

COMMUNICATION

Triple Constraint Model of Project Management

- Balancing the constraints of scope, cost, time with in the frame of the quality to meet the customer expectations



KEY TERMINOLOGY

Goal :

An achievable outcome that is generally **broad** and **longer term**
Includes what the project is trying to achieve



Is your objective **Specific**? **SPECIFIC**

Can you **Measure** progress towards goal? **MEASURABLE**

Is the goal realistically **Achievable**? **ACHIEVABLE**

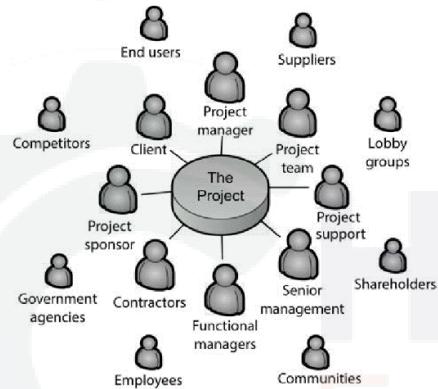
How **Relevant** is the goal to your organization? **RELEVANT**

What is the **Time** for achieving this goal? **TIME BASED**

1304432109

Stakeholder

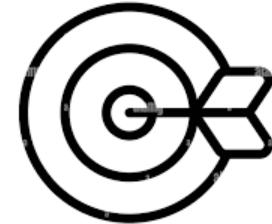
:



Any individual , group or organization that direct or in directly affected by the project

Measurable tasks need to be achieved in shorter Term to reach the project Goal

Objectives:



A project milestone is a or checkpoint that indicates a major goal, event, or task within a project's lifecycle

Milestones



Project Management Life Cycle

Can be divided into five process groups:



PROJECT PHASES: INITIATION



in the initiation phase, you'll define the project, including :

- ✓ Project goals, scope, and Objectives



- ✓ What stakeholders expect out of the project



- ✓ Communicating with stakeholders

- ✓ Carry out all the feasibility studies and assessments



PROJECT PHASES: PLANNING

A good project plan should :

- ✓ Identify the Project Deliverables 
- ✓ Identify the project Activities and Milestones that lead up to goal completion 
- ✓ Developing a Schedule Plan (Baseline plan) 
- ✓ Development of Detailed Budget 

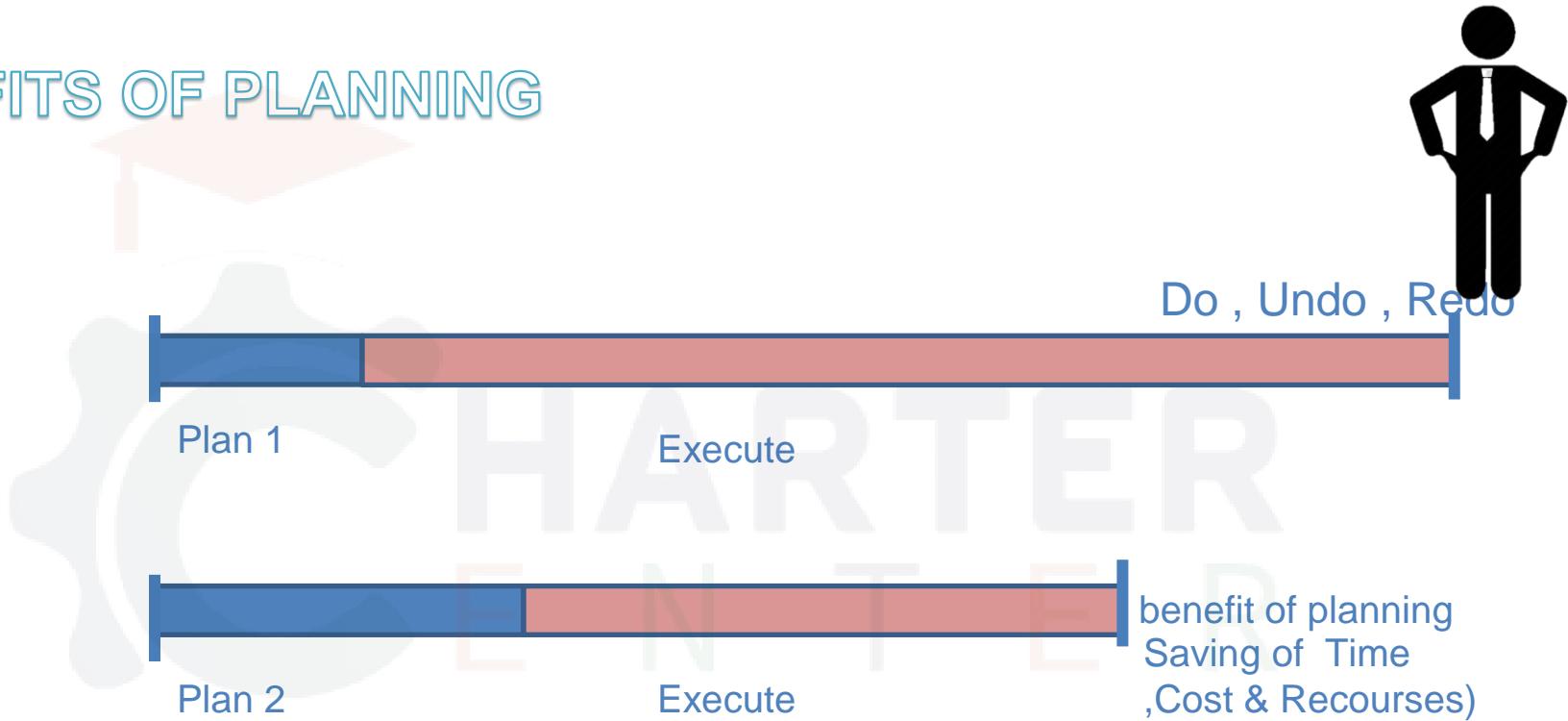
PROJECT PHASES: PLANNING

A good project plan should :

- ✓ Clarifying resources , (Man, Equipment, Material)
- ✓ Risk Assessment
- ✓ Development of the Project Team and their Roles



BENEFITS OF PLANNING



PROJECT PHASES: PLANNING ,

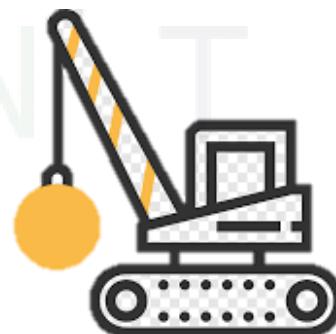
Projects Fail at the beginning not at the end



PROJECT PHASES: EXECUTION ,

Executing a project means putting your plan into action and keeping the team on track.

- ✓ Execute the project scope
- ✓ Manage the team's work
- ✓ Recommend changes and corrective actions
- ✓ Manage project communication with stakeholders



- ✓ Conduct team-building
- ✓ Team motivation
- ✓ Celebrate project milestones
- ✓ Track work in progress and actual costs

PROJECT PHASES: EXECUTION

Actively promoting a supportive environment can save time in the long term..



When assigning Tasks to the team , TASK must be

- ✓ Clear
- ✓ Specific
- ✓ Ownership



PROJECT PHASES

MONITORING AND CONTROLLING



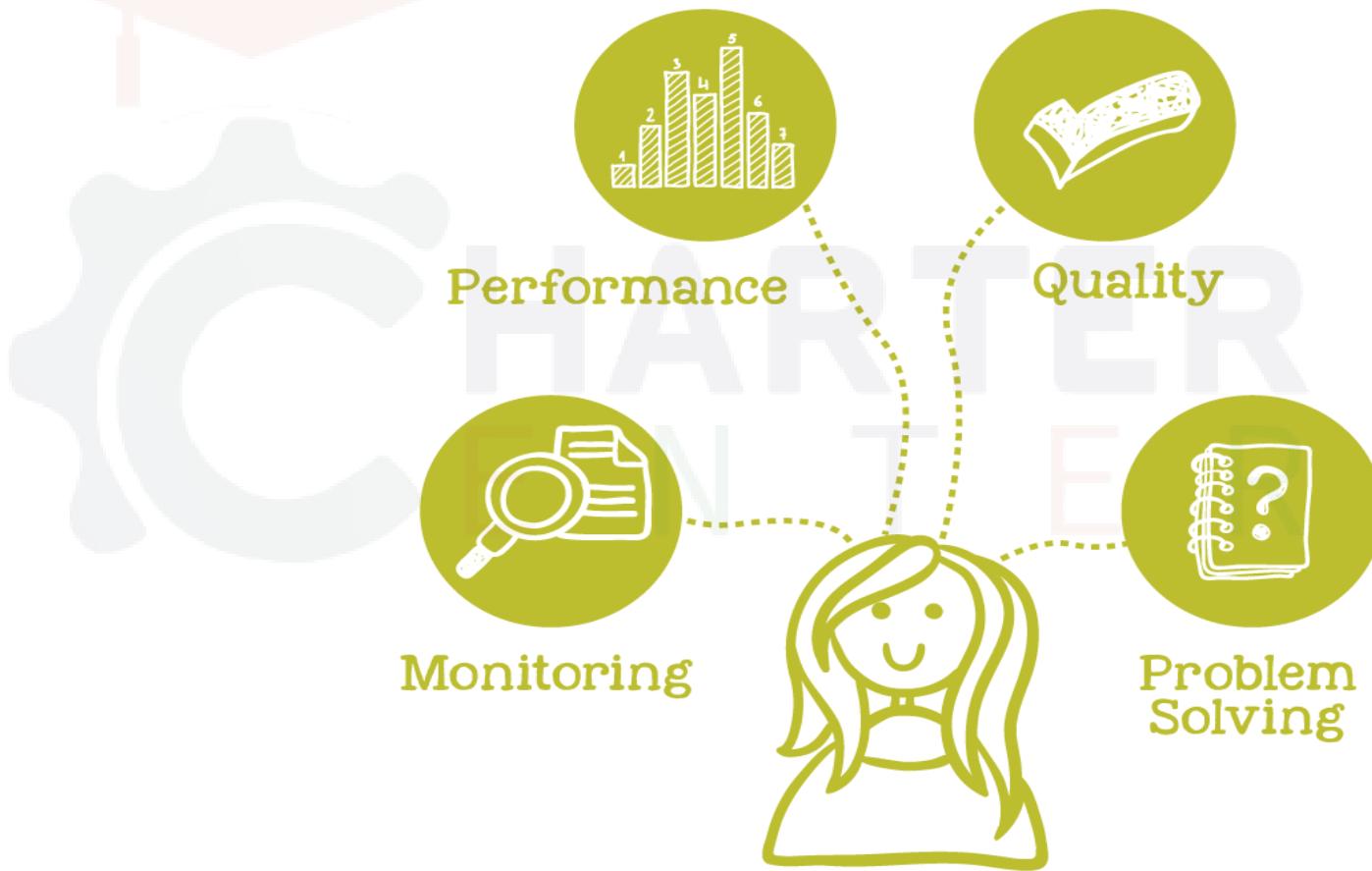
Monitoring
is the evaluation of project status at key points along its schedule

Process of regularly observing and tracking the progress of the project to ensure that the project meets the goal and objective and making any necessary proactive corrections.



Controlling
Taking any action needed for issues or changes that have been identified during the monitoring stage.

PROJECT PHASES MONITORING AND CONTROLLING

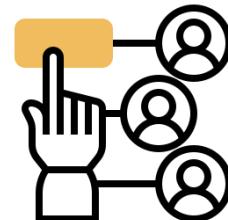


PROJECT PHASES CLOSURE

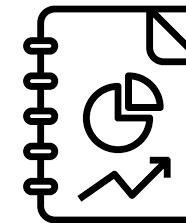
Project handover



Disbanding the Project Team and Reassigning All Project Resources



Creating a project closeout report



Final Payments



Review and evaluation

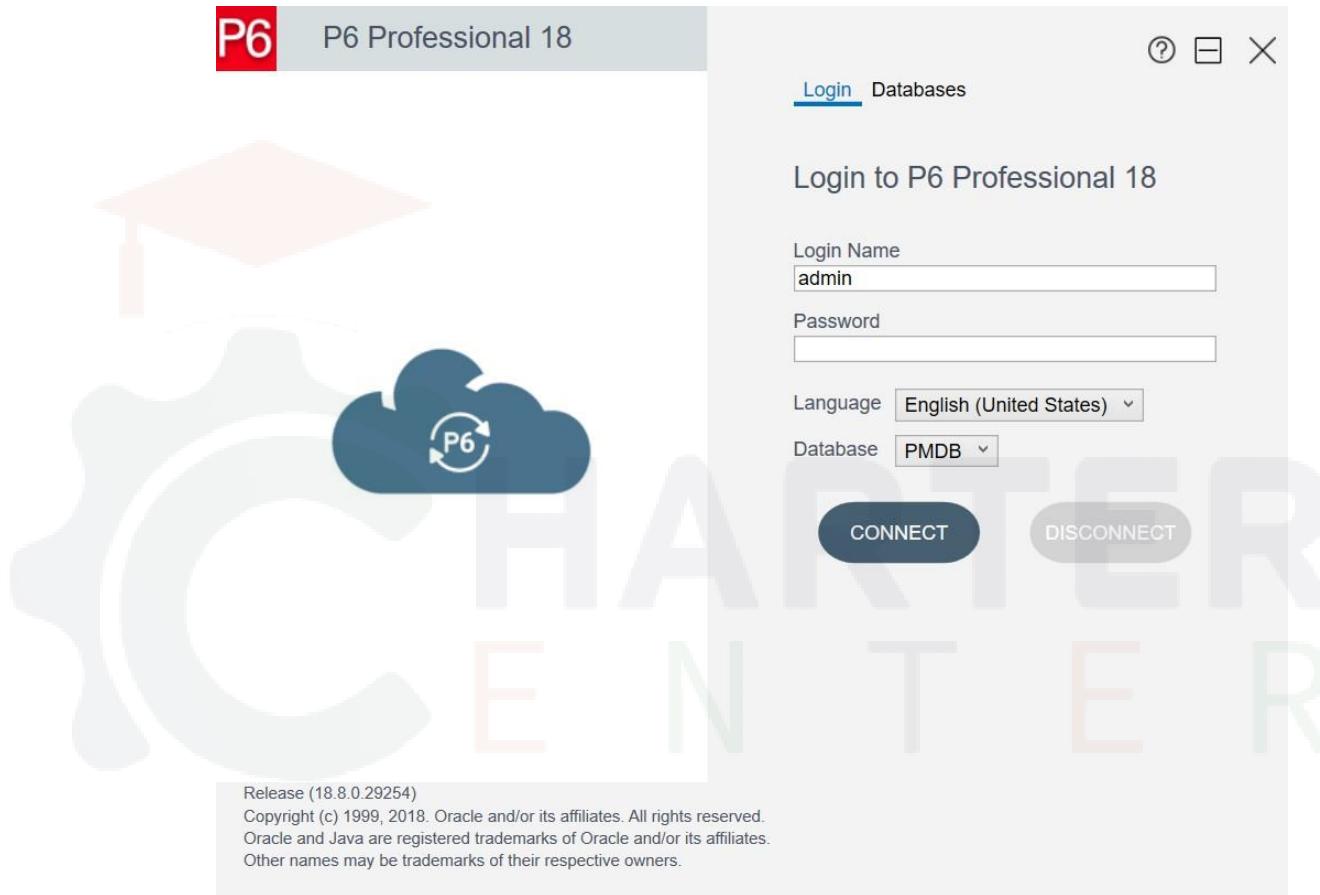


Celebrating the end of the project and your successes



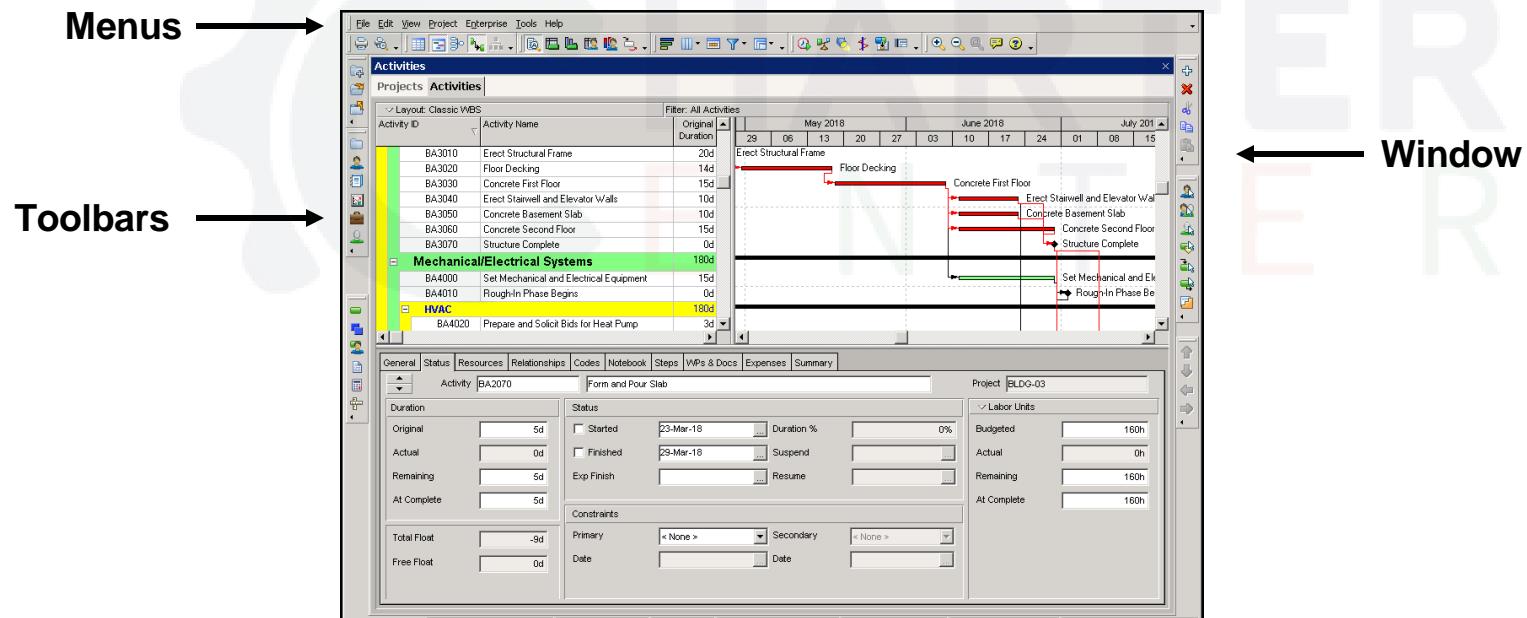
P6 Professional

- When you open P6 Professional R20.12 form  Start this screen will Appear to ask for Primavera login Name and Password as usual same (admin-admin)



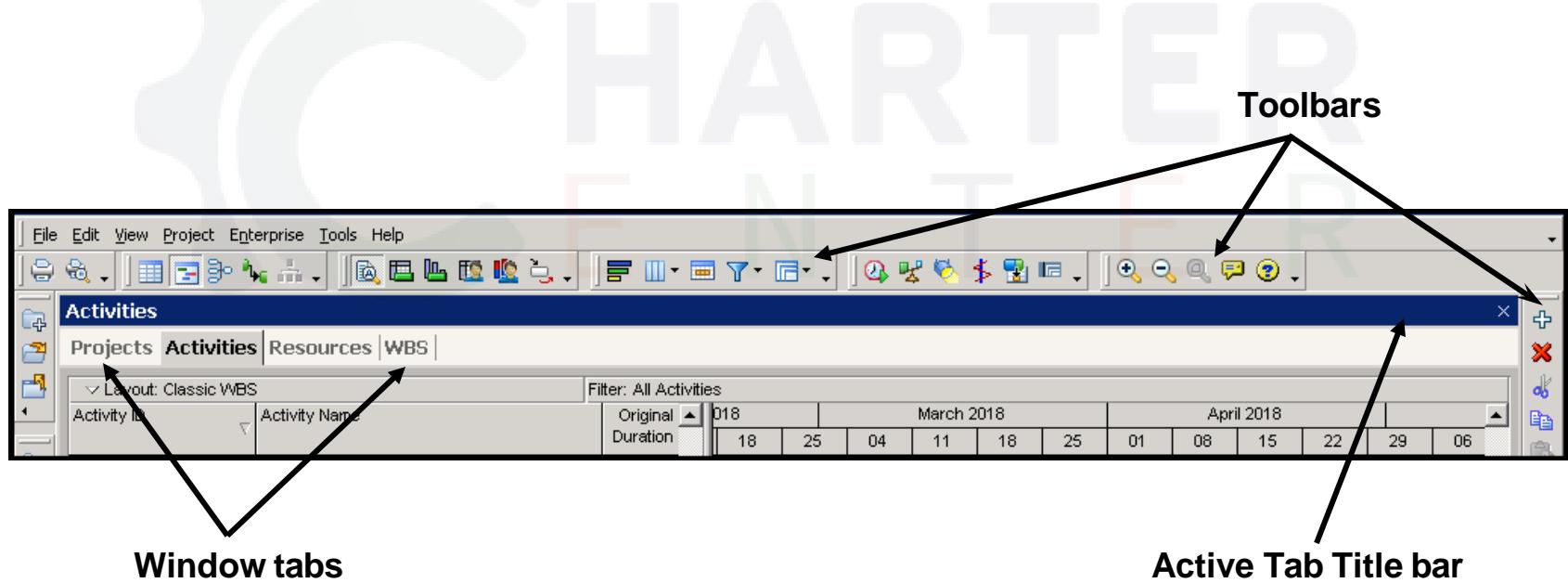
Windows and Menus

- P6 Professional is organized into 11 windows, each focusing on an aspect of project management.
 - Examples: Projects, Resources, WBS, Activities, Expenses
- Launched from menus or toolbars.

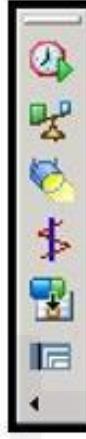


Tabs and Toolbars

- Multiple windows can be open at one time.
 - Windows displayed on tabs.
 - Active Tab Title bar indicates the active window.

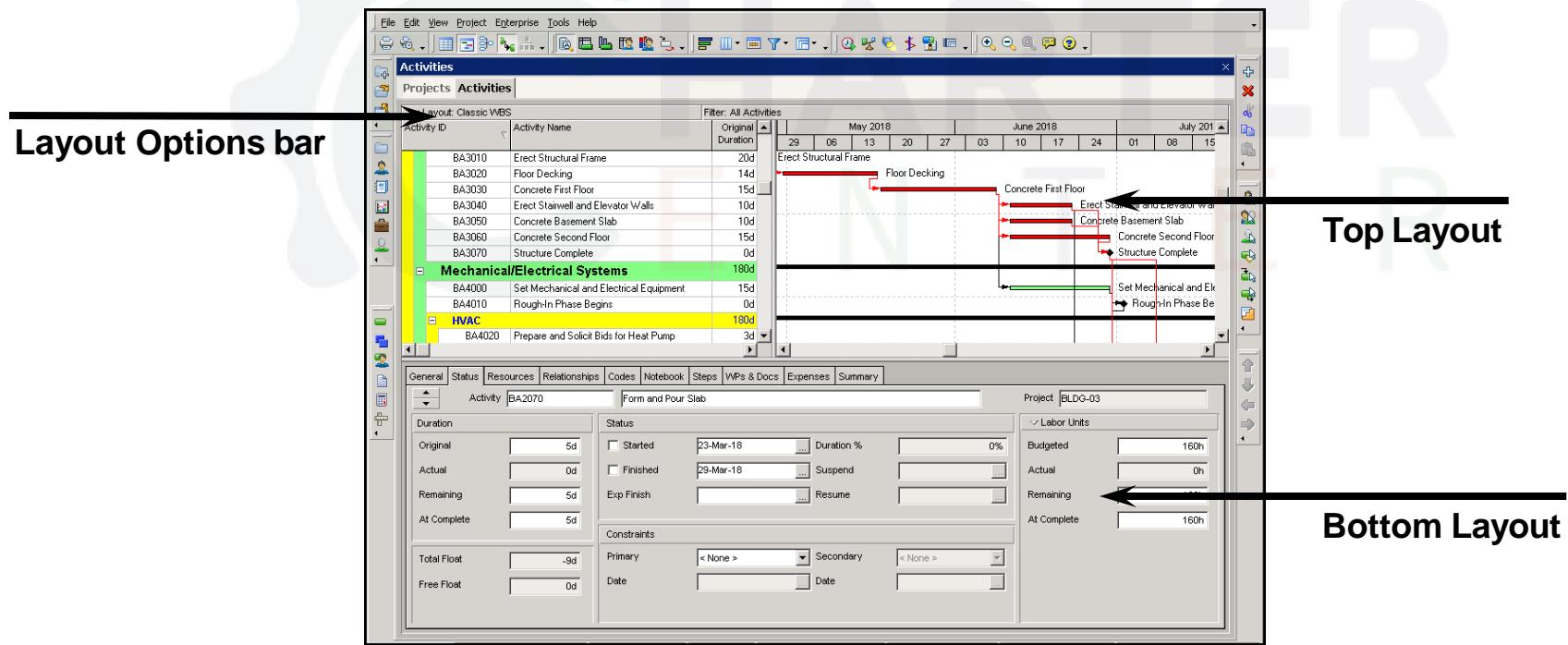


Commonly Used Toolbar

Enterprise	Tools	Edit
 <ul style="list-style-type: none"> Projects Resources Reports Tracking Project Portfolios Roles 	 <ul style="list-style-type: none"> Schedule Level Resources Progress Spotlight Progress Line Update Progress Disable Auto-Reorganization 	 <ul style="list-style-type: none"> Add/Insert Delete Cut Copy Paste
Project	Assign	Layout
 <ul style="list-style-type: none"> Activities WBS Resource Assignments WPs & Docs Expenses Maintain Baselines 	 <ul style="list-style-type: none"> Resources Resources by Role Roles Activity Codes Predecessors Successors Steps 	 <ul style="list-style-type: none"> Bars Columns Time Scale Filter By Group and Sort by

Layouts

- Customized view of information.
 - Available in Projects, WBS, Activities, and Tracking views.
- Consists of top layout and bottom layout.
- Key layout functions on Layout Options bar.



Details

- Displays detailed information about selected item.
- Available in all windows, except Tracking.
- Always in bottom layout.
- Organized into tabs.
 - Tabs can be customized in some windows.

General	Status	Resources	Relationships	Codes	Notebook	Steps	WPs & Docs	Expenses	Summary																																																																																								
<input type="button" value="Activity"/> BA2070		Form and Pour Slab																																																																																															
<table border="1"> <tr> <td colspan="4"> Duration </td> <td colspan="6"> Status </td> </tr> <tr> <td>Original</td> <td>5d</td> <td><input type="checkbox"/> Started</td> <td>23-Mar-18</td> <td>...</td> <td>Duration %</td> <td>0%</td> <td colspan="4"></td> </tr> <tr> <td>Actual</td> <td>0d</td> <td><input type="checkbox"/> Finished</td> <td>29-Mar-18</td> <td>...</td> <td>Suspend</td> <td></td> <td colspan="4"></td> </tr> <tr> <td>Remaining</td> <td>5d</td> <td colspan="3">Exp Finish</td> <td>...</td> <td>Resume</td> <td colspan="4"></td> </tr> <tr> <td>At Complete</td> <td>5d</td> <td colspan="9"></td> </tr> <tr> <td colspan="10"> Constraints </td> </tr> <tr> <td colspan="2">Total Float</td> <td colspan="2">-9d</td> <td>Primary</td> <td>< None ></td> <td>Secondary</td> <td>< None ></td> <td colspan="4"></td> </tr> <tr> <td colspan="2">Free Float</td> <td colspan="2">0d</td> <td>Date</td> <td>...</td> <td>Date</td> <td>...</td> <td colspan="4"></td> </tr> </table>										Duration				Status						Original	5d	<input type="checkbox"/> Started	23-Mar-18	...	Duration %	0%					Actual	0d	<input type="checkbox"/> Finished	29-Mar-18	...	Suspend						Remaining	5d	Exp Finish			...	Resume					At Complete	5d										Constraints										Total Float		-9d		Primary	< None >	Secondary	< None >					Free Float		0d		Date	...	Date	...				
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Project ,Programs , Protfolio

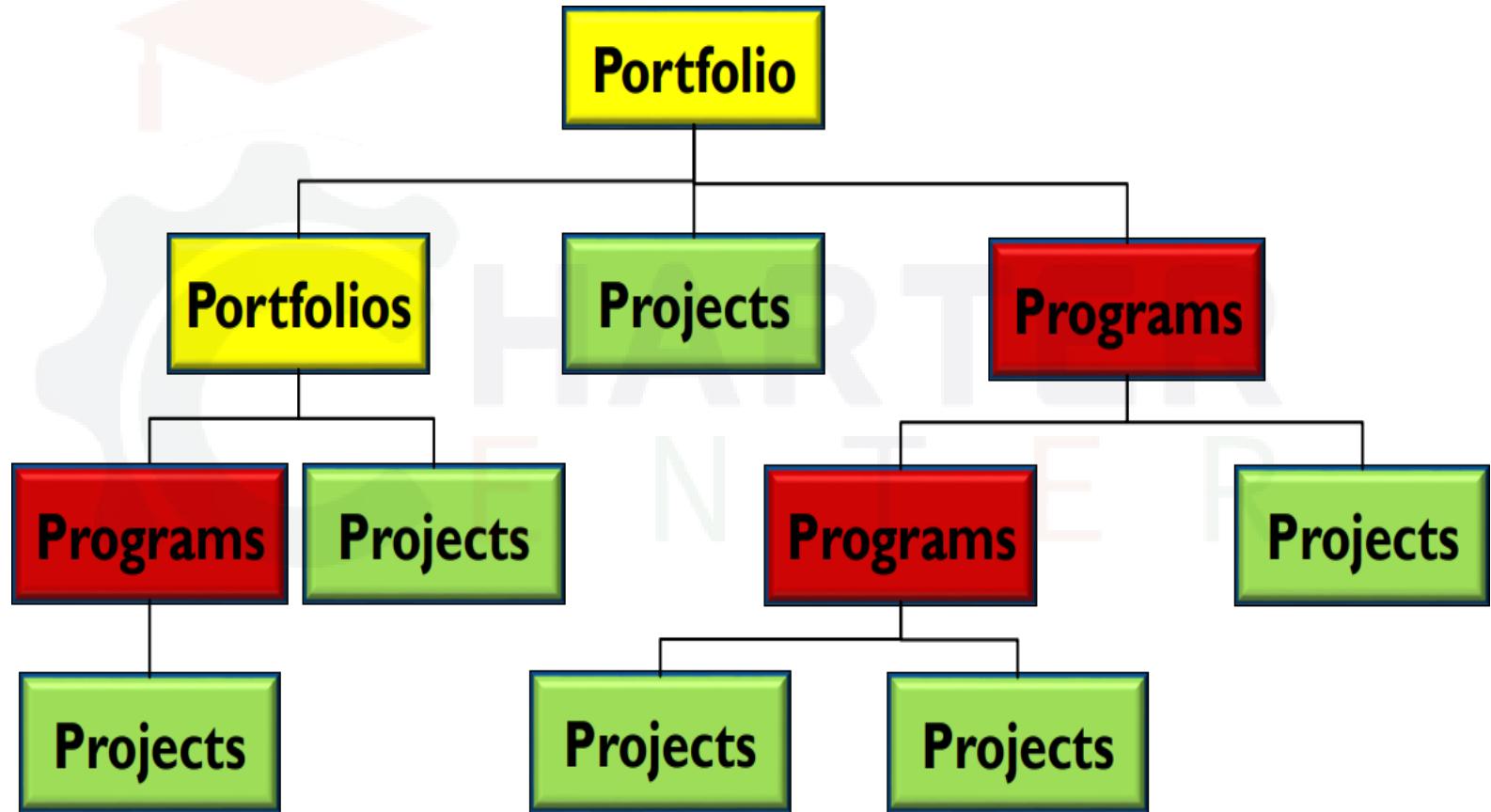
a Project Is a set of objectives has a definite beginning and end to achieve specific goals with specific budgets .

An Enterprise is any company that has multiple divisions, levels, departments, Managed by **CEO**

A program is a group of projects that are similar or related to one another, and which are managed by **PROGRAM MANGER**

A portfolio is a group of different programs and/or projects within the same organization, which may be related or unrelated to one another
Managed by **PORTFOLIO MANGER**

Project ,Programs , Protfolio



Creating a Project

There are three ways to create a project:

- **Create new** – Best suited for new endeavors or for implementation of new processes / policies.
- **Import** – Add data from P6, spreadsheet applications or Microsoft Project.
- **Copy/paste** – Duplicate existing project or elements of existing project.

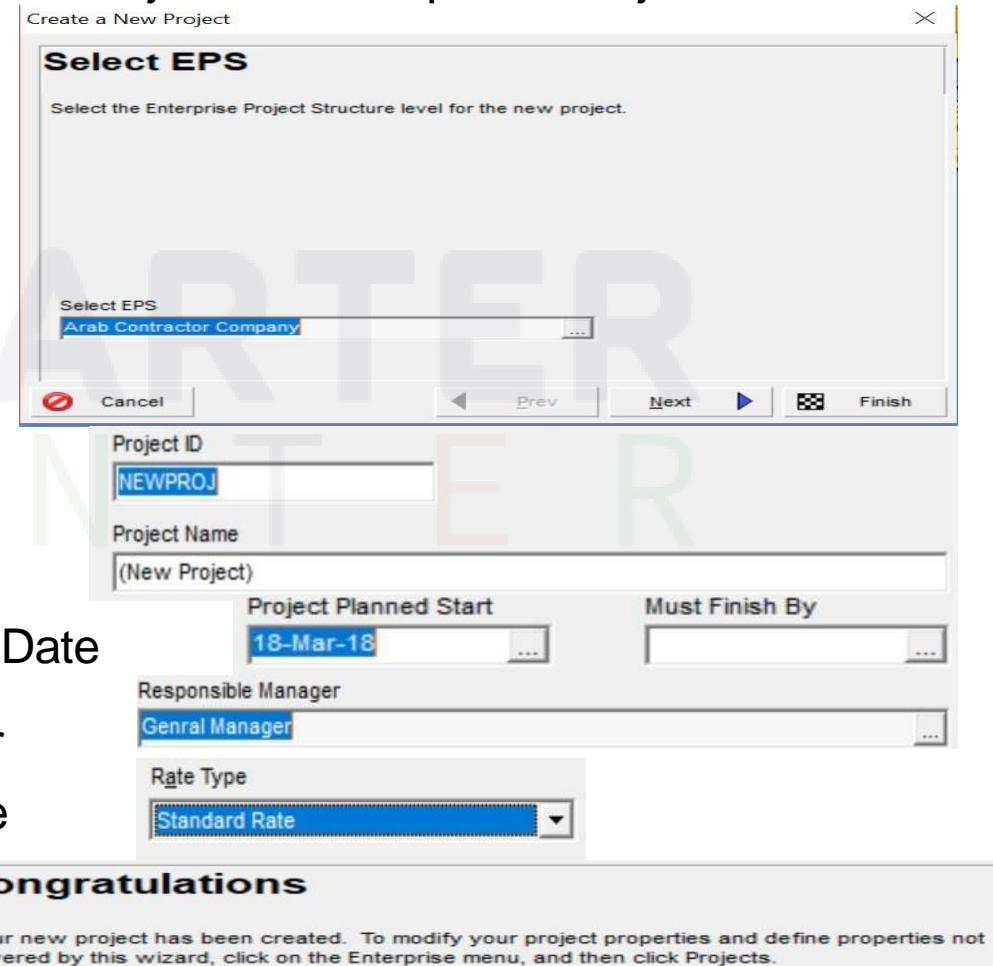
Required Information for Creating a Project

When creating a new project, certain information is required:

- Project ID
- Project Name
- EPS location
- Responsible Manager
- Planned Start date

Required Information for Creating a Project

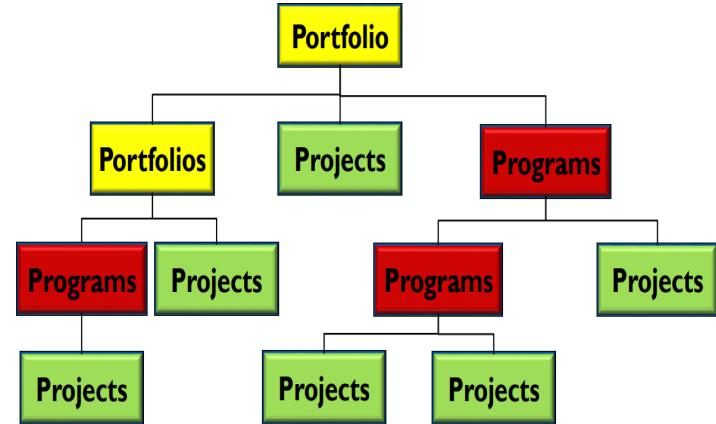
- Form Menu File (+new) this screen will Appear to ask for (EPS)
Select where there location of the Project in Enterprise Project Structure
the NEXT



EPS ,OBS

EPS: Enterprise Project Structure is a hierarchy that represents the breakdown of the projects in your organization

هيكل مشاريع المؤسسة او بنية المؤسسة

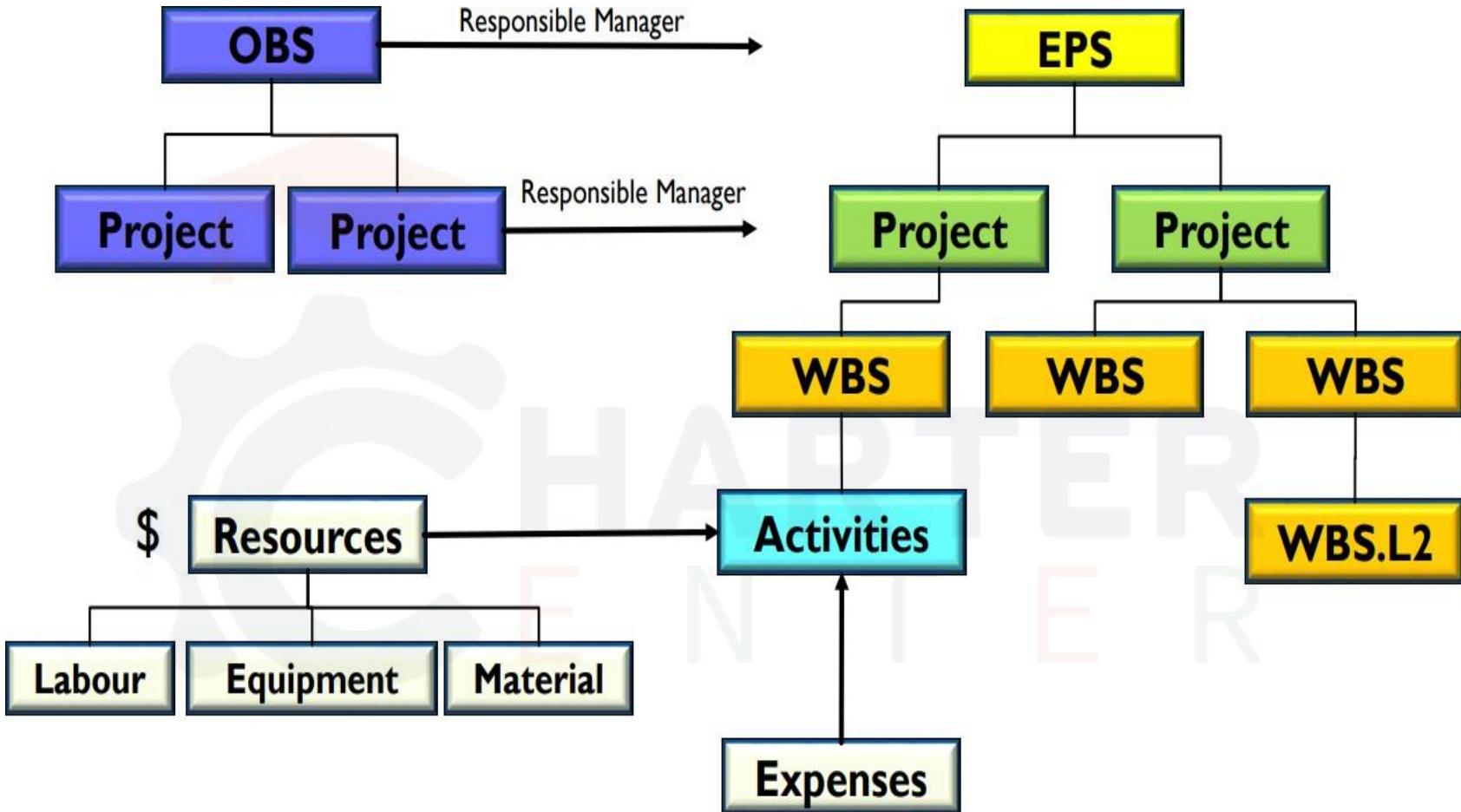


The organizational breakdown structure (OBS) is a hierarchical way to represent the managers responsible for the projects in your enterprise.

هيكل تنظيم الموسسه او بنيه الاداره

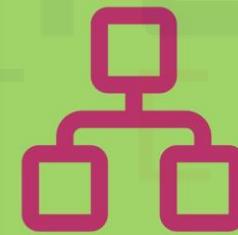


EPS ,OBS



Creating a Work Breakdown Structure

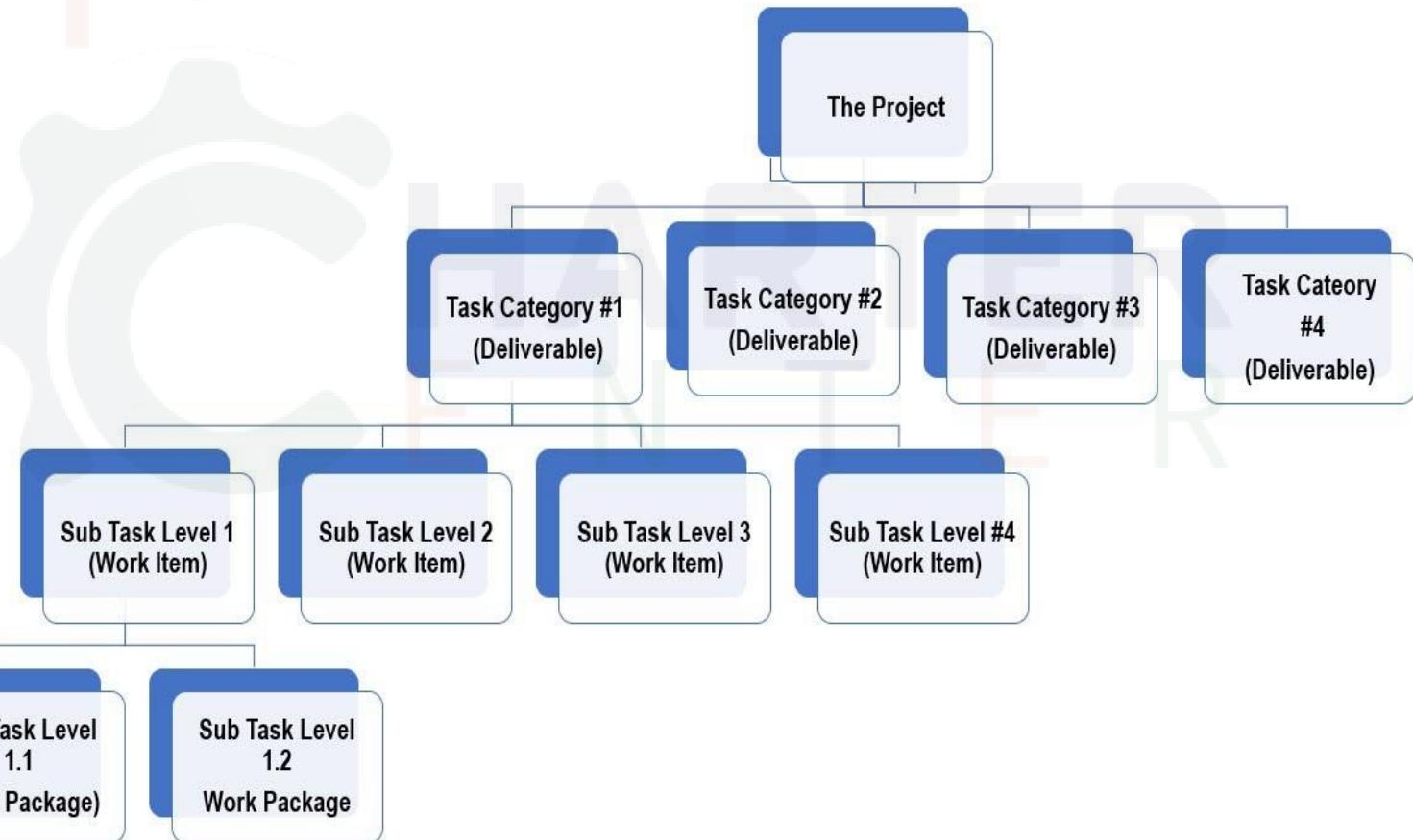
- ❖ The process of subdividing project work into a smaller , more manageable component.
- ❖ A hierarchical arrangement of the products and services produced during, and by, a project.
- ❖ Element represents a deliverable, product, or service
- ❖ Each element contains the activities needed to produce the deliverable
- ❖ Enables you to divide a project into logical pieces for the purpose of planning and control



Creating a
Work
Breakdown
Structure

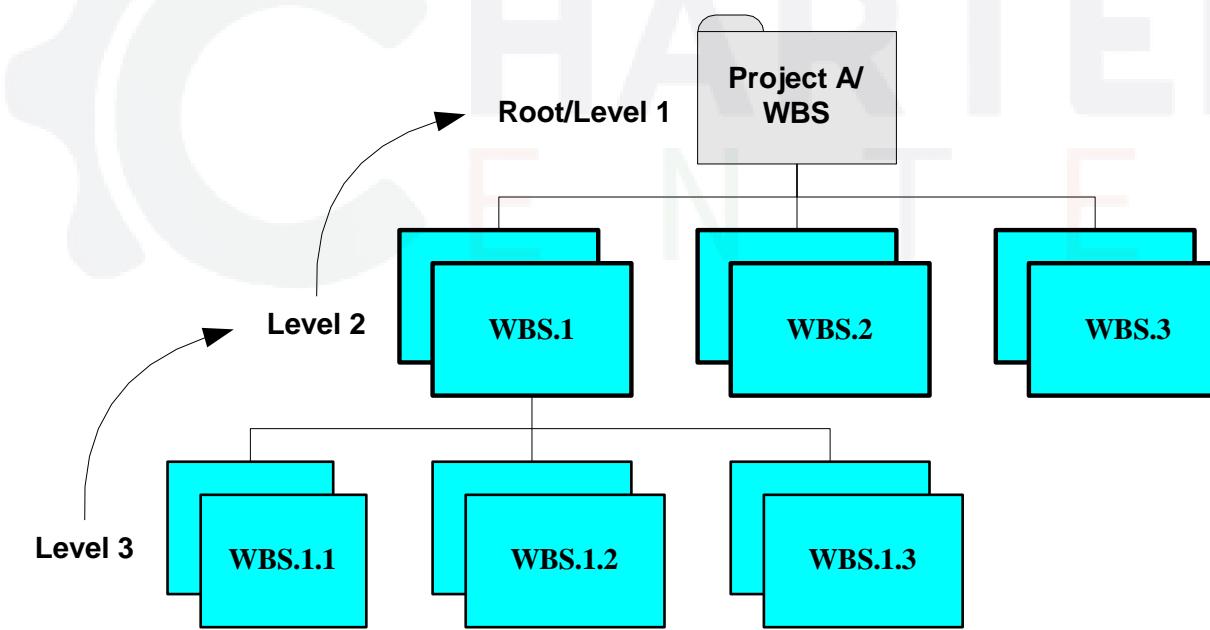
- A WBS is defined by the PMBOK as “a deliverable-oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives and created the required deliverables

Work Breakdown Structure (WBS)

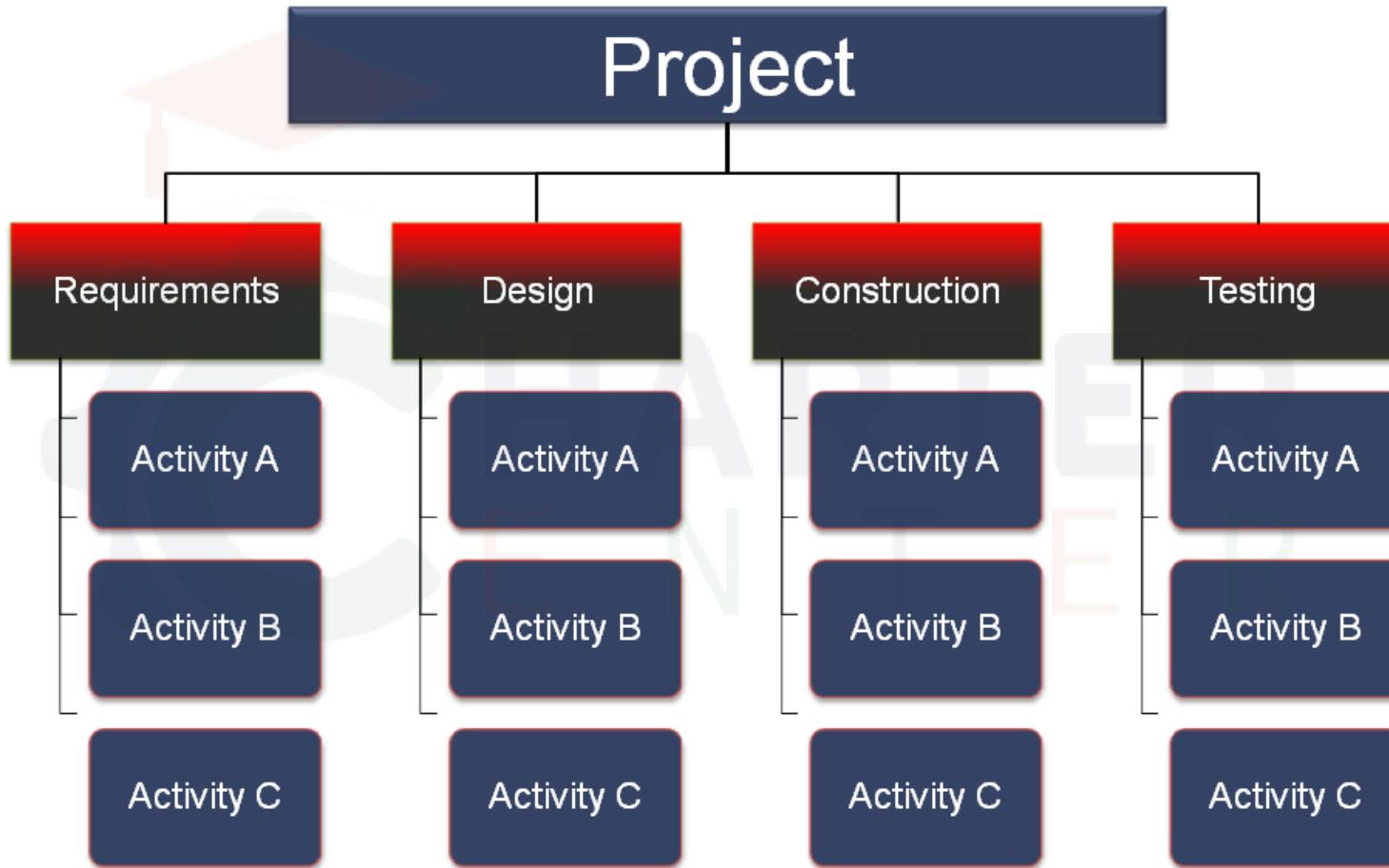


WBS

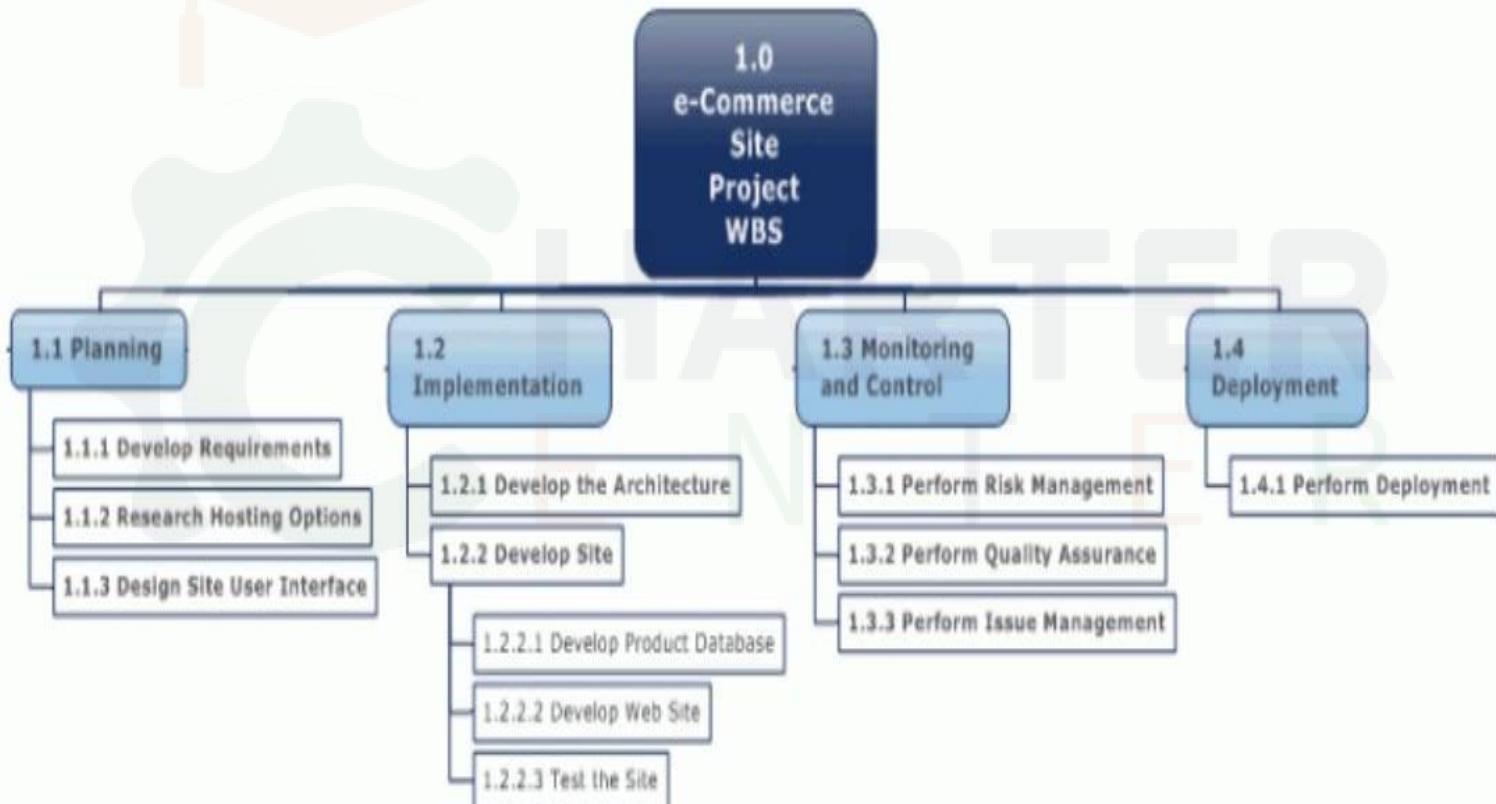
- Project is root node of WBS.
- Child/parent relationships between elements enable lower levels to be rolled up and summarized.



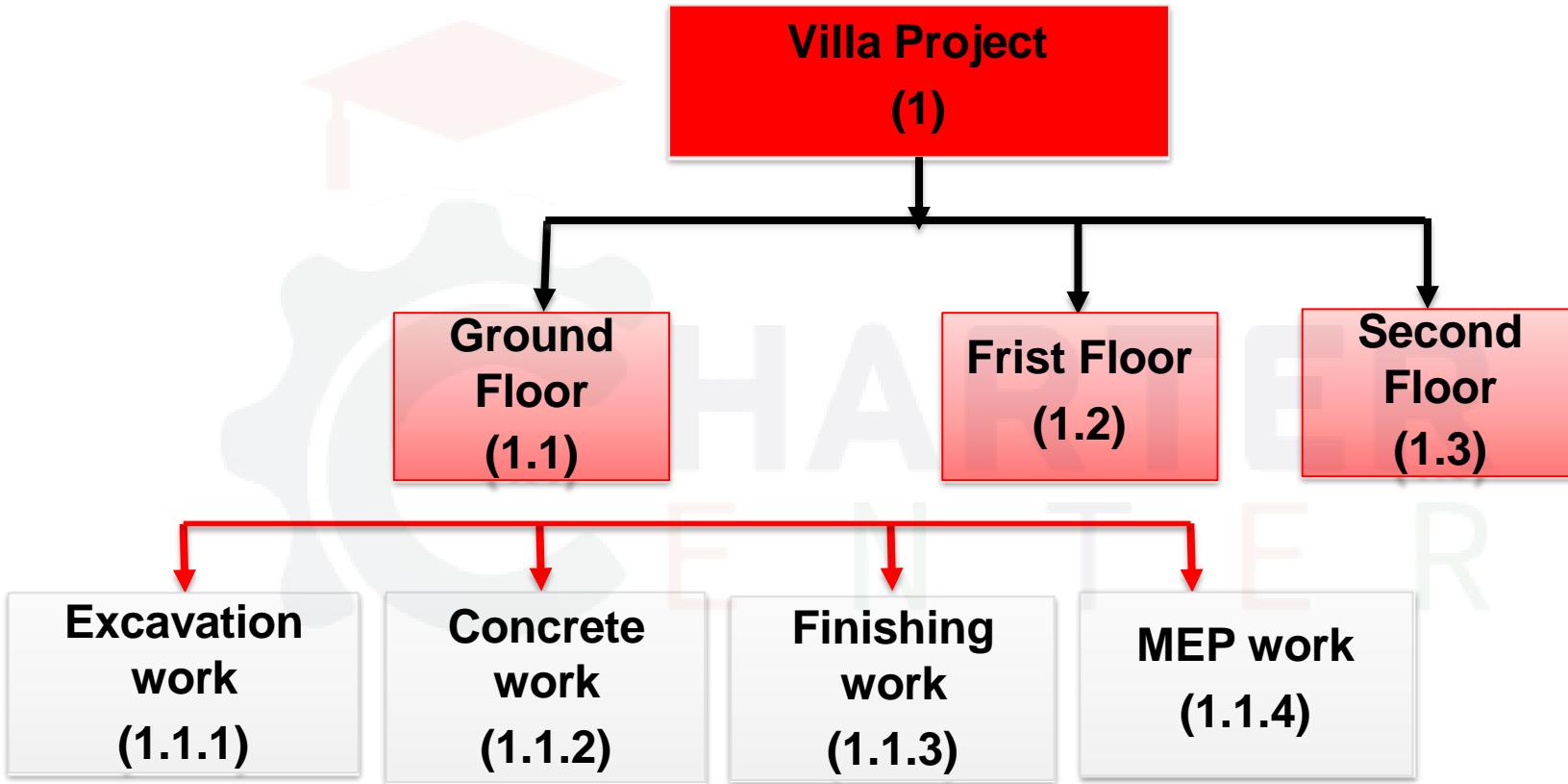
WBS Example



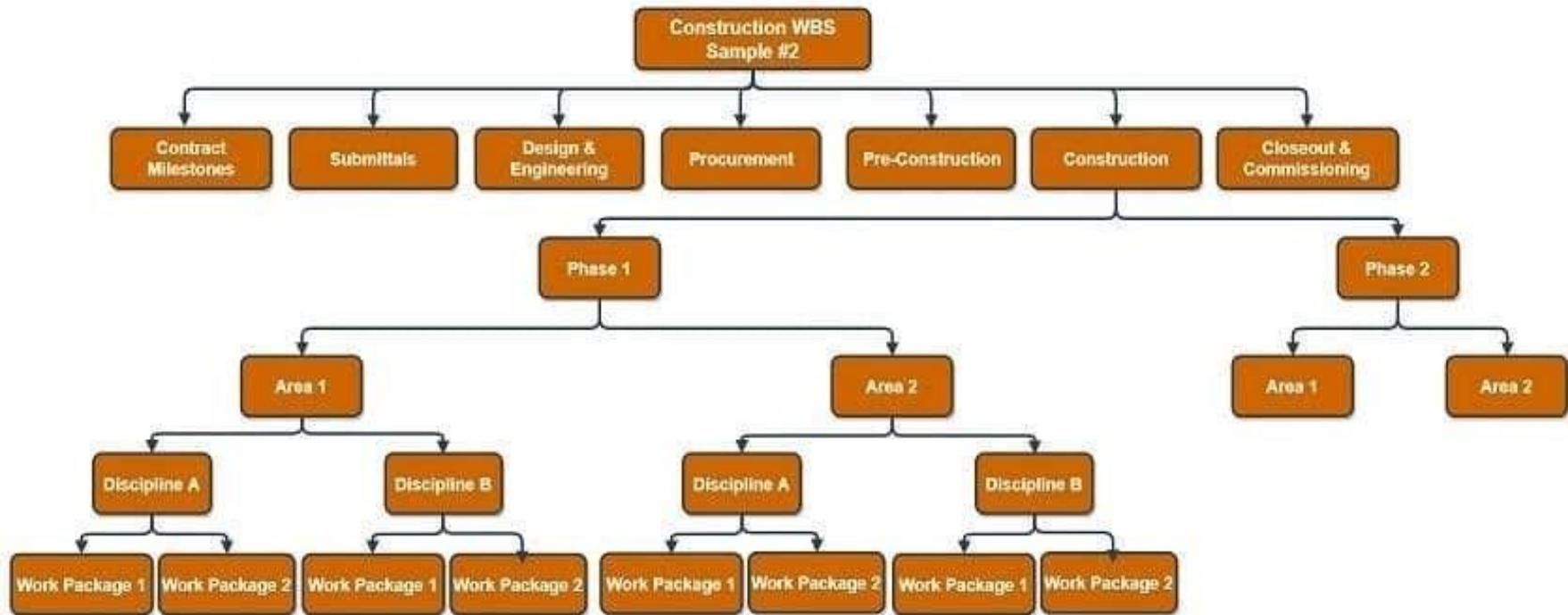
WBS Example



WBS Example



WBS Example



WBS Example



Work Breakdown Structure

Find This icon



P6 Primavera P6 Professional 18 :

File Edit View Project Enter

Projects Activities Projects

Project ID

Enterprise

- A
- HR
- BLDG-17
- E&C**

1

- EC00515
- EC00530
- EC00501
- EC00610
- EC00620
- EC00630

Energy

- NRG00870
- NRG00950
- NRG00800
- NRG00940
- NRG00820

WBS

Projects WBS Activities Resources Reports

Layout: WBS

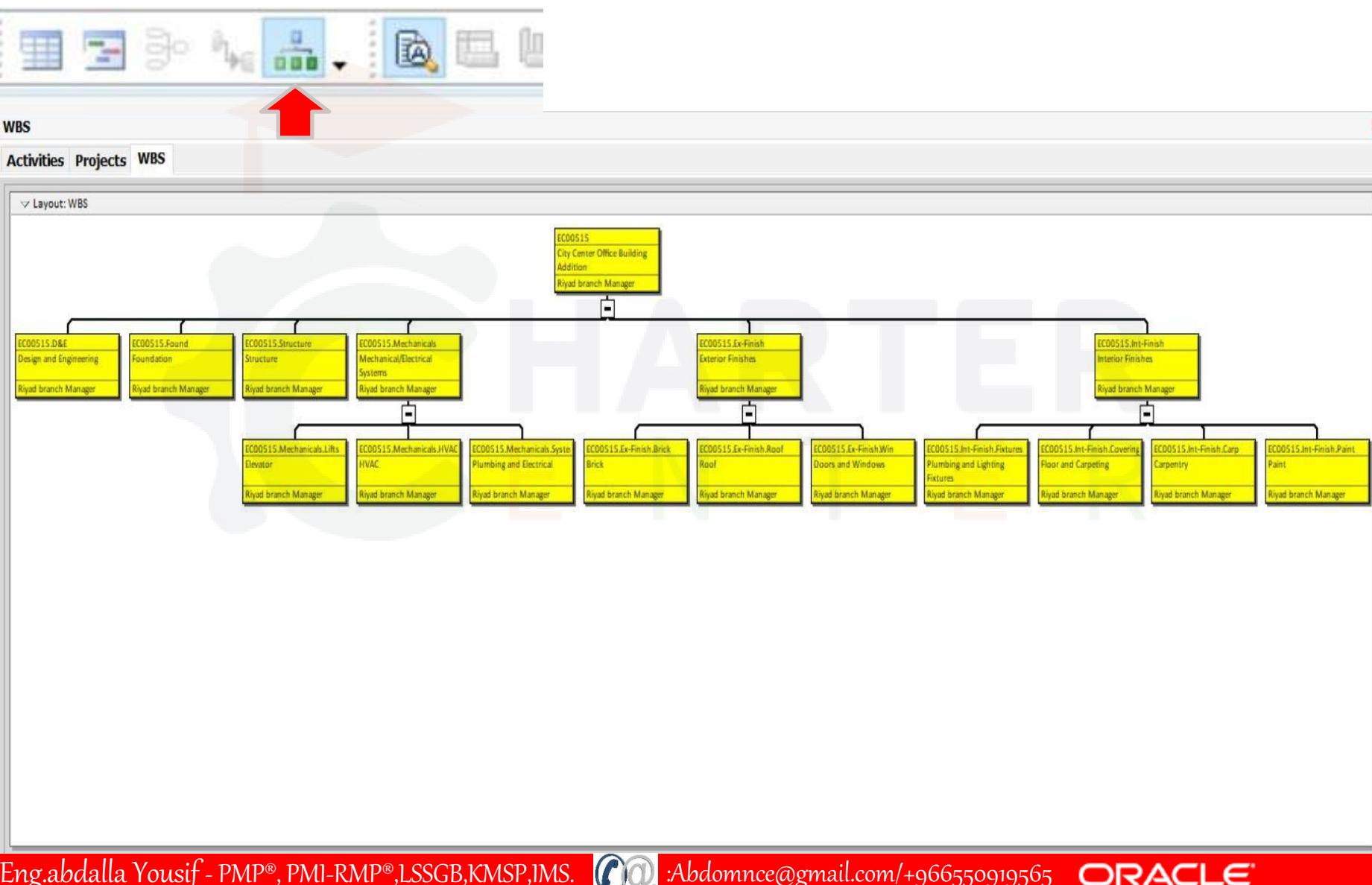
WBS Code	WBS Name	Total Activities	Total Float	Original Budget	Actual Expense	BL2	Mar 12	Mar 19
0	Water Tank Project	8	0d	SR0.00	SR0.00			
0.1	Mobilization work	1		SR0.00	SR0.00			
0.2	Excavation work	2		SR0.00	SR0.00			
0.3	Concrete work	2	5d	SR0.00	SR0.00			
0.4	Import & Install work	2	0d	SR0.00	SR0.00			
0.5	Hand Over work	1	0d	SR0.00	SR0.00			

June 201

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2

Work Breakdown Structure



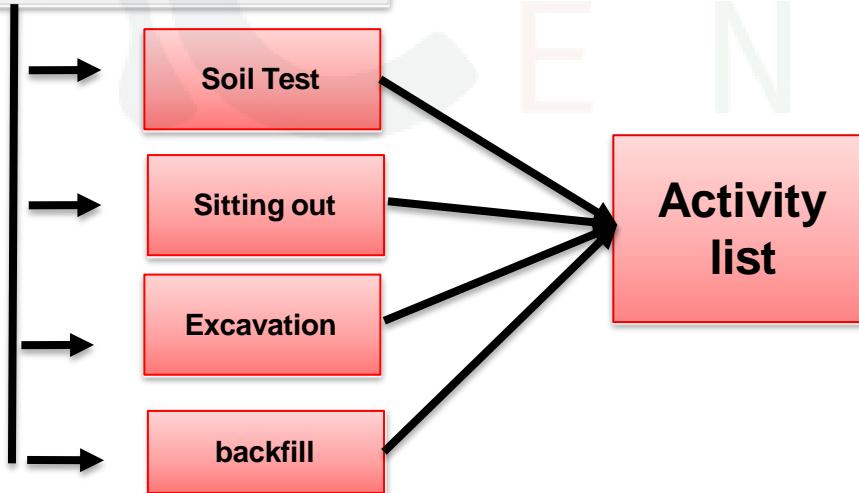
Define Activities

- is the process of identifying and documenting the specific actions to be performed to produce the project deliverables.
- **Define Activities Tools & Techniques-**

➤ **Decomposition:**

We will start from decomposing the work packages in WBS to activities (activity: effort necessary to complete a work package)

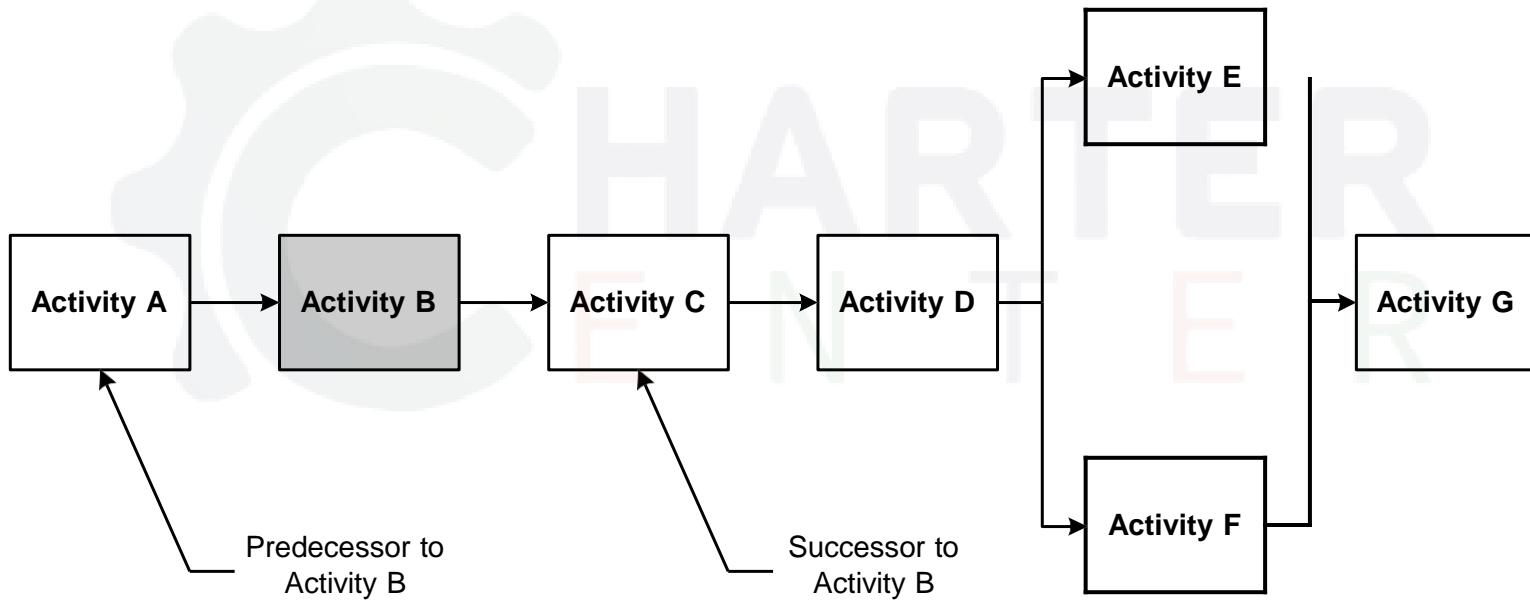
Excavation work
(1.1.1)



Sequence Activities

Network Logic Diagram

A network logic diagram is a graphic representation of all of the activities in a project and their logical (dependent) relationships.



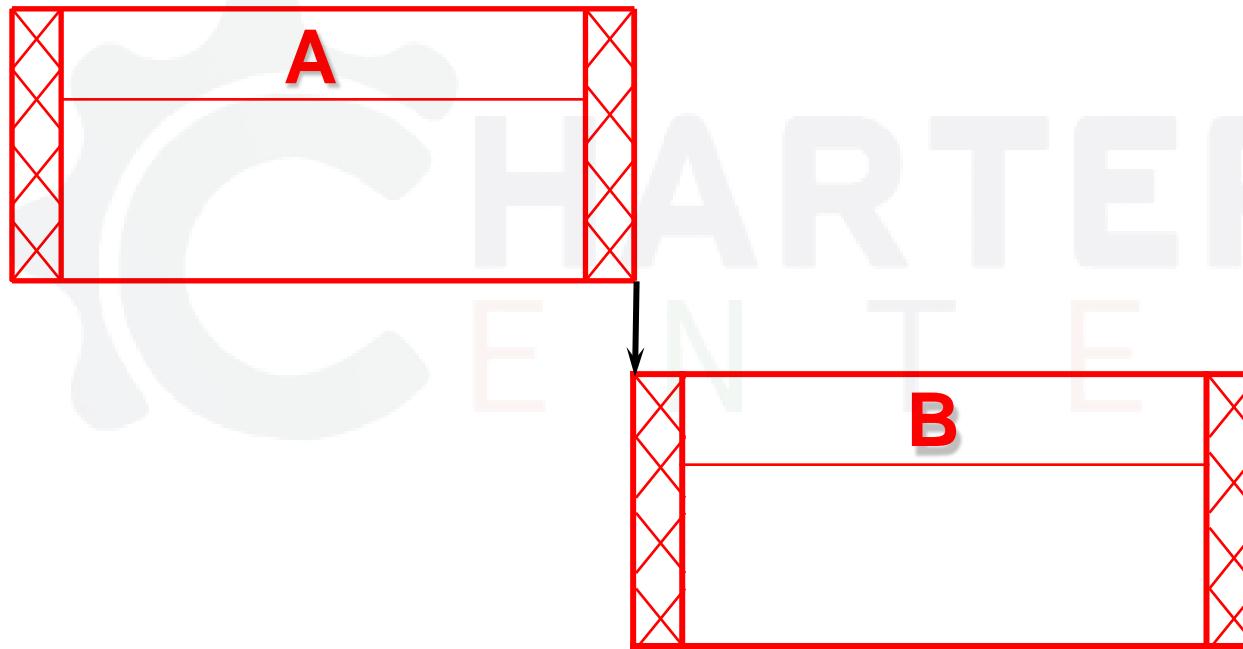
Relationship Types

There are four relationship types:

- **Finish to Start (FS)** – When A finishes, B can start.
- **Start to Start (SS)** – When A starts, B can start.
- **Finish to Finish (FF)** – When A finishes, B can finish.
- **Start to Finish (SF)** – When A starts, B can finish.

Finish to Start (FS)

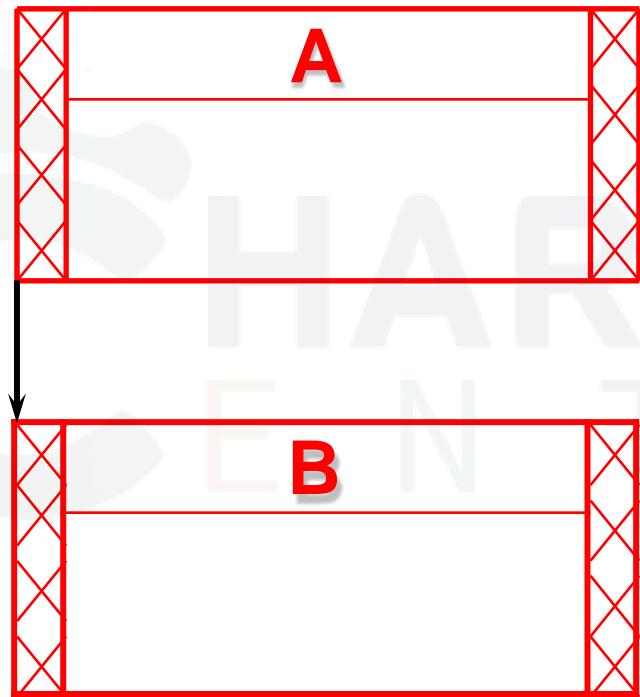
When activity A finishes, activity B can start. This is the most common type of relationship.



Example: When we finish writing the report, we can send it to the client.

Start to Start (SS)

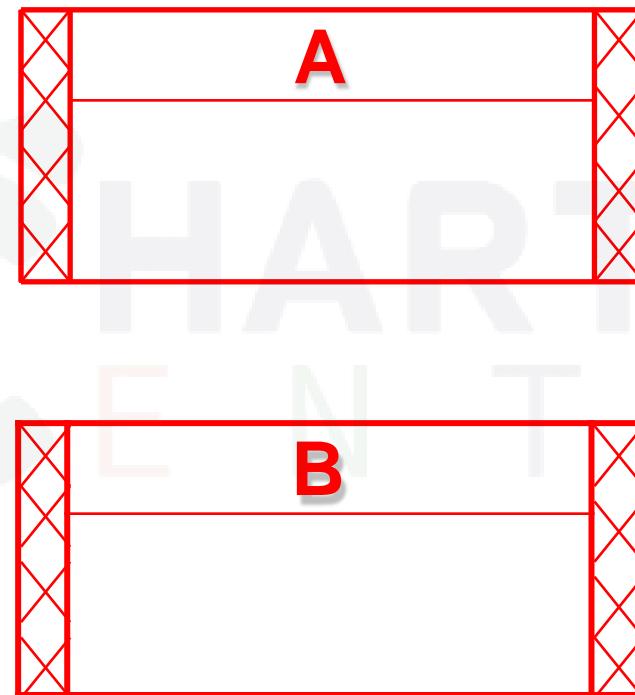
When activity A starts, then activity B can start.



Example: When we start selling our new software, we will start offering support service.

Finish to Finish (FF)

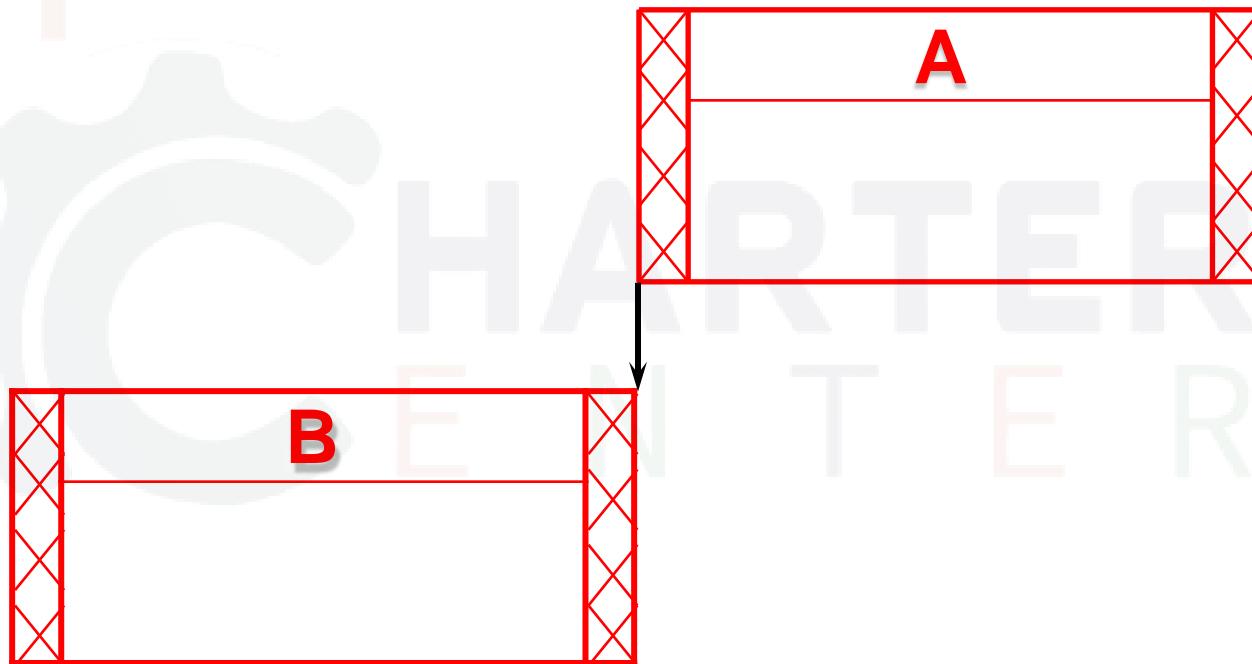
When activity A finishes, then activity B can finish.



Example: When we finish testing, we can finish collecting data.

Start to Finish (SF)

When activity A starts, then activity B can finish.



Example: When we begin manufacturing our own components, we finish releasing of all POs

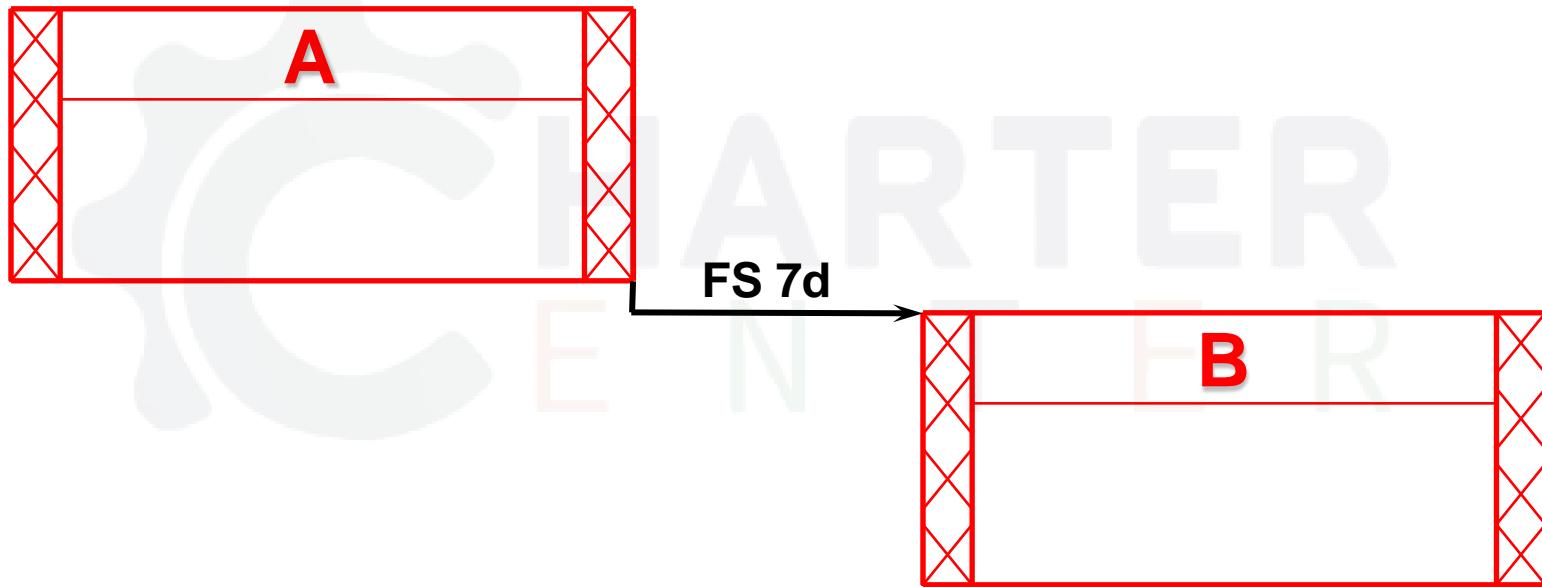
Relationships with Lag

Lag specifies an offset or delay between an activity and its successor.

- Can be added to any relationship type.
- Can be a positive or a negative value.

Finish to Start with Lag

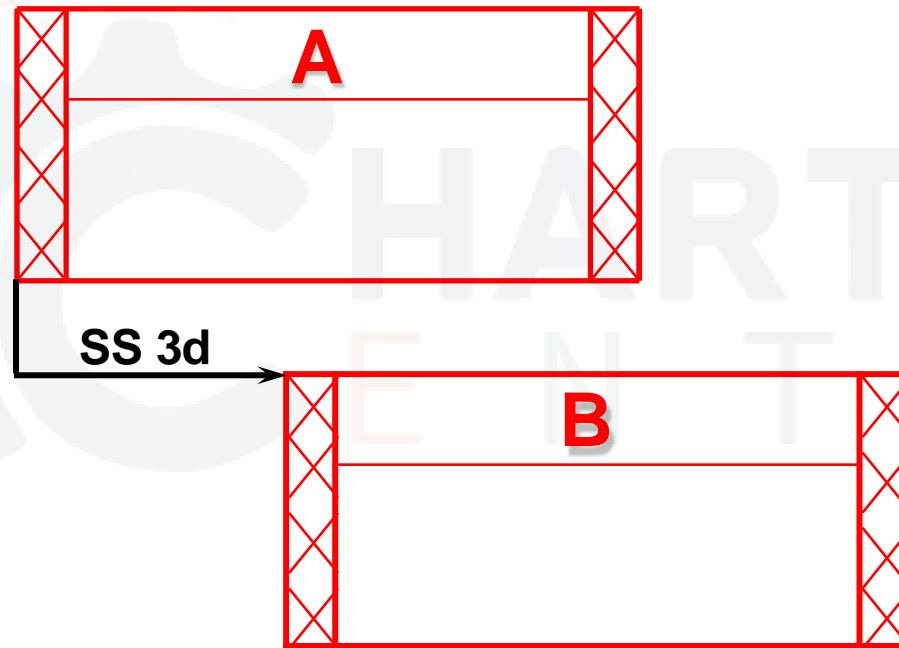
Activity B can start after activity A finishes and seven days have passed.



Example: After the concrete floor is poured and cures for seven days, we can begin constructing the walls.

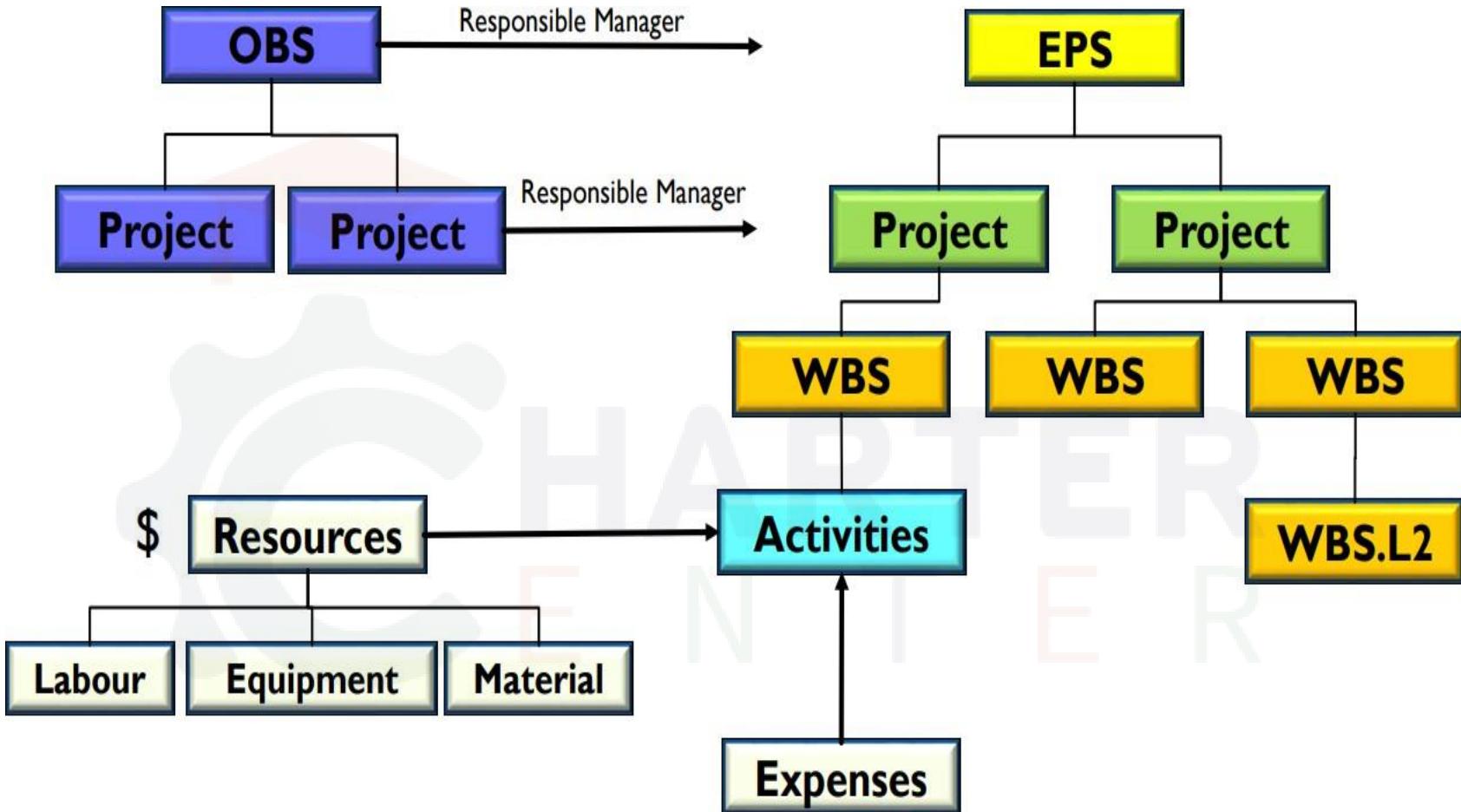
Start to Start with Lag

After activity A starts and 3 days of work have passed, then activity B can start.



Example: We can start laying the drainage pipes three days after we start digging the trenches.

EPS ,OBS

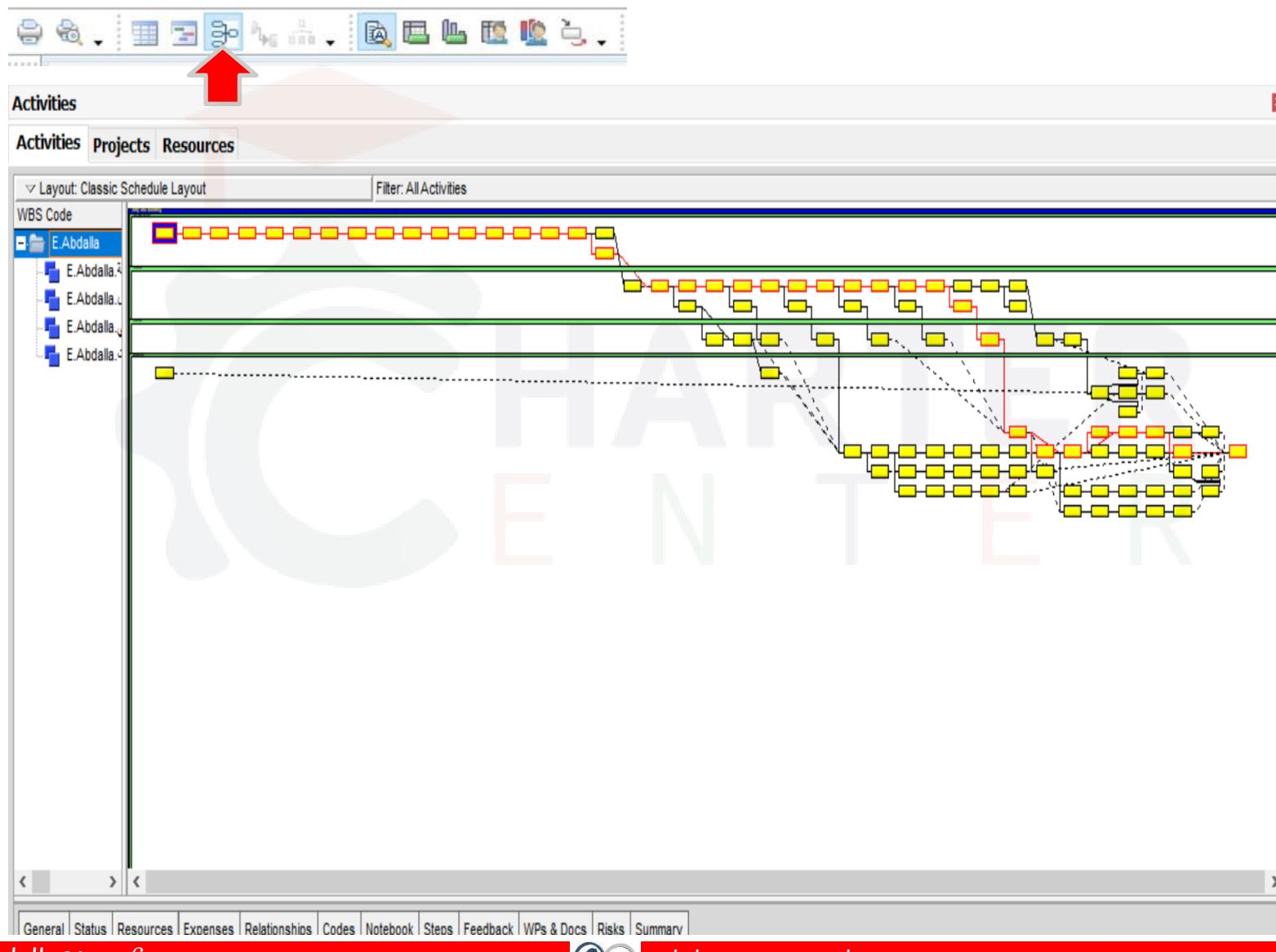


Precedence Diagramming Method (PDM)

PDM is a technique for creating network logic diagrams.

- A box or rectangle represents each activity.
- Lines with arrows connect the boxes and represent the logical relationships between the activities.
 - **Predecessor** - Controls the start or finish of another activity.
 - **Successor** - Depends on the start or finish of another activity.
- Start with either the first activity in the network and enter each successor, or start with the last activity in the network and enter each predecessor.

Project Schedule Network Diagram



Estimate Activity Durations

- Is the process of estimating the number of work periods needed to complete each individual activity with the estimated resources.
- **Estimate Activity Durations Tools & Techniques-**

1. Analogous Estimating (Top-down)

Technique for estimating the duration or cost of an activity or a project using historical data from a similar activity or project.

It is used when there is a limited amount of detailed information about the project, especially in the early stages of project.

2. Parametric Estimating

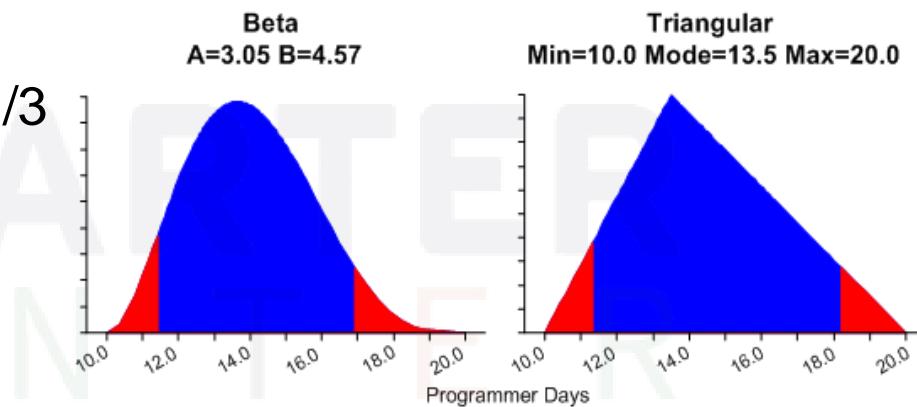
Uses a statistical relationship between historical data and other variables. Activity can be quantitatively determined by Dividing the quantity of work by unit of work Per labor hours

Estimate Activity Durations

3. Three-point Estimates (PERT)

This concept originated with the program evaluation and review technique. Uses three estimates to calculate average: Most likely, Optimistic, Pessimistic

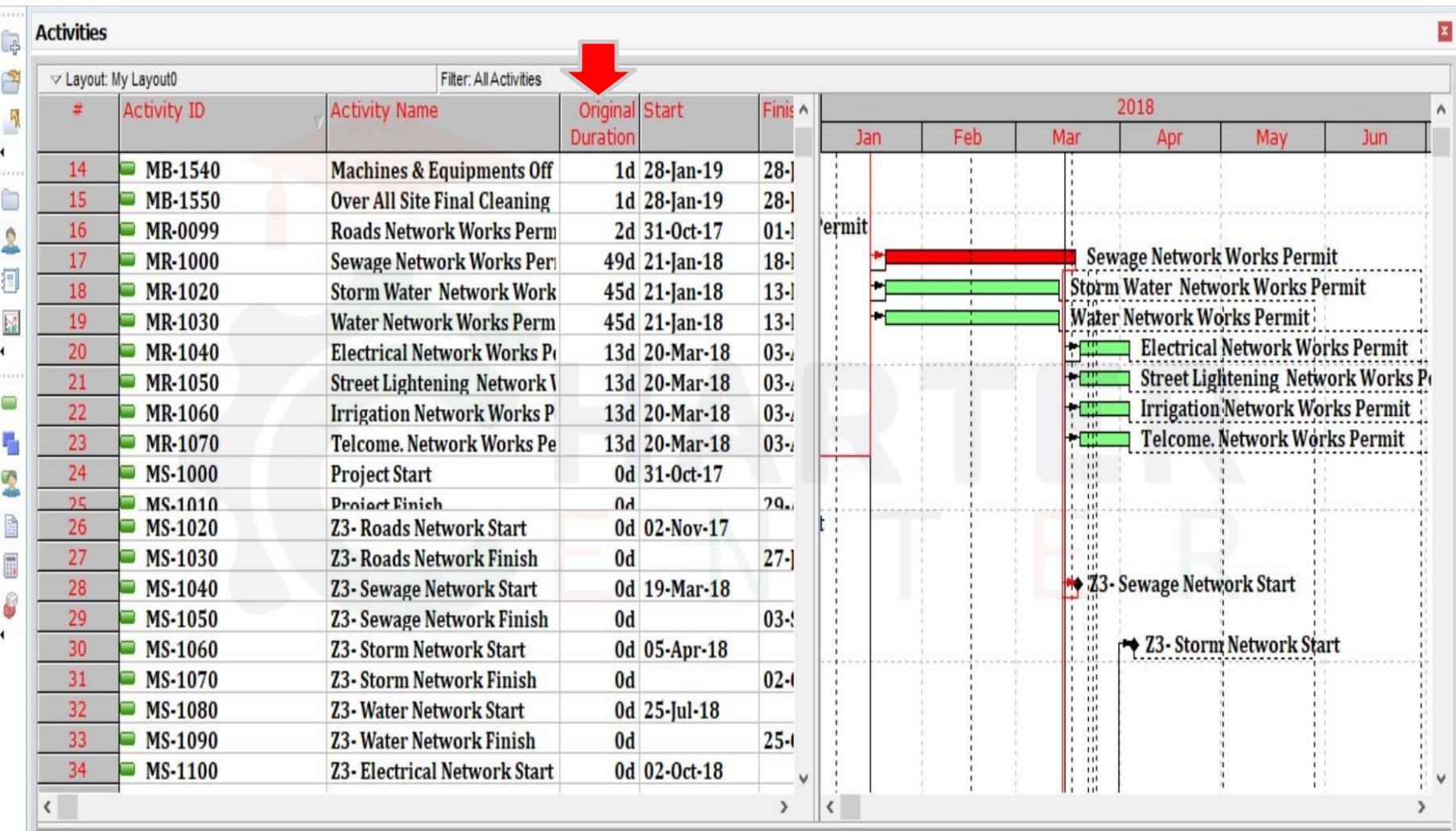
- Triangular Distribution $E = (O+M+P)/3$
- Beta Distribution $E = (O+4M+P)/6$



4-Bottom-up Estimating

In bottom-up estimating, each task is broken down into smaller components. Then, individual estimates are developed to determine what specifically is needed to meet the requirements of each of these smaller components of the work. This technique is highly accurate and can be used in both estimating cost and resources however it's time consuming.

Activity Durations in P6:



Scheduling

Scheduling Purpose

Identify start and completion of the project.

Identify start and completion dates of all activities.

Scheduling

Scheduling steps

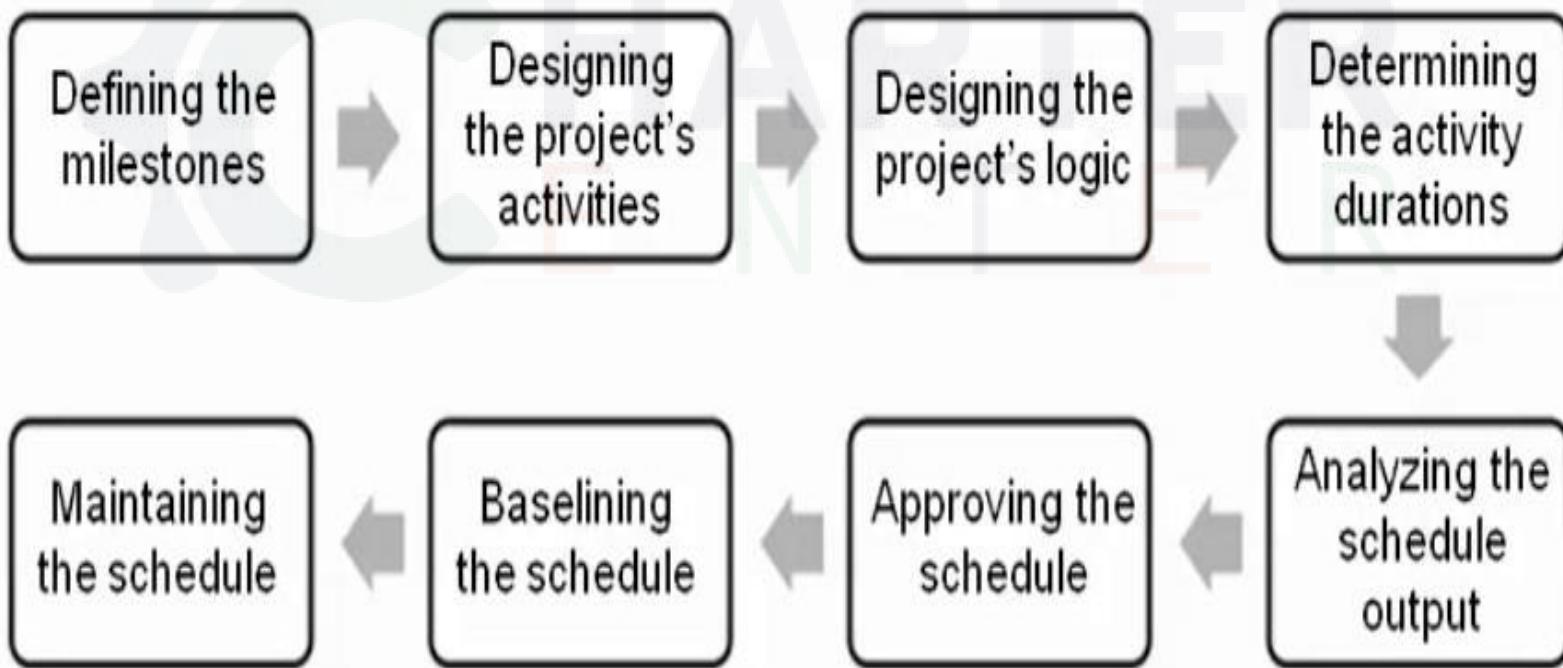
Step 1: Determine Activity Sequence By Creating a Network Diagram

Step 2: Estimate Activity Durations

Step 3: Calculate the Schedule Using Critical Path Method (CPM) Procedures

Develop Schedule

- Develop Schedule is an iterative process of analyzing activity sequence, duration, resource requirement and schedule constraints to create the schedule model, its key benefit that it gathers all the available information into a scheduling tool to generate the schedule model with planned dates for completing project activities.

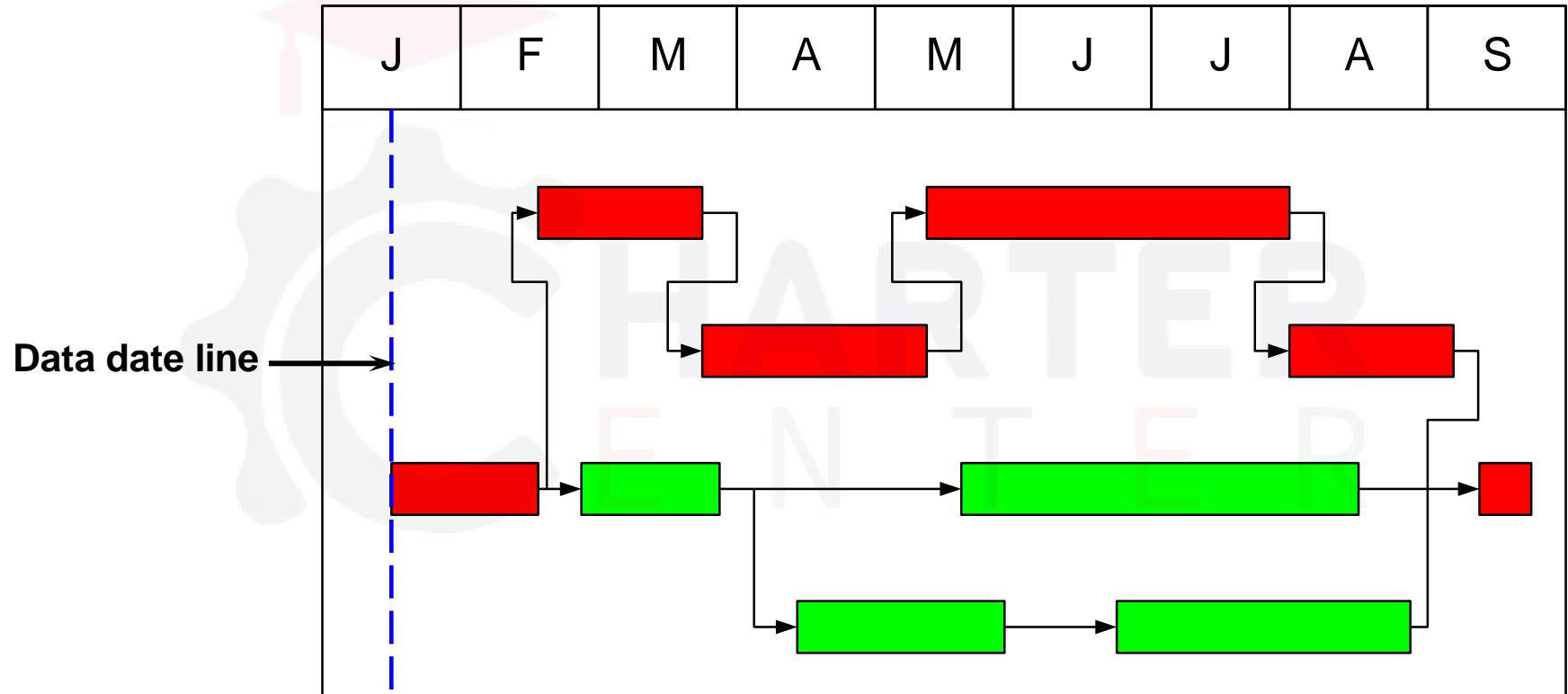


Data Date

- The date that is used as the starting point to schedule all remaining work.
- During the Planning phase, the data date should match the project Start date.



Data Date



Critical Path Method Scheduling

The Critical Path Method (CPM) is the traditional technique for calculating project schedules and determining the minimum total project duration.

- Uses activity durations and relationships between activities to calculate schedule dates.
- Calculation is done in two passes – forward and backward – through the activities in a project.

Critical Path

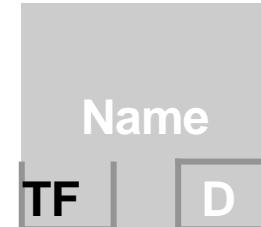
- The sequence of activities that determines a project's minimum total duration and completion date.
- Generally the longest continuous path of activities through the project.
- The duration of the activities on the critical path controls the duration of the entire project. A delay to any activity on the critical path will delay the Finish date of the project.

Critical Path Method

LS

LF

- Calculates the following for each activity

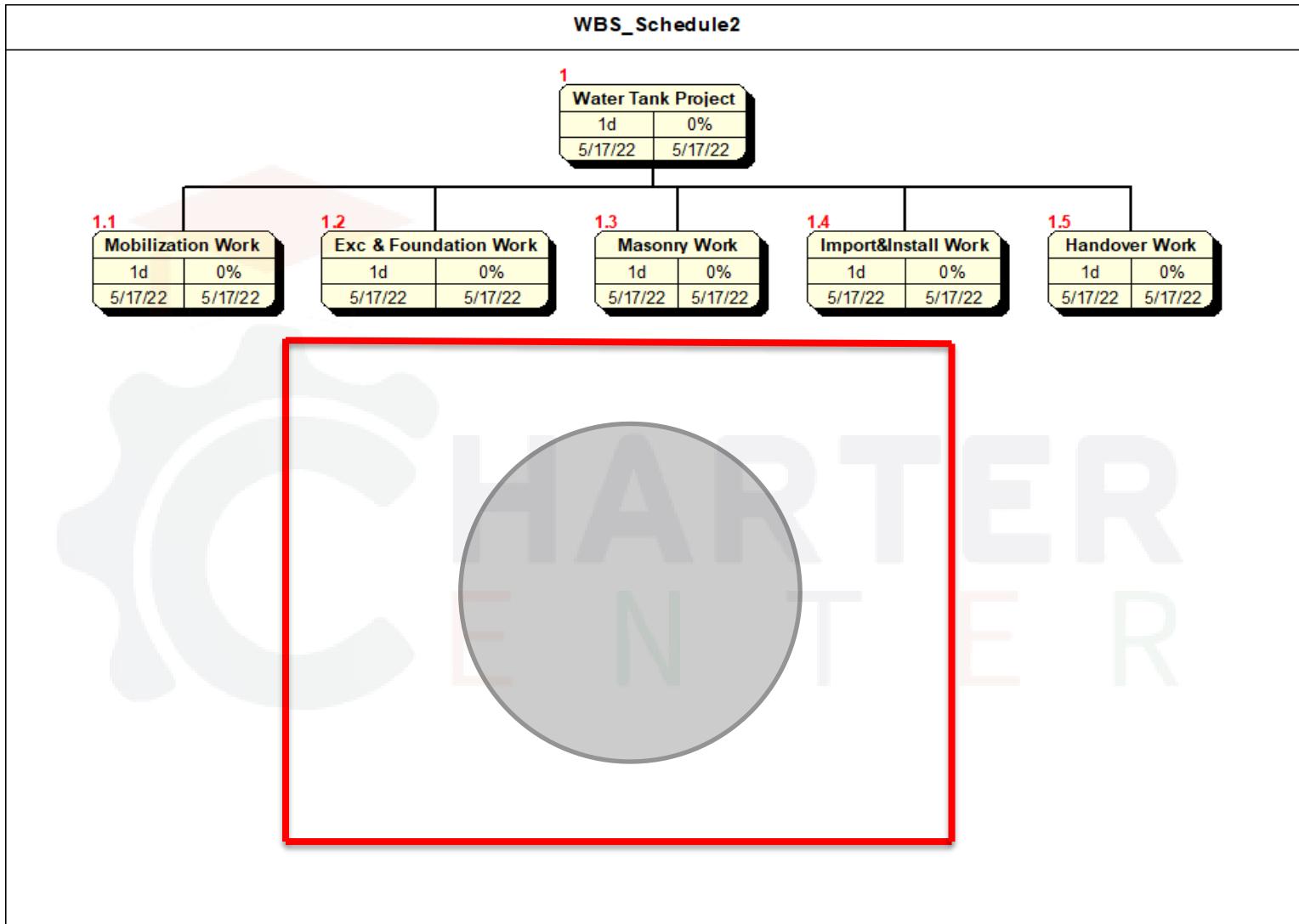


ES

EF

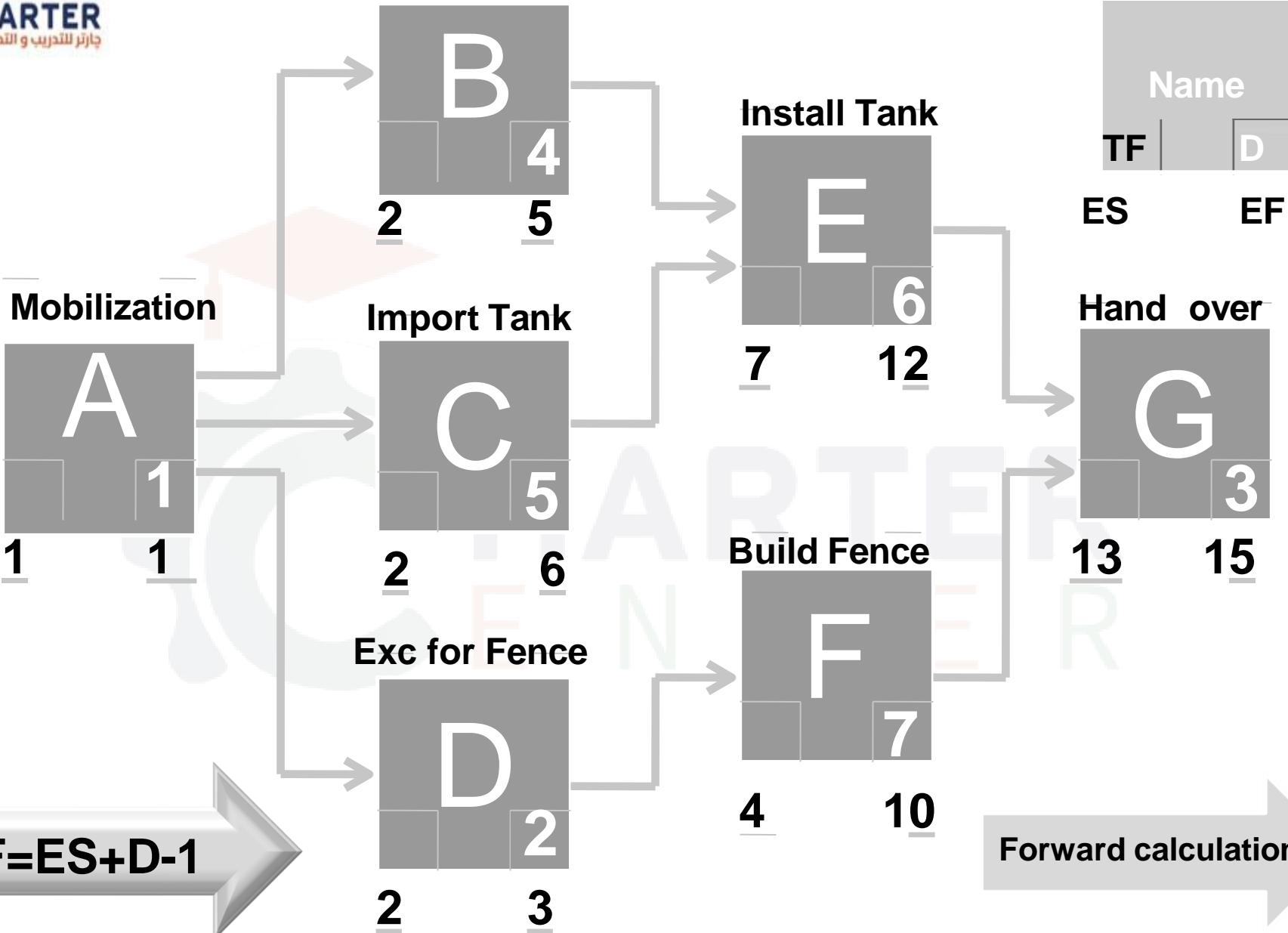
- Float (slack): is an indication of activity flexibility in relation to time, there are 3 float types:
- Total float: measures the positive differences between early and late dates. The amount of time that a schedule activity can be delayed without delaying the project. **Total Float= LS- ES OR = Lf- EF**
- Free float: the amount of time that a schedule activity can be delayed without delaying the early start date of any immediate successor activity within the network path. **Free Float(a)= ES(b)-EF(a)**
- Project float: the amount of time that the overall project can be delayed without delaying the required completion date provided by the customer.

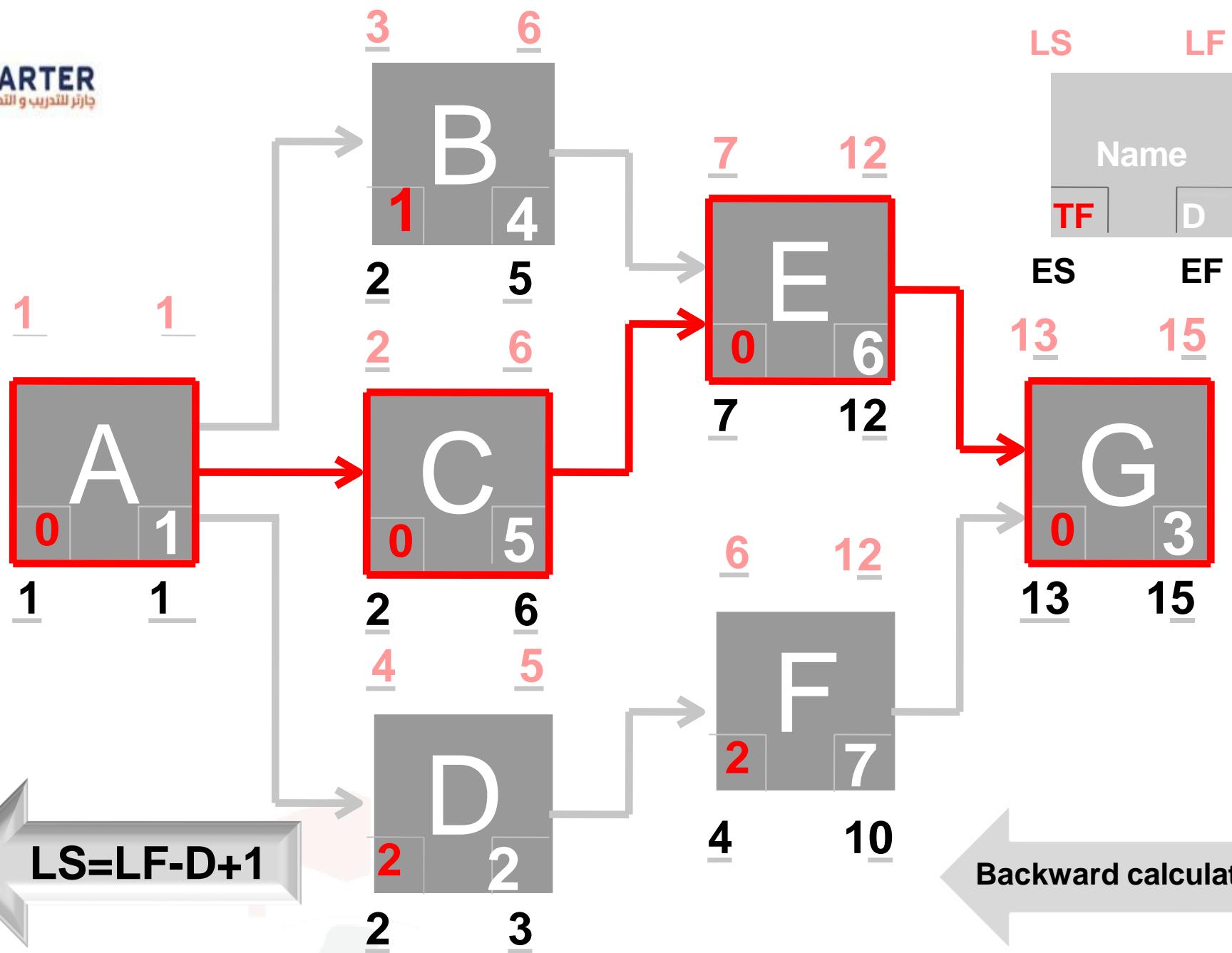
Water Tank Project

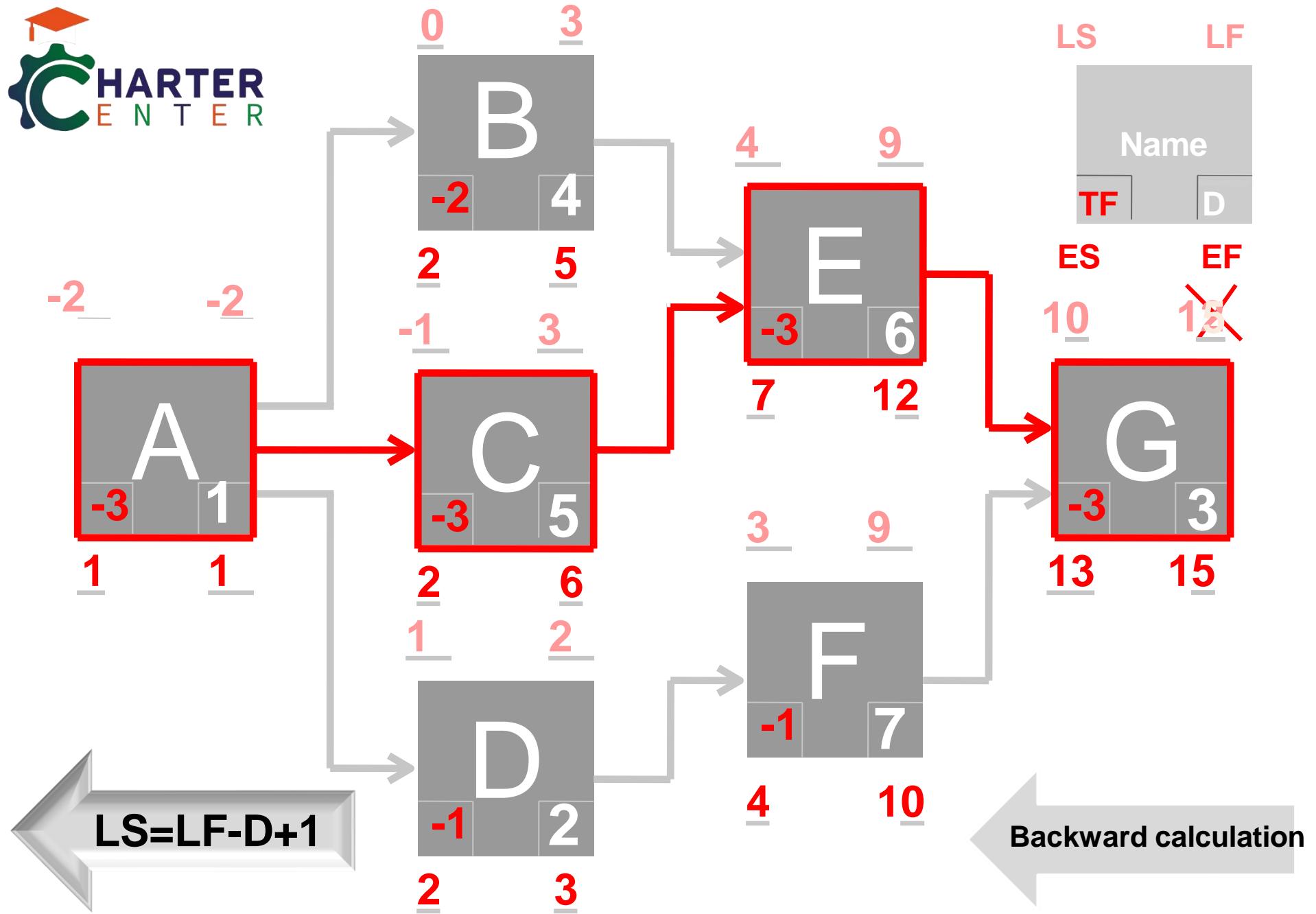


Exc for Tank

LS LF







What's is the Critical Path?

- **Riskiest path in a project**
- **Path with longest duration**
- **Path with smallest total float**
- **Path with the most important activities**

Calendars

- Specify work time and nonwork time.
- Used for scheduling and leveling resources.
- An unlimited number of calendars can be created.
- All activities must have an assigned calendar.



Calendar Pools

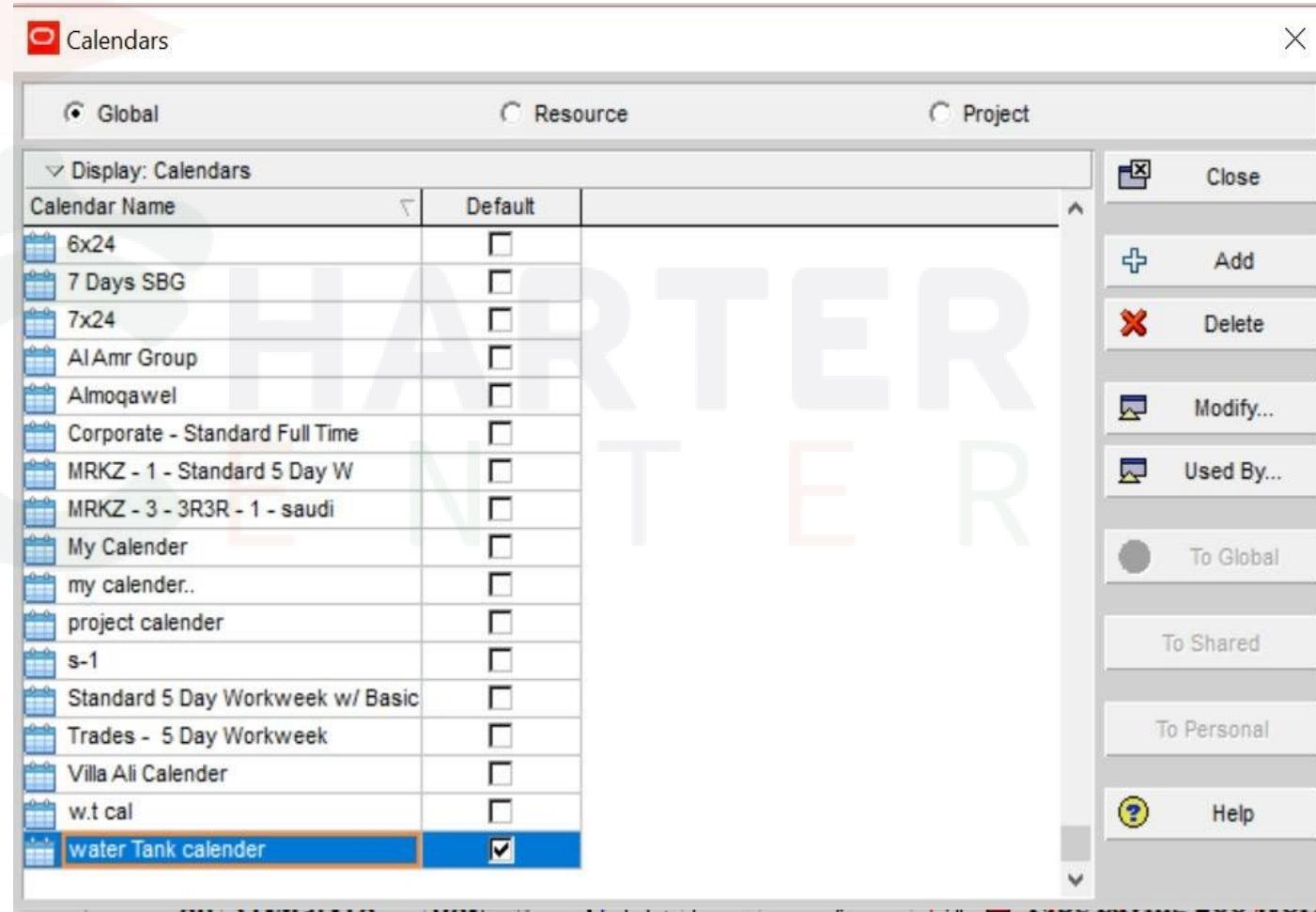
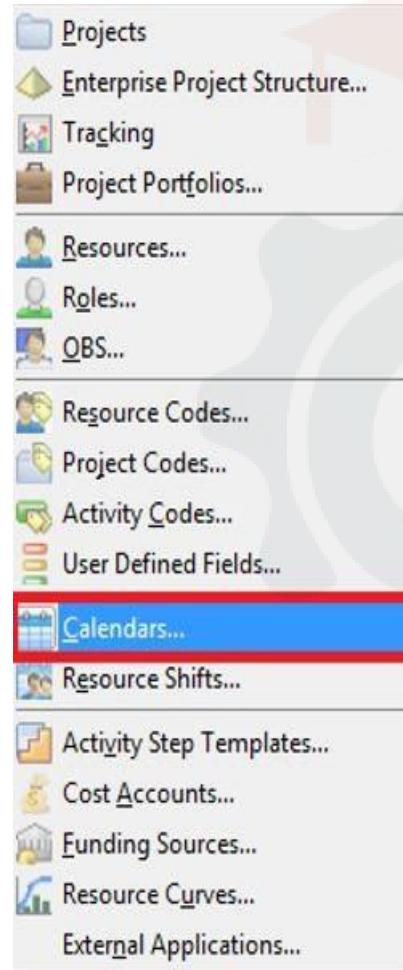
- There are three calendar pools:
 - Global
 - Project
 - Resource
- Determines whether the calendar is available to:
 - All projects, resources, and activities.
 - One project and its activities.
 - Resources only.

Calendar Pools

- Global
 - Calendars that can be used by all projects and resources.
 - Example: 5-day workweek, 8 hours/day (usually with holidays and non-work days from the organization's calendar).
- Project
 - Project-specific calendars.
 - Example: 6-day workweek calendar to accelerate project.
- Resource
 - Resource calendar can be assigned to resource only – not to an activity.
 - Example: Personal vacation days for an individual resource.

Calendar

- Form Enterprise Menu Select Calendars



Calendars

Global Resource Project

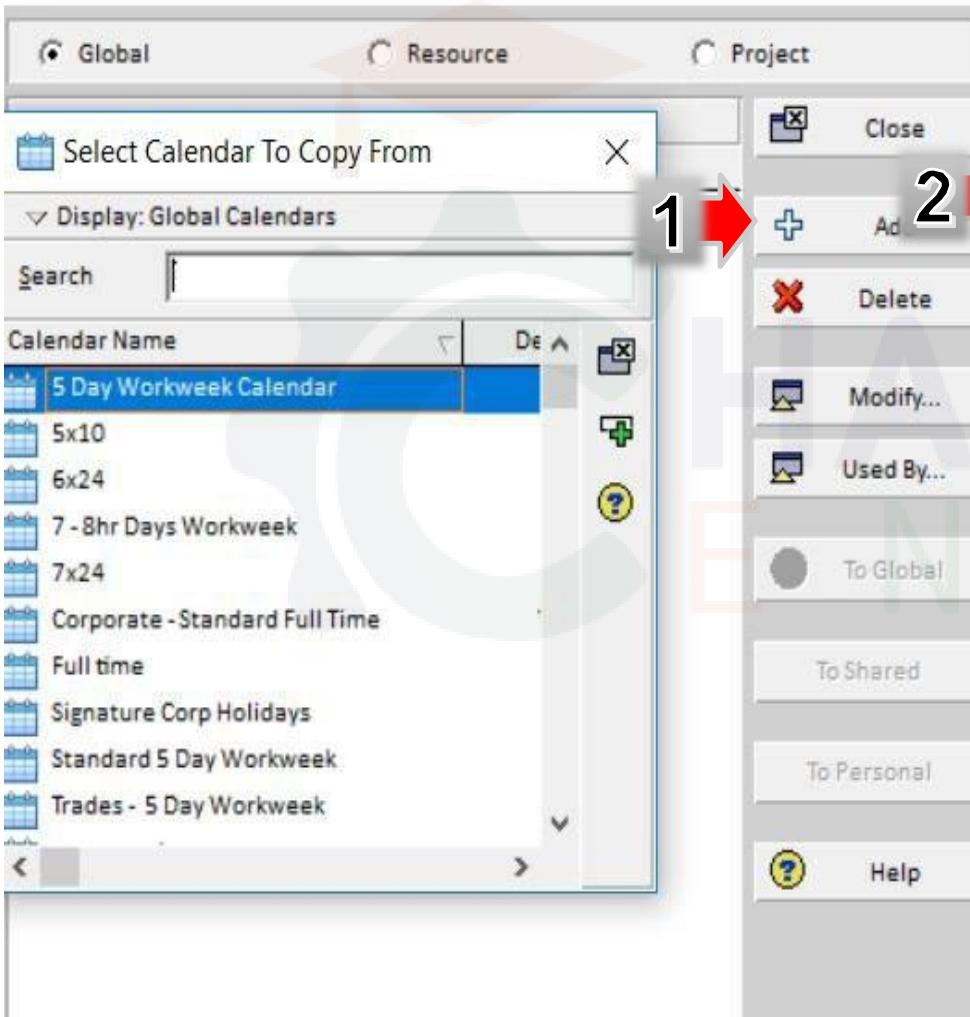
Display: Calendars

Calendar Name	Default
6x24	<input type="checkbox"/>
7 Days SBG	<input type="checkbox"/>
7x24	<input type="checkbox"/>
Al Amr Group	<input type="checkbox"/>
Almoqawel	<input type="checkbox"/>
Corporate - Standard Full Time	<input type="checkbox"/>
MRKZ - 1 - Standard 5 Day W	<input type="checkbox"/>
MRKZ - 3 - 3R3R - 1 - saudi	<input type="checkbox"/>
My Calender	<input type="checkbox"/>
my calender..	<input type="checkbox"/>
project calender	<input type="checkbox"/>
s-1	<input type="checkbox"/>
Standard 5 Day Workweek w/ Basic	<input type="checkbox"/>
Trades - 5 Day Workweek	<input type="checkbox"/>
Villa Ali Calender	<input type="checkbox"/>
w.t.cal	<input type="checkbox"/>
water Tank calender	<input checked="" type="checkbox"/>

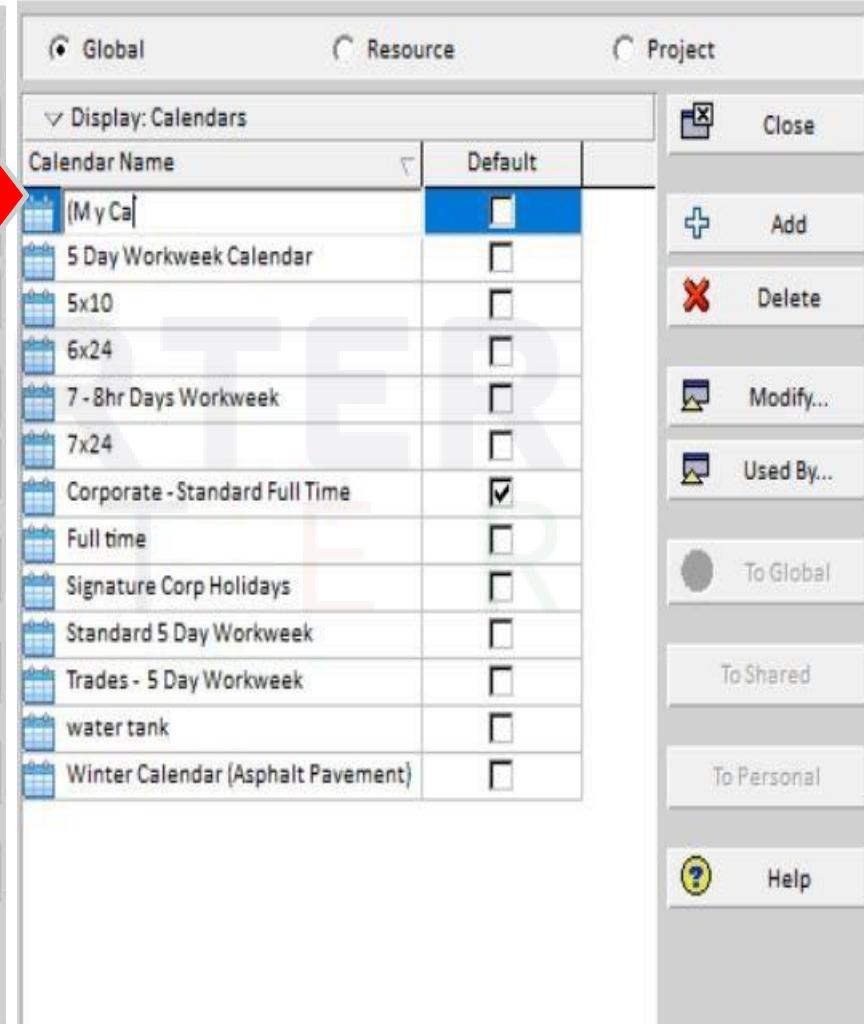
Close Add Delete Modify... Used By... To Global To Shared To Personal Help

Add Project calendars

P6 Calendars



P6 Calendars



Modify calendars

P6 Calendars

X

Global Calendar: Full time

X

Global Resource Project

Display: Calendars

Calendar Name	Default
5 Day Workweek Calendar	<input type="checkbox"/>
5x10	<input type="checkbox"/>
6x24	<input type="checkbox"/>
7 - 8hr Days Workweek	<input type="checkbox"/>
7x24	<input type="checkbox"/>
Corporate - Standard Full Time	<input checked="" type="checkbox"/>
Full time	<input type="checkbox"/>
Signature Corp Holidays	<input type="checkbox"/>
Standard 5 Day Workweek	<input type="checkbox"/>
Trades - 5 Day Workweek	<input type="checkbox"/>
water tank	<input type="checkbox"/>
Winter Calendar (Asphalt Pavement)	<input type="checkbox"/>

1 

Total work hours/day Detailed work hours/day

September 2019

Sun	Mon	Tue	Wed	Thr	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Work hours/day: 8.0

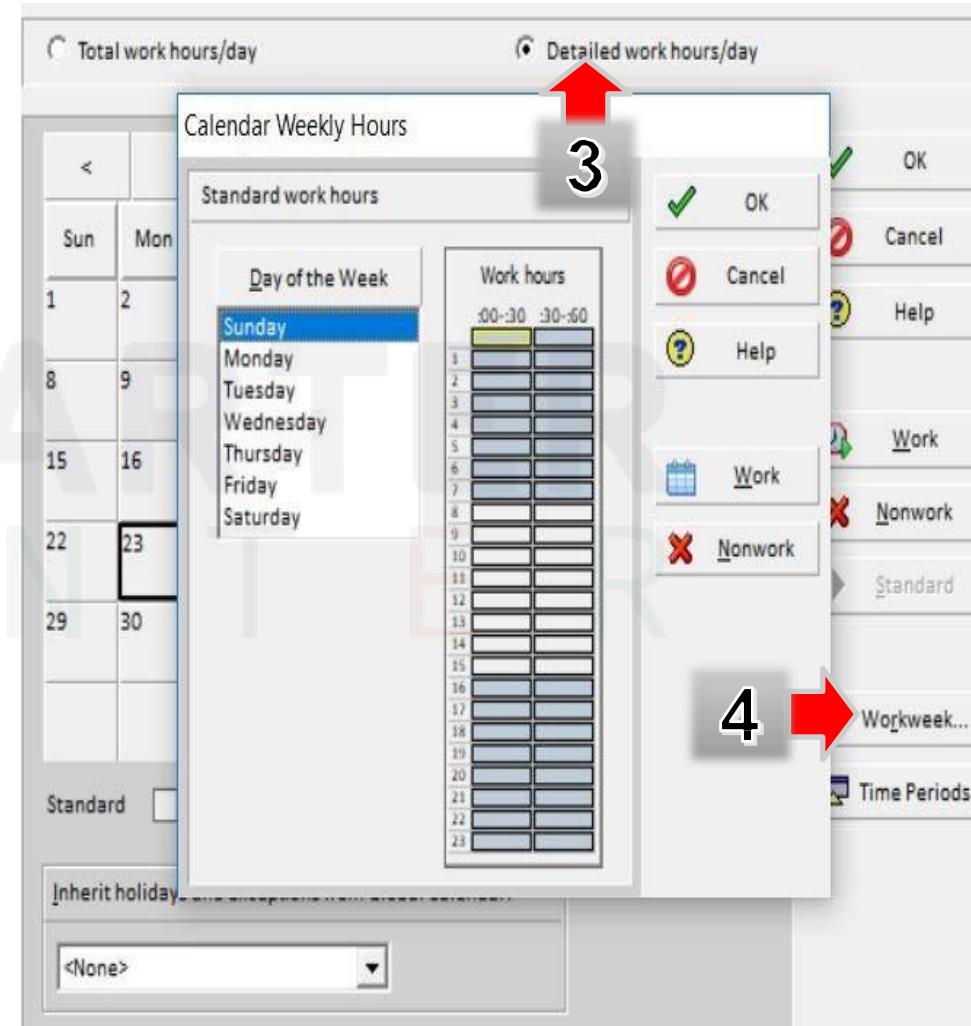
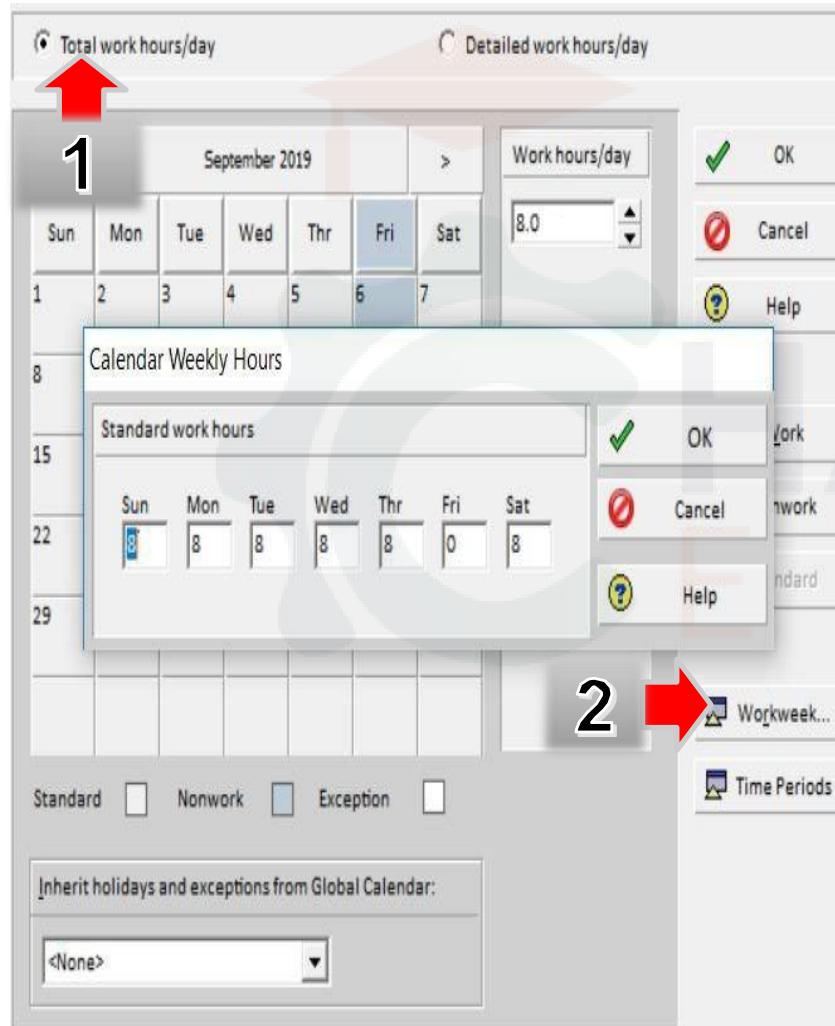
Standard Nonwork Exception

Inherit holidays and exceptions from Global Calendar:

<None>

OK Cancel Help
 Work Nonwork Standard
 Workweek... Time Periods

Total work/day-Detailed hours/day



Time Periods

Total work hours/day Detailed work hours/day

< September 2019 >

	00-30	30-60
1		
2		
3		
4		
5		
6		
7		

Hours per Time Period

Specify the number of work hours for each time period.

Hours/Day	Hours/Week	Hours/Month	Hours/Year
8.0	48.0	192.0	2304.0

OK Cancel Help

15

22

29

Standard Nonwork Exception

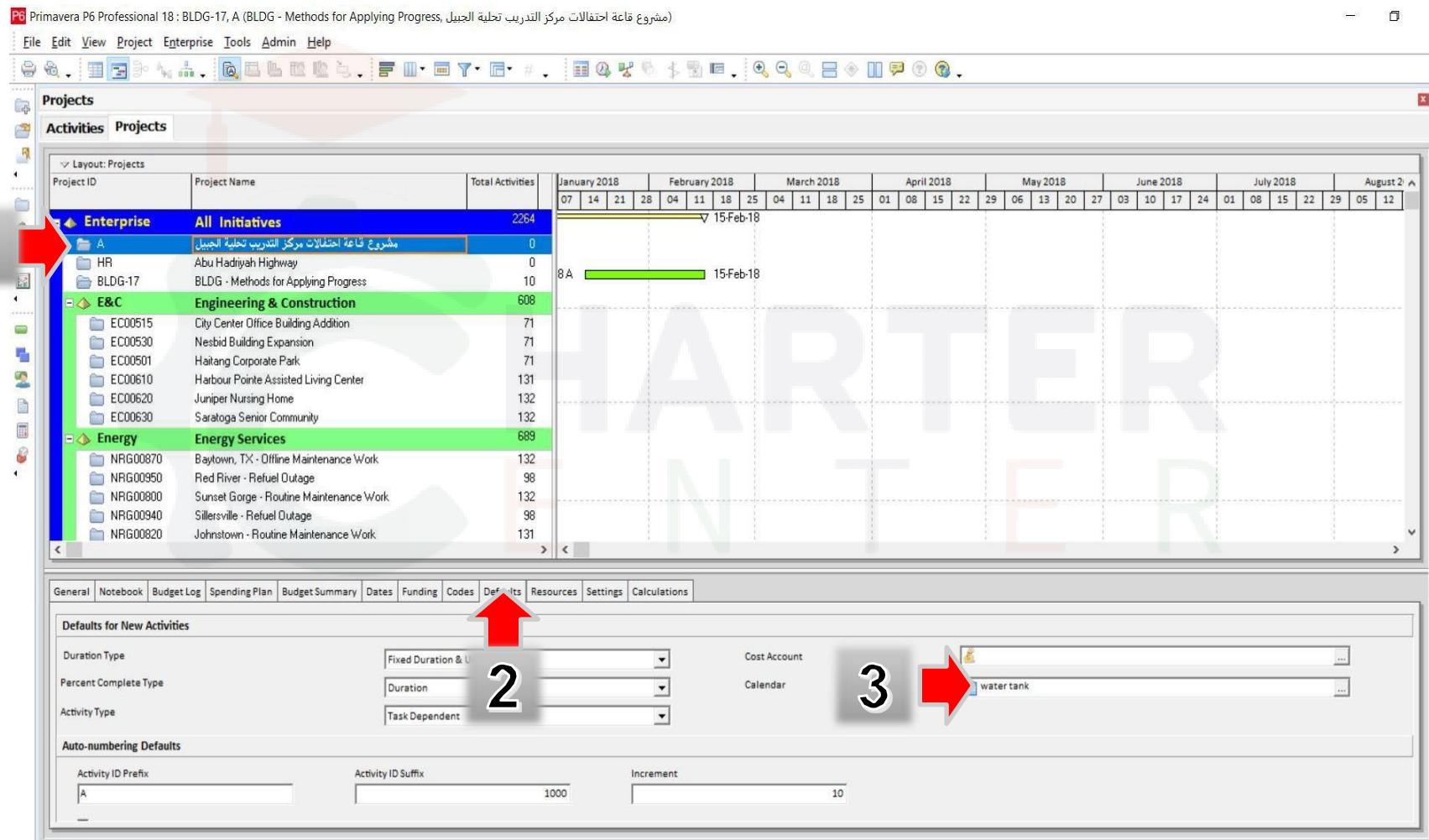
1

Workweek... Time Periods

Inherit holidays and exceptions from Global Calendar:

<None>

Assign Project calendars



Resource Calendars

There are two types of resource calendars:

- Shared:
 - Share among multiple resources.
 - Can convert to personal calendar.
- Personal:
 - Assign to single resource.
 - Calendar is deleted if resource is deleted.
 - Resource can edit personal resource calendar.

Work Time Types

A calendar can include four types of work time:

- Standard day
 - Work hours in day match calendar's work week.
- Nonwork
 - Zero working hours in day.
- Exception
 - Work hours in day do not match calendar's work week.
 - Example: Weekend work hours for a resource normally on a 5-day workweek.
- Nonwork Exception
 - A full day of nonwork time not covered by the standard work week (e.g., vacation).

Calendars and Activity Types

Activity Type determines which calendar is used when a project is scheduled.

- **Task Dependent:** Resource assignments are scheduled according to the calendar assigned to the activity.
- **Resource Dependent:** Resource assignments are scheduled according to the calendar assigned to the resource.

Objectives

After completing this lesson, you should be able to:

- Describe available constraint types.
- Apply Must Finish By constraint to a project.
- Apply a Start On or After constraint to an activity.
- Add a Notebook topic to a constrained activity.

Constraints

- Date restrictions used to reflect project requirements that cannot be built into the network logic.
- More accurately reflect real-world aspects of a project.
- Provide added control of a project.
- Apply to the entire project or to individual activities.
 - Commonly used project-level constraint: Must Finish By
 - Commonly used activity-level constraint: Start On or After
- No more than 10 percent of a project's activities should be constrained.

Must Finish By

- Used when an overall project deadline must be met.
- Forces all activities in the project to finish by the date (and time) specified.
- Establishes the date from which late dates are calculated in the backward pass.
- Affects the Total Float of the entire project.

Start On or After

- Used to set the earliest date an activity can begin.
- Forces the activity to start no earlier than the constraint date.
- Pushes the activity's early start date to the constraint date.
- Affects the early dates of the activity's successors.

Additional Start Constraints

- **Start On** — Forces an activity to start on the constraint date:
 - Shifts both early and late start dates to the constraint date.
 - Used to specify dates submitted by contractors or vendors.
- **Start On or Before** — Forces an activity to start no later than the constraint date:
 - Shifts the late start to the constrained date.
 - Affects the late dates of its predecessors.
 - Used to place a deadline on the start of the activity.

Additional Finish Constraints

- **Finish On** — Forces an activity to finish on the constraint date:
 - Shifts both early and late finish dates to the constraint date.
 - Used to satisfy intermediate project deadlines.
- **Finish On or Before** — Forces an activity to finish no later than the constraint date:
 - Pulls the late finish date to the constraint date.
 - Affects the late dates of its predecessors.
 - Used to set intermediate completion points in the project.
- **Finish On or After** — Forces an activity to finish no earlier than the constraint date:
 - Shifts the early finish to the constrained date.
 - Affects the early dates of its successors.

Additional Constraints

- **As Late as Possible** — Delays activity as late as possible without delaying successors:
 - Shifts early dates as late as possible.
 - Also called a zero free float constraint.
- **Mandatory Start and Finish** — Forces early and late dates to be equal to the constraint date:
 - Affects late dates of predecessors and early dates of successors.
 - May violate network logic.

Objectives

After completing this lesson, you should be able to:

- Group activities according to specific criteria.
- Sort activities.
- Apply a filter.
- Create a filter.

Presenter Notes
2024-03-04 22:20:13

Objectives

Using Action Verbs for Objectives
In the slide, use the introductory phrase “After completing this lesson, you should be able to”

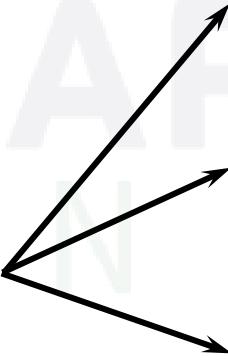
followed by a colon. Use action verbs to introduce each bulleted objective. Your choice of action verb depends on the content of the lesson: If the content is designed to cover facts and terms, use such verbs as identify, choose, select, match, label, list, and so on.

If the content is designed to teach a concept, use such verbs as identify, choose, select, indicate, match, classify, and so on.

If the content is about application of knowledge or execution of a procedure or process, use such verbs as use, run, create, modify, construct, drop, and so on. For detailed and high-level content, use such verbs as conclude, analyze, separate, compare, contrast, justify, differentiate, perform, and so on

Grouping

- A flexible way to organize data into categories that share a common attribute.
- Can be used to create customized layouts.
- Organized by grouping bands.



Jan 2010	BA1000	Building Addition Kickoff	11-Jan-10
	BA1010	Design Building Addition	11-Jan-10
	BA1020	Review and Approve Designs	11-Jan-10
	BA2000	Begin Building Construction	22-Jan-10
	BA2010	Site Preparation	22-Jan-10
Feb 2010	BA2020	Excavation	17-Feb-10*
Mar 2010	BA2030	Install Underground Water Lines	03-Mar-10
	BA2040	Install Underground Electric Conduit	03-Mar-10
	BA2050	Form/Pour Concrete Footings	10-Mar-10
	BA2060	Concrete Foundation Walls	24-Mar-10
Apr 2010	BA2070	Form and Pour Slab	07-Apr-10
	BA2080	Backfill and Compact Walls	14-Apr-10
	BA2090	Foundation Phase Complete	
	BA3000	Begin Structural Phase	15-Apr-10
	BA3010	Erect Structural Frame	15-Apr-10
May 2010	BA3020	Floor Decking	13-May-10
Jun 2010	BA3030	Concrete First Floor	03-Jun-10
	BA3040	Erect Stairwell and Elevator Walls	24-Jun-10
	BA3050	Concrete Basement Slab	24-Jun-10
	BA3060	Concrete Second Floor	24-Jun-10
Jul 2010			15-Jul-10

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content

11. If it doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.

Grouping

-	Jan 2010	27d
BA2010	Site Preparation	18d
BA1010	Design Building Addition	12d
BA1020	Review and Approve Designs	9d
BA2000	Begin Building Construction	0d
BA1000	Building Addition Kickoff	0d
-	Feb 2010	10d
BA2020	Excavation	10d
-	Mar 2010	28d
BA2060	Concrete Foundation Walls	10d
BA2050	Form/Pour Concrete Footings	10d
BA2040	Install Underground Electric Conduit	5d
BA2030	Install Underground Water Lines	5d
-	Apr 2010	26d
BA3010	Erect Structural Frame	20d
BA2070	Form and Pour Slab	5d
BA2080	Backfill and Compact Walls	1d
BA3000	Begin Structural Phase	0d
BA2090	Foundation Phase Complete	0d
-	May 2010	14d
BA3020	Floor Decking	14d
-	Jun 2010	30d
BA3060	Concrete Second Floor	15d
BA3030	Concrete First Floor	15d
BA3050	Concrete Basement Slab	10d
BA3040	Erect Stairwell and Elevator Walls	10d
-	Jul 2010	17d
BA5080	Insulation and Built-up Roofing	10d
BA5070	Brick Exterior Walls	7d
BA3070	Structure Complete	0d
BA5060	Close-In Phase Begins	0d
-	Aug 2010	18d

- Activities can be grouped:
 - By hierarchical fields (WBS, activity codes, project codes).
 - By data fields (dates, costs, Total Float, other numeric data).
- Can be used to:
 - Quickly view subtotal data in grouping bands.
 - View summary bars in the Gantt Chart.
 - Summarize data for reporting purposes.

Sorting

- Determines the sequence in which activities are listed within grouping bands.
- Based on data item, you can sort:
 - Alphabetically
 - Numerically
 - Chronologically
- Click on column header to quickly sort ascending, descending

	Jan 2010	11-Jan-10
	BA1000	11-Jan-10
	BA1010	11-Jan-10
	BA1020	11-Jan-10
	BA-ADMIN	11-Jan-10
	BA2000	22-Jan-10
	BA2010	22-Jan-10
	BA6040	22-Jan-10
	BA5000	25-Jan-10*
	BA1030	28-Jan-10
	BA5010	28-Jan-10
	Feb 2010	02-Feb-10
	BA1040	02-Feb-10
	BA6050	03-Feb-10
	BA4020	16-Feb-10
	BA6060	16-Feb-10
	BA2020	17-Feb-10*
	BA4030	19-Feb-10
	BA4040	23-Feb-10
	BA5020	24-Feb-10
	BA6070	24-Feb-10
	BA4050	24-Feb-10
	Mar 2010	01-Mar-10

Sorted by Start date
Ascending

	Jan 2010	11-Jan-10
	BA5010	28-Jan-10
	BA1030	28-Jan-10
	BA5000	25-Jan-10*
	BA6040	22-Jan-10
	BA2010	22-Jan-10
	BA2000	22-Jan-10
	BA-ADMIN	11-Jan-10
	BA1020	11-Jan-10
	BA1010	11-Jan-10
	BA1000	11-Jan-10
	Feb 2010	02-Feb-10
	BA4050	24-Feb-10
	BA6070	24-Feb-10
	BA5020	24-Feb-10
	BA4040	23-Feb-10
	BA4030	19-Feb-10
	BA2020	17-Feb-10*
	BA6060	16-Feb-10
	BA4020	16-Feb-10
	BA6050	03-Feb-10
	BA1040	02-Feb-10
	Mar 2010	01-Mar-10

Sorted by Start date
Descending

Filtering

- Determines which activities are displayed in a layout.
- Enables you to create customized layouts that:
 - Limit the number of activities displayed.
 - Help you focus on a particular group of activities (critical activities, for example).

Jan 2010		-12d
BA-ADMIN	Project Administration	-12d
BA1000	Building Addition Kickoff	-12d
BA1010	Design Building Addition	-12d
BA1020	Review and Approve Designs	-12d
BA1030	Assemble Technical Data for Heat Pump	21d
BA2000	Begin Building Construction	-12d
BA2010	Site Preparation	-12d
BA5000	Assemble Brick Samples	21d
BA5010	Review and Approve Brick Samples	30d
BA6040	Assemble and Submit Flooring Samples	1d
Feb 2010		27d

Filter

Jan 2010		-12d
BA1000	Building Addition Kickoff	-12d
BA1010	Design Building Addition	-12d
BA1020	Review and Approve Designs	-12d
BA2000	Begin Building Construction	-12d
BA2010	Site Preparation	-12d
Feb 2010		-12d

SECTION III

Assigning Resources and Baselining

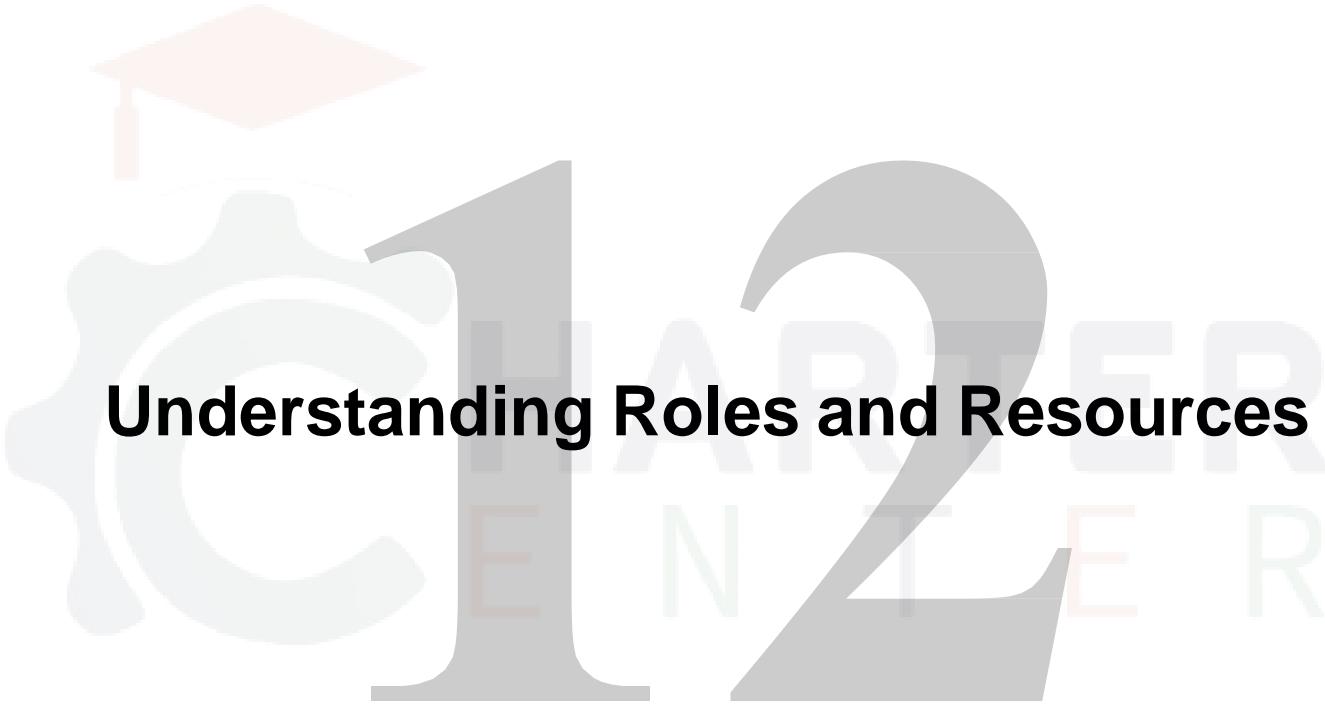
Understanding Roles and Resources

Assigning Roles and Resources

Optimizing the Project Plan

Baselining the Project Plan

Importing and Exporting Data



Understanding Roles and Resources

Objectives

After completing this lesson, you should be able to:

- Define Currencies.
- Define Unit of Measure.
- Describe resources.
- Identify the differences between labor, nonlabor, and material resources.
- View the resource dictionary.

Currencies

- Form Admin Menu Select Currencies.

Currencies

Display: Currencies				
Base	Currency ID	Currency Name	Currency Symbol	Exchange Rate
<input checked="" type="checkbox"/>	SAR	Saudi Riyal	\$	1.000000
<input type="checkbox"/>	GBP	Pound Sterling	£	0.618603
<input type="checkbox"/>	JPY	Japanese Yen	¥	91.270800
<input type="checkbox"/>	EUR	Euro	€	0.689711
<input type="checkbox"/>	CNY	Chinese Yuan Renminbi	¥	6.825020
<input type="checkbox"/>	CAD	Canadian Dollar	\$	1.037570
<input type="checkbox"/>	RUB	Russian Ruble	RUB	0.033948

1 

2 

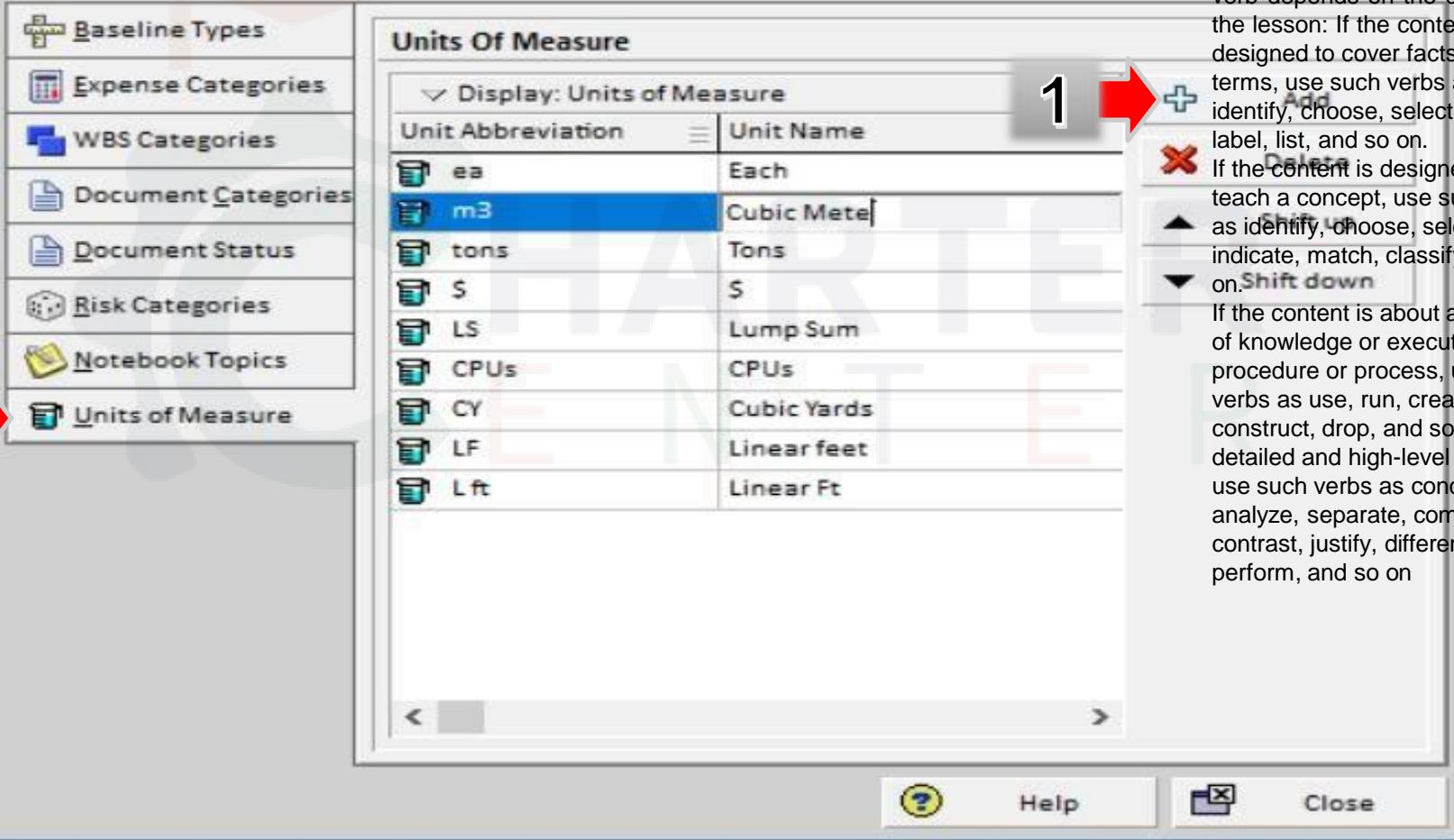
General | Appearance

Currency ID	Currency name
SAR	Saudi Riyal
Currency symbol	Exchange rate
SAR	1.000000

Currencies

- Form Admin Menu Select Admin Categories

Admin Categories



Units Of Measure

Display: Units of Measure

Unit Abbreviation	Unit Name
ea	Each
m ³	Cubic Meter
tons	Tons
S	S
LS	Lump Sum
CPUs	CPUs
CY	Cubic Yards
LF	Linear feet
L ft	Linear Ft

Help Close

Objectives

Using Action Verbs for Objectives
 In the slide, use the introductory phrase "After completing this lesson, you should be able to" followed by a colon. Use action verbs to introduce each bulleted objective. Your choice of action verb depends on the content of the lesson:

If the content is designed to cover facts and terms, use such verbs as identify, choose, select, match, label, list, and so on.

If the content is designed to teach a concept, use such verbs as identify, choose, select, indicate, match, classify, and so on.

If the content is about application of knowledge or execution of a procedure or process, use such verbs as use, run, create, modify, construct, drop, and so on. For detailed and high-level content, use such verbs as conclude, analyze, separate, compare, contrast, justify, differentiate, perform, and so on

Roles and Resources

Role: A job title or skill needed to complete an activity.



Project Manager

Resource: The specific individual used to complete the activity.



Tim Harris

Roles and Resources

- Both are enterprise data – available for use across all projects.
 - Both are usually defined by the application administrator.
- Roles are associated with resources according to their function.
 - Each resource can also be assigned one primary role, which defines the resource's core skill or responsibility in the organization.
- Roles can be placeholders in activity assignments until specific resources are assigned to do the work.

Roles and Resources



Resource: Paul Kim

Roles: Civil Engineer, Cost Engineer, Planning Engineer

Primary Role: Civil Engineer

Relationship Between Roles and Resources



PRIMARY
ROLE



ROLE

ROLES →	Project Mgr	Civil Engineer	Plan Engineer	Cost Engineer
↓ RESOURCES	Tim Harris	Star		
PRIMARY ROLE	Oliver Rock		Checkmark	Star
ROLE	Paul Kim	Star	Checkmark	Checkmark

Resource Types

Labor (people)

- Resources and roles
- Measured in units of time.
- Generally re-used between activities/projects.
- Recorded in terms of price/unit (for example, \$50/hour).



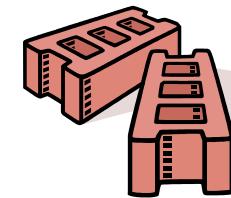
Nonlabor (equipment)

- Measured in units of time.
- Recorded in terms of price/unit (for example, \$500/hour).



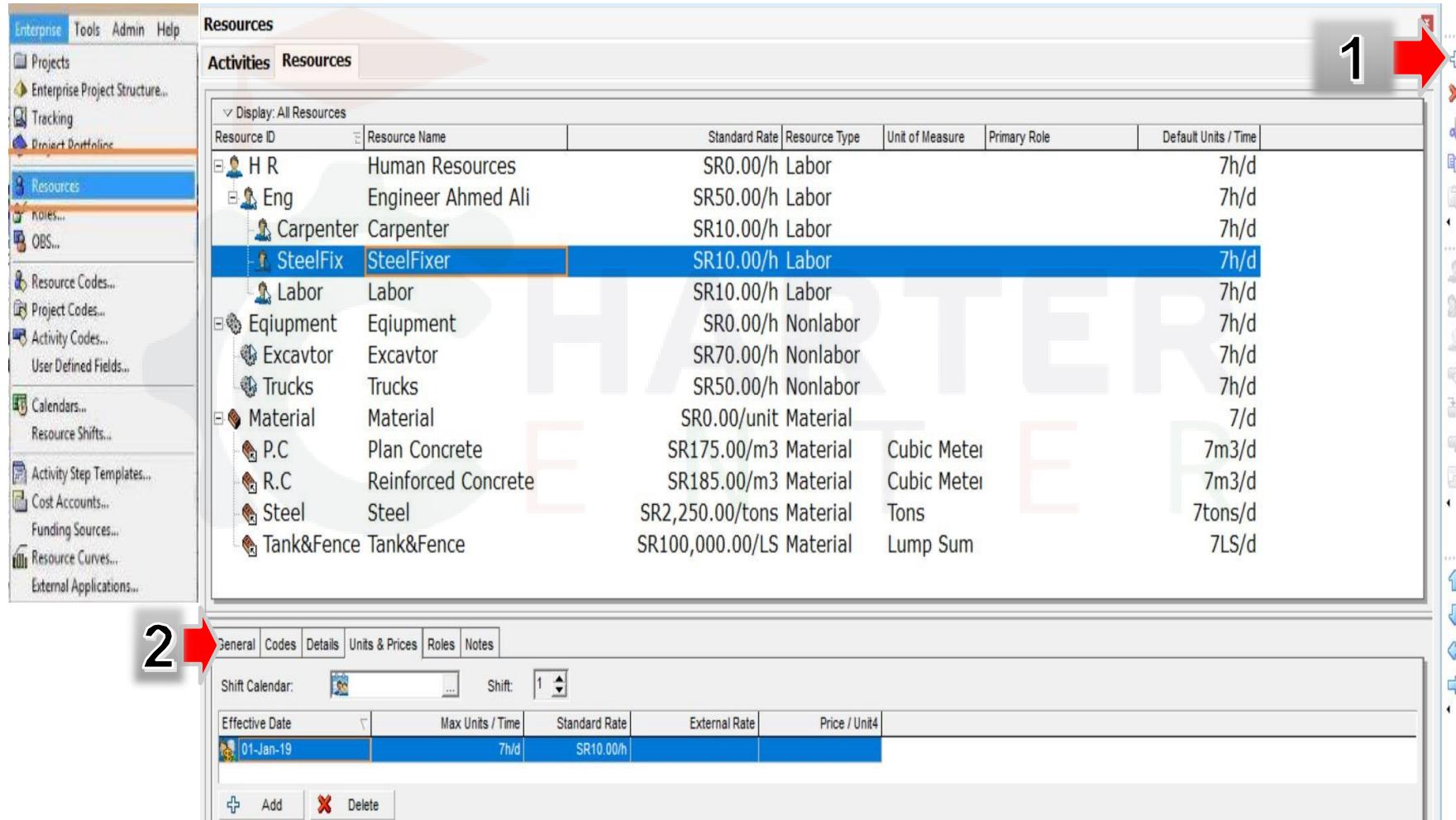
Material (consumables)

- Measured in units other than time (for example, \$5/sq.ft.).



Define Resource

- Form Enterprise Menu Select Resource.



The screenshot shows the Oracle Project Management software interface. The left sidebar has 'Enterprise' selected, and the 'Resources' tab is active. The main area displays a list of resources with a hierarchical structure. The 'SteelFixer' resource is selected and highlighted with a blue border. The detail view at the bottom shows the 'General' tab selected, with fields for Shift Calendar, Effective Date, Max Units / Time, Standard Rate, External Rate, and Price / Unit. The 'SteelFixer' row in the list also has a blue border, matching the detail view.

Resource ID	Resource Name	Standard Rate	Resource Type	Unit of Measure	Primary Role	Default Units / Time
HR	Human Resources	SR0.00/h	Labor			7h/d
Eng	Engineer Ahmed Ali	SR50.00/h	Labor			7h/d
Carpenter	Carpenter	SR10.00/h	Labor			7h/d
SteelFix	SteelFixer	SR10.00/h	Labor			7h/d
Labor	Labor	SR10.00/h	Labor			7h/d
Equipment	Equipment	SR0.00/h	Nonlabor			7h/d
Excavtor	Excavtor	SR70.00/h	Nonlabor			7h/d
Trucks	Trucks	SR50.00/h	Nonlabor			7h/d
Material	Material	SR0.00/unit	Material			7/d
P.C	Plan Concrete	SR175.00/m ³	Material	Cubic Meter		7m ³ /d
R.C	Reinforced Concrete	SR185.00/m ³	Material	Cubic Meter		7m ³ /d
Steel	Steel	SR2,250.00/tons	Material	Tons		7tons/d
Tank&Fence	Tank&Fence	SR100,000.00/LS	Material	Lump Sum		7LS/d



132

Assigning Roles and Resources

Objectives

After completing this lesson, you should be able to:

- Assign roles to an activity.
- Assign rates on roles.
- Assign resources to an activity by role and directly from the resource dictionary.
- Adjust Budgeted Units/Time for a resource.
- Assign expenses to activities.

Assigning Roles

Step 1 Roles Dictionary



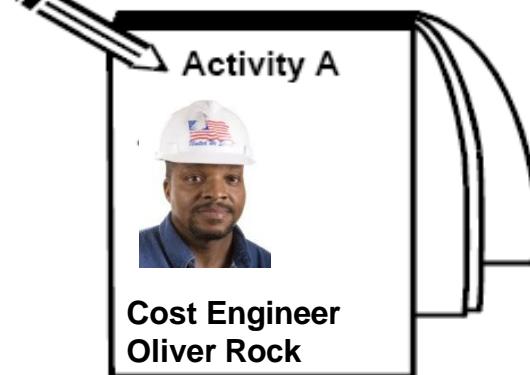
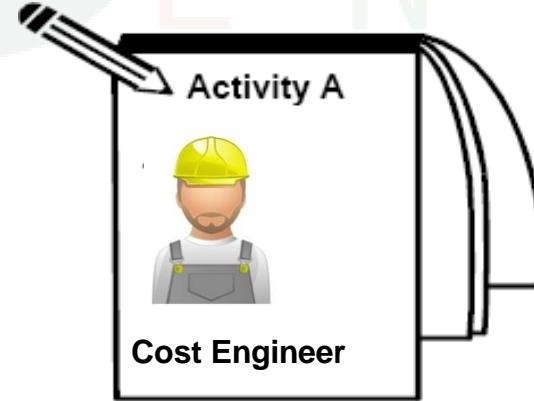
Project Manager

Step 2 Assign Role to Activity



Cost Engineer

Step 3 Replace Role with Resource



Assigning Resources

Assign by role:

- At least one role must be assigned to an activity.
- Replace role assignment with a specific resource.
- Replace single role assignments individually or multiple role assignments simultaneously.

Assign directly from the resource dictionary:

- Labor resources without role assignments.
- Required method when assigning nonlabor and material resources.

Steps for Resource Management

1. Define resource in the resource dictionary.



Resource: Oliver Rock

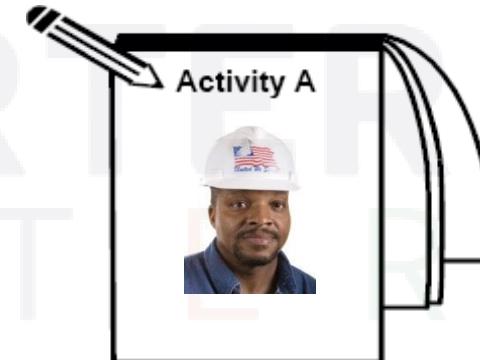
Roles: Cost Engineer,
Purchasing

Primary Role: Cost Engineer

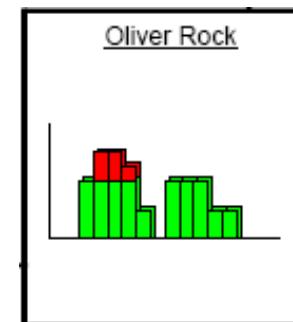
Max Units/Time: 8h/d

Rates: Commercial \$32/h
GSA \$29/h
Internal \$26/h

2. Assign resource to activities.



3. Analyze resources and costs.





Optimizing the Project Plan

Objectives

After completing this lesson, you should be able to:

- Analyze schedule dates.
- Shorten a project schedule.
- Analyze resource availability.
- Resolve resource overallocation.
- Analyze project costs.

Presenter Notes
2024-03-04 22:20:19

Objectives

Using Action Verbs for Objectives
In the slide, use the introductory phrase “After completing this lesson, you should be able to”

followed by a colon. Use action verbs to introduce each bulleted objective. Your choice of action verb depends on the content of the lesson: If the content is designed to cover facts and terms, use such verbs as identify, choose, select, match, label, list, and so on.

If the content is designed to teach a concept, use such verbs as identify, choose, select, indicate, match, classify, and so on.

If the content is about application of knowledge or execution of a procedure or process, use such verbs as use, run, create, modify, construct, drop, and so on. For detailed and high-level content, use such verbs as conclude, analyze, separate, compare, contrast, justify, differentiate, perform, and so on

Project Constraints

Successful projects must balance multiple constraints.

- Scope
- Quality
- Schedule
- Budget
- Resources
- Risk

Presenter Notes
2024-03-04 22:20:19

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.



Optimizing the project plan

- 1. Analyzing Schedule Dates
- 2. Analyzing Resource Allocation
- 3. Analyzing the Budget



Analyzing Schedule Dates

- Finish date – Most important date in the schedule:
 - Compare the scheduled Finish date to the Must Finish By date.
 - If the scheduled Finish date is later than the Must Finish By date, the project must be shortened.
 - Finish date is calculated; it cannot be edited.
- Project deliverables should also be scheduled to finish by the dates imposed by project sponsors.
 - Identify milestone dates and ensure that the schedule meets them.

Shortening the Project

- Focus on critical activities.
- Refine duration estimates.
 - Break down long activities.
 - Assign additional resources to reduce duration.
- Use relationships to overlap activities.
- Apply/modify constraints.
- Change calendar assignments.
 - Put critical activities on a longer workweek.
 - Add exceptions to non-work time.

Analyzing Resource Allocation

- Determine which resources are overallocated.
- Identify activities contributing to resource overallocation.
- Remove overallocation from appropriate resources.
 - Replace the overallocated resource with another available resource.
 - Increase the resource's workweek.
 - Increase the hours/day that the resource works.
 - Assign additional resources to the activity.

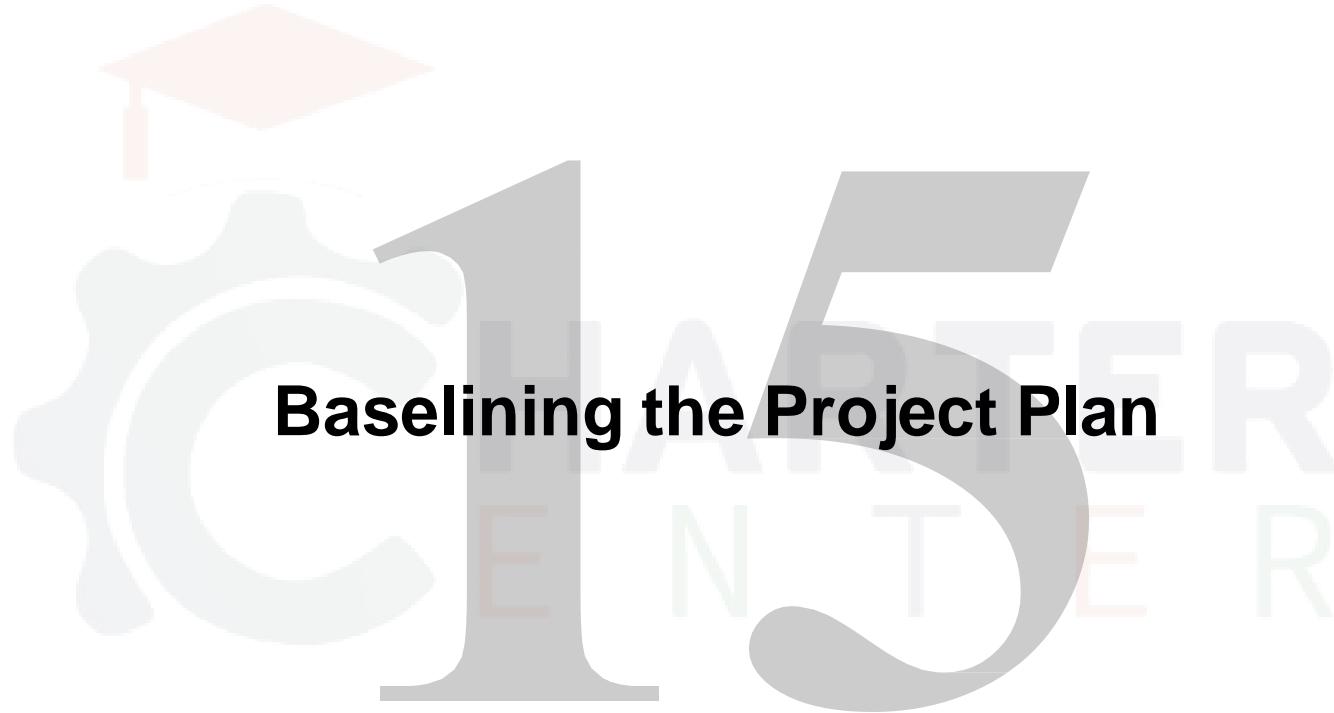
Analyzing the Budget



ew budgeted costs for individual activities, WBS
ents, and the entire project.

- Confirm that costs are within budget.





Baselining the Project Plan

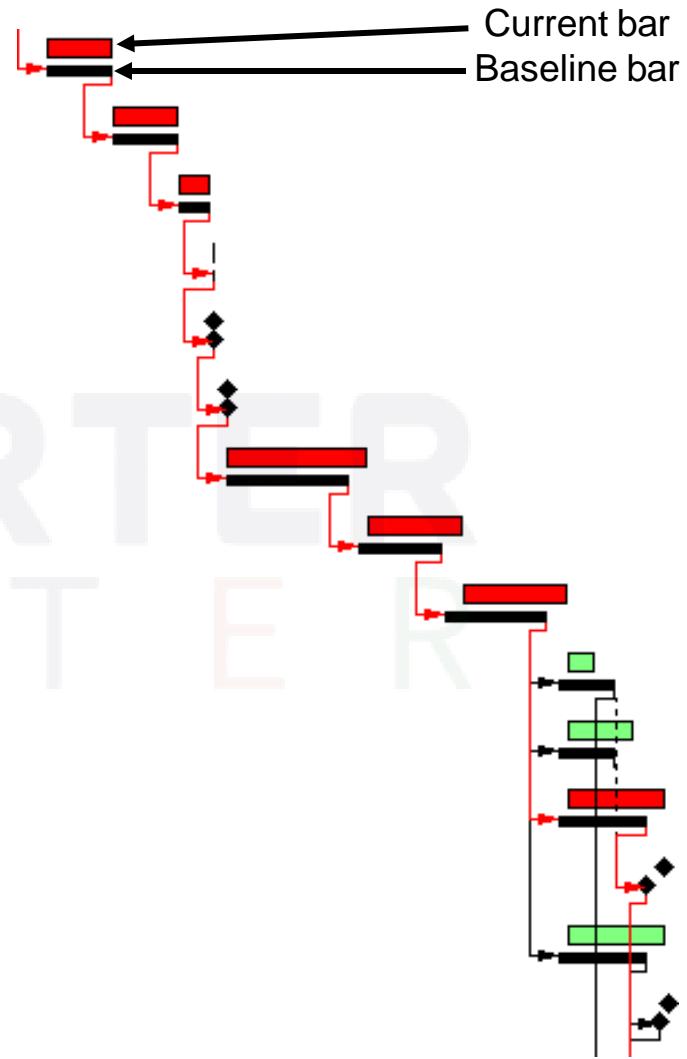
Objectives

After completing this lesson, you should be able to:

- Create a baseline plan.
- Display baseline bars on the Gantt chart.
- Modify the bars on the Gantt chart.

What is a Baseline?

- A copy of the project plan used as a basis for comparison when evaluating the progress of an updated project.
 - Create a baseline before updating a schedule for the first time.
- Provides a target against which to track a project's cost, schedule, and resource performance.





Importing and Exporting Data

Objectives

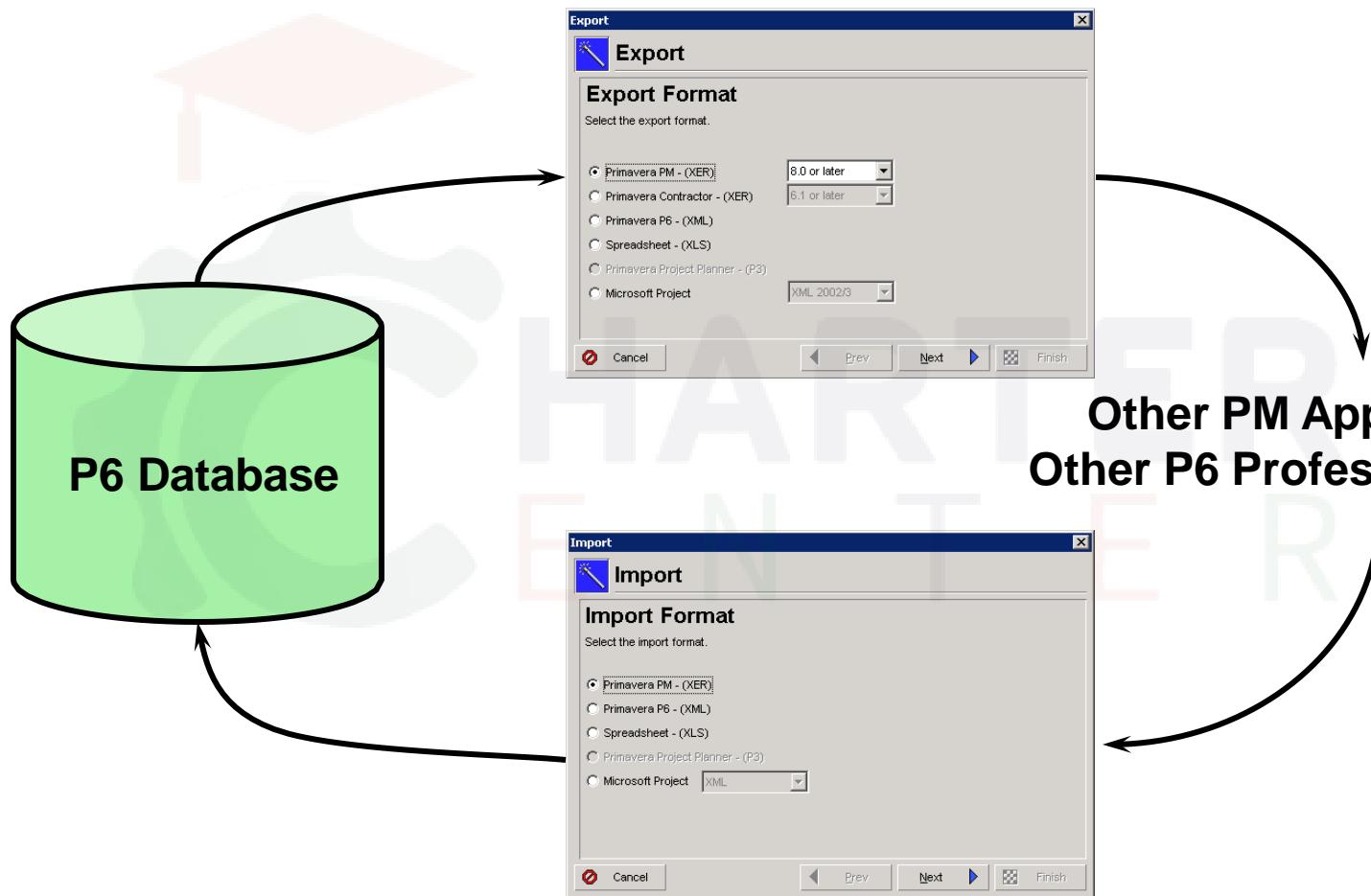
After completing this lesson, you should be able to:

- Describe the process of importing and exporting data.
- Export a project.
- Import a project.

Presenter Notes
2024-03-04 22:20:21

Objectives
Using Action Verbs for Objectives
In the slide, use the introductory phrase “After completing this lesson, you should be able to” followed by a colon. Use action verbs to introduce each bulleted objective. Your choice of action verb depends on the content of the lesson: If the content is designed to cover facts and terms, use such verbs as identify, choose, select, match, label, list, and so on. If the content is designed to teach a concept, use such verbs as identify, choose, select, indicate, match, classify, and so on. If the content is about application of knowledge or execution of a procedure or process, use such verbs as use, run, create, modify, construct, drop, and so on. For detailed and high-level content, use such verbs as conclude, analyze, separate, compare, contrast, justify, differentiate, perform, and so on.

Import / Export Wizards



Reasons to Import/Export Project Data

- Share project information with:
 - Other P6 EPPM users.
 - Users of other project management tools.
 - Your organization's human resource and accounting departments.
- Archive projects or create backups.
 - Single or multiple projects can be imported/exported at one time.
 - The Export wizard enables you to choose the format and data type (activities, resources, expenses, or complete projects) that you want to export.

Presenter Notes
2024-03-04 22:20:21

Sample: This graphic depicts how the incident response life cycle flows clockwise through six phases: Preparation, Identification, Containment, Eradication, Recovery, and Follow-up Accessibility No-Vision or Low-Vision Graphic and screenshot descriptions need to be included in the notes area of every course. Keep the descriptions concise. Be consistent with repeated occurrences of the same graphic or screenshot. Describe only those graphics that are pertinent to the course—not decorative icons. Use screenshots sparingly. Do not use screenshots of code or text.

Descriptions must be included

Open and don't have any other notes for the course.

Import/Export Formats

Primavera PM (XER)

- P6's proprietary format.
- Independent of database type used (Oracle or MS SQL).

Primavera PM (XML)

- Share project information between P6 EPPM databases.
- Compatible with Microsoft Project 2002 or later.

Spreadsheet (XLS)

- Compatible with Excel and other spreadsheet applications.

Primavera Project Planner (P3)

- Share project information with Oracle Primavera Project Planner version 3.x.

Microsoft Project (MPX, XML)

- Integrate with Microsoft Project and other third-party tools.

Presenter Notes
2024-03-04 22:20:21

Sample: This graphic depicts how the incident response life cycle flows clockwise through six phases: Preparation, Identification, Containment, Eradication, Recovery, and Follow-up Accessibility No-Vision or Low-Vision Graphic and screenshot descriptions need to be included in the notes area of every course. Keep the descriptions concise.

Be consistent with repeated occurrences of the same graphic or screenshot.

Describe only those graphics that are pertinent to the course—not decorative icons. Use screenshots sparingly. Do not use screenshots of code or text.

Descriptions must be included even if you don't have any other

notes for the course.

SECTION IV

Project Execution and Control

**Methods of Applying Progress
Executing the Project Plan
Reflection Projects
Analyzing the Updated Project
Reporting Performance**



Methods of Applying Progress

Objectives

After completing this lesson, you should be able to:

- Describe methods for applying progress to a project.



Updating a Project

- After a project has started, actual project data should be updated regularly.
- Updates can be monthly, weekly, daily, or hourly depending on project length and the precision of project control.
- A variety of methods can be used for updating the project.
- A single method need not be used exclusively. Multiple updating methods can be used within a single project.

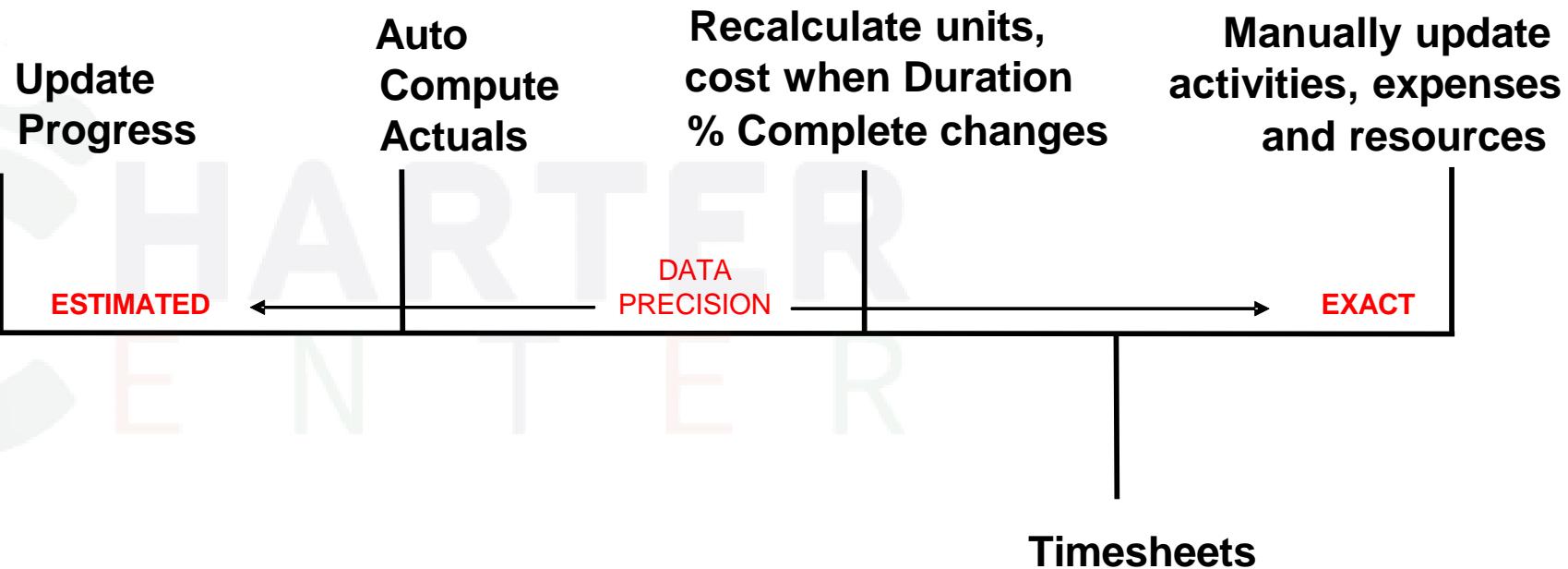
Updating a Project

Consider these factors when deciding on a method:

- Data precision: The degree to which project data is exact (based on manual data entry) or estimated (based on automated calculations).
 - Is project data entered manually?
 - Is project data automatically calculated and applied?
- Internal or external: The extent to which individuals other than the project manager are empowered to update project data.
 - Do other persons – resources, for example – update project data?

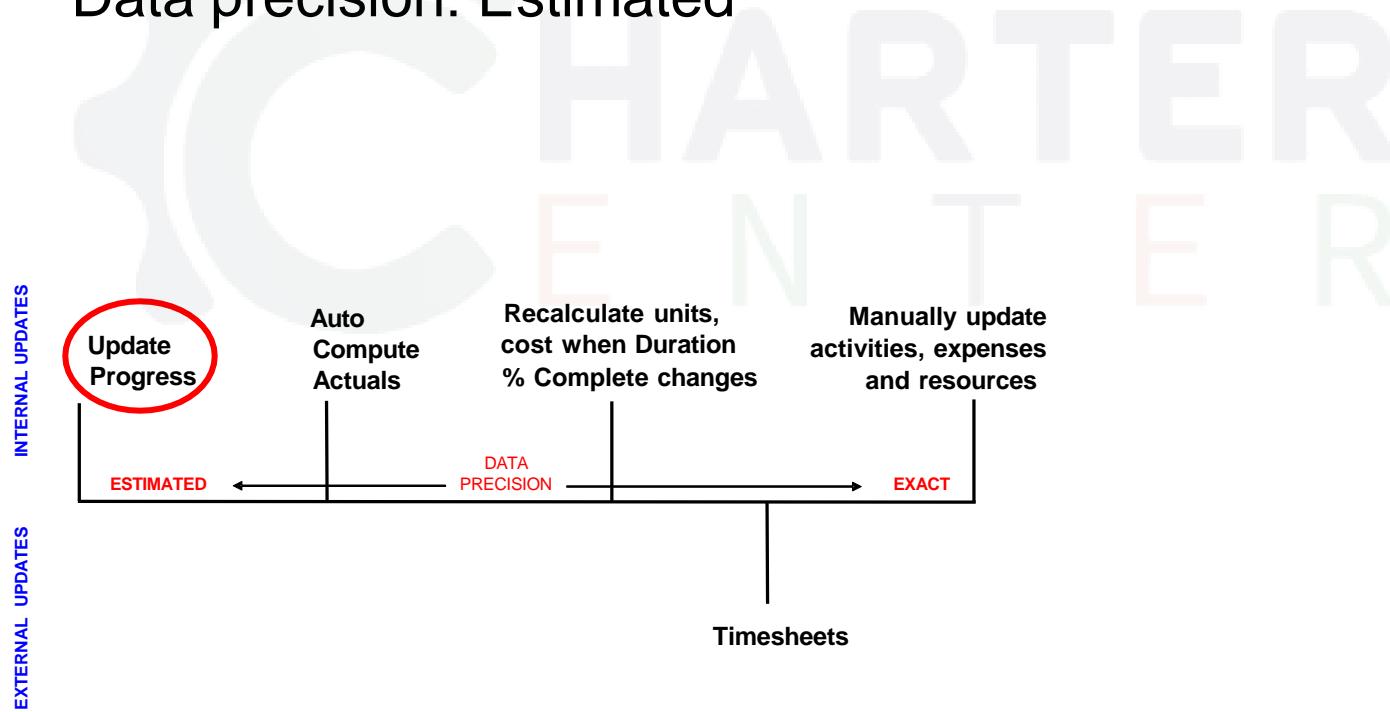
Spectrum of Updating Methods

INTERNAL UPDATES



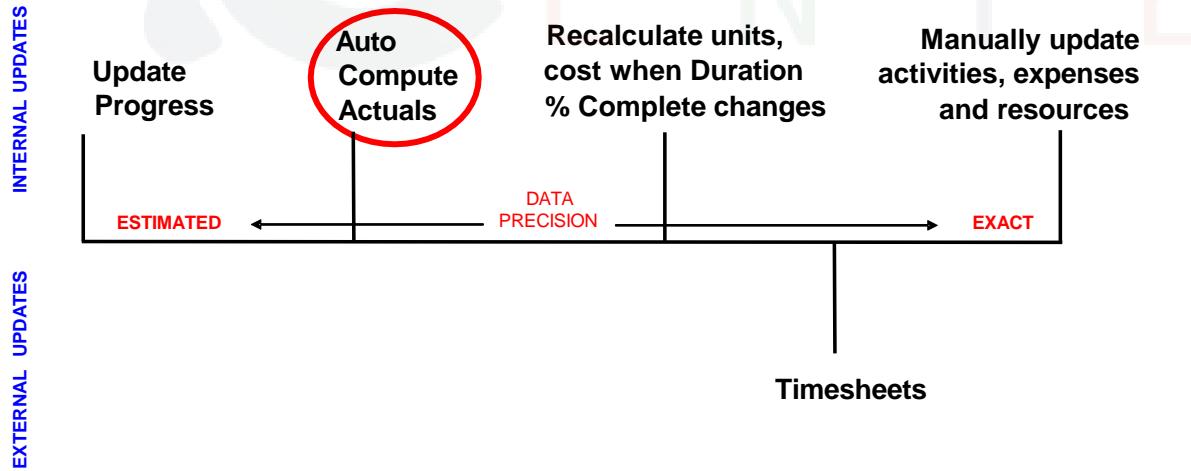
Update Progress

- Updates activity dates, expenses, and resource utilization according to project plan
- Internal update
- Data precision: Estimated



Auto Compute Actuals

- Updates activity dates, expenses, and resource utilization according to project plan
 - however, enables you to select which elements are computed automatically
- Internal update
- Data precision: Estimated

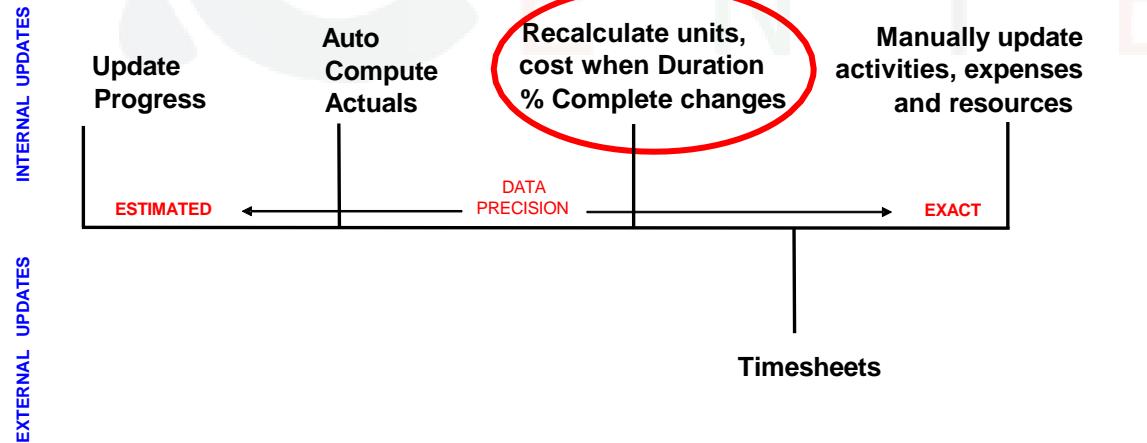


Auto Compute Actuals

- Values are computed based on element you select for auto compute:
 - If activity is selected, resources and expenses also automatically updated.
 - If just resource or expense is selected, only those elements are automatically updated.
- Doesn't affect successor activities outside of status period until project is scheduled.

Recalculate Units, Cost When Duration % Complete Changes

- Project-level setting computes units based on Duration % Complete
- Internal update
- Data precision: Units and costs estimated based on exact Duration % Complete

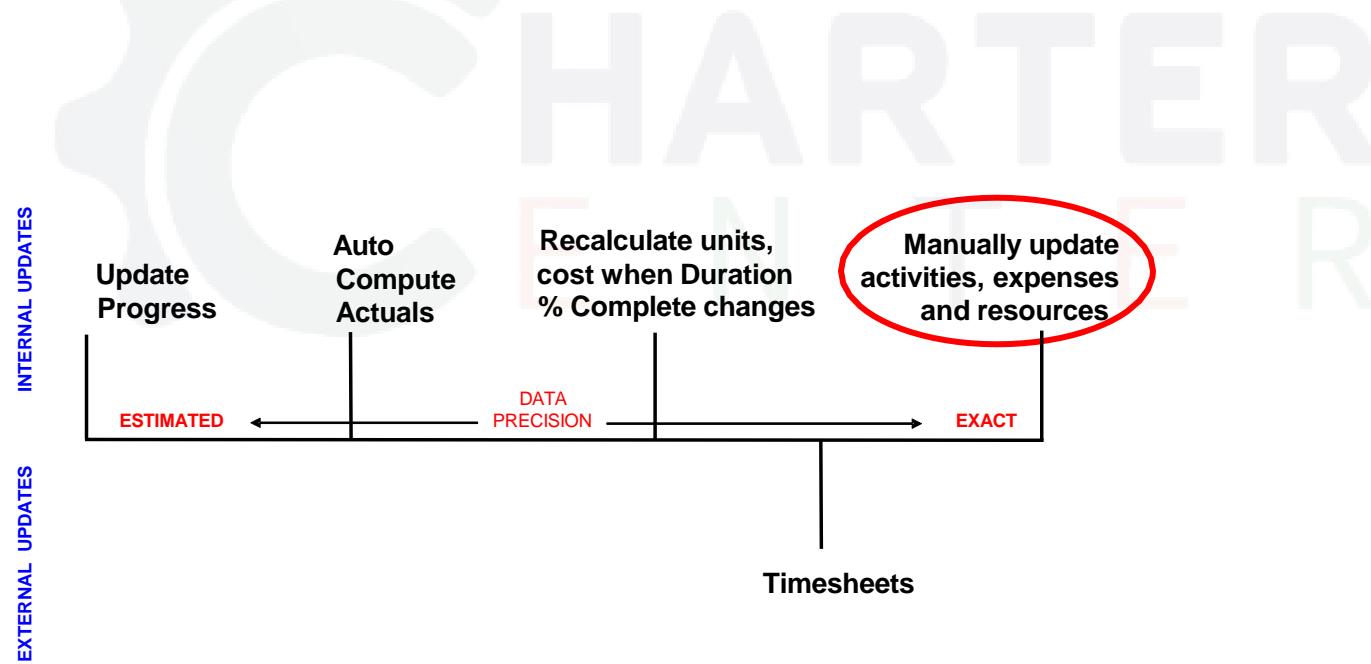


Recalculate Units, Cost When Duration % Complete Changes

- Based on Budgeted Units/Time, application calculates Actual Units and subtracts from Budgeted Units
- Example: 10-day activity with 80 Budgeted Units (8 h/d)
 - 2 days progress (Duration % Complete = 20%)
 - Actual Units automatically recalculated to 16h
 - Remaining Units automatically recalculated to 64h

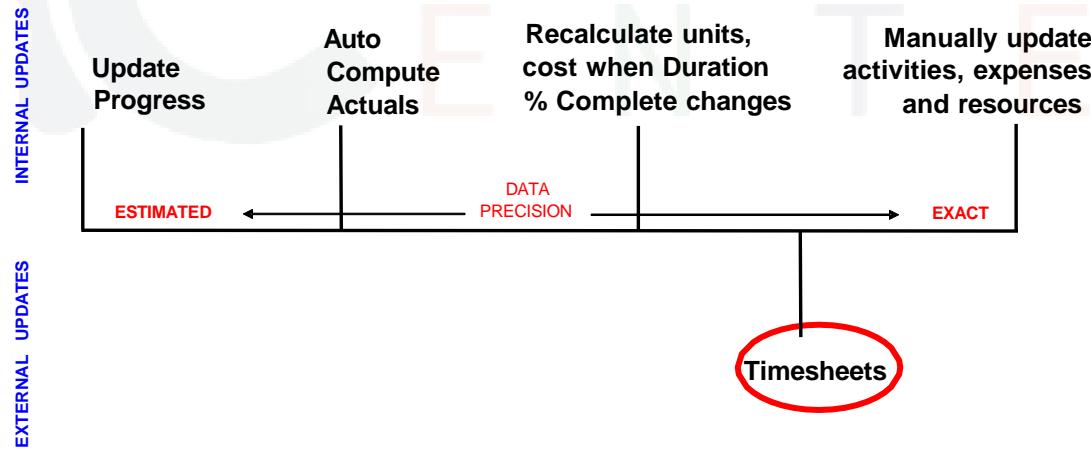
Manually Update Activities, Expenses, and Resources

- Manually enter values for each element.
- Internal update
- Data precision: Exact



Timesheets

- Resources record hours worked.
- Manager approves / rejects timesheets and then applies actuals
- External update
- Data precision: Exact



Timesheets

- Resources record hours worked against activities.
- Primary resource also can mark activities started or finished and update Remaining Duration.
- After approving / rejecting timesheets, manager applies actuals.
 - Only statused activities are recalculated.
 - Does not affect activities not in the status period.
 - Activities within the status period that are not progressed are pushed out to new data date.

Delegating Status Updates

Project updates can be delegated to external resources, such as subcontractors. Methods include:

- Reflection project
 - Reflection project is updated by subcontractor, resource, or individual designated as Activity Owner.
 - Can status activities, update resource assignments
 - Project manager has ability to view and then approve/reject updates before merging reflection project into source project.
 - Available in P6 Professional only.
- Import updated project
 - Copy of project updated by another individual and then imported.



18

Executing the Project Plan

Objectives

After completing this lesson, you should be able to:

- Use Progress Spotlight.
- Update the status of completed activities and activities in progress.
- Reschedule the project.

Presenter Notes
2024-03-04 22:20:25

Objectives

Using Action Verbs for Objectives

In the slide, use the introductory phrase "After completing this lesson, you should be able to"

followed by a colon. Use action verbs to introduce each bulleted objective. Your choice of action verb depends on the content of the lesson: If the content is designed to cover facts and terms, use such verbs as identify, choose, select, match, label, list, and so on.

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Updating a Project

Once a project has started, actual activity information should be updated at regular intervals.

- Schedule dates and durations
- Resource usage
- Expenses



Data Date

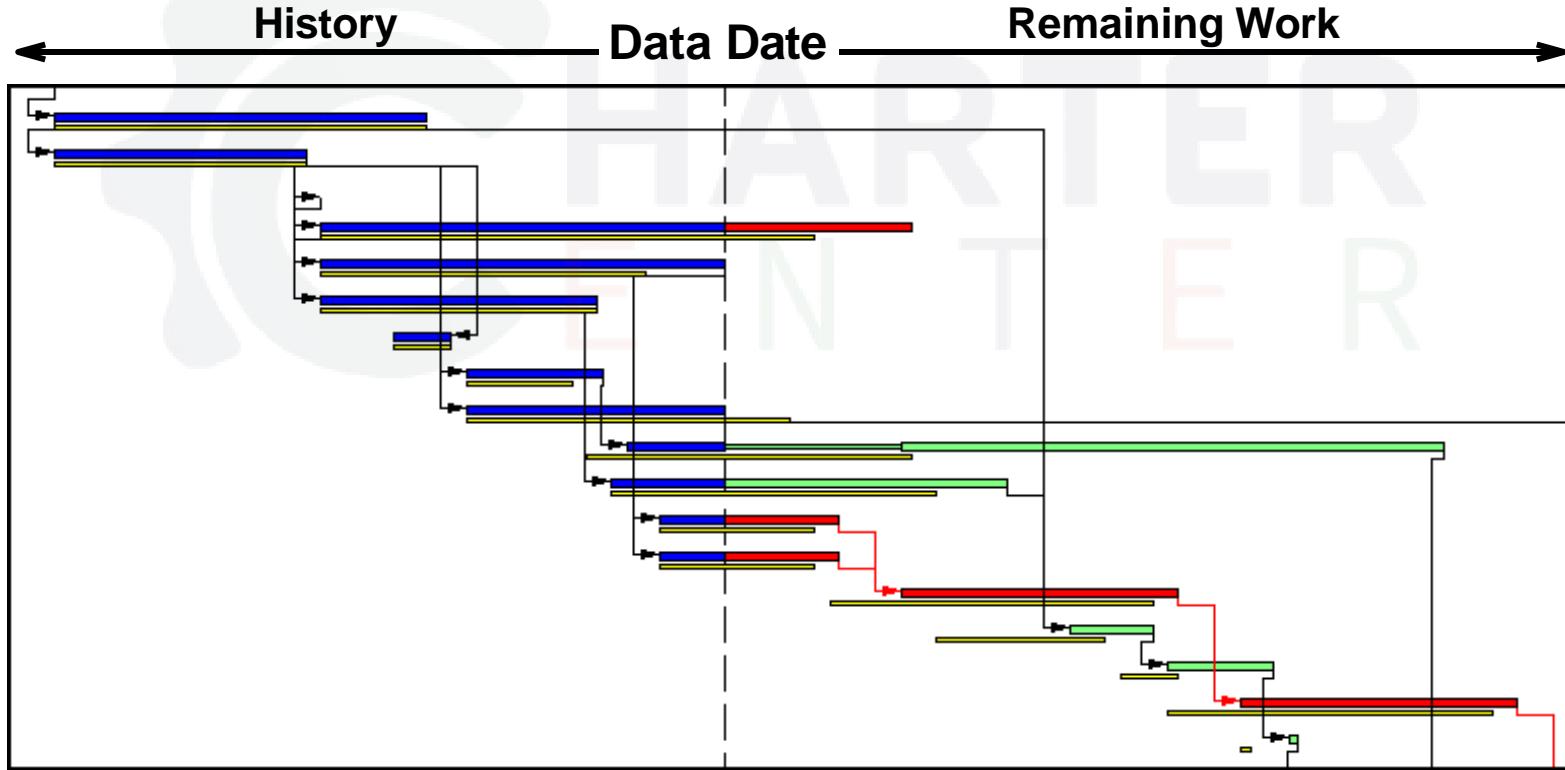
The data date is the date up to which actual performance data is reported and the date from which future work is scheduled. The data date always starts at the beginning of the day.

Presenter Notes
2024-03-04 22:20:25

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT OFF. Remember, you have the activity guide section to include additional information.



The Updating Process

Standard project update procedures should be established, including how data is collected and how often it is updated.

- Create a baseline plan (optional).
- Identify the new data date.
- Enter activity progress.
- Report resource use and costs to date.
- Use Suspend and Resume dates as necessary.
- Reschedule using the new data date.

Presenter Notes
2024-03-04 22:20:25

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.



19

Reflection Projects

Objectives

After completing this lesson, you should be able to:

- Create a reflection project.
- Merge changes from reflection project into source project.



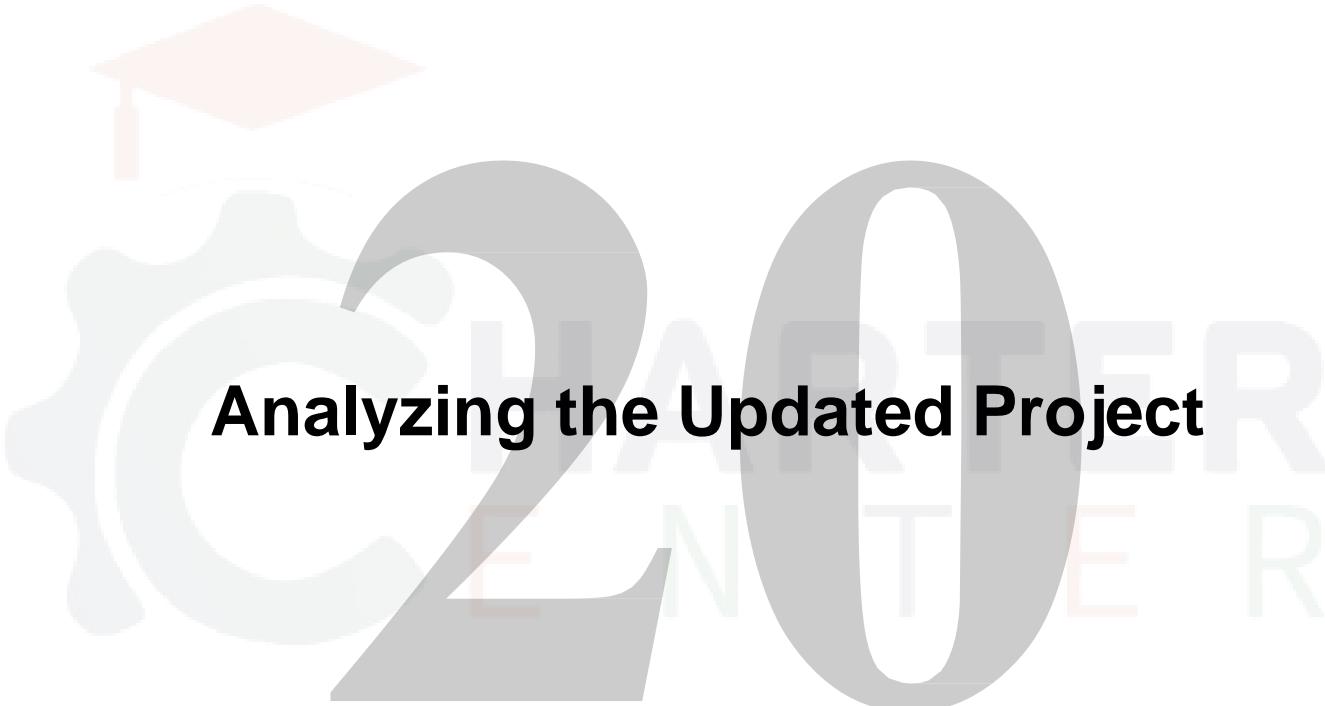
Reflection Projects

A copy of a project used for updating or to conduct what-if analysis.

- Team members or other P6 Professional users can update status of activities in which they are designated Activity Owner.
- Review and decide which changes to merge into the source project.
- What-If status.
- Baselines in the source project are copied to the reflection project.
 - Enables you to convert reflection project into active project with baseline data in place.

Presenter Notes
2024-03-04 22:20:26

STUDENT CONTENT:
In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .
Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.



Analyzing the Updated Project

Objectives

After completing this lesson, you should be able to:

- Analyze schedule dates, resource availability/allocation, and project costs.
- Identify areas where the project is falling behind schedule or exceeding planned costs.
- Make changes necessary to address variances.
- Understand the importance of analyzing a project after every status update.

Presenter Notes
2024-03-04 22:20:26

Objectives

Using Action Verbs for Objectives
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Steps for Analyzing the Updated Project

1. Perform a baseline analysis.
 - Compare current plan to baseline plan to analyze variances.
 - Compare calculated Finish and Must Finish By dates.
2. Make changes to restore important schedule milestones.
 - Focus on critical activities.
3. Perform a resource usage analysis.
 - Identify availability or allocation issues.
 - Adjust resource assignments to resolve issues.
4. Perform cost analysis.
 - Compare Total Cost to the Original Budget.

Presenter Notes
2024-03-04 22:20:27

STUDENT CONTENT:

Top slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.

Questions to Determine How to Adjust a Schedule

- Can the Finish date of the project slip?
- Can the scope of the activity/project decrease?
- Were the planned hours over- or under-estimated?
- Can any relationships between activities be changed?
- Can additional resources be assigned?
- Can resources work overtime?

Shortening the Project

- Focus on critical activities.
- Refine duration estimates.
 - Break down long activities.
 - Assign additional resources to reduce duration.
- Use relationships to overlap activities.
- Apply/modify constraints.
- Change calendar assignments.
 - Put critical activities on a longer workweek.
 - Add exceptions to non-work time.



Reporting Performance

Objectives

After completing this lesson, you should be able to:

- Describe reporting methods.
- Run a schedule report.
- Create a resource report with the Report wizard.
- Create a time distributed report.
- Create a report using the current layout.

Presenter Notes
2024-03-04 22:20:27

Objectives
Using Action Verbs for Objectives
In the slide, use the introductory phrase “After completing this lesson, you should be able to” followed by a colon. Use action verbs to introduce each bulleted objective. Your choice of action verb depends on the content of the lesson: If the content is designed to cover facts and terms, use such verbs as identify, choose, select, match, label, list, and so on. If the content is designed to teach a concept, use such verbs as identify, choose, select, indicate, match, classify, and so on. If the content is about application of knowledge or execution of a procedure or process, use such verbs as use, run, create, modify, construct, drop, and so on. For detailed and high-level content, use such verbs as conclude, analyze, separate, compare, contrast, justify, differentiate, perform, and so on.

Methods for Reporting Performance

- Reports from layouts
- Reports from Report wizard
- Reports from Report editor

Presenter Notes
2024-03-04 22:20:28

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.



SECTION VI

Appendices

Creating Output Managing Documents

Presenter Notes
2024-03-04 22:20:28

Objectives

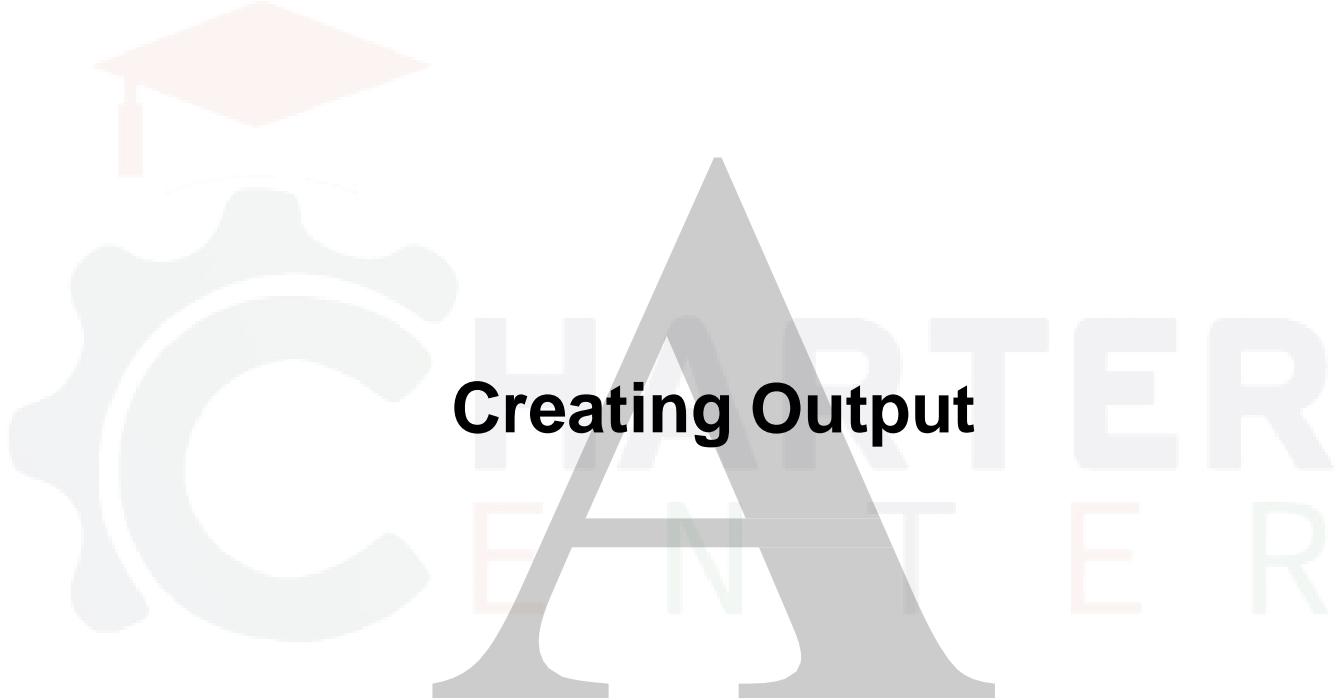
Using Action Verbs for Objectives
In the slide, use the introductory phrase “After completing this lesson, you should be able to”

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Creating Output

Objectives

After completing this lesson, you should be able to:

- Customize the appearance of headers and footers.
- Insert and format the curtain and text attachment tools.
- Format the appearance of the data date.

Presenter Notes
2024-03-04 22:20:28

Objectives

Using Action Verbs for Objectives

In the slide, use the introductory phrase “After completing this lesson, you should be able to”

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Output Controls

P6 Professional offers functionality to enhance onscreen display and printed material:

- Formatting layouts for print
 - Headers, footers
 - Graphics
- Gantt chart
 - Curtain tool
 - Text tool
 - Customized data date line

Presenter Notes
2024-03-04 22:20:28

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.



Project Documents

Project documents can be classified as either a work **product** or a reference document:

- **Work product** – A document that is a project or activity deliverable and will be turned over to the project's end user or customer.
- **Reference document** – A document that can be referenced by a project participant for the purpose of providing standards or guidelines for performing work.

Presenter Notes
2024-03-04 22:20:29

STUDENT CONTENT:

In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate to slide. **KEEP IT BRIEF!** Remember, you have the activity guide section to include additional information.

Linking Documents

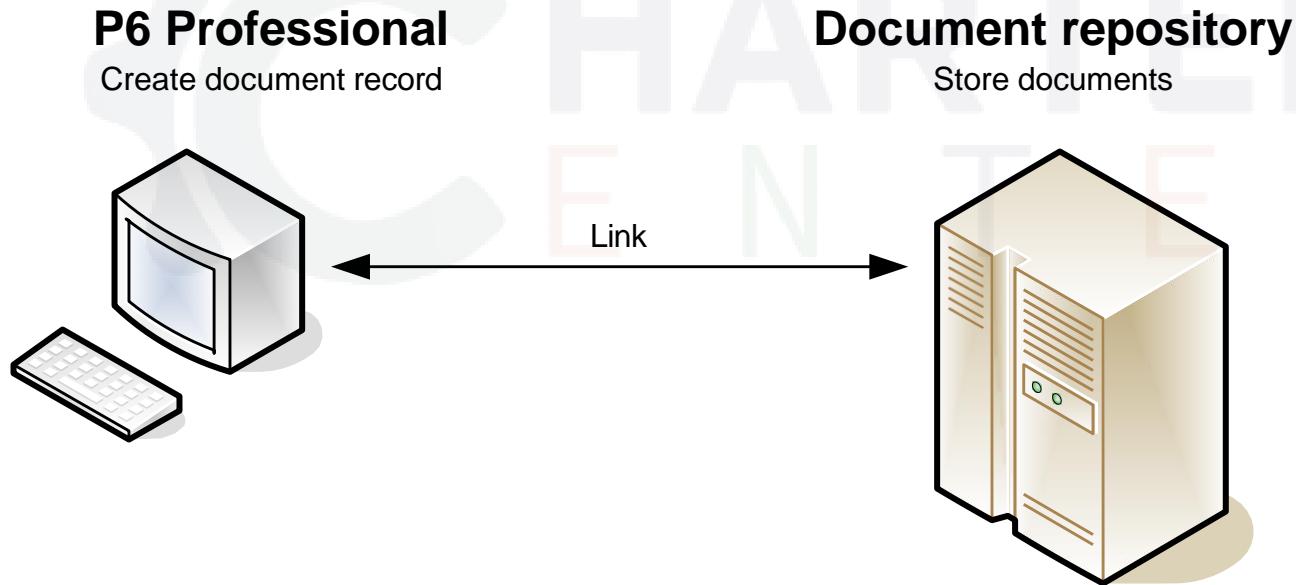
Documents are not stored in the P6 Professional database. Instead, create a document record and then link to the document source.

Presenter Notes
2024-03-04 22:20:29

STUDENT CONTENT:

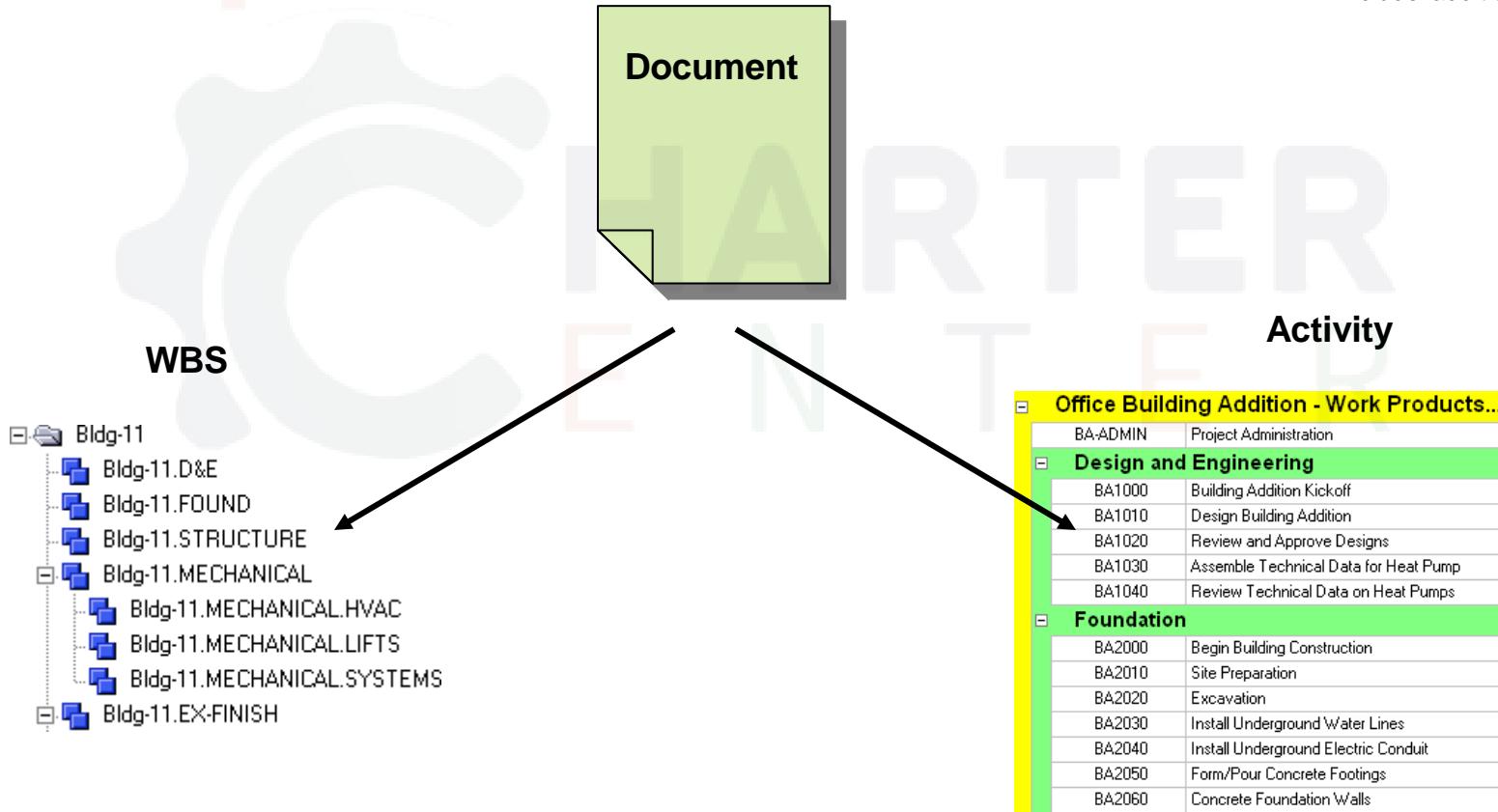
In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .

Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for slide. KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.



Assigning Documents

Project document can be assigned to a WBS element or activity.



STUDENT CONTENT:
 In slide: High-level concepts only. Avoid tool descriptions – focus on concepts .
 Below slide: Additional information that relates to slide content but doesn't fit or isn't appropriate for the KEEP IT BRIEF! Remember, you have the activity guide section to include additional information.