

Filtering & grouping by schedule status

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The tips and tricks below are taken from Project Mentor, the smart way to learn Microsoft Project. For further information, please go to:

www.projectlearning.net/project_mentor.htm

More useful tips and tricks can be found on the Project Learning blog:

www.projectknowledge.net

Related Document(s)

Looking for schedule variances www.projectlearning.net/pdf/I1_1.pdf

Filtering & grouping by schedule status

Introduction

A large number of Microsoft Project users find that, whilst they can update a project with actual progress, determining schedule variances can often prove to be trickier. Although visual baseline comparisons can be made against the schedule, these tend to be focused on specific groups of tasks. Variances across an entire project's schedule can sometimes be difficult to spot.

These tips and tricks illustrate a number of options and techniques that can be used to help find the tasks across the project's complete schedule that aren't progressing according to plan.

Background

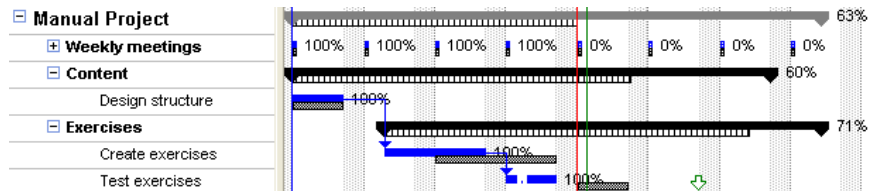
When a project is in progress, there are often a number of slippages and variances that exist. If the project is small, differences between the project's current schedule and its baseline may be easy to spot. As projects get larger, variances will become progressively more difficult to find.

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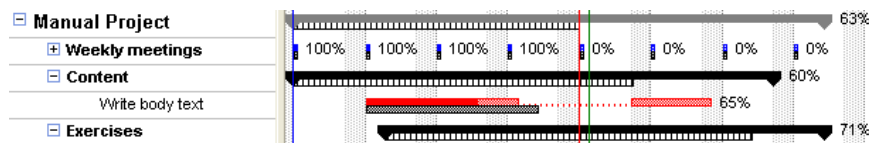
Filtering on a task's status

Within Microsoft Project there are a number of global filters that can be applied to determine if the project is on schedule or not. The following global filters could be applied:

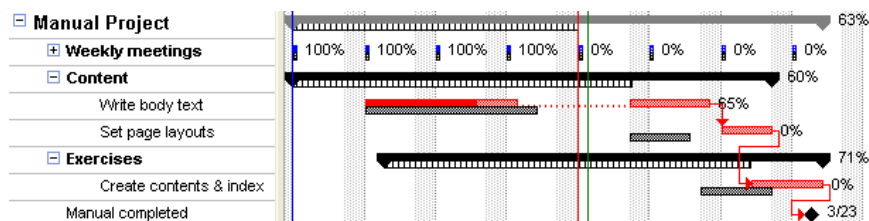
- Completed tasks:



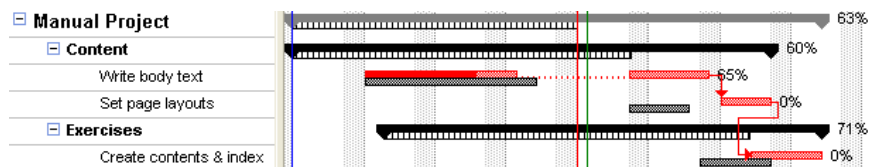
- In progress tasks:



- Incomplete tasks:



- Slipping tasks:



Hints

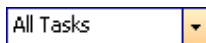
- To review the filter criteria for a global filter, select Filtered For from the Project menu followed by More Filters... Then select the appropriate filter name and click EDIT
- Other useful global filters include: Unstarted Tasks, Slipped / Late Progress (this will filter any task that has slipped beyond its baseline, even if it is completed).

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Filtering tasks with negative slack

Most global filters that review the project's schedule compare against baseline values. Whilst this is useful for analyzing where variances exist, it doesn't always indicate if the project and its tasks are exceeding any constrained dates. To apply an AutoFilter to select tasks with a negative slack value, first apply a suitable table and then run an AutoFilter against values within appropriate columns:

- a. Firstly, remove any Global Filters by selecting:

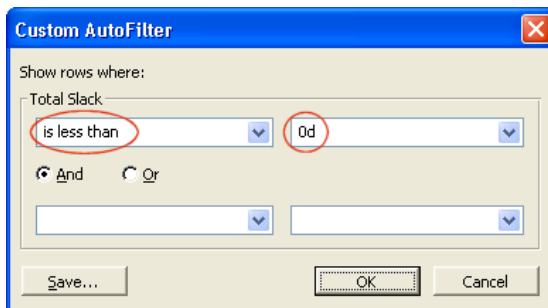


- b. From the View menu, select Table and then select Schedule.

- c. Turn on AutoFilters with  (or Project..Filtered for..AutoFilter) so that any column's contents could be filtered upon.

- d. Use the drop down list within the column heading for Total Slack and then select (Custom...) as the criteria.


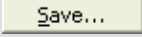
- e. Within the Custom AutoFilter dialog, select as below, confirmed with OK.



- f. Displaying tasks that possess negative slack:

	Task Name	Total Slack
0	Manual Project	0 days
10	Content	-1 day
13	Set page layouts	-1 day
14	Exercises	-1 day
17	Create contents & index	-1 day
18	Manual completed	-1 day

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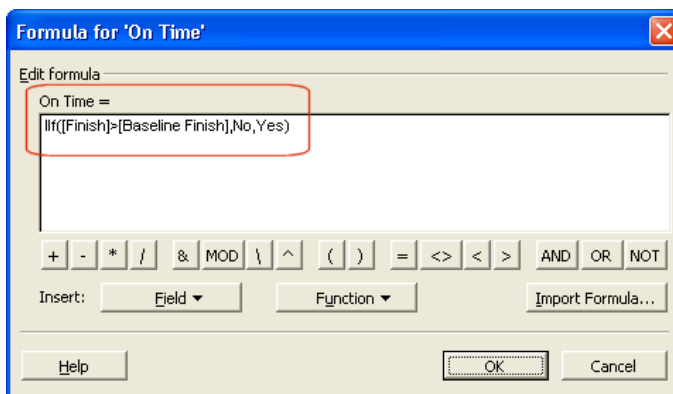
Hints	<ul style="list-style-type: none">• To find which tasks have inflexible constraints against them (and hence could give rise to the negative slack values), apply the 'Tasks with Fixed Dates' global filter or add the indicators column to the current table.• To clear an AutoFilter criteria against one column, use the (All) selection within the drop down list. To clear ALL AutoFilter criteria, turn off AutoFilter with .• To create a global filter from an AutoFilter, use the  button within the Custom AutoFilter dialog box.
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Filtering & grouping by schedule status

Determining schedule status using custom formulae

As well as using filters to select tasks that have slipped, custom fields can be created that contain calculated values within the field definition. These calculated values can then be displayed using graphical indicators. The custom field can then be added to a table to provide an immediate indication of a task's status. To achieve this, firstly create the custom field:

- a. From the Tools menu, choose Customize and then choose Fields.
- b. Select the type of field (in this case a Flag field) and then the specific field to customize.
- c. Click **Rename...**, entering a suitable name, followed by OK.
- d. To define the field's formula, click on **Formula...**.
- e. Create the formula by entering it in directly or by inserting fields, operators and functions, confirmed with OK.



- f. As values for the original field will be overwritten with calculated values, confirm with OK once more.
- g. To display graphical indicators instead of Yes/No values, click **Graphical Indicators...**.

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- h. Define suitable indicators as below and confirm with OK, followed by OK.

Graphical Indicators for "On Time"

Indicator criteria for

- Nonsummary rows
- Summary rows
 - Summary rows inherit criteria from nonsummary rows
- Project summary
 - Project summary inherits criteria from summary rows

Cut Row Copy Row Paste Row Insert Row Delete Row

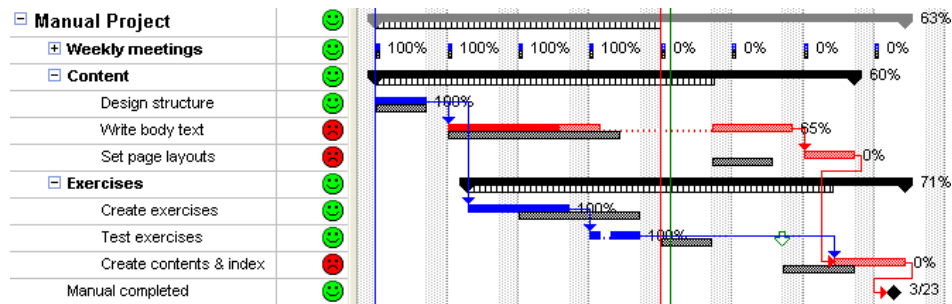
Test	Value(s)	Image
Test for 'On Time'		
equals	No	☹
equals	Yes	☺

To display graphical indicators in place of actual data values, specify the value range for each indicator and the image to display. Tests are applied in the order listed and processing stops at the first successful test.

Show data values in ToolTips

Help Import Indicator Criteria... OK Cancel

Once the custom field has been created, it can be added to a suitable table:



The formula above uses a 'Flag' field. This field will return a Yes or a No value, dependant upon the formula's expression. Tasks with a scheduled finish later than their baseline finish equate to a No (a red frowning face), all other tasks will return a Yes value (a green smiling face).

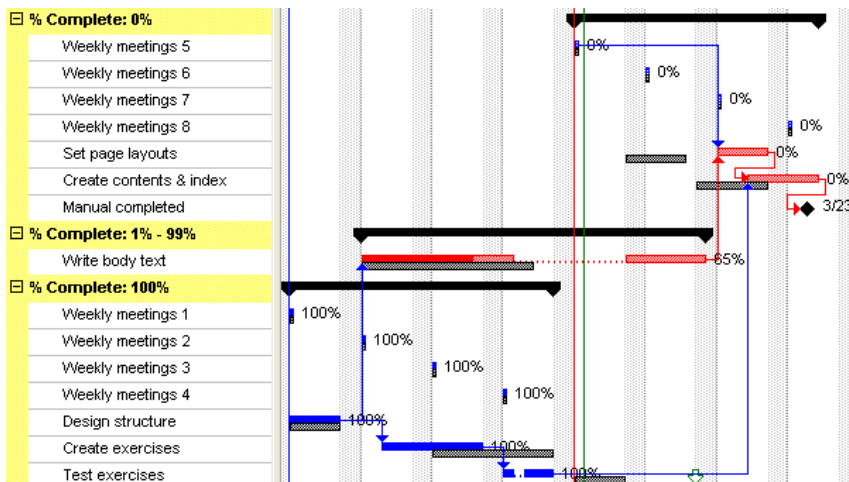
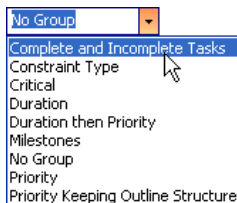
Hints	<ul style="list-style-type: none"> • Custom formulae can be shared between open projects using Import Formula... • Custom formulae must be of the correct data type; number cost, text and so on.
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Filtering & grouping by schedule status

Grouping by progress status

By default, a view is sorted by ID. As an alternative, views can be sorted by group. This provides a number of useful ways to make decisions based upon the status of a project's schedule.

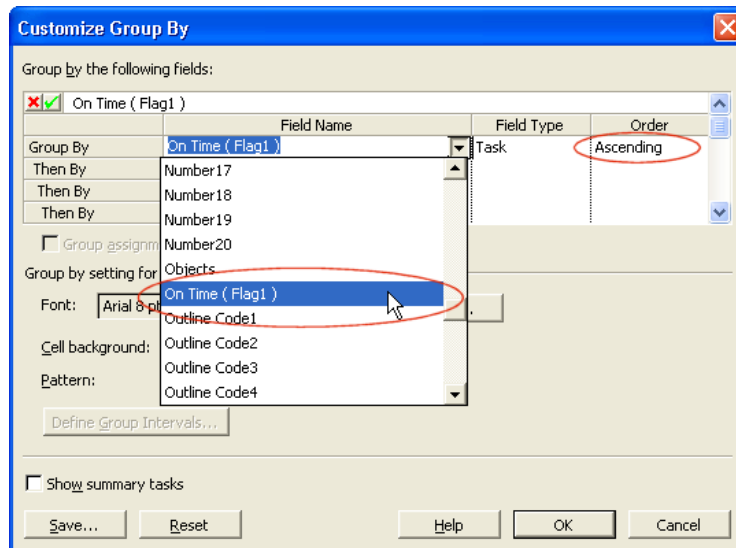
- A project's tasks could be grouped by:



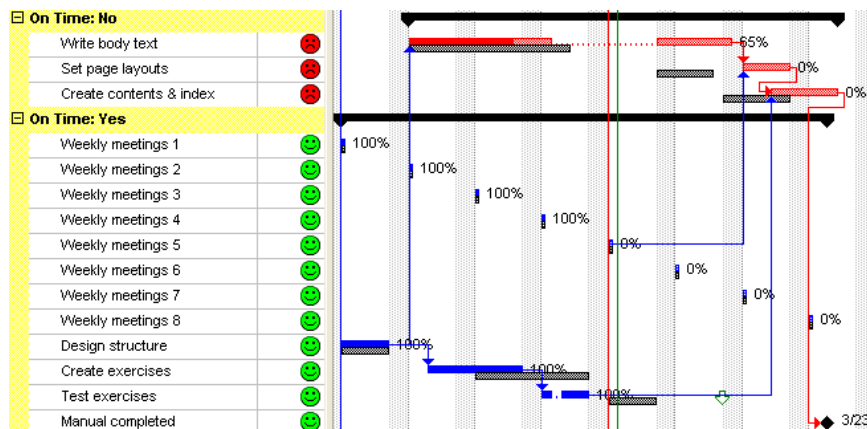
Filtering & grouping by schedule status

To create a more sophisticated grouping, a new group criteria could be created:

- From the Project menu, select Group by: and then select Customize Group By...
- Choose the field to group upon (in this case the field 'Flag1' has been renamed to be 'On Time'), then confirm with OK.



- The project's tasks are now grouped as:



Hints	<ul style="list-style-type: none">To save a group for later use, click on Save... within the Customize Group By dialogGroup criteria, global filters and custom fields are common project components. As such, they are saved with the project document and can be copied to other projects using the Organizer.
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