

ASSIGNING MULTIPLE ACTIVITY CODE VALUES TO SINGLE ACTIVITIES IN P6

1 Introduction

Some scheduling products like Powerproject allow Multiple Code Values to be assigned to an activity. This is useful for example when you have:

- Two people responsible for an activity, or
- Your building levels are represented by an Activity Code, but you have a column and you wish to assign Level 1, Level 2 and Level 3 to the column erection activity,

But in P6 you may only assign one Code Value to a Code thus only person who is represented as a single code value or one building level may be assigned to a Code.

This paper will explore the workaround options to resolve this issue in P6.

2 Aim

The aim of this paper is to outline methods to mimic the assignment of multiple Codes to an activity in P6 and demonstrate how the options work with:

- Filters and
- Group and Sort

3 List of options

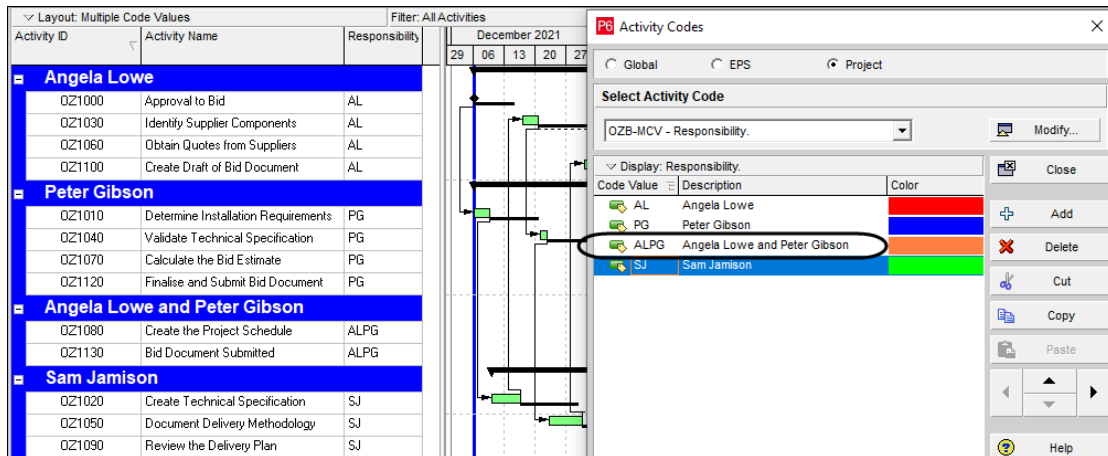
The following Summarizes the options I have discovered, say for assigning multiple responsibilities to an activity:

- Create an Activity Code and Activity Code Values for each person, plus creating additional Activity Code Values representing two or more people,
- Create multiple Activity Codes, one for each person with one Activity Code Value for each person in each Activity Code,
- Use a User Defined Field,
- Using Roles or Resources.



4 Create an Activity Code and Activity Code Values for each person, plus create additional Activity Code Values representing two or more people

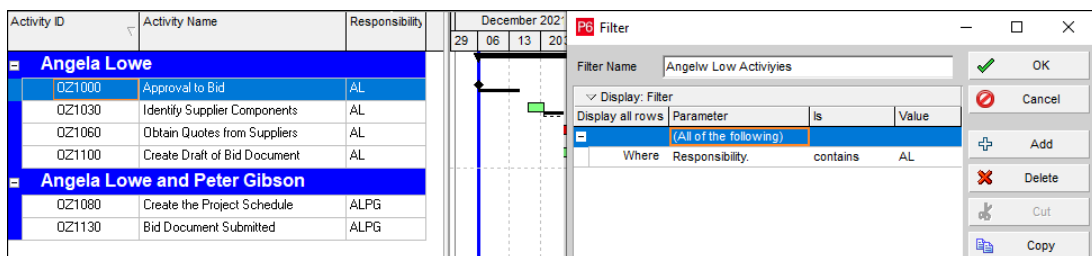
The picture below shows how an Activity Code Value may be made for two people and then the activities grouped on the Activity Code:



The screenshot shows the P6 Activity Codes dialog with the 'Project' tab selected. The 'Select Activity Code' dropdown is set to 'OZB-MCV - Responsibility.'. The 'Display: Responsibility.' section shows a list of Activity Code Values with their descriptions and colors:

Code Value	Description	Color
AL	Angela Lowe	Red
PG	Peter Gibson	Blue
ALPG	Angela Lowe and Peter Gibson	Orange
SJ	Sam Jamison	Green

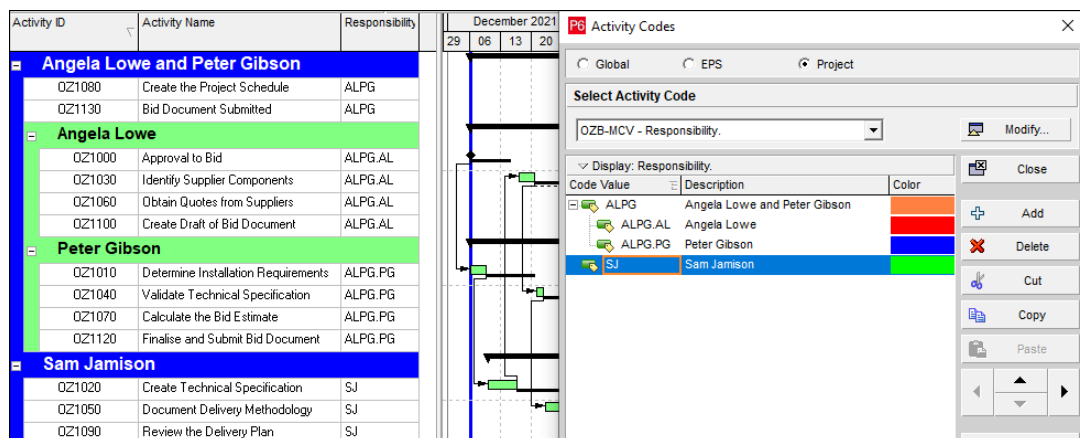
A filter would be made as per the picture below:



The screenshot shows the P6 Filter dialog with the 'Filter Name' set to 'Angela Low Activities'. The 'Display: Filter' section shows a table with the following content:

Display all rows	Parameter	is	Value
(All of the following)	Where Responsibility.	contains	AL

Using a hierarchy of Activity Code Values results in a view as per the picture below which does not allow for multiple groups:



The screenshot shows the P6 Activity Codes dialog with the 'Project' tab selected. The 'Select Activity Code' dropdown is set to 'OZB-MCV - Responsibility.'. The 'Display: Responsibility.' section shows a list of Activity Code Values with their descriptions and colors:

Code Value	Description	Color
ALPG	Angela Lowe and Peter Gibson	Orange
ALPG.AL	Angela Lowe	Red
ALPG.PG	Peter Gibson	Blue
SJ	Sam Jamison	Green

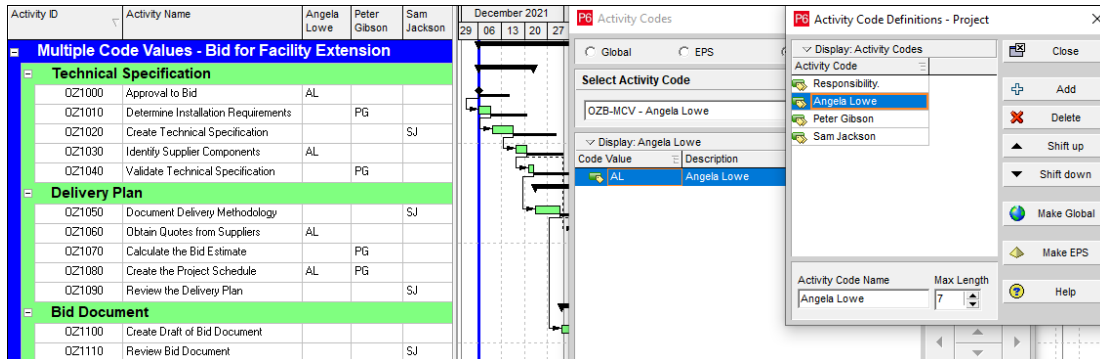
This option works as long as you are content with:

- Creating additional Codes for each group, and
- Seeing Multiple bands for each person when two people are assigned to an activity.

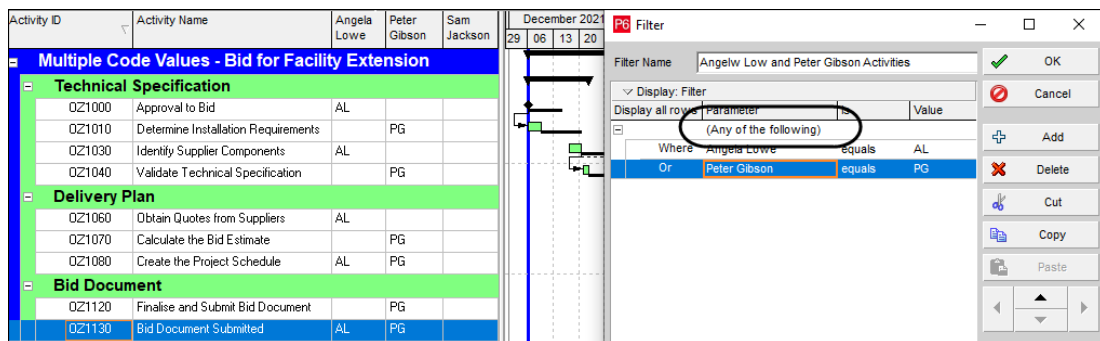
NOTE: The Activity Code title has a full stop at the end, "Responsibility." so it is not confused with the P6 built in field titled "Responsibility".

5 Create multiple Activity Codes, one for each person with one Activity Code Value for each person in each Activity Code

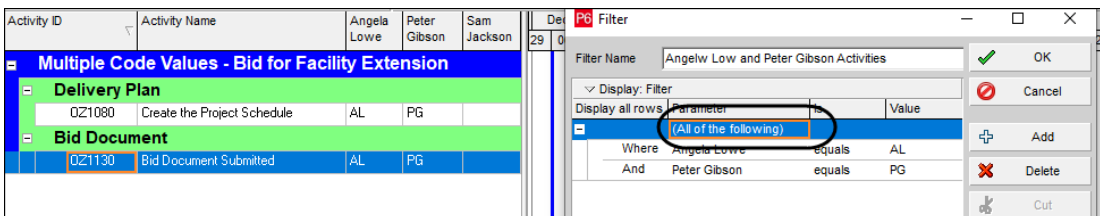
Creating an Activity Code for each person would result in the picture below:



With this option you have the option of **Any of the following**:

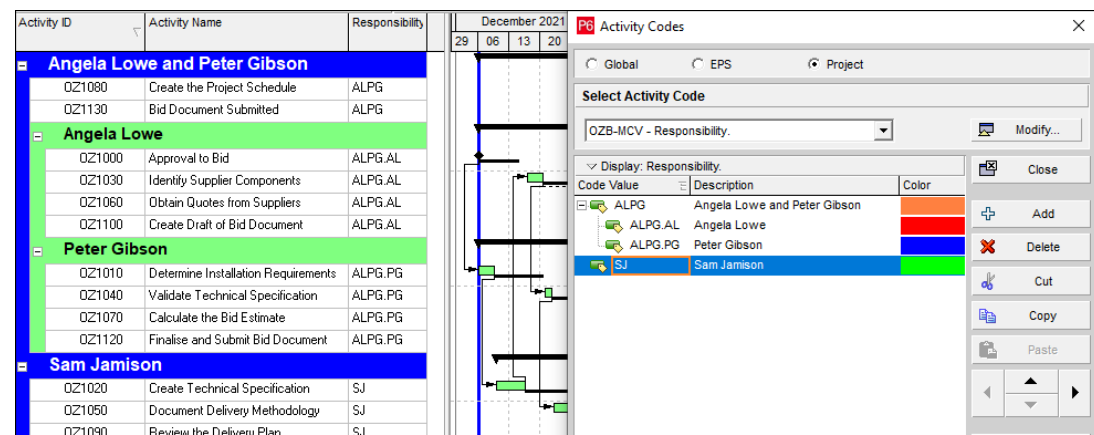


Or **All of the following**:



This filtering option could also be mimicked in the first example.

Grouping and Sorting as the picture below does not result in a good outcome:



6 Use a User Defined Field

The result with a UDF is basically the same as using one Activity Code with multiple Code Values, but:

- This method is prone to typing errors.
- There is a limit of 256 characters so there becomes a limitation to the number of people that may be represented with this method.

The persons full name is displayed in the column:

Activity ID	Activity Name	Responsibility UDF
Multiple Code Values - Bid for Facility Extension		
Technical Specification		
021020	Create Technical Specification	Sam Jackson
021040	Validate Technical Specification	Peter Gibson
021010	Determine Installation Requirements	Peter Gibson, Sam Jackson
021030	Identify Supplier Components	Angela Lowe
021000	Approval to Bid	Angela Lowe
Delivery Plan		
021090	Review the Delivery Plan	Sam Jackson
021050	Document Delivery Methodology	Sam Jackson
021070	Calculate the Bid Estimate	Peter Gibson
021080	Create the Project Schedule	Angela Lowe, Peter Gibson
021060	Obtain Quotes from Suppliers	Angela Lowe
Bid Document		
021110	Review Bid Document	Sam Jackson
021120	Finalise and Submit Bid Document	Peter Gibson
021130	Bid Document Submitted	Angela Lowe, Peter Gibson
021100	Create Draft of Bid Document	Angela Lowe

Group and sort results in no control in the order as the bands will be in alphabetical order:

Activity ID	Activity Name	Responsibility UDF
Angela Lowe		
021100	Create Draft of Bid Document	Angela Lowe
021060	Obtain Quotes from Suppliers	Angela Lowe
021030	Identify Supplier Components	Angela Lowe
021000	Approval to Bid	Angela Lowe
Angela Lowe, Peter Gibson		
021130	Bid Document Submitted	Angela Lowe, Peter Gibson
021080	Create the Project Schedule	Angela Lowe, Peter Gibson
Peter Gibson		
021120	Finalise and Submit Bid Document	Peter Gibson
021070	Calculate the Bid Estimate	Peter Gibson
021040	Validate Technical Specification	Peter Gibson
Peter Gibson, Sam Jackson		
021010	Determine Installation Requirements	Peter Gibson, Sam Jackson
Sam Jackson		
021110	Review Bid Document	Sam Jackson
021090	Review the Delivery Plan	Sam Jackson
021050	Document Delivery Methodology	Sam Jackson

Filtering will be the same as with Codes.

7 Using Roles or Resources

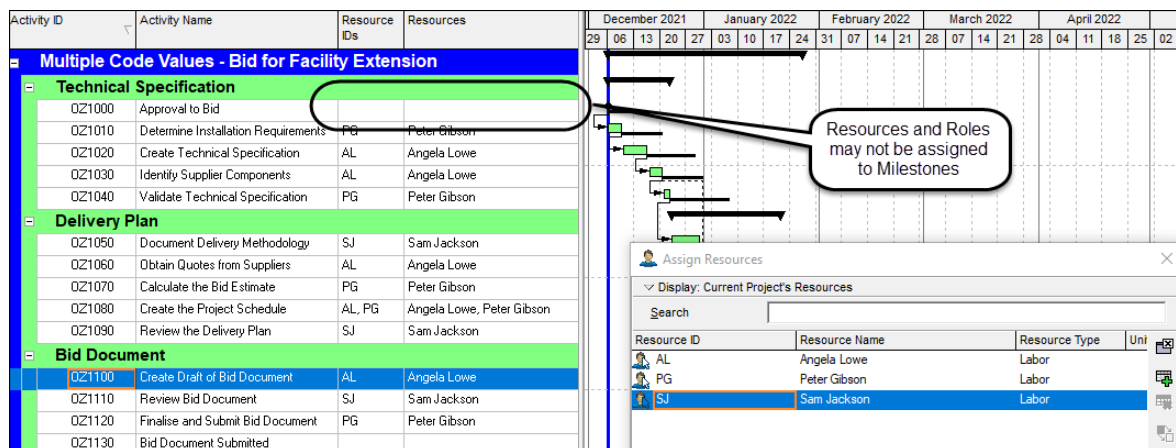
Resourcing is one of the few data items that allows multiple attributes to be assigned.

The list of fields that may have multiples attributes assigned are:

- Roles
- Resources
- Expenses – but these may not be Grouped or filtered on in the Activity View
- Risks – but these may not be Grouped or filtered on in the Activity View
- Steps – these would be a little impractical to use.
- Documents – these would be a little impractical to use.

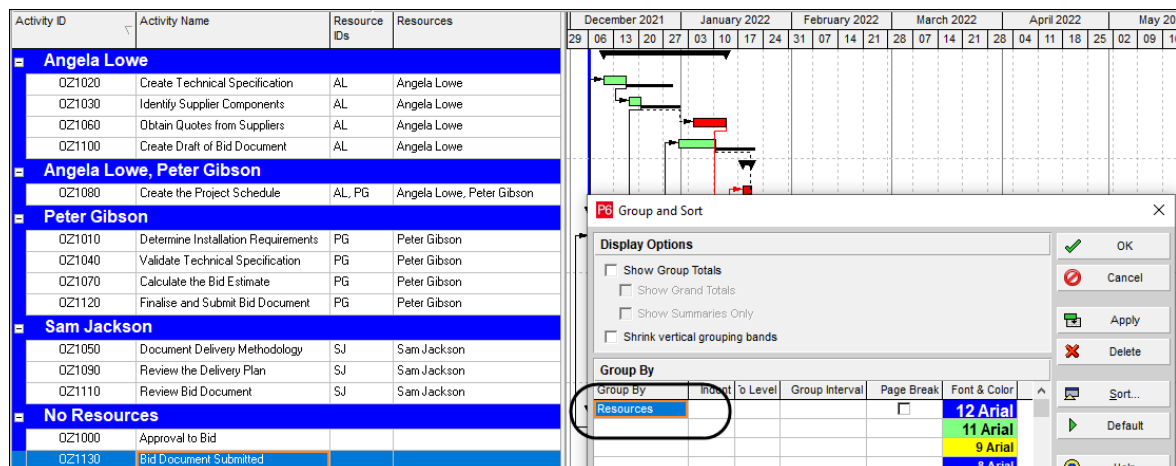
I will demonstrate the results with resources but roles would have a similar outcome.

- The first issue you will encounter is that you may not assign resources to Milestones, but
- You are able to see the Resource ID and/or the Resource Name in columns:



Activity ID	Activity Name	Resource IDs	Resources
Multiple Code Values - Bid for Facility Extension			
Technical Specification			
021000	Approval to Bid		
021010	Determine Installation Requirements	PG	Peter Gibson
021020	Create Technical Specification	AL	Angela Lowe
021030	Identify Supplier Components	AL	Angela Lowe
021040	Validate Technical Specification	PG	Peter Gibson
Delivery Plan			
021050	Document Delivery Methodology	SJ	Sam Jackson
021060	Obtain Quotes from Suppliers	AL	Angela Lowe
021070	Calculate the Bid Estimate	PG	Peter Gibson
021080	Create the Project Schedule	AL, PG	Angela Lowe, Peter Gibson
021090	Review the Delivery Plan	SJ	Sam Jackson
Bid Document			
021100	Create Draft of Bid Document	AL	Angela Lowe
021110	Review Bid Document	SJ	Sam Jackson
021120	Finalise and Submit Bid Document	PG	Peter Gibson
021130	Bid Document Submitted		

Grouping and Sorting by Resource has the same issue as using Activity Codes as P6 will not display a resource bar in the Activities View:



Activity ID	Activity Name	Resource IDs	Resources
Angela Lowe			
021020	Create Technical Specification	AL	Angela Lowe
021030	Identify Supplier Components	AL	Angela Lowe
021060	Obtain Quotes from Suppliers	AL	Angela Lowe
021100	Create Draft of Bid Document	AL	Angela Lowe
Angela Lowe, Peter Gibson			
021080	Create the Project Schedule	AL, PG	Angela Lowe, Peter Gibson
Peter Gibson			
021010	Determine Installation Requirements	PG	Peter Gibson
021040	Validate Technical Specification	PG	Peter Gibson
021070	Calculate the Bid Estimate	PG	Peter Gibson
021120	Finalise and Submit Bid Document	PG	Peter Gibson
Sam Jackson			
021050	Document Delivery Methodology	SJ	Sam Jackson
021090	Review the Delivery Plan	SJ	Sam Jackson
021110	Review Bid Document	SJ	Sam Jackson
No Resources			
021000	Approval to Bid		
021130	Bid Document Submitted		

Filtering may be made on Resources and/or Resources ID and

Activity ID	Activity Name	Resource IDs	Resources	December 2021	January 2022	February 2022	March 2022	April 2022
				29 06 13 20 27 03 10 17 24 31	07 14 21 28 04 11 18			
Angela Lowe, Peter Gibson								
OZ1080	Create the Project Schedule	AL, PG	Angela Lowe, Peter Gibson					
Peter Gibson								
OZ1010	Determine Installation Requirements	PG	Peter Gibson					
OZ1040	Validate Technical Specification	PG	Peter Gibson					
OZ1070	Calculate the Bid Estimate	PG	Peter Gibson					
OZ1120	Finalise and Submit Bid Document	PG	Peter Gibson					
Sam Jackson								
OZ1050	Document Delivery Methodology	SJ	Sam Jackson					
OZ1090	Review the Delivery Plan	SJ	Sam Jackson					
OZ1110	Review Bid Document	SJ	Sam Jackson					

PG Filter

Filter Name Resource is Peter Gibson or Angela Lowe

Display: Filter

Display all rows

Parameter

Is

Value

(Any of the following)

Where Resources contains Peter

Or Resource IDs contains SJ

OK

Cancel

Add

Delete

The All of the following will only operate when:

- “Contains” is used in the filter specification and
- both parameters are either Resources or Resource ID but not a mixture:

Activity ID	Activity Name	Resource IDs	Resources	December 2021	January 2022	February 2022	March 2022	April 2022
				29 06 13 20 27 03 10 17 24 31	07 14 21 28 04 11 18			
Angela Lowe, Peter Gibson								
OZ1080	Create the Project Schedule	AL, PG	Angela Lowe, Peter Gibson					

PG Filter

Filter Name Resource is Peter Gibson or Angela Lowe

Display: Filter

Display all rows

Parameter

Is

Value

High Value

(All of the following)

Where Resources contains Peter

And Resources contains Angela

OK

Cancel

Add

Delete

The main advantage of this method is that in the Resource Assignments workspace when two resources are assigned to an activity then the activity is displayed twice:

Activity ID	Activity Name	Remaining Early Units	2021	2022
			December	January
			29 06 13 20 27 03 10 17 24 31	07 14 21 28 04 11 18
Multiple Core Values				
Angela Lowe				
OZ1020	Create Technical Specification		40.0h	40.0h
OZ1030	Identify Supplier Components		8.0h	40.0h
OZ1060	Obtain Quotes from Suppliers		8.0h	8.0h
OZ1080	Create the Project Schedule			32.0h
OZ1100	Create Draft of Bid Document			8.0h
Peter Gibson				
OZ1010	Determine Installation Requirements		32.0h	16.0h
OZ1040	Validate Technical Specification		32.0h	16.0h
OZ1070	Calculate the Bid Estimate			16.0h
OZ1080	Create the Project Schedule			16.0h
OZ1120	Finalise and Submit Bid Document			16.0h
Sam Jackson				
OZ1050	Document Delivery Methodology			16.0h
OZ1090	Review the Delivery Plan			16.0h
OZ1110	Review Bid Document			8.0h

But of course the work and costs will be meaningless, but these could be zeroed out

8 Summary

These are my thoughts on the method of assigning multiple codes to activities and none are ideal.
I would welcome any feedback and I will edit this paper in line with new information.

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