Microsoft Project Custom Formula Guide

Custom formula fields and graphical indicators can be used with any version of the desktop Microsoft Project application, as well as with Project Server.

Have a suggestion for a graphical indicator or a question about customizations? Join the conversation with Ira Brown in the

MPUG Customization Discussion Forum

Created by your friends at MPUG and Project Widgets
How to Use This Guide

Custom formula fields and graphical indicators can be used with any version of the desktop Microsoft Project application, as well as with Project Server.

The following steps will help you get started with creating your own custom fields and graphical indicators. You can refer to the examples included in this document for the specific field settings required to define a custom field and associated graphical indicator.

To create a custom field in the “standalone” version of Microsoft Project, do the following:

1. Start the Microsoft Project application.
   - If you are using Microsoft Project 2003 or 2007, from the menu, select Tools...Customize...Fields.
   - If you are using Microsoft Project 2010 or 2013, from the ribbon, select the Project tab, and click the Custom Fields button.
2. From the Type drop down, select the type of custom field you want to create (Text, Flag, etc.).
3. From the Field options, select Task or Resource. All of the examples in this document pertain to Task custom fields.
4. From the Field list, select the field you want to define (Text1, Text2, etc.).
5. Click the Rename button to assign a meaningful name to the custom field (e.g., Should Have Started).
6. Click the Formula button, and a dialog box will be displayed.
7. Type the formula as shown in this document, and click OK.
8. Click the Graphical Indicators button, and select the options as shown with the examples in this document.
9. To create a custom field for Project Server, from the Server Settings page in the Project Web App, select Enterprise Custom Fields and Lookup Tables. Click the New Field button, and enter all of the field settings as described in this document.

The examples in this guide will help you get started with creating custom fields in Microsoft Project.

If you have any suggestions for other useful fields that the MPUG community would benefit from, please email them to customization@mpug.com. Each month, we will publish some of the best submissions, and the number one suggestion will be awarded the prestigious “Top Field” award!
Display Red, Yellow, or Green Light Indicator Based Upon Finish Variance Threshold

Why It’s Important:
Allows you to see the degree to which a task’s Finish date is later than its Baseline Finish date.

Type of Field: Duration

Formula:
[Finish Variance]
Task Needs To Be Baselined

Why It’s Important:
A baseline allows a user to compare a task’s current Start and Finish dates to the originally planned Start and Finish Dates.

Type of Field: Flag

Formula:

[Baseline Start] = ProjDateValue("NA")
Task Start Date or Finish Date Needs To Be Updated

Why It’s Important:
Makes it easy to see when a task’s Start is earlier than the current date, but still is 0 % Complete, or a task’s Finish is earlier than the current date, but less than 100 % complete.

Type of Field: Text

Formula:
Switch(Date()>[Start] And [% Complete]=0,"Should Have Started", Date()<=[Finish] And [% Complete] <100,"Should Have Finished", Date ()<=[Start],“,”, Date()<=[Finish],“”

Custom Fields

Graphical Indicators for "Update Required"
Tasks That Do Not Have Dependencies

Why It’s Important:
A task that does not have any predecessors or successors may not properly show its impact to other tasks in the schedule.

Type of Field: Flag

Formula:
Summary Tasks That Have Dependencies

Why It’s Important:
Obscures the detail of the critical path; you have less visibility as to what is driving the detailed tasks.

Type of Field: Flag

Formula:
IIf([Predecessors]<>"" Or [Successors]<>"" ) And [Summary]=True,True,False)
Summary Tasks That Have Resources Assigned

Why It’s Important:
It is considered a best practice to not assign resources to summary tasks, and this complicates a task’s rollup behavior.

Type of Field: Flag

Formula:
IIf([Summary]=True And [Resource Names]<>"",True,False)
Tasks That Do Not Have Resources Assigned

Why It’s Important:
Without a resource assigned, you will not know who will be performing a task, or how much Work that task will take.

Type of Field: Flag

Formula:
Tasks That Have Negative Total Slack

Why It’s Important:
Tasks with negative Total Slack are not meeting the targeted schedule date.

Type of Field: Flag

Formula:
IIf([Total Slack]<0,True,False)
Unfavorable Variance on Critical Path

Why It’s Important:
If a task Finish date is scheduled later than the Baseline Finish date and the task is on the project’s critical path, it is negatively impacting the Finish date of the project.

Type of Field: Flag

Formula:
IIf([Finish Variance]>0 And [Critical]=True,True,False)