

PLANNING & CONTROL USING

ORACLE® PRIMAVERA® P6

VERSION 8 TO 21 PPM PROFESSIONAL



PAUL E. HARRIS

1

EASTWOOD HARRIS PTY LTD.

Welcome to the
**Eastwood Harris Pty Ltd
Primavera P6
Versions 8 to 21
PPM Professional
3 day training course**




Page 2 Copyright Eastwood Harris Pty Ltd 2022

2

EASTWOOD HARRIS PTY LTD.

Administration

- Evacuation procedure
- Facilities, timings and meals
- Mobile phones & Emails
- Introductions:
 - Your name,
 - The types of projects you are involved in,
 - Your experience in scheduling software,
 - What you seek from this course and
 - What version of P6 does your company use,
- Course attendance sheet.



Page 4 Copyright Eastwood Harris Pty Ltd 2022

4


EASTWOOD HARRIS PTY LTD.

Course Objectives

This objectives of this course are to teach participants:

- Introduction to the user interface,
- How to plan projects without resources,
- Filters, layouts and printing,
- Baselines, and updating an un-resourced project,
- Creating and assigning roles and resources,
- Controlling projects with resources and costs,
- Setting up and administering a database plus advanced features including import/export,
- Activity Codes, Custom Data Fields and Global Change,

Successful completion of all the course workshops will confirm that the objectives have been met.



Page 5 Copyright Eastwood Harris Pty Ltd 2022


5

EASTWOOD HARRIS PTY LTD.

Course Conduct

The course consists of:

- The instructor demonstrating the software using a combination of:
 - A PowerPoint slide show and
 - Live software demonstrations,
- Most chapters are then reinforced with student workshops working through a scenario of creating a small project planning the submission of a bid,
- The book is for you to keep,
- Ask any questions as the course progresses.



Page 6 Copyright Eastwood Harris Pty Ltd 2022


6

EASTWOOD HARRIS PTY LTD.

Course Agenda

Day 1 Modules

- 1 - Introduction
- 2 - Creating a Project Plan
- 3 - Starting Up and Navigation
- 4 - Creating a New Project
- 5 - Defining Calendars
- 6 - Creating a Primavera Project WBS
- 7 - Adding Activities and Organizing Under the WBS
- 8 - Formatting the Display
- 9 - Adding Relationships
- 10 - Activity Network View
- 11 - Constraints.



Page 7 Copyright Eastwood Harris Pty Ltd 2022

7

1

EASTWOOD

HARRIS

PTY LTD.

Course Agenda

Day 2 Modules

- 12 - Group, Sort and Layouts
- 13 - Filters
- 14 - Printing, Reports and Visualizer
- 15 - Schedule Options and Setting a Baseline
- 16 - Updating an Unresourced Schedule
- 17 - User and Administration Preferences
- 18 - Creating Roles and Resources
- 19 - Assigning Roles, Resources and Expenses.



Page: 8

Copyright Eastwood Harris Pty Ltd 2022

8

EASTWOOD


HARRIS

PTY LTD.

Course Agenda

Day 3 Modules

- 20 - Resource Optimization
- 21 - Updating a Resourced Schedule
- 22 - Other Methods of Organizing Project Data
- 23 - Global Change
- 24 - Managing the Enterprise Environment
- 25 - Multiple Project Scheduling
- 26 - Utilities
- 27 - Earned Value.



Page: 9

Copyright Eastwood Harris Pty Ltd 2022

9


EASTWOOD

HARRIS

PTY LTD.

1 - INTRODUCTION

- 1.1 - Purpose of the Course
- 1.2 - Required Background Knowledge
- 1.3 - Purpose of Planning
- 1.4 - Project Planning Metrics
- 1.5 - Planning Cycle
- 1.6 - Levels of Planning
- 1.7 - Monitoring and Controlling a Project.



Page: 10

Copyright Eastwood Harris Pty Ltd 2022

10


EASTWOOD

HARRIS

PTY LTD.

1.1 – Purpose of the course

- Provide a method for planning, scheduling and controlling projects using Primavera,
- Within an established Enterprise Project database or a blank database,
- Up to an intermediate level.



Page: 11

Copyright Eastwood Harris Pty Ltd 2022

11


EASTWOOD

HARRIS

PTY LTD.

1.2 - Required Background Knowledge

- The ability to use a personal computer and understand the fundamentals of the operating system,
- Experience using application software such as Microsoft Office and
- An understanding of how projects are planned, scheduled and controlled, including understanding the project management processes applicable to your projects.



Page: 12

Copyright Eastwood Harris Pty Ltd 2022

12


EASTWOOD

HARRIS

PTY LTD.

1.3 - Purpose of Planning

- The ultimate purpose of planning is to build a model that allows you to predict which activities and resources are critical to the timely completion of the project,
- Strategies may then be implemented to ensure that these activities and resources are managed properly, thus ensuring that the project will be delivered both **On Time** and **Within Budget**.



Page: 13

Copyright Eastwood Harris Pty Ltd 2022

13

EASTWOOD HARRIS PTY LTD.

3 - STARTING UP AND NAVIGATION - SUMMARY

- 3.11 - Application of Options within Forms
- 3.12 - Do Not Ask Me About This Again
- 3.13 - Right-clicking with the Mouse
- 3.14 - Accessing Help
- 3.15 - Refresh Data – F5 Key
- 3.16 - Commit Changes – F10 Key
- 3.17 - Send Project
- 3.18 - Closing Down.

Page 93 Copyright Eastwood Harris Pty Ltd 2022

93

EASTWOOD HARRIS PTY LTD.

3.19 - Workshop 1 - Navigating Around the Windows

- To become familiar with Primavera you will need open your database and navigate around the windows,
- Note:** Your windows may look different from the ones used in this course which uses a demonstration database provided by Oracle Primavera.

Page 94 Copyright Eastwood Harris Pty Ltd 2022

94

EASTWOOD HARRIS PTY LTD.

4 - CREATING A NEW PROJECT

- 4.1 - Creating a Blank Project
- 4.2 - Copy an Existing Project
- 4.3 - Importing a Project
- 4.4 - Setting Up a New Project
- 4.5 - Project Dates
- 4.6 - Saving Additional Project and EPS Information - Notebook Topics
- 4.7 - Workshop 2 - Creating Your Project.

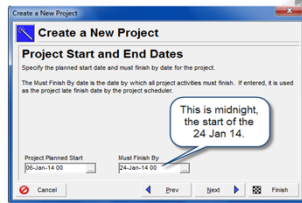
Page 95 Copyright Eastwood Harris Pty Ltd 2022

95

EASTWOOD HARRIS PTY LTD.

4.1 - Creating a Blank Project

- Select **File, New** to run the **Create a New Project** wizard,
- Information Required:
 - EPS Node
 - A unique Project ID
 - Project Name
 - Planned Start date
 - (Optional Must Finish By date)
 - Responsible Manager (OBS)
 - Resource Rate Type.



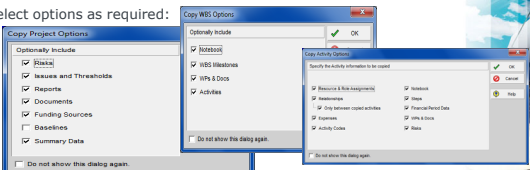
Page 96 Copyright Eastwood Harris Pty Ltd 2022

96

EASTWOOD HARRIS PTY LTD.

4.2 - Copy an Existing Project

- Select project or projects to be copied,
- Select **Edit, Copy** or **Ctrl C**,
- Select EPS Node to be copied to,
- Edit, Paste** or **Ctrl V**,
- Select options as required:



Page 97 Copyright Eastwood Harris Pty Ltd 2022

97

EASTWOOD HARRIS PTY LTD.

4.3 - Importing a Project

- Different Versions of Primavera run on different databases including Oracle and Microsoft databases,
- Primavera will not open a standalone project file,
- You may be required to import a project or project data that has been created in another program,
- Primavera is equipped with a set of tools for importing projects and data in Excel format from other sources,
- Select **File, Import...** to open a wizard that will guide you through the process of importing projects into your database,
- Select **File, Export...** to open a wizard that will guide you through the process of exporting projects from your database,
- NOTE:** Importing projects will often import a large amount of unwanted data.

Page 98 Copyright Eastwood Harris Pty Ltd 2022

98

EASTWOOD

HARRIS

PTY LTD.

Now lets get our hands dirty!

Page 57

Copyright Eastwood Harris Pty Ltd 2022

57

EASTWOOD

HARRIS

PTY LTD.

3 - STARTING UP AND NAVIGATION

3.1 - Logging In

3.2 - The Projects Window

3.3 - Opening One or More Projects

3.4 - Displaying the Activities Window

3.5 - Opening a Portfolio

3.6 - Introduction to Layouts

3.7 - User Interface Update

3.8 - User Preferences

3.9 - Starting Day of the Week

3.10 - Admin Preferences – Set Industry Type

continued...

Page 58

Copyright Eastwood Harris Pty Ltd 2022

58

EASTWOOD

HARRIS

PTY LTD.

3 - STARTING UP AND NAVIGATION

3.11 - Application of Options within Forms

3.12 - Do Not Ask Me About This Again

3.13 - Right-clicking with the Mouse

3.14 - Accessing Help

3.15 - Refresh Data – F5 Key

3.16 - Commit Changes – F10 Key

3.17 - Send Project

3.18 - Closing Down

3.19 - Workshop 1 – Navigating Around the Windows.

Page 59

Copyright Eastwood Harris Pty Ltd 2022

59

EASTWOOD

HARRIS

PTY LTD.

Database Options for P6 V8 to 20

There are three database options for P6 Version 8 to 20:

▪ EPPM – Enterprise Project Portfolio Management:

▪ Two interfaces, Web client and Windows client,

▪ Administration and reporting from the Web,

▪ Scheduling may be completed from the Web but the tool is weak,

▪ Scheduling is normally undertaken in the Windows Client,

▪ Allows integrations with many other Oracle tools,

▪ Aimed at large corporations,

▪ PPM – Professional Project Manager:

▪ One interface, Windows Client,

▪ Restricted integration,

▪ Aimed at smaller companies

▪ Stand-Alone installations:

▪ One interface, Windows Client,

▪ Aimed at consultants and companies with a single user.

Page 60

Copyright Eastwood Harris Pty Ltd 2022

60

EASTWOOD

HARRIS

PTY LTD.

Windows Client with EPPM Database

▪ Admin Menu removed

Primavera P6 Professional R8.2.1 (64-bit) (Offline Maintenance Work)

File Edit View Project Enterprise Tools Help

Layout Projects

Project List

Energy Services

152

1

27-Aug-11

15-Sep-11

General

Planning Resources

Budget Log

Scheduling Plan

Budget Summary

Dates

Funding

Codes

Defaults

Resources

Settings

Calculations

Project ID

Project Name

Enterprise

Status

Responsible Manager

Checked Out Status

Checked Out By

Date Checked Out

Project Linking Priority

Page 61

Copyright Eastwood Harris Pty Ltd 2022

61

EASTWOOD

HARRIS

PTY LTD.

Web Tool Version 16

▪ This is where Administration is undertaken:

Oracle Primavera P6

Dashboard All Release All Customers

Corporate IT Product R&D Construction Energy Manufacturing Workflow Systems Bus

Administration Administration Help Help Logout

Customers

Current Budget by Location

Current Budget by PM

Page 62

Copyright Eastwood Harris Pty Ltd 2022

62

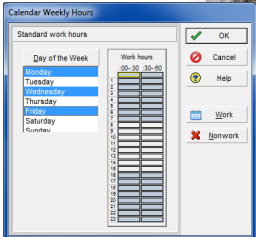
10

EASTWOOD HARRIS PTY LTD.

Adjusting Calendar Working Hours...

Editing Calendar Weekly Hours

- Select **Total work hours/day** then select workweek or
- Select **Detailed work hours/day**



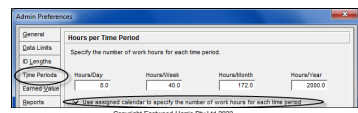
Page 123 Copyright Eastwood Harris Pty Ltd 2022

123

EASTWOOD HARRIS PTY LTD.

5.10 - Calculation of Activity Durations in Days, Weeks or Months

- P6 records durations in hours and the display of durations in days, weeks or months of activities is a mathematical calculation,
- In P6 this may be made in one of two methods:
 - Individually for each Calendar in the **Calendar** form – the **RECOMMENDED METHOD**, or
 - Globally for All Calendars – **NOT RECOMMENDED** (this was the only method in P6 Version 6.2 and earlier).
- Always check the box below in the **Admin, Admin Preferences..., Time Periods** tab:



Page 124 Copyright Eastwood Harris Pty Ltd 2022

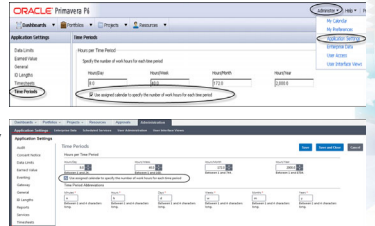
124

EASTWOOD HARRIS PTY LTD.

5.10 - Calculation of Activity Durations in Days, Weeks or Months

In the P6 Optional Client this is set in the Web Client:

- P6 Version 16



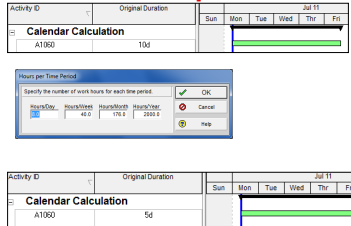
- P6 Version 17, 18, 19 and 20

Page 125 Copyright Eastwood Harris Pty Ltd 2022

125

EASTWOOD HARRIS PTY LTD.

Calendar Example:



Page 126 Copyright Eastwood Harris Pty Ltd 2022

126

EASTWOOD HARRIS PTY LTD.

5.11 - Calendars for Calculating Project, WBS & Other Summary Durations

- In Primavera Version 7 and later the summary durations of bands in the **Projects Window** are calculated based on the **Database Default Calendar** from the first activity Start to the last activity Finish,
- Also the non work time in all views for all projects in the Gantt Chart is also displayed using the **Database Default Calendar**.

Page 127 Copyright Eastwood Harris Pty Ltd 2022

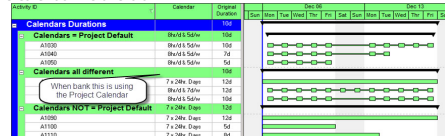
127

EASTWOOD HARRIS PTY LTD.

Calendars for Calculating Project, WBS & Other Summary Durations

Other summary bands are calculated as follows:

- When all the activities in a band share the same calendar then the summary duration is calculated on the calendar of the activities in the band and the calendar name is displayed in the Calendar column, and
- When the calendars for the activities are different the summary duration is calculated on the **Project Default calendar**, the **8h/d 5d/w**, and the calendar field is blank:



Page 128 Copyright Eastwood Harris Pty Ltd 2022

128

EASTWOOD

HARRIS

PTY LTD.

8.3.1 - Formatting the Bars

- To format the Activity Bars you must open the **Bars** form by :
 - Select **View, Bars**, or
 - Click on the **Bars** Toolbar icon, or
 - Right-click in the bars area and select **Bars** from the menu,
- Each bar listed in the table may be hidden or displayed on the bar chart by checking the box in the **Display** column,
- New bars may be added by clicking on the Add icon and deleted by clicking on the Delete icon,
- The bar at the top of the list is placed on the screen and then the one below drawn over the top of it, so it would be simple to hide one bar with a second.

Page 183
Copyright Eastwood Harris Pty Ltd 2022

183

EASTWOOD

HARRIS

PTY LTD.

Formatting the Bars....

- The **Name** is the title assigned to the bar and may be displayed in the printout legend,
- The **Timescale** option enables the nomination of a predefined bar which is selected from the drop down box,
- Double clicking on a cell in the **Filter** column opens the **Filters** form which will determine which activities are displayed with the assigned bar format:

Page 184
Copyright Eastwood Harris Pty Ltd 2022

184

EASTWOOD

HARRIS

PTY LTD.

Formatting the Bars....

- Negative Float** is displayed in a similar way as in Microsoft Project and requires another bar in addition to the **Positive Float** bar and both the **Timescale** and **Filter** selected as Negative Float,
- The **Float** bar shows **Total Float**
- There is no **Free Float** bar available,
- The **% Complete** bar is linked to the **Activity % Complete**.

Page 185
Copyright Eastwood Harris Pty Ltd 2022

185

EASTWOOD

HARRIS

PTY LTD.

8.3.2 Formatting Bars Issues

- There are a number of issues with the Primavera standard bar formatting that need to be understood so the user may display the activity bars logically,
- The Primavera default formatting is applied by clicking on the **Default** button in the **Bars** form,
- In general this **Default** button should always be avoided in all forms as it re-applies the Primavera defaults destroying any formatting changes you have made,
- These formatting issues have been resolved in the www.primavera.com.au_layout,
- You should consider using the www.primavera.com.au_layout to create new layouts resolves many of these issues,
- We will go through these issues now.

Page 186
Copyright Eastwood Harris Pty Ltd 2022

186

EASTWOOD

HARRIS

PTY LTD.

Float on Complete Activity

- Total Float Bar Issue, by default a Total Float bar is displayed on a completed activity,
- But the Float value is set to "Null":

Activity ID	Activity Name	Start	Finish	Total Float
A1010	Activity A	23-Aug-14 08 A	30-Sep-14 17 A	5d
A1020	Activity B	22-Sep-14 08 A	31-Oct-14 17	5d
A1030	Activity C	03-Nov-14 08	28-Nov-14 17	5d

Page 187
Copyright Eastwood Harris Pty Ltd 2022

187

EASTWOOD

HARRIS

PTY LTD.

Float on Complete Activity

- To remove this bar set the filter on the Float Bar in the in the **Bars** form to be **Not Started** or **In Progress**:

Display	Name	Timescale	User Start Date	User Finish Date	Filter	Preview
<input checked="" type="checkbox"/>	Float Bar	Float Bar			Not Started or In Progress	

Page 188
Copyright Eastwood Harris Pty Ltd 2022

188

EASTWOOD HARRIS PTY LTD.

Total Float

- Total Float** is the difference between either the **Late Finish** and the **Early Finish** or the difference between the **Late Start** and the **Early Start** of an activity.,
- The lower 2 days' activity has float of $7 - 9 = 2$ days,
- None of the other activities have float.

Orig Dur	Total Float	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
5d	0d																
4d	0d																
2d	2d																
6d	0d																

Page 244 Copyright Eastwood Harris Pty Ltd 2022

244

EASTWOOD HARRIS PTY LTD.

Critical Path

- The **Critical Path** is the chain of activities where any delay causes an immediate delay in the project end date,
- It is in the top row of activities.

Orig Dur	Total Float	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
5d	0d																
4d	0d																
2d	2d																
6d	0d																

Page 245 Copyright Eastwood Harris Pty Ltd 2022

245

EASTWOOD HARRIS PTY LTD.

10 - ACTIVITY NETWORK VIEW - SUMMARY

- 10.1 - Viewing a Project Using the Activity Network View
- 10.2 - Adding, Deleting and Dissolving Activities in the Activity Network View
- 10.3 - Adding, Editing and Deleting Relationships
- 10.4 - Formatting the Activity Boxes
- 10.5 - Reorganizing the Activity Network
- 10.6 - Saving and Opening Activity Network Positions
- 10.7 - Early Date, Late Date and Float Calculations.

Page 246 Copyright Eastwood Harris Pty Ltd 2022

246

EASTWOOD HARRIS PTY LTD.

10.8 - Workshop 8 - Scheduling Calculations and Activity Network View

- We want to practice using the Activity Network View and,
- Then you may work through calculating early and late dates with a simple manual exercise which is found in your copy of the book this course is based on.

Page 247 Copyright Eastwood Harris Pty Ltd 2022

247

EASTWOOD HARRIS PTY LTD.

11 - CONSTRAINTS

- 11.1 - Assigning Constraints
- 11.2 - Project Must Finish By Date
- 11.3 - Activity Notebook
- 11.4 - Completed Schedule Check List
- 11.5 - Workshop 9 - Constraints.

Page 248 Copyright Eastwood Harris Pty Ltd 2022

248

EASTWOOD HARRIS PTY LTD.

AACE RP

The following AACE RP is applicable to this chapter:

- The AACE RP 24R-03 Developing Activity Logic.

Page 249 Copyright Eastwood Harris Pty Ltd 2022

249

EASTWOOD

HARRIS

PTY LTD.

Use scheduling options from

- The option **Use scheduling options from** was added in Version 20 allowing the **Default Project** to be selected here as well as in **Project, Select Default Project** form,
- When more than one schedule has been opened then you should read carefully the **Multiple Project Scheduling** chapter to understand how the **Default Project** function operates.
- This will be covered in more detail in module 25.

Page: 306

Copyright Eastwood Harris Pty Ltd 2022

306

EASTWOOD

HARRIS

PTY LTD.

Ignore relationships to and from other projects

- Relationships may be created between two projects when:
 - Two or more projects are opened together, or
 - When using the **Select project** option in the Predecessor or Successor forms to create a relationship to an unopened project,
- Checking this option will ignore relationships with other projects that are not currently open,
- Also, activities which have been imported with **External Early Start** and **External Late Finish** dates have these constraints ignored when checked, covered later.

Page: 307

Copyright Eastwood Harris Pty Ltd 2022

307

EASTWOOD

HARRIS

PTY LTD.

Make Open-ended Activities Critical

- This option makes activities without a successor that would normally have float as critical,
- This option makes the **Late Dates** equal the **Early Dates** when an activity has no successor,
- Open-ends Not Critical:**

Total Float	Oct 12	Oct 19	Oct 26	Nov 02																		
0	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
10																						

- Open-ends Critical:**

Total Float	Oct 12	Oct 19	Oct 26	Nov 02																		
0	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
0																						

Page: 309

Copyright Eastwood Harris Pty Ltd 2022

309

EASTWOOD

HARRIS

PTY LTD.

Make Open-ended Activities Critical

- This also allows the user to display multiple **Critical Paths** in one project without the use of constraints:
- Open-ends Not Critical:**

- Open-ends Critical:**

Page: 310

Copyright Eastwood Harris Pty Ltd 2022

310

EASTWOOD

HARRIS

PTY LTD.

Use Expected Finish Dates

- This option turns on or off Expected Finish Constraints that have been assigned against activities,
- An Expected Finish Constraint Calculates the Remaining Duration, for both un-started & in-progress activities,
- This is usually not turned off:

Activity ID	Activity Name	Expected Finish	Start	Finish	27	Jul 04	Jul 11
Project A	Prior to Re-schedule	20-Jul-11 16:00	04-Jul-11 08:00	20-Jul-11 16:00			
A1000	Activity Original Duration 5 days	5d	06-Jul-11 00:00	12-Jul-11 16:00			
A1040	Activity Original Duration 5 days	5d	15-Jul-11 16:00	20-Jul-11 16:00			

Activity ID	Activity Name	Original Duration	Expected Finish	Start	Finish	27	Jul 04	Jul 11	Jul 18
Project A	After Re-schedule	20d	20-Jul-11 16:00	04-Jul-11 08:00	20-Jul-11 16:00				
A1000	Activity Original Duration 5 days	5d	06-Jul-11 16:00	12-Jul-11 16:00					
A1040	Activity Original Duration 5 days	10d	15-Jul-11 16:00	06-Jul-11 00:00	15-Jul-11 16:00				

Page: 311

Copyright Eastwood Harris Pty Ltd 2022

311

EASTWOOD

HARRIS

PTY LTD.

Schedule automatically when a change affects dates

- This is similar to automatic recalculation in other products,
- It recalculates the schedule when data that affects the timing of the schedule is changed,
- Note:** It is recommended that this is never turned on as it slows down the software as it recalculates every time you make a change that affects dates.

Page: 312

Copyright Eastwood Harris Pty Ltd 2022

312

EASTWOOD

HARRIS

PTY LTD.

19.1 - Understanding Resource Calculations and Terminology

- A Resource has three principal components after it has been assigned to an Activity:
 - Quantity**, in terms of **Work** in hours or days or **Material** quantities required to complete the activity, which are referred to as **Units** by Primavera,
 - The **Resource Unit Rate** is termed **Price/Unit** in Primavera and
 - Cost**, which is calculated from the **Resource Unit Rate** x **Units**.

Page: 369

Copyright Eastwood Harris Pty Ltd 2022

369

EASTWOOD

HARRIS

PTY LTD.

- Each Resource and Expense has the same four fields for **Costs** and **Units**: **Budget**, **Remaining**, **Actual** and **At Completion**,
- When an activity is **Not Started** and the **% Complete** is zero then:
 - Budget** is normally linked to **Remaining** and **At Completion** and therefore a change to one will change the other two and they will always be equal, and
 - Actual will be zero,
- When the activity is marked **Started** and would normally be in-Progress and the **% Complete** is between 1% and 99% then:
 - Budget becomes unlinked from Remaining and At Completion, and
 - At Completion = Actual + Remaining and have a link to % Complete,
- When the activity is **Complete** and the **% Complete** is 100% then:
 - Remaining is set to zero, and
 - At Completion = Actual.

Page: 370

Copyright Eastwood Harris Pty Ltd 2022

370

EASTWOOD

HARRIS

PTY LTD.

- The **Budget** values for **Costs** and **Units** are linked to the **At Completion** values until:
 - An Activity has been marked as Started and normally has a % Complete, or
 - The **Link Budget and At Completion** for not started activities in the **Project Workspace**, **Calculations** tab is unchecked,
- Note:** This function also unlinks Original and Remaining Durations:

Calculations

Activities

Default Price / Unit for activities without resource or role Price / Units

\$0/h

☐ Activity percent complete based on activity steps
☒ Link Budget and At Completion for not started activities
☐ Reset Original Duration and Units to Remaining
☒ Reset Remaining Duration and Units to Original

Resource Assignments

When updating Actual Units or Cost

☐ Add Actual to Remaining
☒ Subtract Actual from At Completion
☒ Recalculate Actual Units and Cost when duration % complete changes
☐ Update units when costs change on resource assignments
☒ Link Actual and Actual This Period Units and Cost

Page: 371

Copyright Eastwood Harris Pty Ltd 2022

371

EASTWOOD

HARRIS

PTY LTD.

19.2 - Project Window Resource Preferences

- We will look at the settings applicable to assigning resources in the:
 - Resources** tab and
 - Calculations** tab.

Page: 372

Copyright Eastwood Harris Pty Ltd 2022

372

EASTWOOD

HARRIS

PTY LTD.

Project Window Resources Tab

Assignment Defaults:

- There are five **Resource Rates** available in Primavera,
- One rate may be set as a **Project default**,
- After assignment to an activity, the **Resource Rate** may be changed using the **Rate Type** field in the **Resources** tab of the **Activities** Workspace.

Resource

Assignment Defaults

Specify the default Rate Type for new assignments

Standard Rate

External Rate

Internal Rate

Price / Unit

Price / Cost

Standard Rate

Resource Assignments

☒ Resources can be assigned to the same activity more than once

Page: 373

Copyright Eastwood Harris Pty Ltd 2022

373

EASTWOOD

HARRIS

PTY LTD.

Project Window - Resources Tab

Drive activity dates by default

- This allows the Activity Original Duration to be unlinked from the Resource Assignment Duration,
- When unchecked will allow resources to be scheduled outside an activity duration, see next slide,
- It is recommended that this is **NOT** unchecked:

Resource

Assignment Defaults

Specify the default Rate Type for new assignments

Standard Rate

☒ Drive activity dates by default

Resource Assignments

☒ Resources can be assigned to the same activity more than once

Page: 374

Copyright Eastwood Harris Pty Ltd 2022

374


EASTWOOD

HARRIS

PTY LTD.

24.12 - Tracking Window

- The **Tracking Window** is used to track multiple projects down to WBS level and reads **Summarized** data when project is closed,
- There are four **Tracking Layout** types which are used for resource, cost, and schedule analysis of multiple projects:
 - Project Table**
 - Project Bar Chart**
 - Project Gantt/Profile**
 - Resource Analysis,**
- Forecast Bars** may be dragged to a new location to see the effect of resource histograms **ONLY** when a project is open:
 - The **Edit, User Preferences...**, **Resource Analysis, Time-Distributed Data** option is set to **Forecast dates** to allow the **Resource Remaining Early units/costs** to be recalculated on the **Forecast dates**,
 - The **Reset Forecast Dates** button resets the **Forecast Dates** back to the Start and Finish dates.



Page: 491

Copyright Eastwood Harris Pty Ltd 2022

491


EASTWOOD

HARRIS

PTY LTD.

24 - MANAGING THE ENTERPRISE ENVIRONMENT - SUMMARY

- 24.1 - Multiple User Data Display Issues
- 24.2 - Enterprise Project Structure (EPS)
- 24.3 - Project Portfolios
- 24.4 - Organizational Breakdown Structure - OBS
- 24.5 - Users, Security Profiles and Organizational Breakdown Structure
- 24.6 - Project Codes
- 24.7 - Filtering, Grouping and Sorting Projects in the Projects Window
- 24.8 - Project Durations in the Project Window



Page: 492

Copyright Eastwood Harris Pty Ltd 2022

Continued...

492


EASTWOOD

HARRIS

PTY LTD.

24 - MANAGING THE ENTERPRISE ENVIRONMENT - SUMMARY

- 24.9 - Why Are Some Data Fields Gray and Cannot Be Edited?
- 24.10 - Summarizing Projects
- 24.11 - Job Services
- 24.12 - Tracking Window.



Page: 493

Copyright Eastwood Harris Pty Ltd 2022

493


EASTWOOD

HARRIS

PTY LTD.

25 - MULTIPLE PROJECT SCHEDULING

- 25.1 - Multiple Projects in One Primavera Project
- 25.2 - Multiple Primavera Projects Representing One Project
- 25.3 - Setting Up Primavera Projects as Sub-projects
- 25.4 - Refresh Data and Commit Changes
- 25.5 - Who Has the Project Open?
- 25.6 - Setting Baselines for Multiple Projects
- 25.7 - Restoring Baselines for Multiple Projects.



Page: 494

Copyright Eastwood Harris Pty Ltd 2022

494

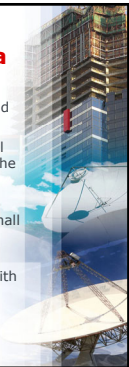
EASTWOOD

HARRIS

PTY LTD.

25.1 - Multiple Projects in One Primavera Project

- When there are many small projects that need to be managed, it would be logical to create a Primavera Project for each project,
- On the other hand, one should also consider putting a number of small projects in one Primavera Project and have the projects identified by the first level WBS Node or some other coding, such as Activity Codes or Project Phase/WBS Category,
- This option is also practical when one scheduler is managing all the small projects,
- The only problem with this approach is that P6 does not allow partial projects to be Baselined, but User Defined date fields in conjunction with a Global Change may be used to create a baseline as outline in the previous chapter.



Page: 495

Copyright Eastwood Harris Pty Ltd 2022

495


EASTWOOD

HARRIS

PTY LTD.

25.2 - Multiple Primavera Projects Representing One Project

- Normally, one Primavera Project would be created for each of an organization's projects,
- There may be a requirement to break a Project down into Sub-projects, these reasons include:
 - The project is large enough to require a number of schedulers,
 - A project may have seperable parts or multiple clients,
 - A sub-project could be created as a Primavera Project for the security of sensitive financial information.



Page: 496

Copyright Eastwood Harris Pty Ltd 2022

496

EASTWOOD

HARRIS

PTY LTD.

27.3 - Earned Value

- P6 has a field titled **Performance % Complete** which is used to calculate the **Earned Value** for each activity,
- In P6 there are some options for calculation of the **Performance % Complete** for all activities in each **WBS Node** which is, in turn, is used to calculate the **Earned Value**:
 - The defaults are set in the **Admin, Admin Preferences...**, **Earned Value** tab,
 - The options are managed at WBS Node for all activities assigned to a specific WBS Node, and each WBS Node may have different values,
 - Open the **WBS Window, Earned Value** tab to see the options which are mainly self-explanatory.

Page 527

Copyright Eastwood Harris Pty Ltd 2022

527

EASTWOOD

HARRIS

PTY LTD.

Earned Value

- Example of the Calculation of the Earned Value:

Activity ID	Activity % Comp	Performance % Complete	SL Project Total Cost	Earned Value Cost	SL Project Labor Units	Earned Value Labor Units
Earned Value Percent Complete						
Activity % Complete						
A1000	50%	50%	\$9,600	\$4,800	60h	40h
WBS Milestone Percent Complete 75%						
A1010	50%	75%	\$9,600	\$7,200	60h	60h
0/100						
A1020	50%	0%	\$9,600	\$0	60h	0h
50/50						
A1030	50%	50%	\$9,600	\$4,800	60h	40h
Custom percent complete at 10%						
A1040	50%	10%	\$9,600	\$960	60h	8h

Page 528

Copyright Eastwood Harris Pty Ltd 2022

528

EASTWOOD

HARRIS

PTY LTD.

27.4 - Actual Costs

- These are the costs actually incurred in performing the work,
- Actual Costs are often calculated from the amount paid plus accruals,
- Actual Costs and Actual Units may be recorded in Primavera and displayed in two methods:
 - The total to date, or
 - Calculated from the **Financial Periods** values when Period values are stored.

Page 529

Copyright Eastwood Harris Pty Ltd 2022

529

EASTWOOD

HARRIS

PTY LTD.

27.5 - Estimate to Complete

- P6 has two separately calculated estimate to complete fields:
 - Estimate to Complete from Resource and Expense Units and Costs, usually titled **Remaining Costs** or **Remaining Units** and
 - Estimate to Complete from P6 Earned Value Calculations, titled **Estimate to Complete** (costs) or **Estimate to Complete Labor Units**,
- NOTE:** It is very important that users understand the differences between these two fields and know which they are using and displaying.

Page 530

Copyright Eastwood Harris Pty Ltd 2022

530

EASTWOOD

HARRIS

PTY LTD.

27.6 - Activity Usage S-Curve Options

- The instructor will step through the options:

Page 531

Copyright Eastwood Harris Pty Ltd 2022

531

EASTWOOD

HARRIS

PTY LTD.

27.7 - Sample Graphical S-Curves

- Remaining and Late Remaining** curves are drawn from the zero point, and
- Traditional EV S-Curves.

Page 532

Copyright Eastwood Harris Pty Ltd 2022

532

87


EASTWOOD

HARRIS

PTY LTD.

27 - EARNED VALUE MANAGEMENT WITH P6 - SUMMARY

- 27.1 - Performance Measurement Baseline
- 27.2 - Planned Value
- 27.3 - Earned Value
- 27.4 - Actual Costs
- 27.5 - Estimate to Complete
- 27.6 - Activity Usage S-Curves
- 27.7 - Sample Graphical S-Curves.



Page: 533

Copyright Eastwood Harris Pty Ltd 2022

533


EASTWOOD

HARRIS

PTY LTD.

Review Expectations

- Any questions,
- Complete Feedback Sheet,
- Course Certificates,
- Have we met your expectations?



Page: 534

Copyright Eastwood Harris Pty Ltd 2022

534

EASTWOOD


HARRIS

PTY LTD.

Database Cleanup at end of course, if required:

Please could you delete all:

- User Filters
- User Layouts
- The resources created but NOT your Resource node
- Your projects.



Page: 535

Copyright Eastwood Harris Pty Ltd 2022


535

EASTWOOD

HARRIS

PTY LTD.

Thank you for attending



Page: 536

Copyright Eastwood Harris Pty Ltd 2022

536