

*Advanced Formula Techniques for
MS Project Experts*

Using

Microsoft® Office Project's

Built-in Functions in Formulas

*Learn how to use the following built-in
functions in formulas by examples*

ProjDurValue

ProjDateAdd

ProjDurConv

ProjDateSub

ProjDateValue

ProjDateDiff

ProjDateConv

*Add the powerful formulas developed in the
book to your formula toolbox*

Ismet Kocaman

Using
Microsoft[®] Office Project's
Built-in Functions
in Formulas

Ismet Kocaman

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Calculating Fiscal Information to Display on the Tables

Any tier of the timescale in any view can display fiscal information based on the **Fiscal year starts in** setting on the **Schedule** tab of the **Project Options** dialog box. On the other hand, this feature is not available on the table part. Therefore, we will now develop formulas to calculate the fiscal year, the fiscal quarter and the fiscal week numbers corresponding to the calendar dates and then display them on the table part of a view.

IMPORTANT NOTE | The purpose of developing these formulas is not to implement different models for the fiscal year, but instead, to have a consistent look between the fiscal information shown on the timescale and the corresponding information displayed on the task date fields of a task table.

Do not make any decisions, especially including the financial ones, based on the fiscal information calculated by using the formulas developed here. Instead, use them just for information and always verify the results by comparing them with the timescale's fiscal information and/or by using other financial calendar tools in your project environment ■

Let us first explore how MS Project's local settings for the fiscal year work before starting to develop formulas to calculate any fiscal information based on the calendar dates specified.

How Do Fiscal Year Related Settings Work ?

Consider the simple schedule below, where both the fields of the table and the tiers of the timescale show the same date information, as we would expect:

Task Name ▼	Start ▼	Finish ▼	2018						
			Q4			Q1			
			Oct	Nov	Dec	Jan	Feb	Mar	
T1	Nov 1 '17	Mar 20 '18							

Calculating Fiscal Information

Suppose that the fiscal year begins in **February**, so let us now set the **Fiscal year starts in** box to **February**, but keep the current setting of the checkbox **Use starting year for FY numbering** which is unchecked by default initially. Note that this checkbox is activated only when a month name other than **January** is selected in the **Fiscal year starts in** box. The schedule now looks like this:

Fiscal year starts in: <February>
 Use starting year for FY numbering (the default setting)

Task Name	Start	Finish	2019					
			Q4			Q1		
			Oct	Nov	Dec	Jan	Feb	Mar
T1	Nov 1 '17	Mar 20 '18						

Filters

- (Select All)
- 2018
 - November
 - 1

FY 2/1/18 - 1/31/18
FY 11/1/18 - 1/31/18
FY 11/1/18 - 11/30/18

MS Project displays the range of dates for the fiscal year, the fiscal quarter and the month in response to holding the mouse pointer over the tiers of the timescale as it is seen in the pictures. All the tip boxes show the date ranges prefixed with the label **FY**, which represents the fiscal year. The calendar dropdowns in the cells and the date fields show the calendar year even though the **AutoFilter** uses the fiscal year. Note that the day numbers and the month names for the task dates are always the same on the timescale but the quarter and year labels on top of them are arranged according to the fiscal year setting. The month **February** is always the second calendar month in the calendar years while it is now the first month of every fiscal year.

Calculating Fiscal Information

In the **Timescale** dialog box, the **Use fiscal year** checkbox is turned on by default for all the tiers, so the timescale shows the fiscal years and the fiscal quarters; thus, the year labels are arranged as follows:

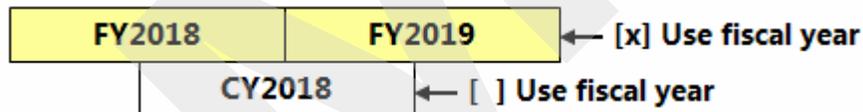
Fiscal year starts in: <February>

Use starting year for FY numbering (the default setting)

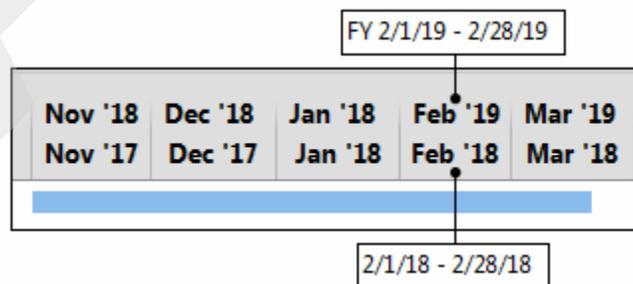


The picture below presents a simple version of the demonstration above, on how the timescale numbers (or labels) the fiscal years with reference to the calendar year **2018** (CY2018) on the tiers showing years, based on the setting of the checkbox **Use starting year for FY numbering**. In this configuration, any fiscal year ends in the calendar year which it is numbered with. Thus, **FY2018** ends in **CY2018**:

Use starting year for FY numbering (default)



Alternatively, the tiers of the timescale can be compared in order to see how **not using the starting year for FY numbering** affects labeling. Thus, the following picture shows timescale with two tiers of **Months**, with the bottom tier not using the fiscal year (that is, the **Use fiscal year** checkbox is unchecked):



As it is seen in the labels above, the fiscal year **2018** ends in the calendar year **2018**.

Calculating Fiscal Information

Let us now turn on the **Use starting year for FY numbering** checkbox and see how the timescale's fiscal year labeling changes, as shown below:

Fiscal year starts in: <February>
[x] Use starting year for FY numbering

The screenshot shows a task Gantt chart for task 'T1' with a start date of 'Nov 1 '17' and a finish date of 'Mar 20 '18'. A callout box above the task bar indicates two fiscal years: 'FY 2/1/17 - 1/31/17' and 'FY 11/1/17 - 1/31/17'. Another callout box below the task bar indicates 'FY 11/1/17 - 11/30/17'. A filters panel on the left shows a tree view with '2017' and 'November' selected, and a sub-filter '1' also selected. The Gantt chart shows a blue bar representing the task duration, with a callout box indicating 'FY 11/1/17 - 11/30/17'.

The following pictures show how the fiscal year labeling on the top tier changes:

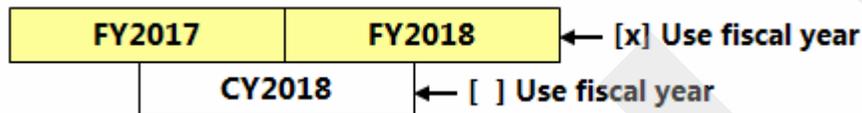
The diagram shows two horizontal bars representing fiscal and calendar years. The top bar is labeled 'Fiscal Year 2018' and spans from 'Jan' to 'Dec'. The bottom bar is labeled 'Calendar Year 2018' and also spans from 'Jan' to 'Dec'. The months are labeled as 'Jan', 'Feb', 'Mar', 'Apr', 'May', 'Jun', 'Jul', 'Aug', 'Sep', 'Oct', 'Nov', and 'Dec'.

The diagram shows a task bar with a callout box above it labeled 'FY 2/1/18 - 2/28/18'. The task bar shows months from 'Nov '17' to 'Mar '18'. A callout box below the task bar indicates '2/1/18 - 2/28/18'. The task bar shows a blue bar representing the task duration, with a callout box indicating 'FY 2/1/18 - 2/28/18'.

Calculating Fiscal Information

Note that, this time, the fiscal year 2018 begins in the calendar year 2018. In the following configuration, any fiscal year starts in the calendar year with which it is numbered. Thus, FY2018 starts in CY2018.

Use starting year for FY numbering



As another example, consider the timescale of the simple schedule below, where the fiscal year starts in February:

Use starting year for FY numbering

Task Name ▼	Start	2019									
		Q4			Q1			Q2			
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
T1	Nov 1 '17										
T2	Feb 1 '18										

Note on the change in the fiscal year number from FY2019 to FY2018 on the top tier of the timescale in the picture below, when the checkbox is turned on. Therefore, the fiscal quarter #1 of the fiscal year 2018 (FQ1/FY2018) now starts in February of the calendar year 2018. The fiscal quarter labels with reference to the month names remain unchanged, as we would expect.

Use starting year for FY numbering

Task Name ▼	Start	2018									
		Q4			Q1			Q2			
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
T1	Nov 1 '17										
T2	Feb 1 '18										

It is important to note that, as it is seen in the examples above, the fiscal year settings do not affect tasks' start and finish dates or any other date information stored in the date type fields as well as MS Project's scheduling calculations on the dates. Instead, they only affect how the AutoFilter pane displays the year numbers in the date type fields and also how the timescale tiers show the periods of the dates.

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