

### IN THIS ISSUE

#### Primavera Project Planner (P3)

■ Version 3.1

#### Survival Guide for Using Filter

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Applying Filter is a vital part of the P3 operation. This article intended to be a comprehensive user's guide for average and advance users. I have listed many practical examples to demonstrate the application based on my many years of experiences.

#### A. Select Activities in a Date Range

1. Filter for 3 Month Look Ahead.

Note: This is a pure look ahead, and does not list all activities completed before data date.

##### Level 1 • Any

Select if	Is	Low Value	High Value
Early Dates	WR	DD+0D	DD+3M
Actual Dates	WR	OD+0D	DD+3M

2. Filter for 3-Month Look Ahead and 1 Month in the Past.

##### Level 1 • Any

Select if	Is	Low Value	High Value
Early Dates	WR	DD+0D	DD+3M
Actual Dates	WR	DD-1M	DD+3M

Note: This application can also be used to generate so called "3 Week Rolling Schedule"

3. Select Activities with Actual (Start) Dates.

##### Level 1 • Any

Select if	Is	Low Value	High Value
Actual start	NE		

4. Select Activities have been started and not yet completed.

**Level 1** • **All**

Select if	Is	Low Value	High Value
Actual start	NE		
Actual finish	EQ		

Note: You may also use Percentage Complete to apply the filter to get the same result. However, you may use the above examples when the Date fields are more reliable than the Percentage Complete one.

5. Checking Activity Slippage Based on a Target Schedule.

**Level 1** • **Any**

Select if	Is	Low Value	High Value
Variance target 1 early finish	LT	1	

Note: The variance can also be based on Target 2.

6. Applying Filter for 3 Month Look Ahead Based on a Target schedule.

Note: Since there is no direct method to filter activities based on the dates from the Target schedule, it is necessary to execute the Global Changes to copy all Early Start and Finish dates into the Custom Data Items of the current schedule. Then, we can apply the filter based on the Custom Data Items.

Step 1:

Create the following Custom Data Items for Activity (in Activity Tab Window):

Name	Type	Length	Description
TGES	S	8	TG ES
TGEF	F	8	TG EF

Step 2:

Create the following specification for a Global Change file to copy the Early Start and Finish dates of Target 1 schedule to the created Custom Data Items and execute it when required. Use the Selection tab window as necessary to optimize the operation.

	Data Item	Criteria	Data Item/Value	Operation	Data Item/Value
Then	TGES	EQ	T1ES		
	TGEF	EQ	T1EF		

Step 3:

An example for applying 3 Month Look Ahead Schedule based on the Target 1 Schedule.

**Level 1** • Any

Select if	Is	Low Value	High Value
TGES – TG ES	WR	DD+0D	DD+3M
TGEF – TG EF	WR	DD+0D	DD+3M

Note: While the concept of Total Float seems to remain skeptical to most field people, simply presenting the Start and Finish date variances between the Current and Target schedules with a look ahead filter will get the messages out more directly, especially when dealing with the subcontractors.

### B. Select Activities with Common Text

1. Select Activities based on certain words and character strings in their description.

Example 1

**Level 1** • Any

Select if	Is	Low Value	High Value
Activity description	CN	Install	

Example 2

**Level 1** • Any

Select if	Is	Low Value	High Value
RESP	EQ	ISEC	

Assumed that RESP is one of the Activity Codes created in the schedule.

Example 3 – Select activities containing “Delay” in the Log Records.

**Level 1** • Any

Select if	Is	Low Value	High Value
Log record	CN	Delay	

Note:

- a. The selection is not case-sensitive.
- b. Use “SN” (string not equal to) to select activities without the specified words or character strings.

2. Select Activities with log records

Example 1

**Level 1** • **Any**

Select if	Is	Low Value	High Value
Log record	NE		

3. Select Activities with Blank Activity Description

**Level 1** • **Any**

Select if	Is	Low Value	High Value
Activity description	CN		

Note: The criteria Code is "CN", not "EQ"

4. Select Activities with Blank Activity Code

**Level 1** • **Any**

Select if	Is	Low Value	High Value
RESP	EQ		

Assumed that RESP is one of the Activity Codes created in the schedule.

Note: The criteria Code can be "CN" or "EQ"

5. Select Activities with Question mark (?) Wildcard

**Level 1** • **Any**

Select if	Is	Low Value	High Value
Activity ID	EQ	CN1????	

Note: One question mark represents a wildcard for that particular position. You may use more than one question mark as required. You can only use EQ or NE as criteria codes in the IS column.

6. Select Activities with Asterisk (\*) Wildcard

**Level 1** • Any

Select if	Is	Low Value	High Value
Resource	EQ	LABOR*	

Note: One Asterisk mark represents a wildcard for the remaining positions. You can't specify any characters after the Asterisk. You can only use EQ or NE as criteria codes in the IS column. The above example is to select all activities with the resources using the common prefix – LABOR. The selection is not case-sensitive.

### C. Select Critical Activities

1. Select Activities by Total Float

**Level 1** • Any

Select if	Is	Low Value	High Value
Total float	LT	0	

2. Select Activities by Longest Path

**Level 1** • Any

Select if	Is	Low Value	High Value
Longest path	EQ	Yes	

### D. Select Activities with Type

1. Select Activities based on Constraint Type

Level 1		• Any	
Select if	Is	Low Value	High Value
Constraint	EQ	Hammock Activity	

Note:

- a. List of Constraint types: Early Start, Early Finish, Late Start, Late Finish, Start on, Mandatory start, Mandatory finish, Hammock activity, Zero total float, Zero free float, Expected finish, Start milestone, Finish milestone, Start flag, and Finish flag. Please refer to P3 Reference Manual for their definitions.
- b. When reviewing schedules form others for critical path purpose, always check "Constraint EQ Zero total float".

2. Select Activities based on Activity Type

Level 1		• Any	
Select if	Is	Low Value	High Value
Activity type	EQ	Finish milestone	

Note:

- a. List of Activity types: Task, Independent, Meeting, Start milestone, Finish milestone, and Start flag. Finish flag, Hammock, and WBS. Please refer to P3 Reference Manual for their definitions.
- b. You will get the same results by applying filters "Constraint EQ Finish Milestone" or "Activity type EQ Finish milestone". The same concept can also be applied to Start milestone, Start flag, Finish flag, and Hammock.

### E. Select Activities Relating Resources and Costs

1. Select All Activities with a Resource Assigned

**Level 1** • Any

Select if	Is	Low Value	High Value
Resource	NE		

Note: This will select all activities with a resource “assigned”, even the Budget Cost or Quantity is zero. The “assigned” is defined as a resource data has been added through the Cost, Resource, or Budget Detail window

2. Select Activities based on the Resources Assigned

**Level 1** • Any

Select if	Is	Low Value	High Value
Resource	EQ	ISEC	

3. Select Activities based on the Cost Accounts Assigned

**Level 1** • Any

Select if	Is	Low Value	High Value
Cost Account (11)	EQ	11230	

Note: The other option – Cost Account (12) is the combination of 11 positions of the Cost Account (11), and one position of the Cost Category. In most cases, use the option of Cost Account (11).

4. Select Activities based on the Cost Category Assigned

**Level 1** • Any

Select if	Is	Low Value	High Value
Cost Account Category	EQ	S	

5. Select Activities based on the Resource Curve Assigned

**Level 1** • Any

Select if	Is	Low Value	High Value
Resource curve	EQ	0	

Note: "0" is the default values for linear curve.

6. Select Activities based on the Dollar or Quantity Amounts (Resource Amounts)

Note: Since there is no direct method to filter activities based on the resource amounts, it is necessary to execute the Global Changes to copy all resources amounts into the Custom Data Items for Resources/Cost. Then, we can apply the filter based on the Custom Data Items. The following examples demonstrate how to copy all budget cost and quantity to the Custom Data Items.

Step 1:

Create the following Custom Data Items for Resource/Cost (in Resource/Cost Tab Window):

Name	Type	Length	Description
ORBC	P	10	ORIGINAL BUDGET COST
ORBQ	P	10	ORIGINAL BUDGET QUANTITY

Note: Do not create them in Activity Tab Window.

Step 2:

Create the following specification for a Global Change file to copy all resource amounts to the created Custom Data Items and execute it when required. Use the Selection tab window as necessary to optimize the operation.

	Data Item	Criteria	Data Item/Value	Operation	Data Item/Value
Then	ORBC	EQ	BC		
	ORBQ	EQ	BQ		

Step 3:

An example to select activities with the Budget Cost greater than \$ 50,000.

Example 1

**Level 1** • Any

Select if	Is	Low Value	High Value
ORIGINAL BUDGET COST	GT	50000	



### Example 2

The operation can become more complicated when dealing with multiple resources assigned to each activities. In short, all resources will also be copied to the Custom Data Items with separated assignment and amounts for each activity. You may also need to add more condition when applying filter as required. Here is the example.

#### Level 1 • All

Select if	Is	Low Value	High Value
ORIGINAL BUDGET COST	GT	50000	
Resource	EQ	LABOR	

### Reference:

#### 1. Criteria Codes

EQ – Equal To  
NE – Not Equal To  
GT – Greater Than  
LT – Less Than  
WR – Within Range  
NR – Not Within Range  
CN – Contains (the text string)  
SN – Does Not Contain (the text string)

### Final Words:

1. The following subjects are not detailed due to he limited usage. Please let me know if you need some coverage.

WBS, Project Codes

2. Applying filter In P3 is a serious business. Please use them precisely.