

Welcome to the

What's New in Oracle Primavera P6 PPM Professional Versions 19, 20 and 21

presented by Paul E Harris

Abstract

- Oracle has made a number of enhancements in Primavera P6 PPM Professional over the past three years and this presentation will cover the enhancements made in the last three releases based on the 3 papers that Paul E Harris has published.,
- It will also suggest practical uses for all the enhancements and allow a discussion on the enhancements,
- This presentation will be of interest to P6 PPM users who are thinking of upgrading from an earlier version.

Oracle Primavera Enhancement Philosophy

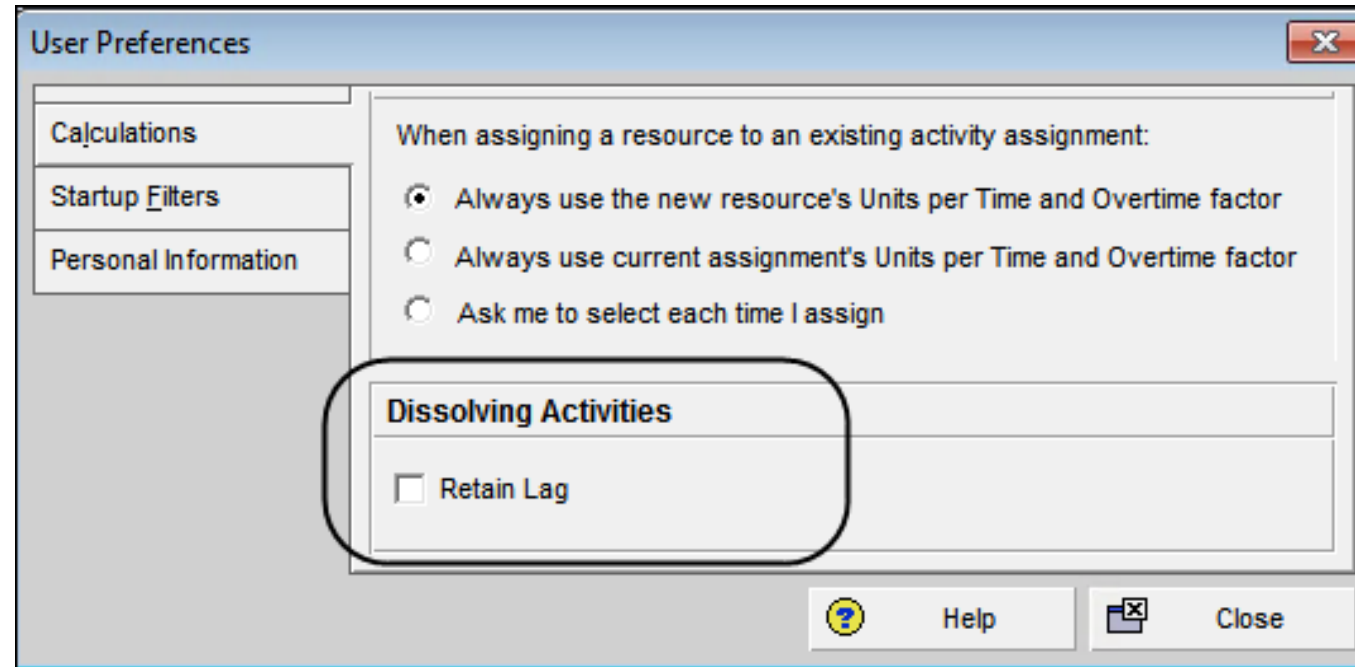
- It has been my observation that when Oracle introduces new functions that affect the way the schedule will calculate then these options need to be turned on before P6 will use the new function,
- Thus the software calculate the same way unless the user turn on a new function.

P6 Version 19 Enhancements

- Dissolve Activities with Lag using Retain Lag
- Project Code Maximum Length Increase
- Details, User Defined Fields tab
- Data Date Default for Apply Actuals
- Allow or Restrict Access to Resources from Multiple Parent Resources

Dissolve Activities with Lag using Retain Lag

- This function was new to P6 Version 19 and introduced the ability to retain lag when dissolving activities.
- When **Retain Lag** is selected from the **User Preferences, Calculations** tab then the dissolved activities predecessor and successor lags are be added to the new relationship:



Project Code Maximum Length Increase

- P6 Version 19 increased the maximum length for **Project Codes** in PPM databases to 60 characters,
- This function would be useful for companies that have long project IDs in their system and want to mirror them in P6.

Details, User Defined Fields tab

- P6 Version 19 added a new **Details, User Defined Fields** tab, similar to the **Codes** tab, displaying the assigned **User Defined Fields** (UDFs),
- It is available in the following windows: Projects, WBS, Activities, Resource Assignments, Project Expenses, Issues, and Work Products, Risks and Documents,
- The user must add the **UDF Field** to the **User Defined Fields** tab by clicking on the **Customize User Defined Fields** button,
- The displayed UDF Fields are saved as part of the View, thus the user will not automatically see which UDFs a data item such as a Project or Activity are being utilized.

The screenshot shows the 'User Defined Fields' window. At the top, there are fields for 'Activity' (A1040) and 'Project' (ACCBRC). Below this is a table with columns 'User Defined Field', 'Data Type', and 'Value'. The table contains two rows: 'Deadline' with 'Finish Date' and '15-Nov-22 00', and 'Indicator' with 'Indicator' and a green circle icon. At the bottom, there is a 'Customize User Defined Fields' button and a 'Hide empty rows' checkbox.

User Defined Field	Data Type	Value
Deadline	Finish Date	15-Nov-22 00
Indicator	Indicator	


The screenshot shows the 'Activity Details' window with the 'User Defined Fields' tab selected. The window has a tabbed interface with 'Codes', 'Notebook', 'Resources', 'Summary', 'Steps', 'WPs & Docs', and 'User Defined Fields'. The 'User Defined Fields' tab is active, showing a list of 'Available Tabs' (Discussion, Feedback, Risks) and a 'Display Tabs' list (General, Status, Predecessors, Successors, Relationships, Expenses, Codes, Notebook, Resources, Summary, Steps, WPs & Docs, User Defined Fields). The 'User Defined Fields' tab is highlighted with a black box. On the right side, there are buttons for 'OK', 'Cancel', 'Apply', 'Default', and 'Help'.

Details, User Defined Fields tab

- The picture shows that the activity has been assigned a **Parts Availability** date in a column, but this is not displayed in the **User Defined Fields** tab as this **UDF** field has not been added by clicking on the **Customize User Defined Fields** button.
- The **Hide empty rows** button will hide any blank UDF fields, so the Deadline line in the picture below would be hidden if the Hide empty rows was checked.

Activity ID	Activity Name	Work Order	Parts Availability	Start
[-]	Design and Engineering		13-Jan-16 00:00	18-Jan-16 08:00
	EC100 Design Building Addition	8124	13-Jan-16 00:00	18-Jan-16 08:00

User Defined Fields		
	Activity	EC1000 Design Building Addition
User Defined Field	Data Type	Value
Work Order	Text	8124
Deadline	Finish Date	

 Customize User Defined Fields Hide empty rows

Data Date Default for Apply Actuals

- P6 Version 19 allows project to use their own **Data Date** when applying actuals,
- In earlier versions all projects were set to the same **Data Date**.

Project(s) to be updated:

Project ID	Project Name	Current Data Date	New Data Date	Project Planned Start
EC00501	Haitang Corporate f	27-Sep-15 00:00	27-Sep-15 00:00	01-Aug-14 00:00
EC00515	City Center Office E	18-Jan-16 00:00	18-Jan-16 00:00	18-Jan-16 00:00
EC00530	Nesbid Building Exp	12-Oct-15 00:00	12-Oct-15 00:00	12-Oct-15 00:00
EC00610	Harbour Pointe Ass	27-Sep-15 00:00	27-Sep-15 00:00	10-Aug-14 23:00
EC00620	Juniper Nursing Ho	27-Sep-15 00:00	27-Sep-15 00:00	02-Feb-15 00:00
EC00630	Saratoga Senior Co	09-Nov-15 00:00	09-Nov-15 00:00	09-Nov-15 00:00
EC02016	Alaska University -	01-Dec-15 00:00	01-Dec-15 00:00	01-Dec-15 00:00

A new data date is used when actuals are applied.

Each project uses its own new data date
 The same new data date is used for all projects

New Data Date: 18-Jan-16 00:00

When actuals are applied, calculate activity remaining durations:

Based on activity duration type
 Always recalculate

Buttons: Apply, Cancel, Help

Allow or Restrict Access to Resources from Multiple Parent Resources

- Earlier versions only allowed one resource or resource node to be assigned to a user,
- P6 Version 19 introduced the ability to allow a user to be assigned up to five resources or resource nodes when defining resource access,
- A user may view and assign the selected resources and the child resources from resources assigned here:

The screenshot displays the 'P6 Users' application window. The main table lists users with columns for Login Name, Personal Name, Global Profile, and Resource. The user 'harrispe' (Paul E Harris, Administrator) is selected. Below the table, the 'Global Security Profile' is set to 'Administrator'. The 'Specify the resources that the user will be able to access' section is active, showing a list of resources: Trades.Trades, Engineering.Engineering Department (selected), Contr.External Contractors, ManufEng.Manufacturing Engineering Group, and ProductOps.Product Operations Group. A callout box points to this section with the text: 'This whole section enabling up to 5 resources or resource nodes was added in Version 19.' A 'Select Resource' dialog box is open, showing a search field and a list of resources with their IDs and names: CaseyA (Andrea Casey), LeeC (Cindy Lee), ProductOps (Product Operations Gro - selected), HillF (Frank Hill), WestL (Larry West), BaxterS (Sue Baxter), and WynnA (Alice Wynn).

P6 Version 20 Enhancements

- New login screen
- Relationship Comments
- Role Rate Change Over Time
- Multiple Project Scheduling Data Date Selection
- Multiple Project Scheduling Options Selection
- Lean Tasks may be imported using an XML file
- Different Projects may have different Financial periods
- Assignment Codes
- Histogram Bars Exact Values
- Plus Lots of Other Enhancements

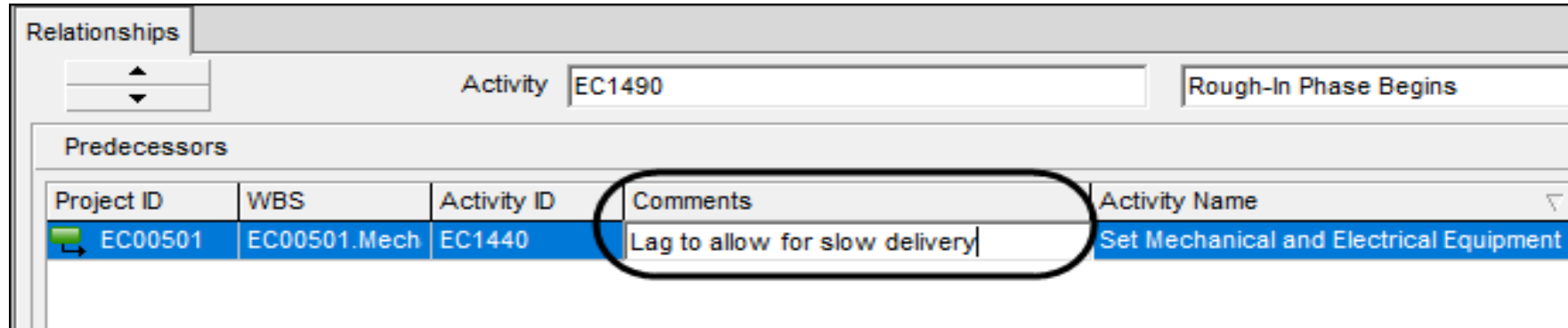
New login screens

- P6 Version 20 has introduced new login screens,
- These have the same information but just a different format.

The image shows two overlapping windows from the P6 Professional 20 software. The background window is the main login screen, titled "P6 Professional 20". It features a "Login Name" field with the text "admin" and an empty "Password" field. Below these is an "Advanced" section with a dropdown for "Database" set to "PMDB" and a dropdown for "Language" set to "English (United States)". At the bottom of this window are "Connect" and "Disconnect" buttons, and a link for "Edit database configuration?". The foreground window is titled "P6 Database Configuration". It has a search bar at the top, a list of database options (JSDB, PMDB, PMDB_BAK) with "PMDB" selected and marked with a checkmark, and a "Delete" button at the bottom left. On the right side of this window, there are fields for "Driver Type" (Microsoft SQL Server/SQL Express), "Database Alias" (PMDB), "Connection String" (PRIMAVERA-PC/PMDB), and "Keystore" (checked for "Use default database keystore"). At the bottom right are "Test", "Cancel", "Back", and "Next" buttons.

Relationship Comments

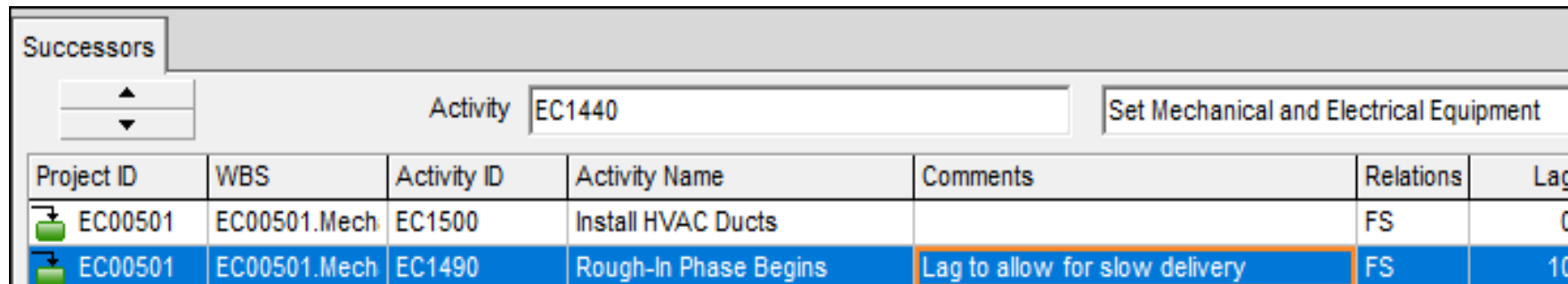
- A **Comments** column may be added to the **Activities** window **Relationships**, **Predecessor** and **Successor** tabs:



The screenshot shows the 'Relationships' window with the 'Predecessors' tab selected. The 'Activity' field is set to 'EC1490' and the relationship type is 'Rough-In Phase Begins'. A table below lists the predecessor relationship:

Project ID	WBS	Activity ID	Comments	Activity Name
EC00501	EC00501.Mech	EC1440	Lag to allow for slow delivery	Set Mechanical and Electrical Equipment

- The comment is seen in both the **Predecessor** and **Successor** window of each relationship assigned a comment:

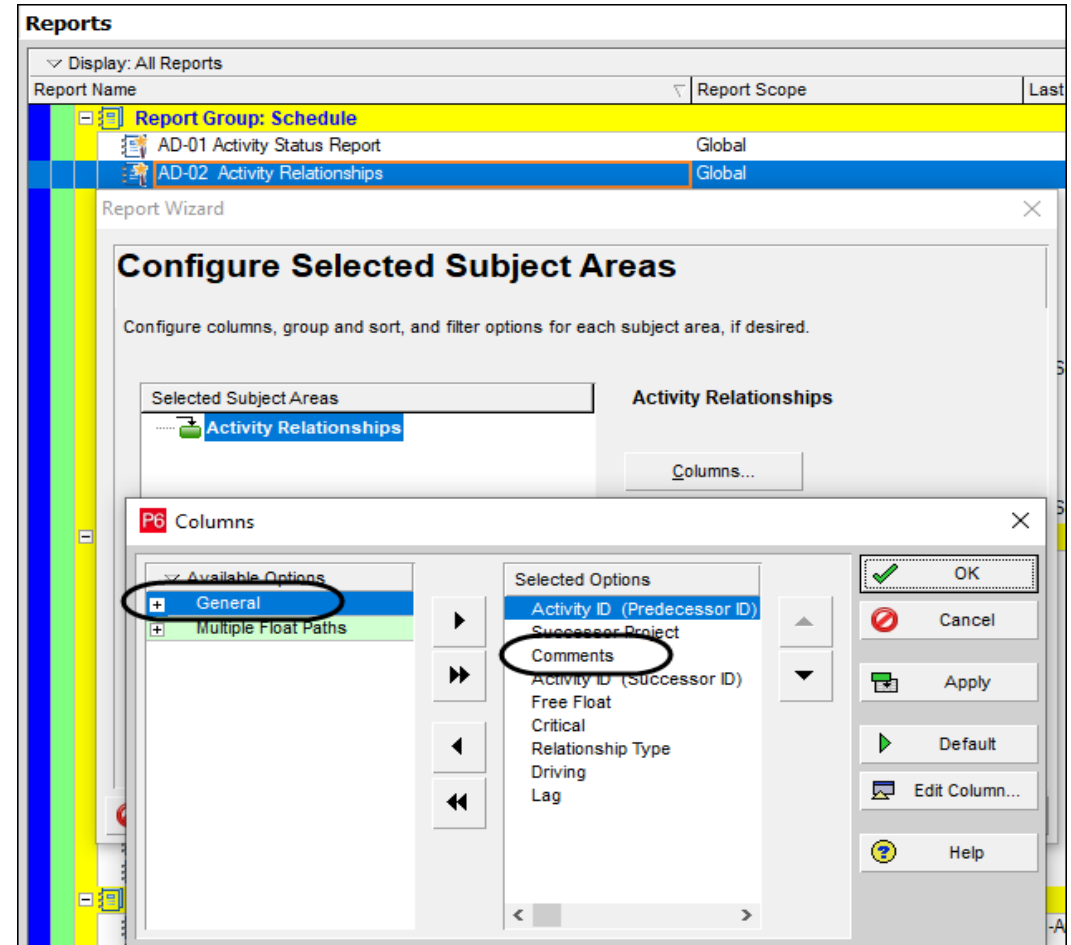


The screenshot shows the 'Successors' window with the 'Activity' field set to 'EC1440' and the relationship type is 'Set Mechanical and Electrical Equipment'. A table below lists the successor relationships:

Project ID	WBS	Activity ID	Activity Name	Comments	Relations	Lag
EC00501	EC00501.Mech	EC1500	Install HVAC Ducts		FS	0
EC00501	EC00501.Mech	EC1490	Rough-In Phase Begins	Lag to allow for slow delivery	FS	10

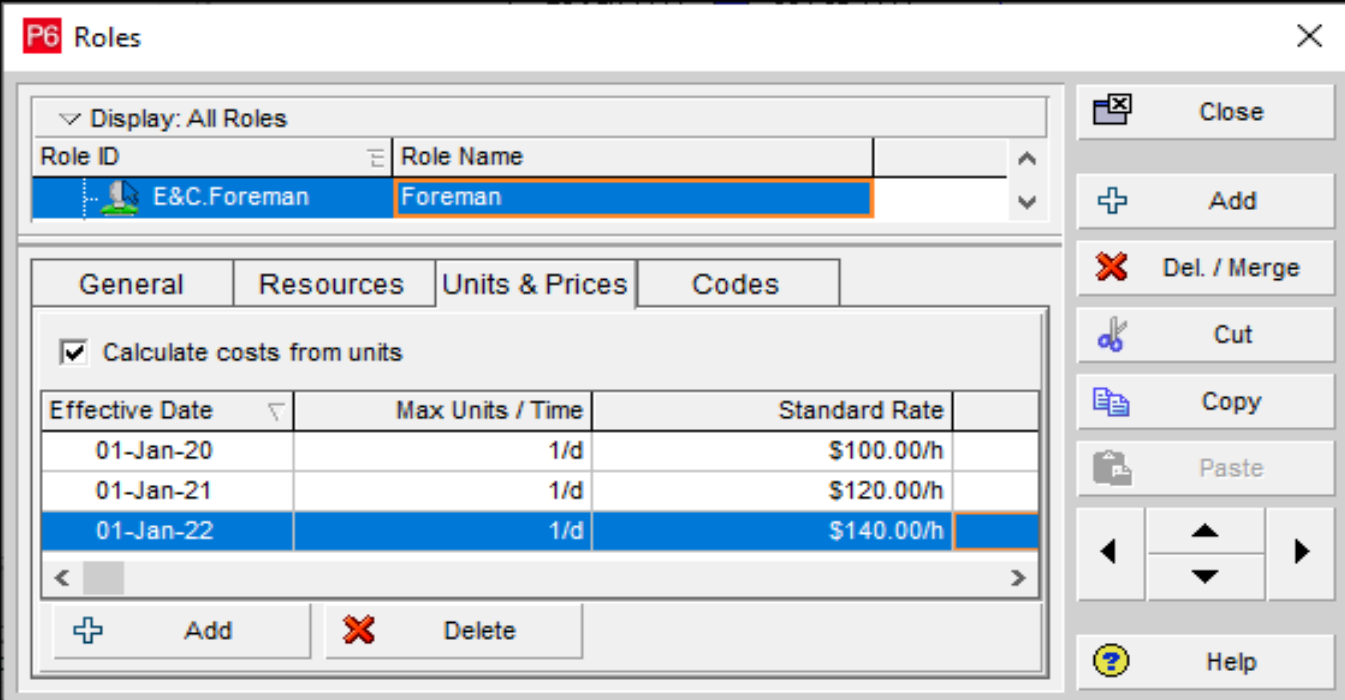
Relationship Comments

- This is a very useful function and in the past one had to either use a **Note** or a **UDF** assigned to either the predecessor or successor activity to record notes about a relationship,
- This function is also useful for recording changes to relationships,
- The **Comments** column is available in the **Activity Relationship** report:



Role Rate Change Over Time

- Resources have always been able to vary their rate over time but Roles were not and this was one of the drivers to use resources and not roles,
- The picture shows a Role Rate changing over time:



The screenshot shows the 'P6 Roles' dialog box. The 'Display' dropdown is set to 'All Roles'. The selected role is 'E&C.Foreman' with the name 'Foreman'. The 'Units & Prices' tab is active, showing a table with columns for 'Effective Date', 'Max Units / Time', and 'Standard Rate'. The table contains three rows, with the third row (01-Jan-22) highlighted in blue.

Effective Date	Max Units / Time	Standard Rate
01-Jan-20	1/d	\$100.00/h
01-Jan-21	1/d	\$120.00/h
01-Jan-22	1/d	\$140.00/h

Role Rate Change Over Time

- When an activity spans two periods then P6 calculates a proportional rate based on the activity duration in each period,
- You must use the **Recalculate Cost Assignment** function during or after rescheduling, to recalculate the resource costs,
- The picture below show the result of assigning the Role Foreman above and has 5 days work in Dec 2020 and 5 in Jan 2021 using an average rate of \$112:

		Dec 28							Jan 04								
Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	
28-Dec-20		1								1							
						01-Jan-21											
		Dec 28							Jan 04								
Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	
		1	1	1	1	1			1	1	1	1	1				
		\$112	\$112	\$112	\$112	\$112			\$112	\$112	\$112	\$112	\$112				

Role Rate Change Over Time

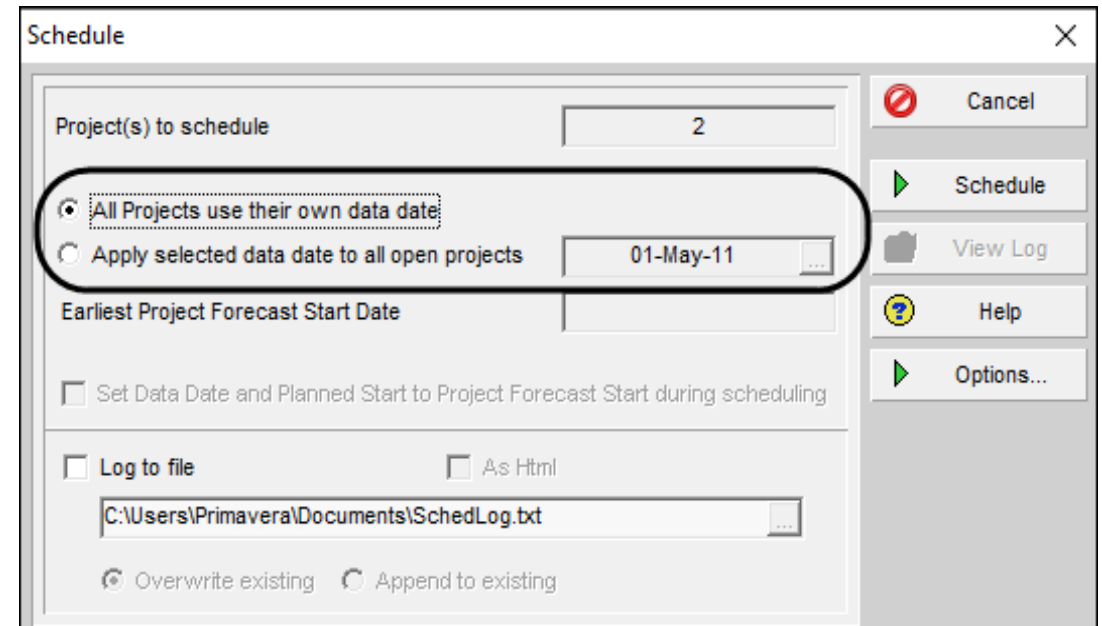
- The picture below show the result of assigning the Role Foreman 3 in Dec 2020 and 7 days in Jan 2021 now using an average rate of \$114:

		Dec 28						Jan 04								
Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon
		29-Dec-20	[Red bar spanning from Tue Dec 29 to Mon Jan 4]													
		Dec 28						Jan 04								
Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon
			1	1	1	1			1	1	1	1	1			1
			\$114	\$114	\$114	\$114			\$114	\$114	\$114	\$114	\$114			\$114

- This demonstrates how the cost are calculated which are not entirely correct as the costs should be lower in 2021 and higher in 2022,
- Note:** This is the same way that resources calculate when an Activity spans an **Effective Date**, but a fix is available in Version 21.

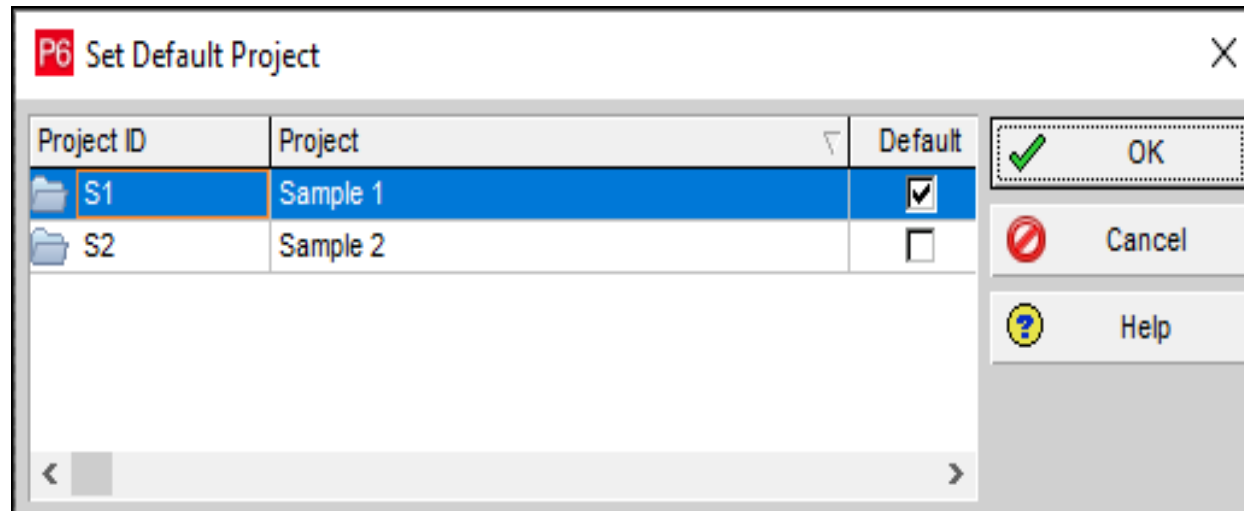
Data Date Selection in Multiple Project Scheduling

- When scheduling multiple projects you now have a choice of the **Data Date** used for calculating your schedules.
- Version 20 added the additional option of:
 - **All Projects use their own data date** which is how earlier versions calculated, or
 - **Apply selected data date to all open projects** and all projects will have their **Data Date** changed to the selected date.



Multiple Project Scheduling Options Selection

- In the P6 Version 19 and earlier when multiple projects were scheduled together and they had different **Scheduling Options**, which could happen when users change them from default or when you imported a project,
- Then all the different **Scheduling Options** of all the projects being scheduled were changed to the **Default Project** on a permanent basis and changed projects would calculate differently from then on.



Multiple Project Scheduling Options Selection

- But now with Version 20 you may select which project **Scheduling Options** are used when scheduling multiple project in the **Scheduling Options** form which is opened by selecting **Tools, Schedule, Options**,
- The **Default Project** may also be selected in the **Levelling** form.

Schedule Options

Use scheduling options from

S2 - Sample 2

S1 - Sample 1

S2 - Sample 2

Ignore relationships to and from other projects

Make open-ended activities critical

Use Expected Finish Dates

Schedule automatically when a change affects dates

Close

Cancel

Default

Help

Level Resources

Use scheduling options from

OZB-16 - Bid for Facility Extension

Automatically level resources when scheduling

Consider assignments in other projects with priority equal/higher than

Preserve scheduled early and late dates

Recalculate assignment costs after leveling

Level all resources

Select Resources...

Close

Level

Default

Added in P6 Version 20

Multiple Project Scheduling Options Selection

- The author found in Version 20,
 - The **Default Project** selected in the **Scheduling Options** form did not change the option in the **Set Default Project** form and
 - The **Scheduling Options** form option took priority over the **Set Default Project** form option.
- What happens now in P6 Version 20?
 - The **Default Project** set in **Project**, **Set Default Project** is ignored and not changed when the **Default Project** is changed in the **Scheduling Options, Use scheduling options** form,
 - The options from the project set in **Scheduling Options, Use scheduling options** form are used to calculate all the projects, and
 - The other project(s) **Scheduling Options** are changed permanently to the project selected the **Scheduling Options, Use scheduling options** form on a permanent basis. This is the same as when the **Default Project** was changed in earlier versions.

Multiple Project Scheduling Options Selection

- Thus, in **Version 20**:
 - The **Default Project** may now be set in two places but they are not linked and the project selected in the **Scheduling Options, Use scheduling options** form takes priority over the **Default Project** and they may be different,
 - Thus, the problem of **Scheduling Options** being changed when scheduling multiple projects has **NOT** been solved. You now have two options to mess up your **Scheduling Options** of projects when scheduling multiple projects with different options,
 - Again, I reiterate you should make all the **Scheduling Options** in one database the same when you schedule multiple projects and be careful when importing projects.

Lean Tasks may be imported using an XML file

Primavera Cloud allows activities to be broken down into tasks.

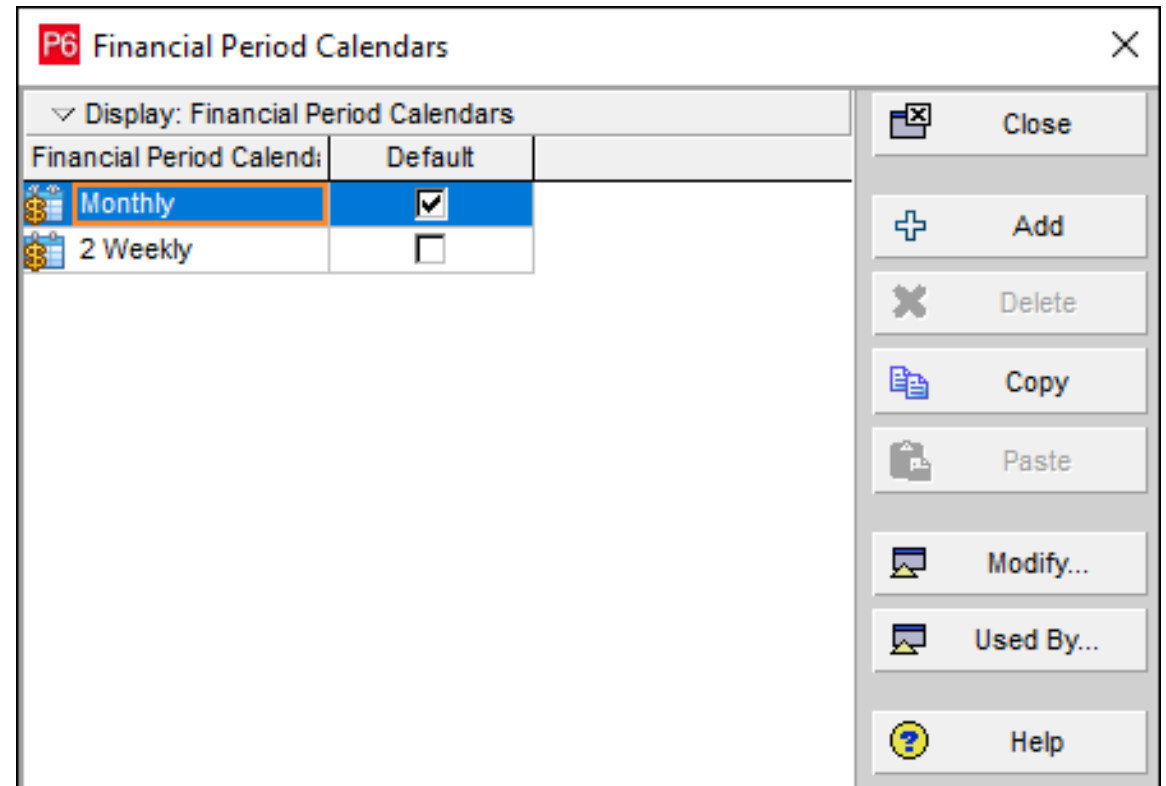
Lean Tasks are similar to the P6 **Steps** function but with more functionality such as allowing the assignment of tasks to subcontractors.

Lean Tasks may have the following attributes:

- Assignment of a duration,
- May be made “**Private**” so other people do not see them,
- Tasks may have logic between them which are called “**Handoffs**”,
- A Task’s Float is called “**Slack**”,
- The planning of **Tasks** is completed on a **Planning Board** that may be shared between team members. This is a tool designed for short term planning by the people completing the work,
- When you are using an EEPM database you may import Adding an activity through an XML file from Adding an activity .

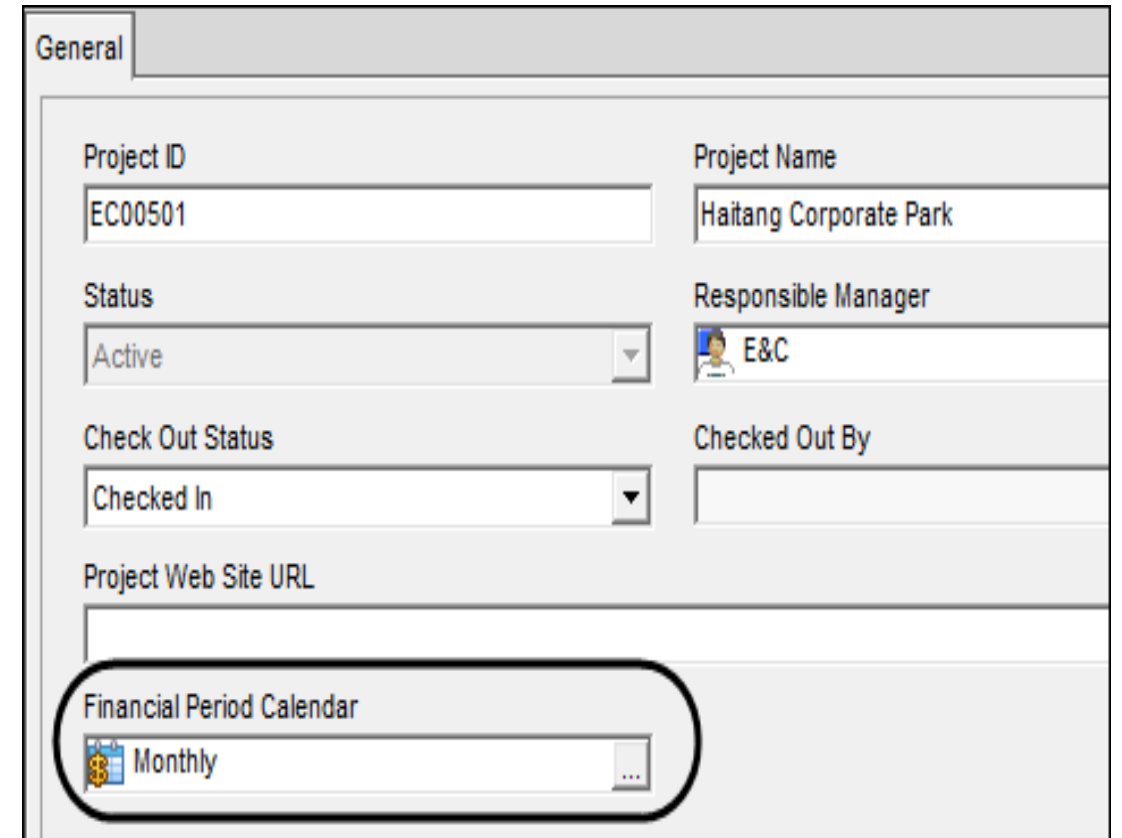
Different Projects may have different Financial periods

- You may now assign different **Financial Period** to each project in P6 Version 20 by the use of **Financial Period Calendars**,
- When you select **Admin, Financial Period Calendars** you may create multiple **Financial Period Calendars** and each may have different **Financial Periods** such as weeks or months:



Different Projects may have different Financial periods

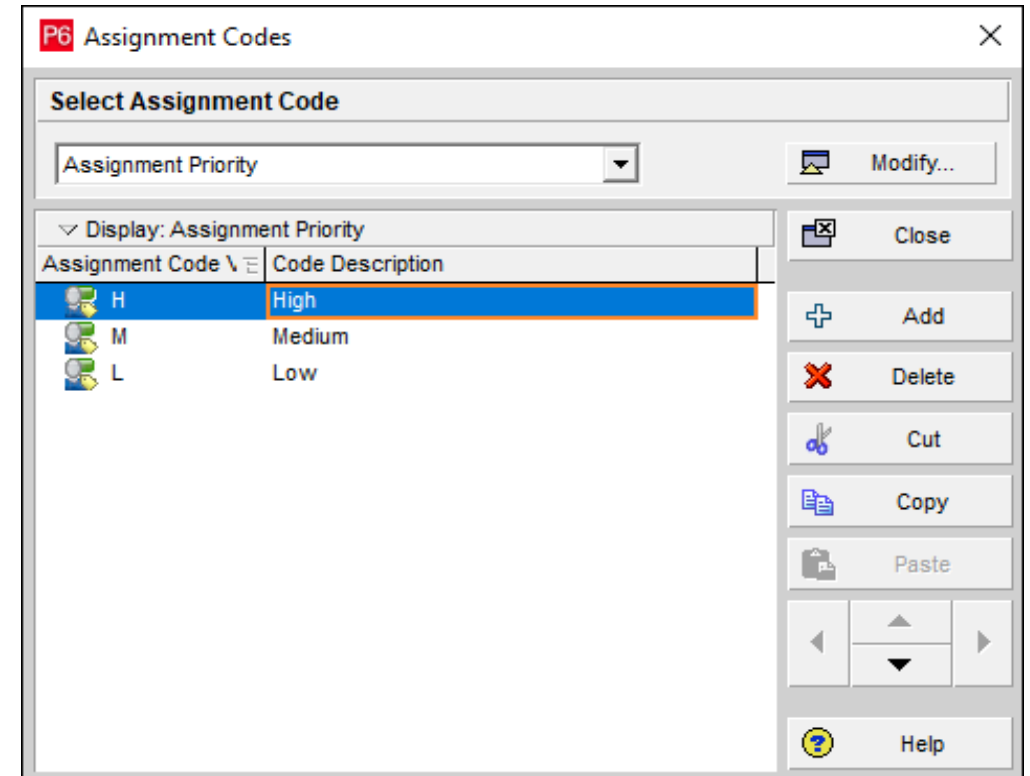
- The **Financial Period Calendar** is assigned to a project in:
 - The **Projects Window, General tab**, or
 - By displaying the **Financial Period Calendar** column in the **Projects** window:
- **Note:** This function did not work in the authors P6 Version 20.12.0.37740, but updates should fix this issue. As an interim you may change the **Default Financial Period Calendar** before creating a project.



The screenshot shows the 'General' tab of a project configuration window. The 'Project ID' is EC00501 and the 'Project Name' is Haitang Corporate Park. The 'Status' is set to 'Active' and the 'Responsible Manager' is E&C. The 'Check Out Status' is 'Checked In'. The 'Project Web Site URL' field is empty. The 'Financial Period Calendar' dropdown menu is open, showing 'Monthly' as the selected option. A red circle highlights the 'Financial Period Calendar' dropdown menu.

Assignment Codes

- There is a new function titled **Assignment Codes** allowing users to code up assignments so resource assignments may be Grouped or Filtered.
- This function could be used for:
 - Assigning priority to resource assignments against tasks,
 - When there is one generic resource in the database that is being supplied by multiple subcontractors and this could be used to identify the subcontractor,
 - When there is one generic resource in the database and you require a specific skill or qualification for the resource then this could be identified with an Assignment Code,
- **Assignment Codes** are created in the same way as other codes by selecting **Enterprise, Assignment Codes**.



Assignment Codes

Assignment Codes are assigned to Resources or Role Assignments in the:

- Codes tab in the Resource Assignment window, or
- Displaying the Assignment Code column in the Activities window, Details pane, Resources tab, or
- Displaying the Assignment Code column in center section of the Resource Usage Spreadsheet.

Resource Assignments

Layout: Bucket Planning

Activity ID	Activity Name	Assignment Priority
Assignment Priority: H High		
EC1500	Install HVAC Ducts	H
EC1680	Startup and Test HVAC	H
EC1830	Test and Balance HVAC Equipment	H
Assignment Priority: M Medium		
EC1630	Insulate Ducts	M
Assignment Priority: L Low		
EC1650	Set Heat Pump	L

General | Planning | User Defined Fields | **Codes**

Assignment Code	Assignment Code \	Code Description
Assignment Priority	M	Medium

Display: Current Project's ... | Display: Activity Resource Assignments | Display: ...

Resource Name	Activity ID	Assignment Priority
Operator	E&C Resources	
	Trades	
	Operator	
	EC1650	L
	EC1680	H
	EC1830	H
	EC1670	M
	EC1440	
	EC1340	
	EC1680	

Select Assignment Priority

Display: Assignment Priority

Search

Assignment Code	Code Description
H	High
M	Medium
L	Low

Resources

Activity: EC1670 | Relocate HVAC Chiller

Role	Resource ID Name	Assignment Priority	Budgeted Units
Civil/Structural Crews	Elec.Electrician	M	50
Civil/Structural Crews	HVAC.HVAC	M	50
Civil/Structural Crews	Operator.Operator	M	17

Other Enhancements

Resource Assignment Window now allows Grouping and Filtering by Codes and UDFs

- Data in the Resource Assignment window may be filtered and/or grouped using Project, Activity and WBS User Defined Fields (UDFs) and Project Codes in P6 Version 20.

Fill down available in Activities Window Resource Usage Spreadsheet

- Fill down is available in the Activities Window Resource Usage Spreadsheet in P6 Version 20.

P6 Continues Working when there is a Network Failure

- Users may continue working in some circumstances when connected to an EPPM Cloud Connect database and configured to allow this when there is a network failure.

Prevent Risk Categories being Imported into a PPM Database

- When exporting to an XER file Risk Categories are exported but in P6 Version 20 you are able to prevent the Categories being imported into a PPM or SQLite database.
- Risk Categories are not imported or exported to an EPPM database.

Arabic Language

- Arabic is supported in P6 Version 20.

Reset Locked Users

- In the EPPM version users locked out of P6 or Visualizer may be reset.

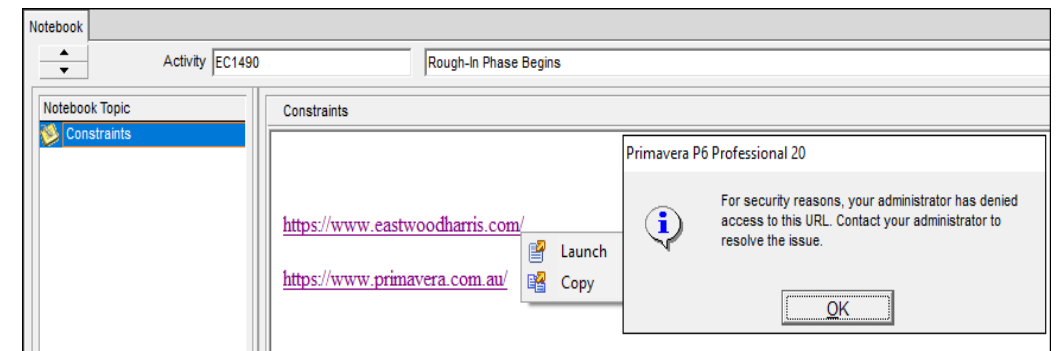
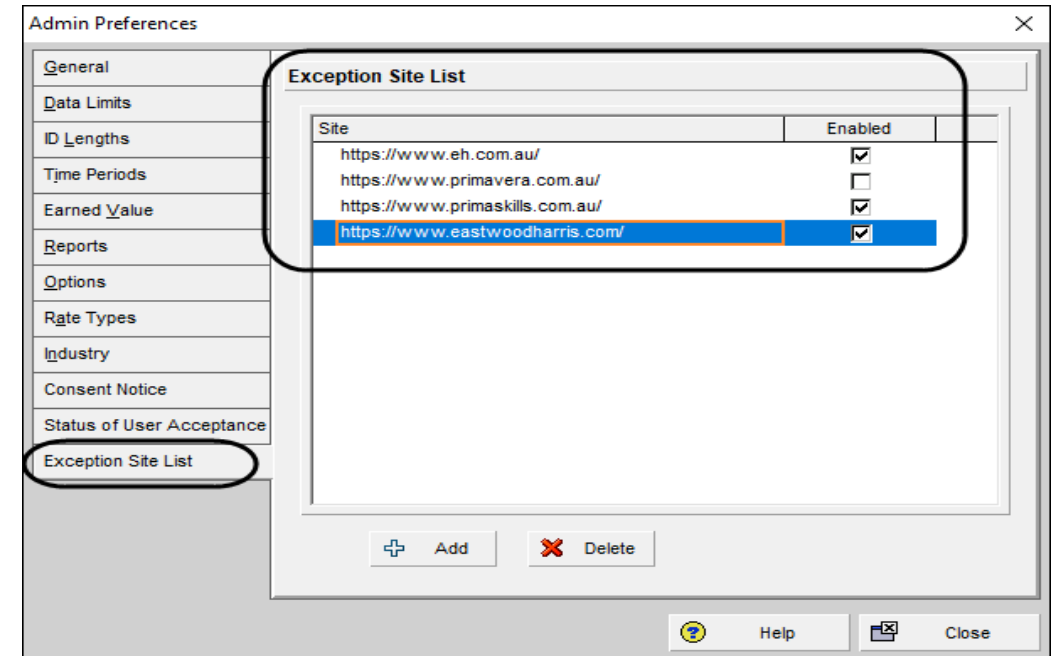
Other Enhancements

Uploading of Harmful Files

- You may prevent people from uploading harmful files in the **Admin Preferences, Options, Document Security:**

Exception Site List

- A list of web sites may be added to **Admin Preferences, Options, Exception Site List:**
- The URLs may then be added to **Notebook Topics and UDFs** and permitted URLs may be launched from P6 by clicking on the URL and selecting **Launch**.
- URLs not listed or not permitted may not be launched but may be copied and pasted into a browser. The picture demonstrates what happens when a URL that has not been enabled has been selected for Launching:



Other Enhancements

Role Codes

- P6 Version 20 introduced **Role Codes** allowing Roles to be assigned a Code in the same way as Resources and Activities.
- This would be useful to assign attributes such as location or office and may be used to group or filter roles.
 - **Role Codes** are created in the **Role Codes** form, and
 - **Role Codes** are assigned to **Roles** in the **Roles** form.

Role Code Value	Code Description
MEL	Melbourne
SYD	Sydney
BRI	Brisbane

Role Code	Role Code Value	Code Description
Branch	SYD	Sydney

P6 Version 21 Enhancements

- Assignment Cost are Exported
- Users may See and Set Activity Start and Finish Times in the Date Picker box when the User Preferences are set only to show the date
- Financial Period Calendar Selection when Importing an XML file
- Maintain Relationships with External Projects When Importing from Primavera XML Files
- IPMDAR Format Supported for EEPM Databases only
- Resource and Role Cost Spreads Consider Rate Changes Over Time
- Activity Critical Path
- Milestone Reduced Relationship Types

Assignment Cost are Exported

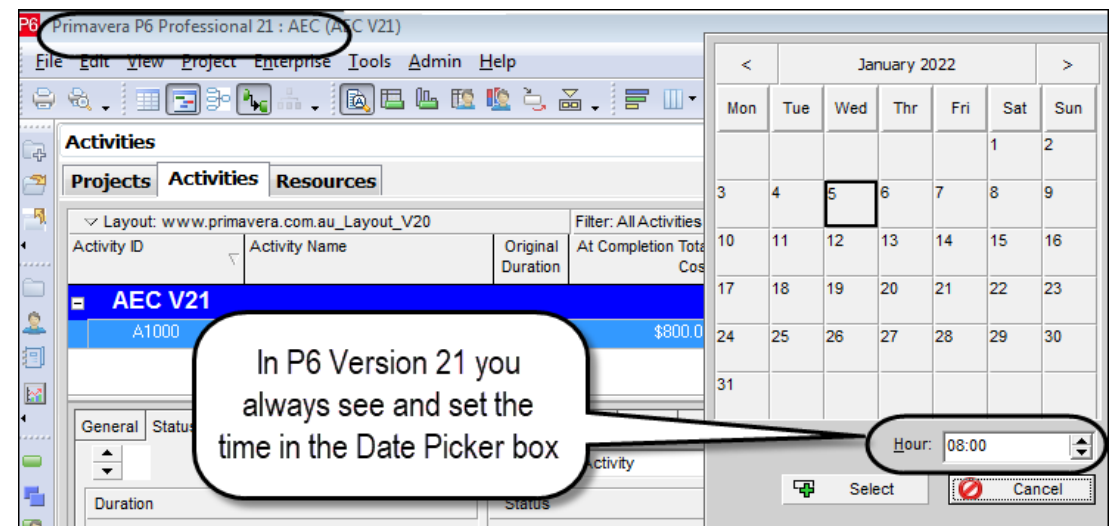
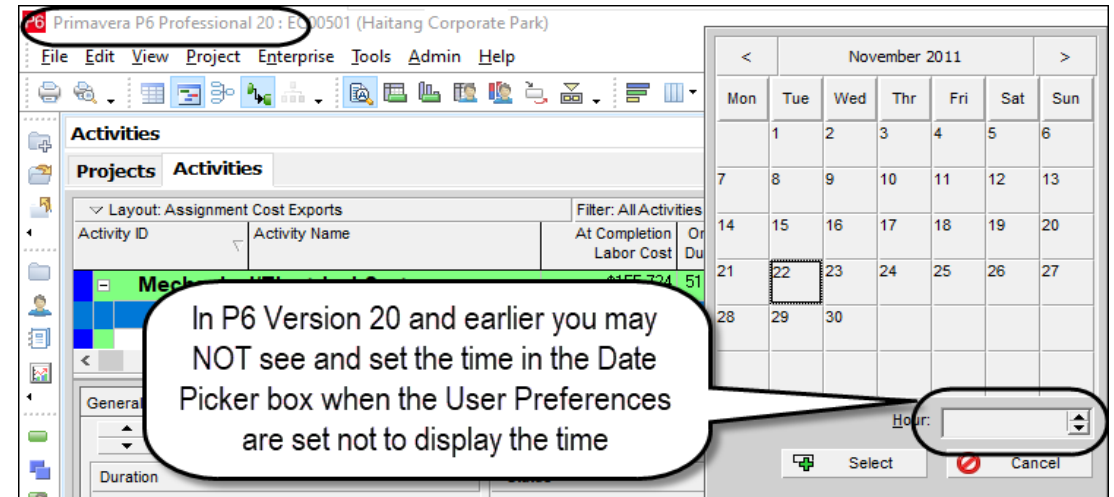
- The Oracle Cumulative Feature Overview file states *“When you export to Primavera XML, Price Per Unit data for assignments is included in the export file.”*
- This statement is in my opinion misleading and there are several pages in my article showing what I found and in summary:
 - With Version 20, when a resource had been assigned to an activity and the rate in the Resource window was then changed, then on export and import to another database the assignment was recalculated based on the Resource rate from the source database and the project showed a different cost in the target database to the source database,
 - With Version 21, I found that the assignment was calculated using the target resource rate when the resource exists in the target database and the project may still show a different cost in the target database to the source database.

Assignment Cost are Exported

- My testing indicates that the **Activity Resource** assignment **Unit Rate** may be changed on the import of an XML file when the source or target database has a different **Unit Rate** in the **Resource** window to the **Resource Assignment Unit Rate**,
- If you want the resource assignment costs to remain the same when importing an XML file, then the **Resource** table **Unit Rates** must be the same as the **Activity** assigned resource **Unit Rates** when a file is exported and you must be careful when you import an XML project into a database if the resource already exists in the target database,
- **NOTE:** If you do not want to risk assignment rates changing on import then use an XER file.

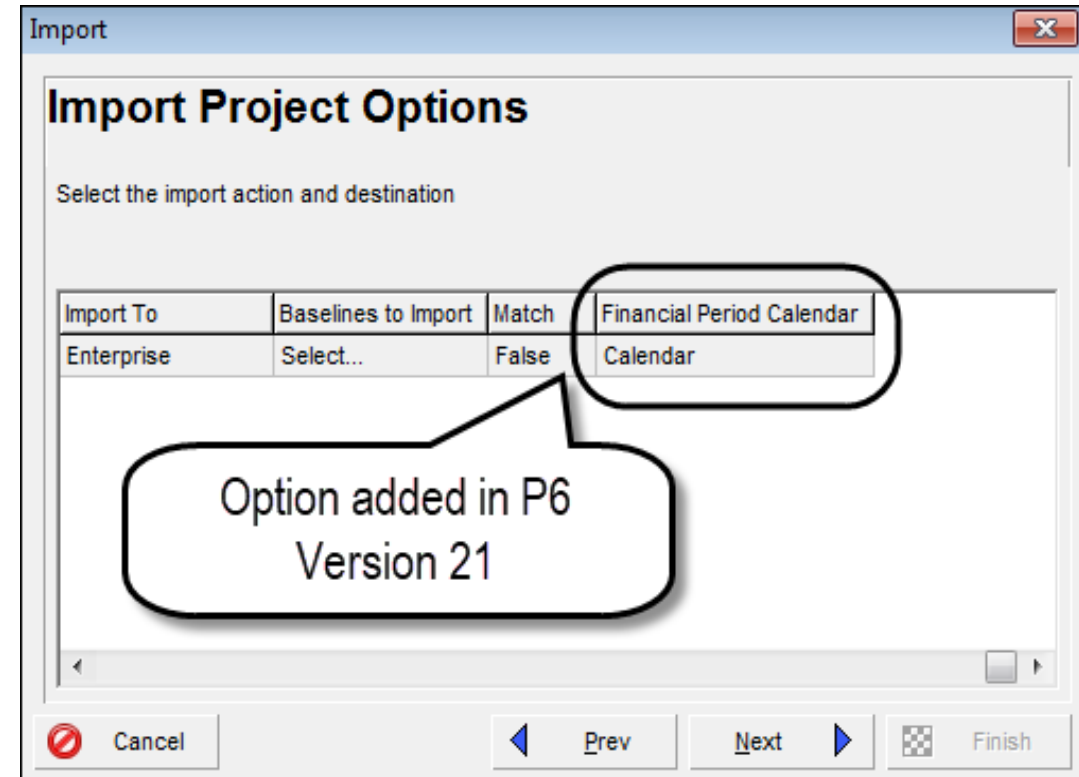
Users may See and Set Activity Start and Finish Times in the Date Picker box when the User Preferences are set only to show the date

- This is a great enhancement as P6 usually picks the wrong time when setting **Actual** dates, **Constraints**, **Suspend** and **Resume** dates when the time is not set to be displayed from the **User Preferences**,
- P6 Version 20 and earlier the time is not available in the **Date Picker** Box,
- P6 Version 21 the time may be set from the **Date Picker** box.
- **NOTE:** The author still recommends that the user should always display the time with the date so they may see that all the tasks are scheduled correctly.



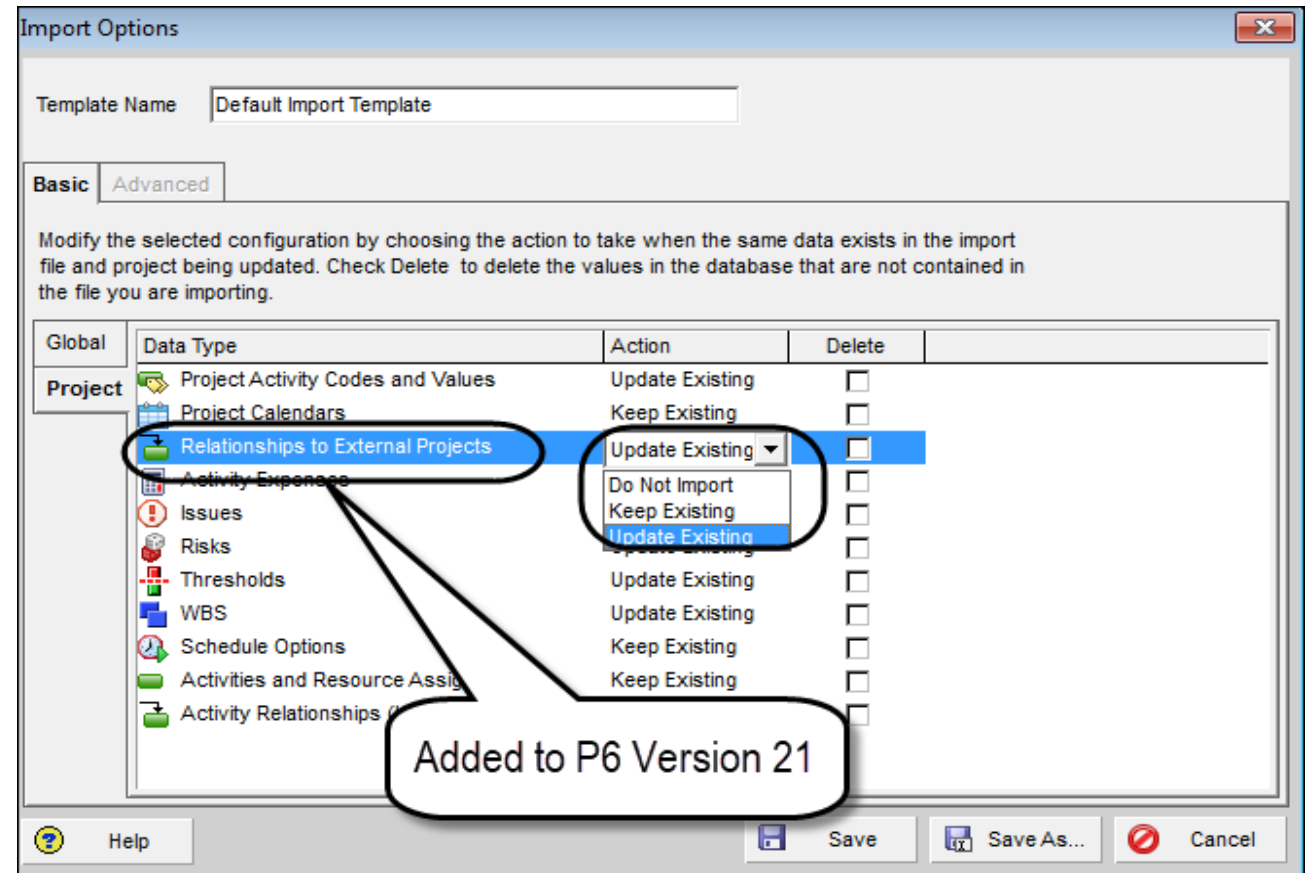
Financial Period Calendar Selection when Importing an XML file

- Version 20 introduced the option of different **Financial Period Calendars** for different projects,
- Version 21 introduced the option when importing an XML file to select the **Financial Period Calendar** to be assigned to a project:



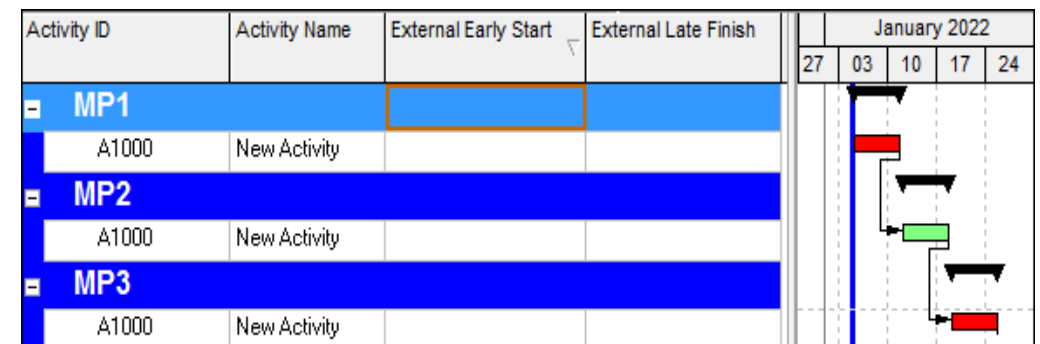
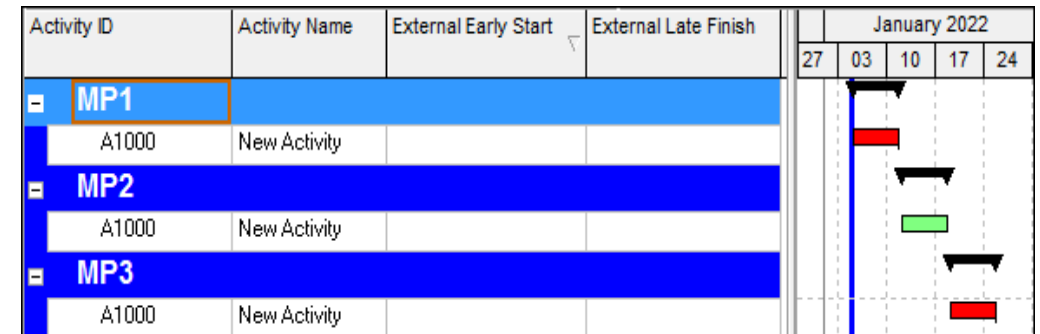
Maintain Relationships with External Projects When Importing from Primavera XML Files

- When you import projects from a Primavera XML file, you can choose whether to retain relationships between activities in the project and those in external projects.



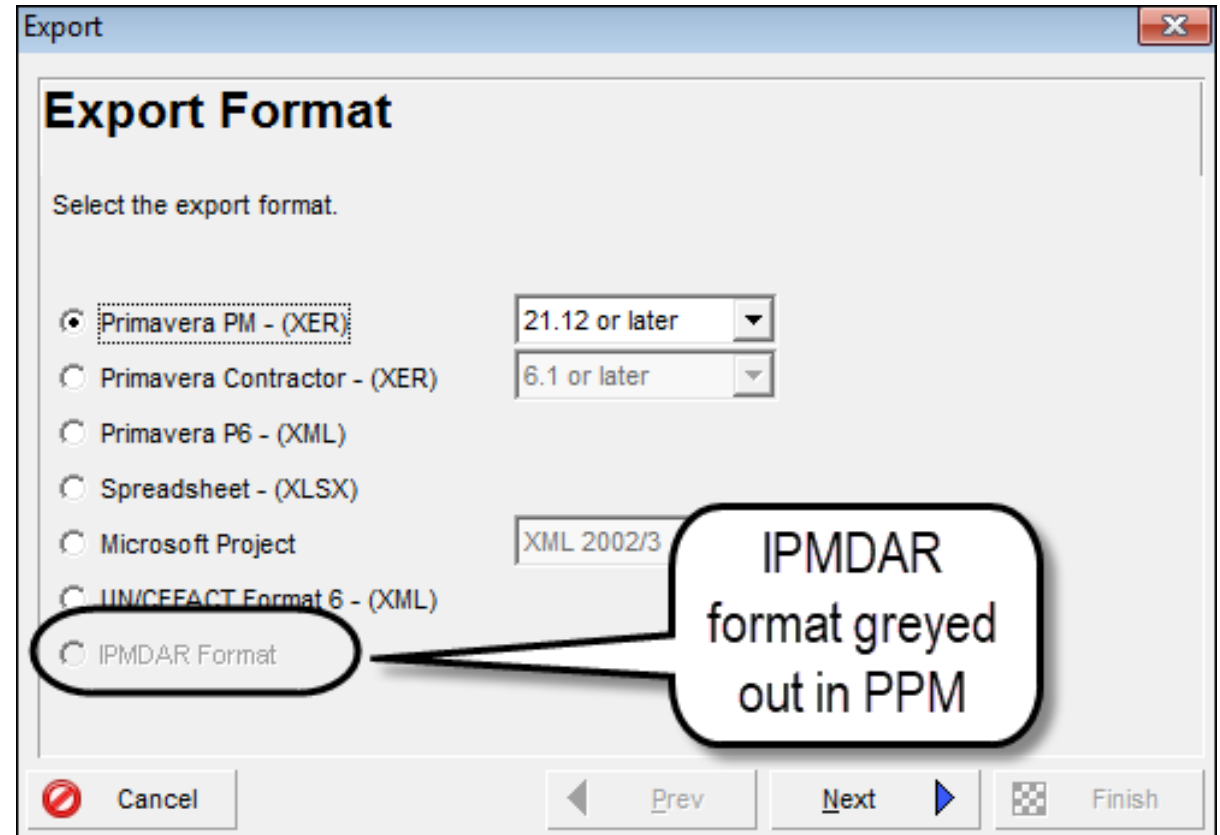
Maintain Relationships with External Projects When Importing from Primavera XML Files

- Three projects, MP1, MP2 and MP3 with their single activities linked:
- The second project, MP2 was exported, deleted and imported with each of the three options:
 - With **Do Not Import, External Dates** not set:
 - With **Keep Existing or Update Existing** and before **Rescheduling**,
- **Note: External Early Start and External Early Finish** dates are not set with this update thus allows you to import a project and **NOT** set **External Dates** when the project has **External Relationships**.



IPMDAR Format Supported for EEPM Databases only

- **IMP**DAR is a project export format required by the US Department of Defense.
- It is only available when you open an EEM database, when exporting from a PPM database the option is greyed out:



Resource and Role Cost Spreads Consider Rate Changes Over Time

- The Admin Preferences, Options has introduced a **Cost Spread** option,
- This changes how the cost spreads for resources and role rates are reflected in the **Resource Usage Spreadsheet and Profile, Activity Usage Spreadsheet and Profile, Tracking View, Resource Assignments window, and Activity Usage Spreadsheets and Profiles, Publishing and Reports.**

The screenshot shows the 'Admin Preferences' window with the 'Options' tab selected. The 'Options' tab is circled in red. The 'Cost Spread' section is also circled in red and contains the following text:

Cost Spread

Spread cost based on

- Linear Spread
- Unit Spread

Other visible sections in the window include:


- Specify the interval to summarize and store resource spreads**
 - Select summarization periods
 - By calendar
 - WBS Level: Week
 - Resource/Role Assignment Level: Week
 - By financial period
- P6 Professional Online Help URL**
 - https://docs.oracle.com/cd/F37128_01/client_help/
 - Always launch Online Help for
- Document Security**
 - Show security warning when launch
 - .exe,.com,.bat,.cmd,.vbs,.js,.msi




Cost Spread Option introduced in P6 Version 21

Cost Spread

Resource and Role Cost Spreads Consider Rate Changes Over Time

- In earlier versions when a resource rate changed during the duration of an activity then P6 took an average rate for the resource over the activity duration which gave an incorrect cashflow,
- In this example I have created a resource that doubled its unit rate from \$20.00 per hour to \$40.00 per hour after the first week:

Resource ID	Resource Name	Resource Type
 CS	Cost Spread	Labor

General	Codes	Details	Units & Prices	Roles	Notes	User Defined Fields
Shift Calendar: 		Shift: 1				
Effective Date	Max Units / Time	Standard Rate				
 01-Jan-22	8/d	\$20/h				
 17-Jan-22	8/d	\$40/h				

Resource and Role Cost Spreads Consider Rate Changes Over Time

- With **Linear Spread** option, which is how older versions calculated, an average rate of \$30.00 per hour is used, which is \$240.00 per day:
- With **Unit Spread** option the cash flow is calculated correctly:

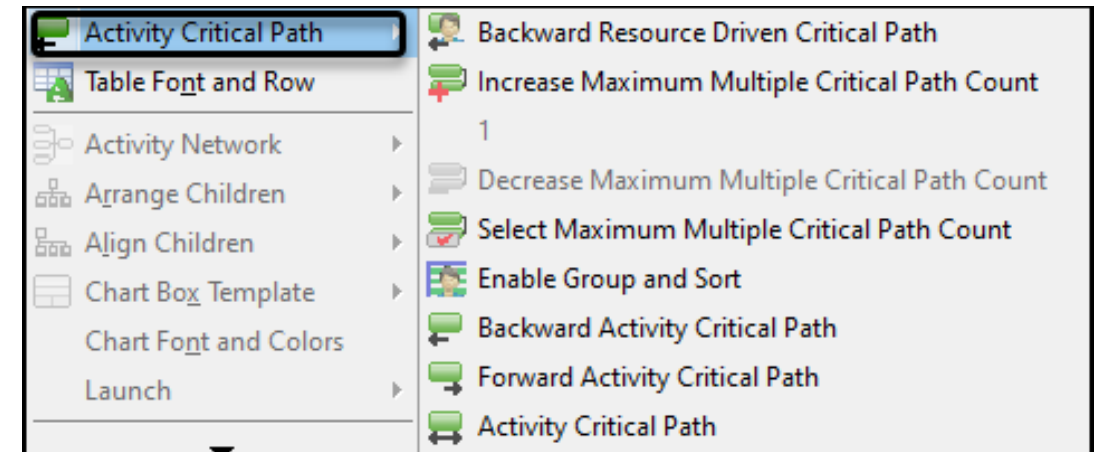
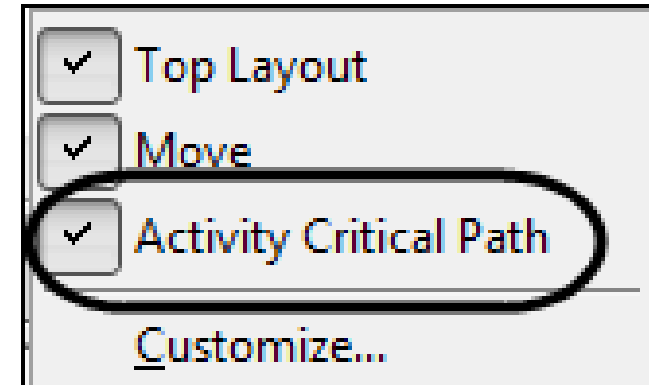
Activity ID	Original Duration	03	Jan 10							Jan 17									
		hr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	
Cost Spreads																			
A1000	10																		
▼ Display: Curr...	▼ Display: Acti...	▼ Display: Open Projects Only																	
Resource ID	Activity ID	At Completion Cost	Jan 10							Jan 17									
CS	Cost S		Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat			
	A1000			\$240	\$240	\$240	\$240	\$240			\$240	\$240	\$240	\$240	\$240				
			\$240	\$240	\$240	\$240	\$240			\$240	\$240	\$240	\$240	\$240					

Activity ID	Original Duration	03	Jan 10							Jan 17									
		hr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat	
Cost Spreads																			
A1000	10																		
▼ Display: Curr...	▼ Display: Acti...	▼ Display: Open Projects Only																	
Resource ID	Activity ID	At Completion Cost	Jan 10							Jan 17									
CS	Cost S		Sun	Mon	Tue	Wed	Thr	Fri	Sat	Sun	Mon	Tue	Wed	Thr	Fri	Sat			
	A1000			\$160	\$160	\$160	\$160	\$160			\$320	\$320	\$320	\$320	\$320				
			\$160	\$160	\$160	\$160	\$160			\$320	\$320	\$320	\$320	\$320					

Activity Critical Path

There is a new toolbar in Version 21 titled **Activity Critical Path**:

- The Toolbar is displayed by right clicking on any toolbar and checking the **Activity Critical Path** option,
- This will display the toolbar,
- There is also a new menu item under the **View** command.
- **IMPORTANT NOTE:** Clicking on a button will activate the command and clicking again will deactivate the command,
- This function may be used in conjunction with the **Float Path Order** function,
- I will demonstrate this function, but there are a number of examples in my paper.



Reduced Milestone Relationship Types

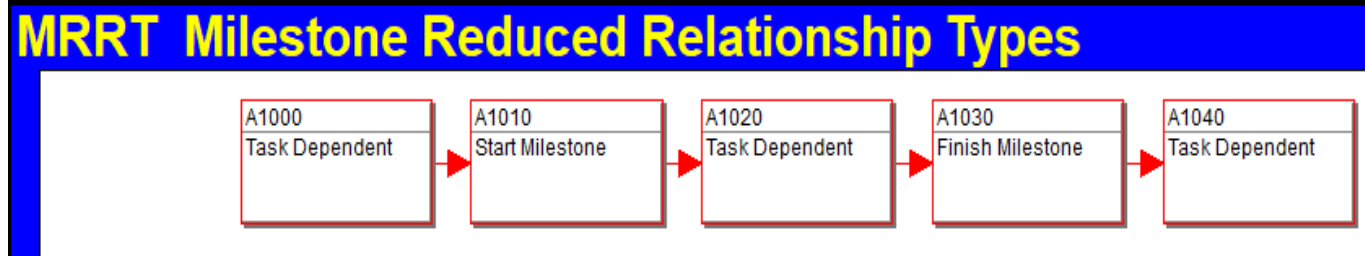
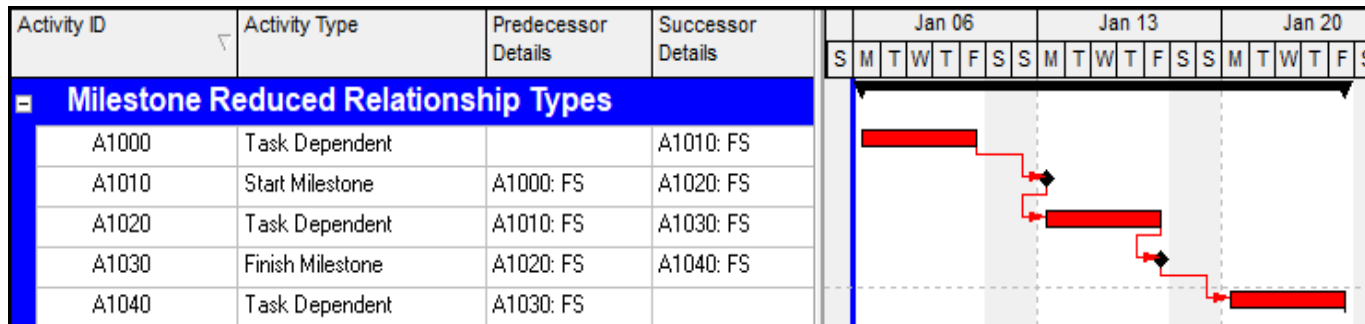
- P6 Version 20 and earlier supports more relationship types than P6 Version21.

	Start Milestone Predecessors	Start Milestone Successors	Finish Milestone Predecessors	Finish Milestone Successors
P6 Version 20 & earlier	FS and SS	FS, SF and SS	FF, FS and SF	FF and FS
P6 Version21	FS and SS	SF and SS	FF and SF	FF and FS

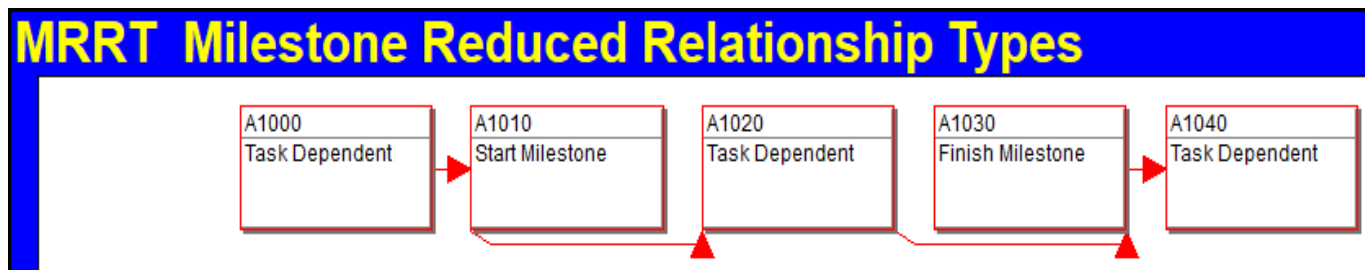
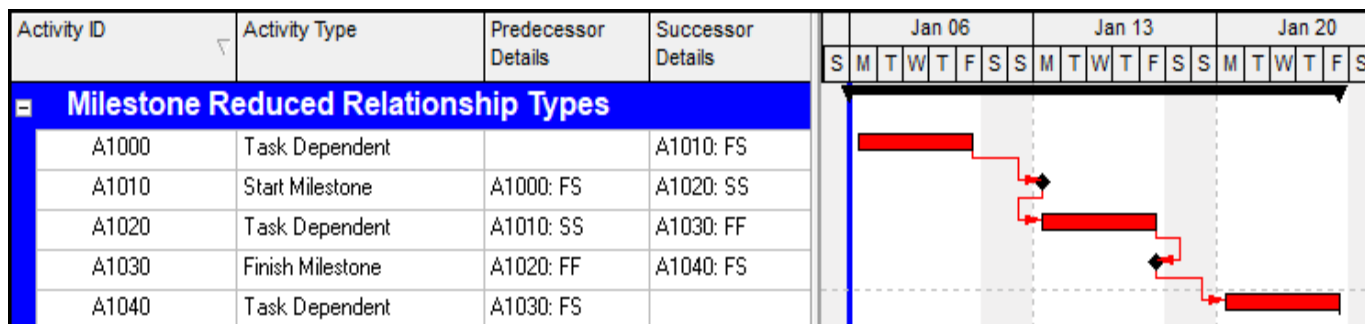
- Thus, in Version 21 **Chain Linking** does not result in all the predecessors and successors being a FS relationship and some people would say that this is no longer a critical path program,
- Projects imported into P6 Version 21 from earlier versions bring in and acknowledge the old relationship types but these Start Milestone FS and Finish Milestone FF cannot be set in Version21.

Reduced Milestone Relationship Types

- P6 Version 20 Chain Linking



- P6 Version 21 Chain Linking



Links to my papers

Below are links to the printed version of my papers:

- What's new in Oracle Primavera P6 Version 21 PPM

http://eastwoodharris.com/DL/TP/220112_Whats_New_in_Oracle_Primavera_P6_Version_21_PPM.pdf

- What's new in Oracle Primavera P6 Version 20 PPM

http://eastwoodharris.com/DL/TP/210114_Whats_New_in_Oracle_Primavera_P6_Version_20_PPM.pdf

- What's new in Oracle Primavera P6 Version 20 PPM

http://eastwoodharris.com/DL/TP/200403_Whats_New_in_Oracle_Primavera_P6_Version_19_PPM.pdf



**THANK YOU
ANY QUESTIONS?**