An ebook from...

MPUG

Reader Favorites, Volume 1

Includes:

2 Create Microsoft Project Custom Toolbars in 4 Steps
Larry Christofaro, PMP, MCITP

6 Ask the Experts: When Linking Summary Tasks Makes Sense
Ellen Lehnert, PMP, MCT, MCITP

8 Creating Milestone Reports in Microsoft Project
Chris Mauck, PMP, MCITP

13 Replace Generic Resources with Named Resources
Larry Christofaro, MCITP, MCTS, PMP

16 Scheduling Master: Finish to Start Successors
Jim Aksel, PMP, PMI-SP, MVP

20 Sorting out Overdue Tasks from Waaaayyyy Overdue Tasks
Michael Nathan, PMP

22 The 30-Second Report
Sam Huffman, PMP

Brought to you by MPUG, http://www.mpug.com

Create Microsoft Project Custom Toolbars in 4 Steps

Larry Christofaro, PMP, MCITP

Creating a custom toolbar in Microsoft Project is a great way to put all of your most frequently-used functions in one spot. As an example, Figure 1 shows a toolbar with functions that a project manager may use if he or she is updating a project plan using percent complete in a Project Server environment.

Figure 1. A toolbar of functions for updating a project plan with percent complete

This toolbar is actually a combination of commands from several toolbars and other commands that don't exist in any toolbar out of the box. Note how it provides a nice sequence of commands assembled in one neat package. The commands I've placed in this toolbar include:

- Project Information: For modifying health indicators or the status date.
- Build team from enterprise: Always a command that is used frequently.
- Using Resource: For when you're discussing status with an individual team member.
- % complete indicators: For quick setting of task completion status.
- Reschedule work: Once you're done updating status to move all remaining work to the future.
- Publish: Always publish your project as your last step before closing.
- Close: Your last step.

How to Create This Custom Toolbar

So you think creating custom toolbars is hard? Think again. Creating toolbars is as simple as following these four easy steps:

1. Select the customize toolbar dialog box: Tools | Customize | Toolbars or right click anywhere on the toolbar area and select Customize.

2. Select the Toolbar tab, then the New button, and create your new toolbar.

Figure 2. Create your toolbar and name it.

3. At this point, the toolbar is placed in the middle of your schedule. I prefer to move it to the toolbar area by selecting and dragging it to the desired location, where it's easier to work with.

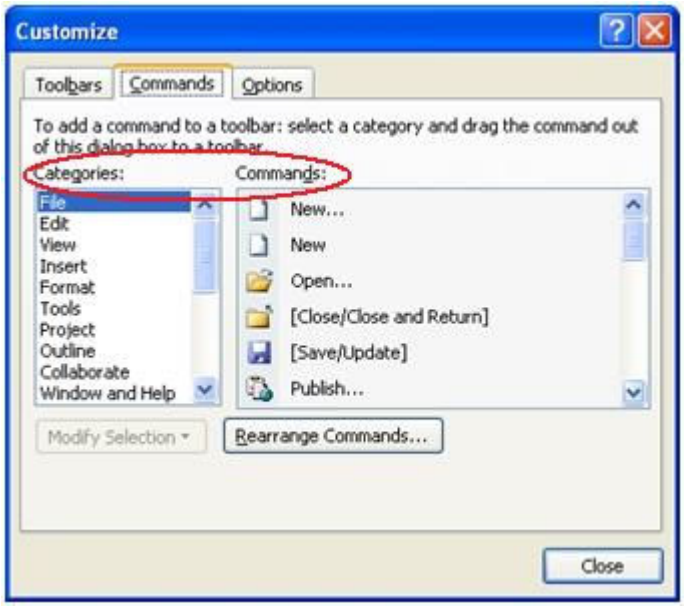
4. Now go to the Commands tab and begin adding commands to your toolbar. This is also done by selecting and dragging the command to the particular toolbar location.

Commands are grouped by category. Categories tend to follow the menu commands, but this isn't always the case. The categories and commands I've used are as follows:

- The File category contains the Project Information, Publish, and Close commands.

- The Utility category contains the Build Team from Enterprise command.
- The Tracking category contains the Using Resource , % complete indicators, and Reschedule Work commands.

Figure 3. Add commands by selecting and dragging to your new toolbar.

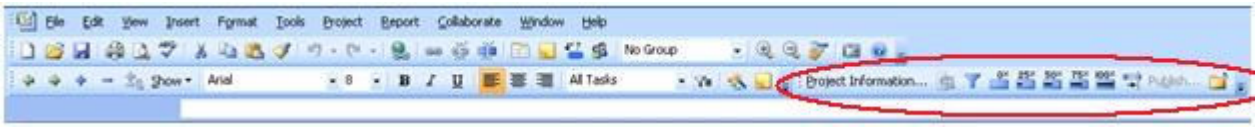


Note: The Reschedule Work command automatically reschedules work based on the Status Date in the Project Information dialog. Alternatively, you can use the Update Project command located in the All Commands category to display the update project dialog box.

Note also that all toolbars are open for adding, moving, and removing commands. These functions can be performed by selecting and dragging the command to and from the toolbars. For instance, you can replace the New command with the New... toolbar command that will automatically bring up the New Project information pane. This gets you one click closer to creating a project from a template.

My set-up -- shown in Figure 4 -- provides the tool commands that I use the most.

Figure 4. My toolbar reflects the commands I use most often.



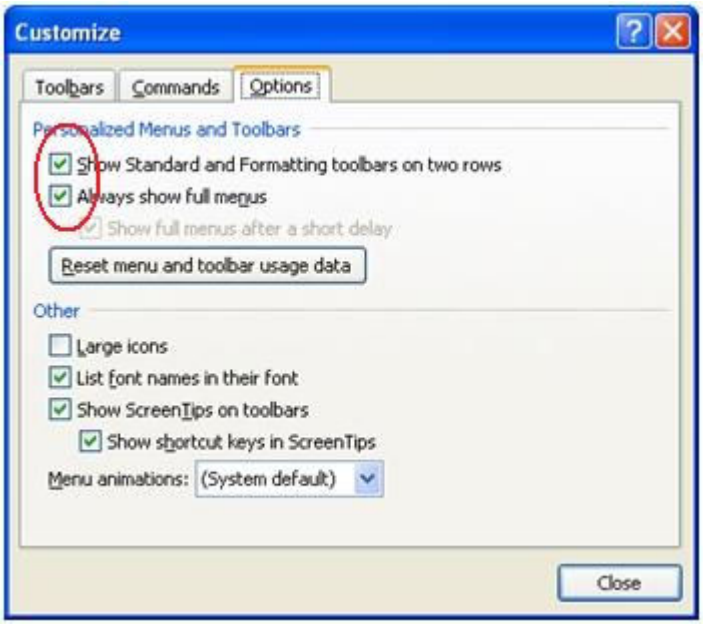
More Toolbar Goodies

From here, you could close the Customize dialog box and be done. However, before you do that, I'm going to share some other toolbar tips. You'll find all of the functions I reference here under the Options tab of this same dialog box.

I like the Show Standard and Formatting toolbars on two rows because it's easier to show all of the toolbar commands

I also like to choose to show full menus because it gives me immediate view of the commands I use but not very often -- which is a lot of them.

Figure 5. A couple of options you'll want to turn on.



If you think that's cool, then you'll love this part: The toolbar commands can be customized to appear however you want. Some of the things you can do include:

- Showing the text or the image or both.
- Changing the button image. (See Figure 6.)
- Editing the image to make it look however you like.
- Assigning a command to a macro.

Figure 6. Knock yourself out! Personalize those button images!

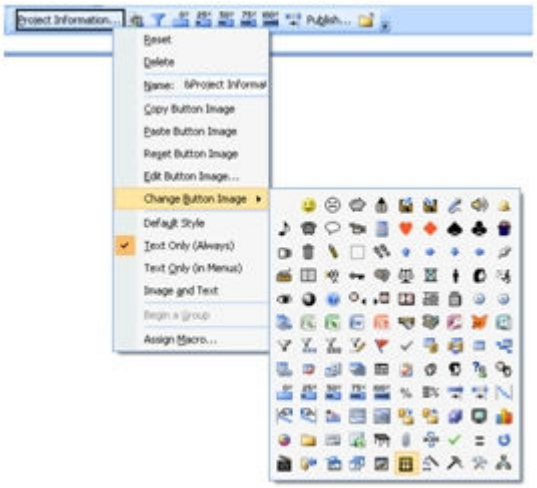


Figure 7 shows our updated toolbar with new images for Project Information and Publish commands.

Figure 7. The updated toolbar with different images for specific commands.

My last tip: You can do all of this to the Enterprise Global Template in Project Server so that a standard can be developed and used throughout your organization. You can contact me if you have questions on how to make this happen.

As a teacher and Microsoft Project advocate, I believe one of the biggest benefits of a custom toolbar is the ability to have the common functions you need in one convenient, accessible spot. Learning what you need to do when you're interacting with Microsoft Project just got a little easier. You and your mouse will work as a well-tuned engine when you've put your most needed functions "one click away."

Larry Christofaro is a senior consultant for Digineer, with over 15 years of project management experience. Larry has combined his strengths in enterprise project management (EPM) architecture and project management to successfully manage deployments for clients ranging from 50 to 2,000 users. As the primary trainer for Digineer, Larry developed the company's best practice standards and training materials for Microsoft Project 2007 and Microsoft Project Server 2007. Larry is a Microsoft Certified IT Professional (MCITP) and a Microsoft Certified Technical Specialist (MCTS) for Project and Project Server. You can contact Larry at lchristofaro@digineer.com.

Ask the Experts: When Linking Summary Tasks Makes Sense

Ellen Lehnert, PMP, MCT, MCITP

Ron from Cleveland, OH asks: Is it a good practice or bad to link summary tasks?

Answer: In general I don't believe that it's a best practice to link summary tasks within a work breakdown structure (WBS). Here are some of the reasons:

- It's the detail tasks and the milestones that move a schedule ahead and not the summaries. Summaries can't be tracked and shouldn't have resources assigned to them. They're not real tasks so much as subtotals and/or titles.
- If you try to track a summary task, it will be right only when there's either zero percent or 100 percent completed on the detail tasks. This occurs because there's a consistent recalculation of the summary task totals by default based on changes to their member tasks.
- Linking summaries can cause errors in the schedule that might be hard to trace.
- Linking summaries means that the entire grouping of tasks must be completed before the next grouping can start.

This last point brings up an interesting idea: Consider the application of some agile-based Scrum scheduling methodology to your project management efforts. In Scrum, a sprint (a period of two to four weeks) is always completed within a set timeframe before the next sprint can start. If any of the work in the first sprint doesn't get completed, that work is moved over to the subsequent sprint. Each sprint is made up of "stories," tasks scheduled to be completed in that two-, three-, or four-week section.

I would recommend using the WBS structure with milestones at the end of each summary grouping, as shown in Figure 1. The tasks within the groupings should be linked to the ending milestones because completion has the ability to push the milestones. Using this structure will also allow for generation of milestone or summary management reports in order to show the progress of the sprints.

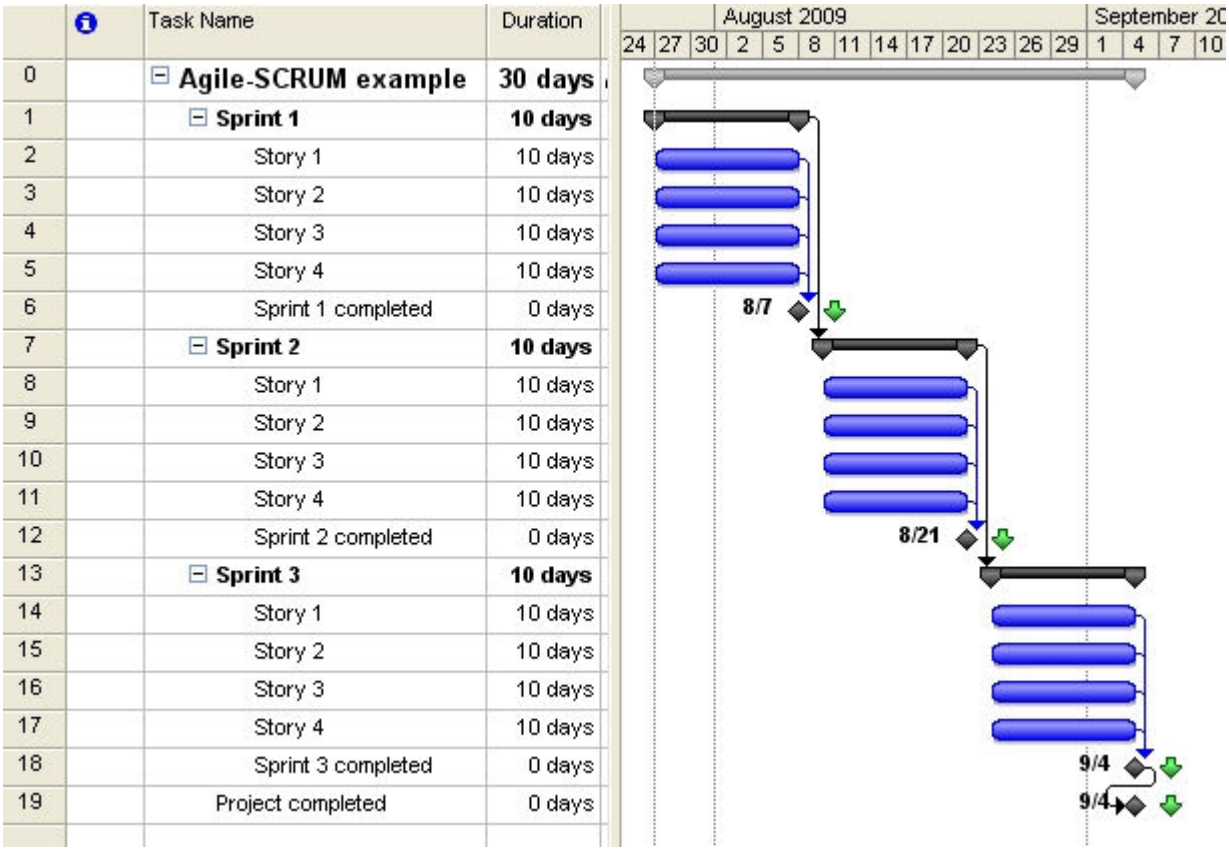
Note that I've placed a deadline after each milestone. During tracking of the tasks, the goal is to ensure that the milestone arrow won't cross the green arrow (deadline) if it does, the scheduler will be alerted. In addition, adding the deadline will allow users to monitor the total slack column to see when the slack goes negative and they're approaching the danger of missing a deadline.

Also during tracking, if the remaining work for a task is increased, the result could be that the schedule is pushed past the two-, three-, or four-week gates and the deadline indicators would alert the scheduler to this problem as well.

Figure 2 shows an example of the rolled up milestone report, which could be used for management reporting. To apply the milestone filter, click on Project | Filtered for | Milestone. To remove the filter, press the F3 key.

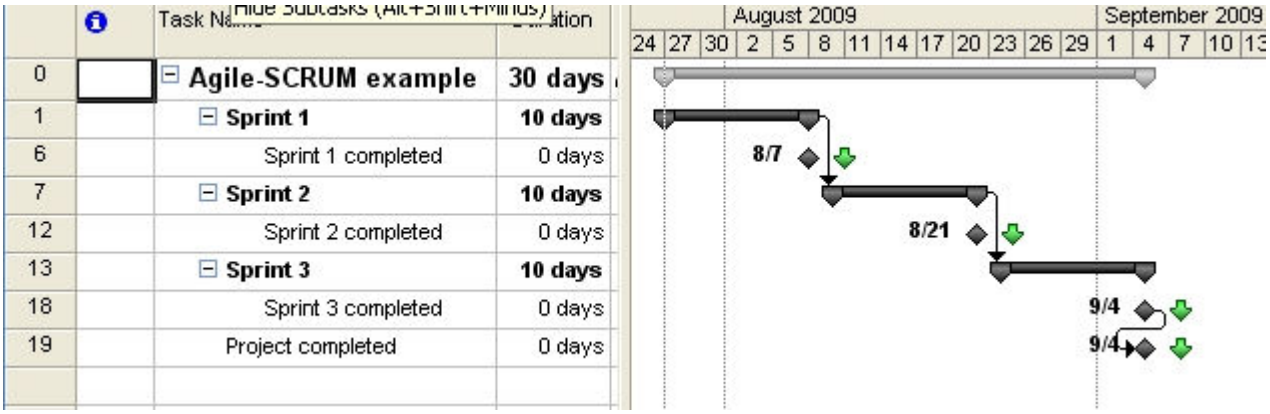
Of course, there's a lot more to managing a project using Scrum methodology than what I show here. But I hope these examples give you some scheduling ideas for predicting the project's critical path and monitoring its progress.

Figure 1: Applying Scrum development techniques to project scheduling.



	Task Name	Duration
0	**Agile-SCRUM example**	**30 days**
1	**Sprint 1**	**10 days**
2	Story 1	10 days
3	Story 2	10 days
4	Story 3	10 days
5	Story 4	10 days
6	Sprint 1 completed	0 days
7	**Sprint 2**	**10 days**
8	Story 1	10 days
9	Story 2	10 days
10	Story 3	10 days
11	Story 4	10 days
12	Sprint 2 completed	0 days
13	**Sprint 3**	**10 days**
14	Story 1	10 days
15	Story 2	10 days
16	Story 3	10 days
17	Story 4	10 days
18	Sprint 3 completed	0 days
19	Project completed	0 days

Figure 2: A roll-up of milestones.



	Task Name	Duration
0	**Agile-SCRUM example**	**30 days**
1	**Sprint 1**	**10 days**
6	Sprint 1 completed	0 days
7	**Sprint 2**	**10 days**
12	Sprint 2 completed	0 days
13	**Sprint 3**	**10 days**
18	Sprint 3 completed	0 days
19	Project completed	0 days

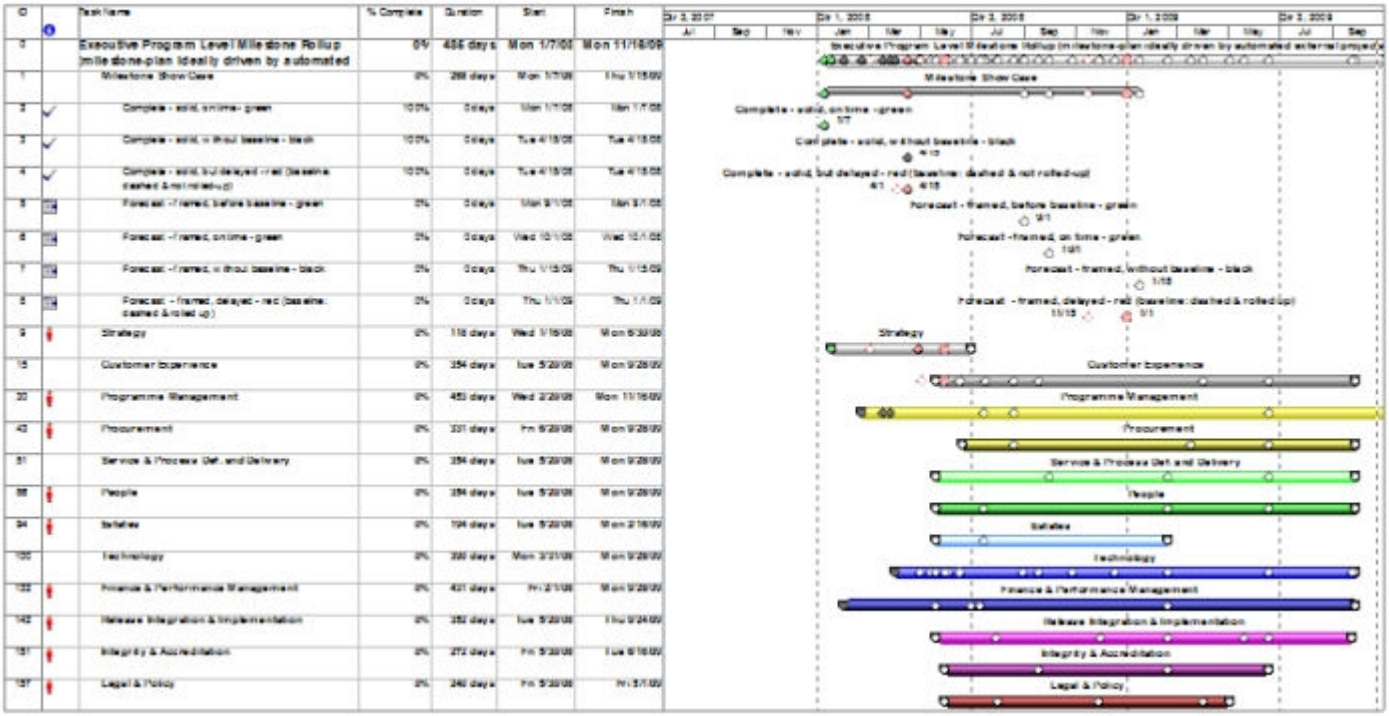
*With over 20 years of corporate training experience, **Ellen Lehnert**, PMP, MCT, MCITP, is a specialist in Microsoft Project and Microsoft Project Server. She contributes to many reference books and holds multiple Microsoft Project certifications. Ellen brings a unique combination of licensed teacher and programming background to the classes she teaches as well as process development, installations, and consulting. Contact her at ellen@lehnertcs.com.*

Creating Milestone Reports in Microsoft Project

Chris Mauck, PMP, MCITP

If you're managing complex programs or large projects, a summary milestone report may be the best way to share information that shows the status of key deliverables. Yet, out of the box Microsoft Project views are limiting and don't provide the visual summary level views that give an executive the quick overview of project or program health he or she needs for making quick and accurate business decisions. In this article I explain how to configure a view within Project that provides an executive rollup of a program showing the projects in the program with milestone status. Figure 1 shows the view that will be created through these configurations.

Figure 1. The summary views we'll create in this step-by-step guide.



To display the status of each milestone graphically, milestone bar styles need to be configured for each unique status. The following logic was applied to distinguish milestones that haven't been baselined, milestones that are on track, milestones that are delayed, and baselined milestones for those milestones that are delayed.

I've selected the following shape types and colors to designate the status of each milestone:

Shape Types:

- Solid diamond: Completed milestone
- Framed diamond: Incomplete milestone
- Dashed framed diamond: Baseline of milestone
- Circle around diamond: Attention Required – Delayed incomplete milestone

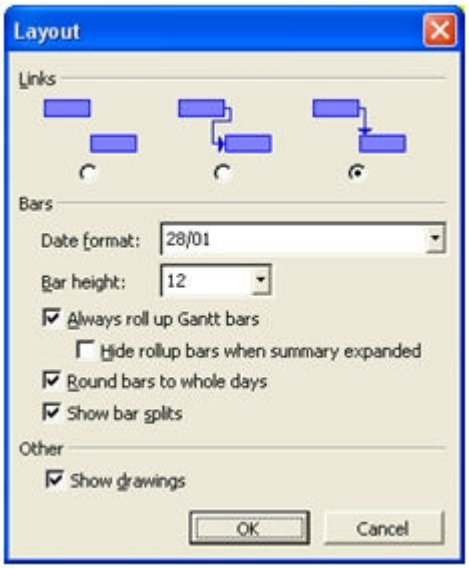
Color coding:

- Black: Not baselined
- Green: On or ahead of schedule
- Red: Delayed

To create a view with these bar styles, open up the Gantt Chart View from Project or copy the default Gantt Chart View to a new view name of your choice and open up that view.

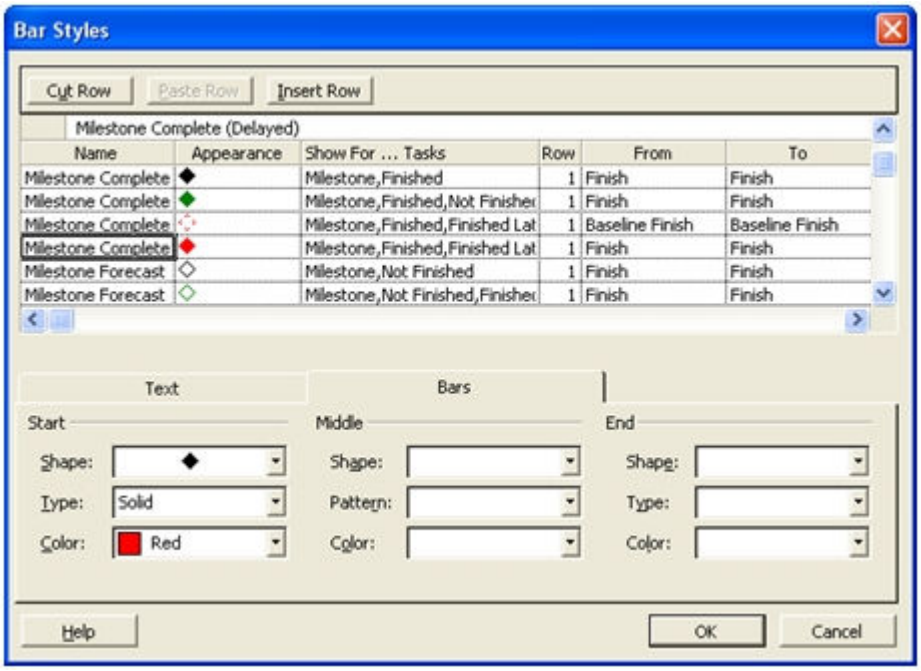
To get milestones to display on a summary level bar, open up the Layout dialog by selecting Format | Layout from the Menu bar. From the Layout dialog, check the box next to "Always roll up Gantt bars" and click OK.

Figure 2. Initial steps.



Next open up the Bar Styles dialog by selecting Format | Bar Styles from the Menu bar.

Figure 3. Laying out the specifications for illustrating milestone status.



Note that the order in which you create the bar styles determines the order of how bar styles overlay on top of each other. The order in which they're shown in the Bar Style dialog from top

to bottom determines priority of sequencing or ordering of how they're drawn on the Gantt chart view. Hence, as you're creating bar styles, pay attention that you don't hide something behind another bar style that you want to display.

Starting at the current bar style named Milestone, rename Milestone to Milestone Complete (No Baseline) and modify the bar properties as shown in the chart below. Insert the remaining bar style names and properties after the bar style you've just modified. The logic of the order of these milestones creates a solid black milestone for all finished milestones and then overwrites the black milestone with a solid green milestone for those that are baselined and on time and a solid red milestone for those that are baselined and late. The same logic follows for the incomplete milestones.

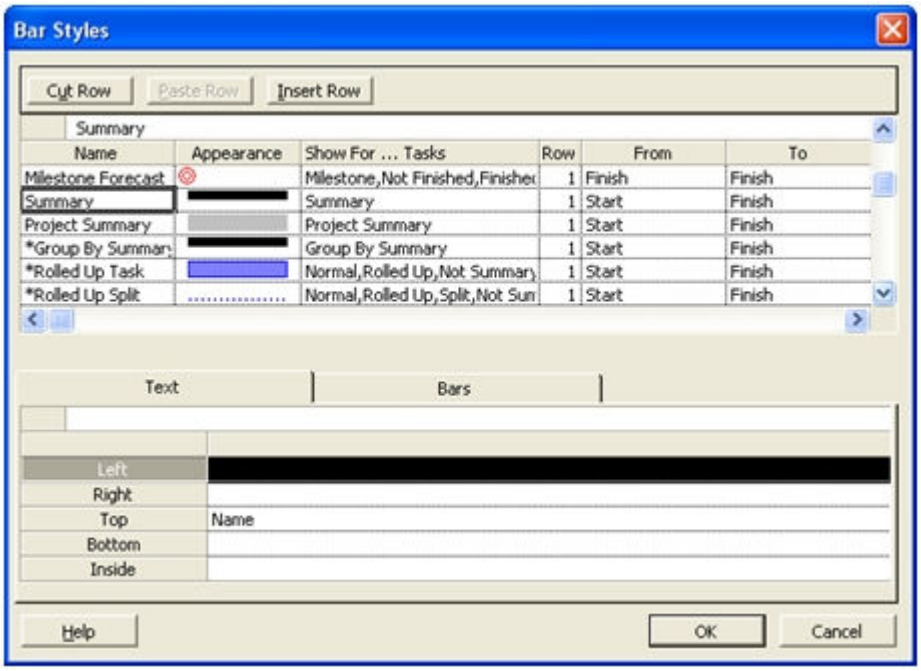
Table 1. How we're ordering the milestones for this report.

Name	Appearance	Show for... Tasks	Row	From	To
Milestone Complete (No Baseline)	Diamond, Solid, Black	Milestone, Finished	1	Finish	Finish
Milestone Complete (On Time)	Diamond, Solid, Green	Milestone, Finished, Not Finished Late	1	Finish	Finish
Milestone Complete (Baselined of Delayed) – not roll	Diamond, Dash, Red	Milestone, Finished, Finished Late	1	Baseline Finish	Baseline Finish
Milestone Complete (Delayed)	Diamond, Solid, Red	Milestone, Finished, Finished Late	1	Finish	Finish
Milestone Forecast (No Baseline)	Diamond, Framed, Black	Milestone, Not Finished	1	Finish	Finish
Milestone Forecast (On Target)	Diamond, Framed, Green	Milestone, Not Finished, Not Finished Late	1	Finish	Finish
Milestone Baseline (of Delayed)	Diamond, Dashed, Red	Milestone, Not Finished, Finished Late	1	Baseline Finish	Baseline Finish
Milestone Forecast (Delayed)	Diamond in Circle, Framed, Red	Milestone, Not Finished, Finished Late	1	Finish	Finish

To add the names and dates of the milestones to the graphical display on the Gantt chart view, click on the Text tab from the Bar Style dialog and select the field to display as shown in Figure 4.

Note that if you do this for the Milestone Complete (No Baseline) and Milestone Forecast (No Baseline), the names and dates will show up for all the task level milestones, since the green and red milestones are just writing over current black milestones.

Figure 4. Specifying what shows up on the graphical display.



Next, create bar styles for rolled up milestones. From the Bar Style menu scroll down the list of bar styles to the current *Rolled Up Milestone bar style. Change this bar style to *Rolled Up Milestone Complete (No Baseline) with the properties shown in the table below and then insert the remaining bar styles listed.

Table 2. Details for bar styles to show summarized milestones.

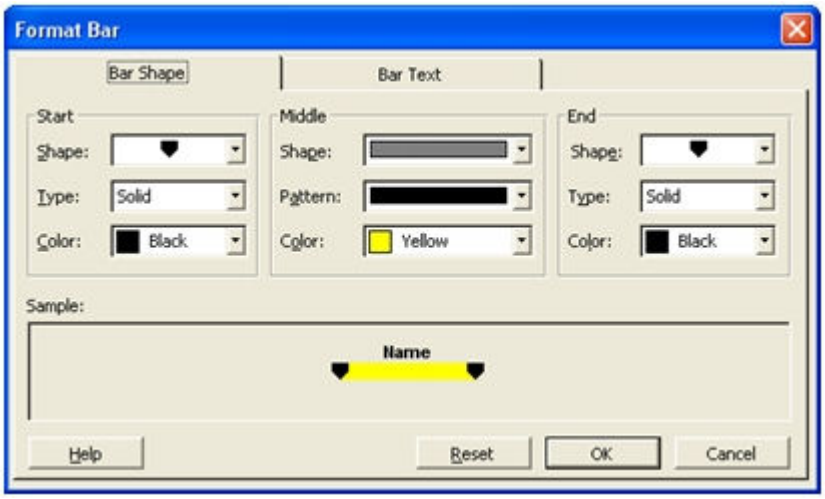
Name	Appearance	Show for... Tasks	Row	From	To
*Rolled Up Milestone Complete (No Baseline)	Diamond, Solid, Black	Milestone,Finished,Rolled Up,Not Summary	1	Finish	Finish
*Rolled Up Milestone Complete (On Target)	Diamond, Solid, Green	Milestone,Finished,Rolled Up,Not Summary,Not Finished Late	1	Finish	Finish
*Rolled Up Milestone Complete (Delayed)	Diamond, Solid, Red	Milestone,Finished,Finished Late,Rolled Up,Not Summary	1	Finish	Finish
*Rolled Up Milestone Baseline (of Delayed)	Diamond, Dashed, Red	Milestone,Not Finished,Finished Late,Rolled Up,Not Summary	1	Baseline Finish	Baseline Finish
*Rolled Up Milestone Forecast (No Baseline)	Diamond, Framed, Black	Milestone,Not Finished,Rolled Up,Not Summary	1	Finish	Finish
*Rolled Up Milestone Forecast (On Target)	Diamond, Framed, Green	Milestone,Not Finished,Rolled Up,Not Summary,Not Finished Late	1	Finish	Finish
*Rolled Up Milestone Forecast (Delayed Date)	Diamond in Circle, Framed, Red	Milestone,Not Finished,Finished Late,Rolled Up,Not Summary	1	Finish	Finish

Tip: *Using * in the name excludes this item from the legend when printing the Gantt chart view.*

To change the color of the various workstreams or project summary bars, if displaying a program level view, select the individual task row. From the Menu bar select Format | Bar to open the Bar dialog. From the Bar Shape tab, change the color under Middle, and click OK. Repeat with a different color for each workstream or project summary.

Finally, to print a view for distribution, from the Menu bar select File | Print Preview. Click on the Page Setup button to open up the Page Setup dialog and customize the header and footer with a logo and custom text. Note that the legend at the bottom of the printout shows bar styles that have been designated for display.

Figure 5. How to specify project summary bars.



Chris Mauck, PMP, MCITP, is the lead of the PMO with Jacobs Advanced Systems Group, a subsidiary of Jacobs Engineering, in Dumfries, VA, which provides advanced technical services to the government. Contact Chris at christopher.mauck@jacobs.com.

Replace Generic Resources with Named Resources

Larry Christofaro, MCITP, MCTS, PMP

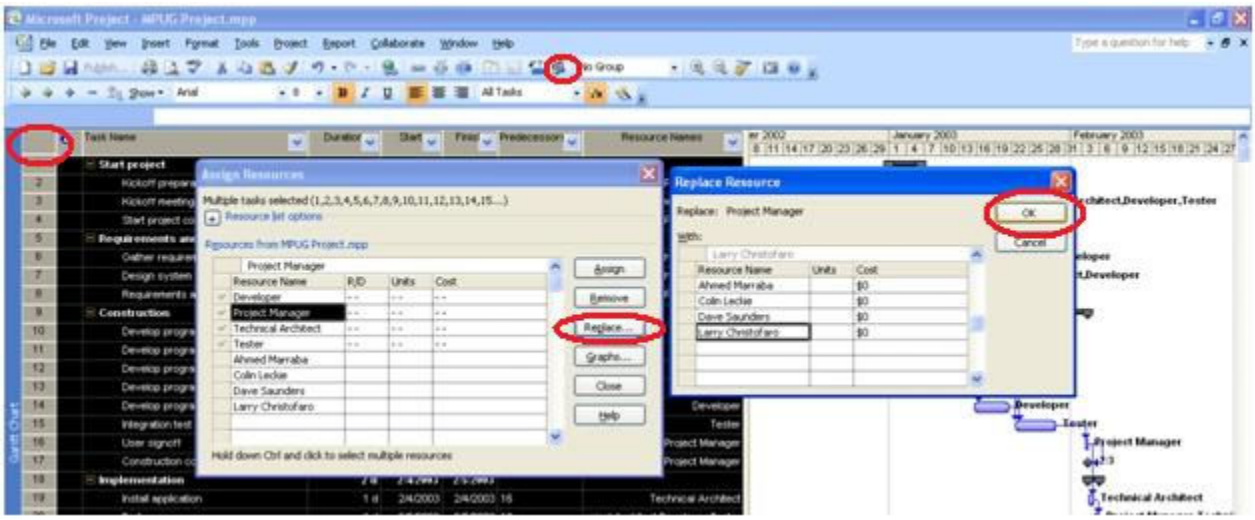
Using generic resources during the project planning process is a good practice most of the time. The use of generic resources enables a project to be planned and built prior to your knowing the specific individuals that will eventually be assigned to the work. But what happens when your real project team is finally known? Replacing a generic resource with a single, named resource is usually simple. But what about having to replace one generic resource with multiple named resources? Or having to replace multiple generic roles with a single named resource? This article provides some best practices on how to accomplish the replacement of resources with ease.

Replacing Resources One-for-One with Microsoft Project

Replacing all of the assignments for a generic resource with a named resource is straightforward. For this, the Assign Resources feature can be used.

1. First, highlight all tasks in the project plan by selecting the heading of the ID column, shown in Figure 1 with the red circle to the far left. (Note: For this case, don't show the project summary task (task 0), or this option won't work correctly.)
2. Open the Assign Resources dialog box either by choosing Tools | Assign Resources or clicking the Assign Resources button on the Standard toolbar, which is shown in Figure 1 with the upper-most red circle.
3. In the Assign Resources dialog box, select the generic resource needed and then click the Replace button (shown in Figure 1 with the lower-most red circle).
4. Next, the Replace Resource box will appear. Select the named resource that will replace the generic resource and click OK (the right-most red circle).

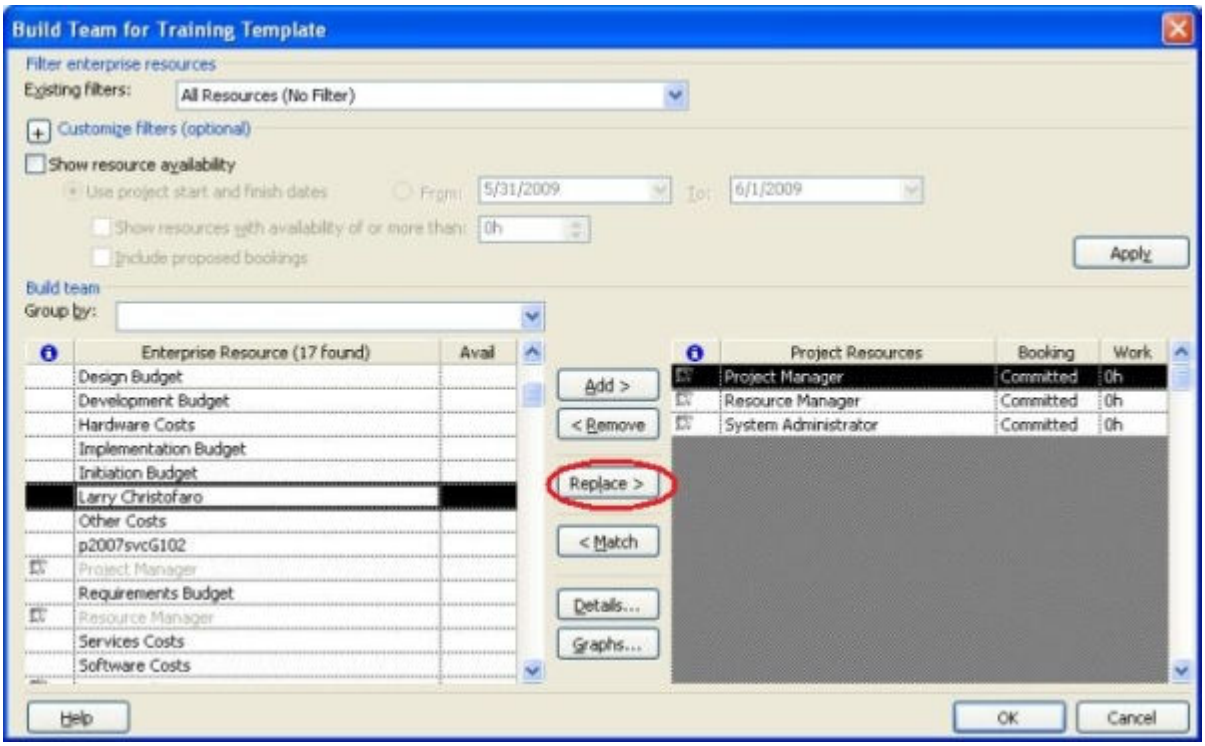
Figure 1: The process for replacing a generic resource with a named resource.



Replacing Generic Resources in Project Server

Project Server offers additional capabilities for replacing resource assignments. The Build Team from Enterprise functionality can be used to replace all assignments from one resource to another, when applicable. Simply select the resource to receive assignments from the list of available resources on the left side of the Build Team dialog box. Then select the resource whose assignments should be replaced from the right side of the Build Team dialog box and click the Replace button.

Figure 2: Project Server uses the Build Team from Enterprise function to replace resources.



Replacing Resources to Selected Tasks

The solution to replacing one generic resource with two or more named resources may be best accomplished one task at a time. However, this effort can be made easier by using features inherent in Microsoft Project. This process is illustrated in Figure 3. There are two named resources that will be used to complete the tasks of a single generic resource called "Developer." The following steps walk through the process of replacing the assignments:

1. Select a task view in the project plan, such as the Gantt Chart.
2. Split the screen to show the Task Form on the lower pane. This can be accomplished by selecting Window | Split.
3. Turn on the auto-filter option by selecting Project | Filtered | Auto-filter or the Auto-filter button on the Formatting toolbar (shown in the upper-most red circle).
4. Make sure the Resource Name field is visible on your view.
5. Select the generic resource from the Resource Name auto-filter dropdown (the lower-most red circle). This displays only the tasks assigned to that generic resource.
6. In each task where the generic resource is assigned, use the Task Form portion of the split screen to replace the generic resource with the appropriate named resource. Once all tasks have been reassigned, the generic resource name will no longer show on the Resource Name dropdown list.
7. Continue steps five and six for each generic resource in the Resource Name auto-filter dropdown list that needs to be replaced with multiple named resources.

Figure 3: Replacing a single generic resource with two or more named resources.

Of course, when working with Project there are always many ways to accomplish the same task. The steps I've identified above provide an easy way to isolate the tasks assigned to a particular resource, in order to best reassign them to multiple resources.

Larry Christofaro is a senior consultant for Digineer, with over 15 years of project management experience. Larry has combined his strengths in enterprise project management (EPM) architecture and project management to successfully manage deployments for clients ranging from 50 to 2,000 users. As the primary trainer for Digineer, Larry developed the company's best practice standards and training materials for Microsoft Project 2007 and Microsoft Project Server 2007. Larry is a Microsoft Certified IT Professional (MCITP) and a Microsoft Certified Technical Specialist (MCTS) for Project and Project Server. You can contact Larry at lchristofaro@digineer.com.

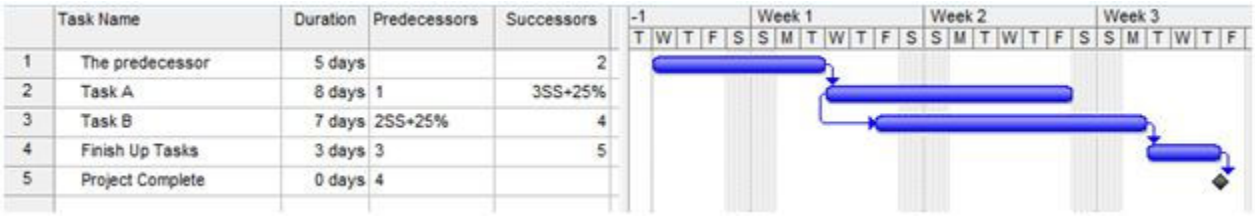
Scheduling Master: Finish to Start Successors

Jim Aksel, PMP, PMI-SP, MVP

In addition to creating schedule logic the way people ordinarily perform their business activities, it's important from a scheduling logic perspective to also include at least one Finish-To-Start successor to each detail level task in a Microsoft Project schedule model. To illustrate this, I'm going to use a wildly exaggerated example.

Consider a program that has tasks as shown in Figure 1. Task A represents an integration activity; Task B represents a testing activity that may commence sometime after the start of integration. Task B is scheduled to start on Friday of Week 1 in the program. The "Finish Up Task" item represents the writing of a test report that can't start until the testing is complete. In this article, we're going to focus on the relationship between Tasks A and B (integration and test).

Figure 1: A sample project.

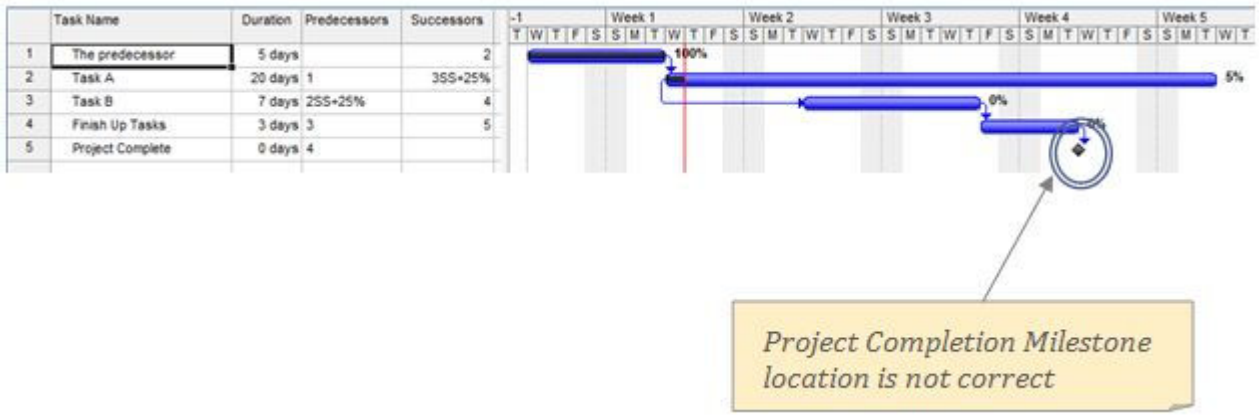


A Start to Start Relationship

The owner of Task B believes she'll have no drivers other than she may start when Task A claims he's 25 percent complete. The scenario is worsened if Task B starts a fixed number of days after Task A starts such as 2SS+2days. The owner of Task A believes she's not a program driver.

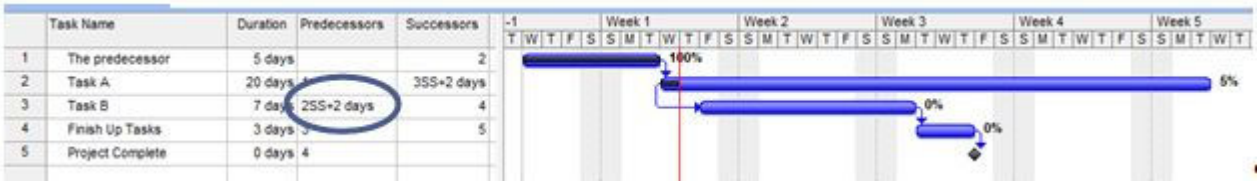
Once execution of Task A begins, the owner of Task A encounters a problem and believes his new task duration is 20 days (instead of eight days). Notice how the lack of a finish to start successor on "Task A" fails to correctly push the Project Complete milestone to a correct date in Figure 2.

Figure 2: The duration of Task A increases.



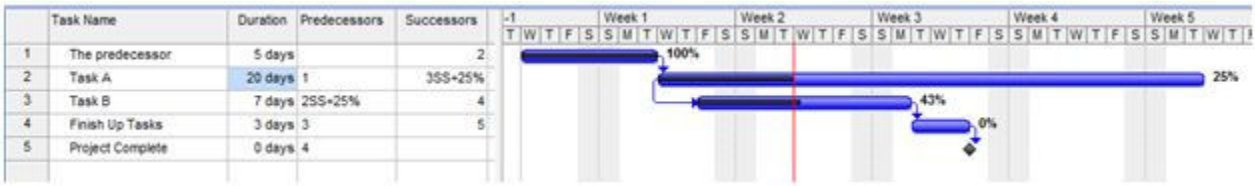
Although the increase in duration of Task A drives the start of Task B to a later date (Wednesday of Week 2), the Project Complete milestone is incorrect because it shows Wednesday of Week 4 instead of Thursday of Week 5. The lag on the predecessor for Task B does move Task B to the right if its predecessor runs longer than anticipated. If the lag on the predecessor to Task B were a fixed amount, say 2SS+2days, then Project Complete milestone would not have moved at all, as shown in Figure 3.

Figure 3: Task B with a fixed duration lag.



The problem is exacerbated if Task B has already started and the owner of Task A realizes his trouble later in the execution process (Figure 4). Essentially this situation becomes identical to a fixed lag on Task B since the existence of progress on Task B freezes its location.

Figure 4: A Task A problem is found after the start of Task B.



The proper way to link this schedule is with a Finish-to-Start successor on Task A linking it to either the Project Complete milestone or the Finish Up Tasks (Figure 5). The original Start-To-Start relationship between Tasks A and B remains along with the new successor.

Figure 5. Changing successors on Task A.

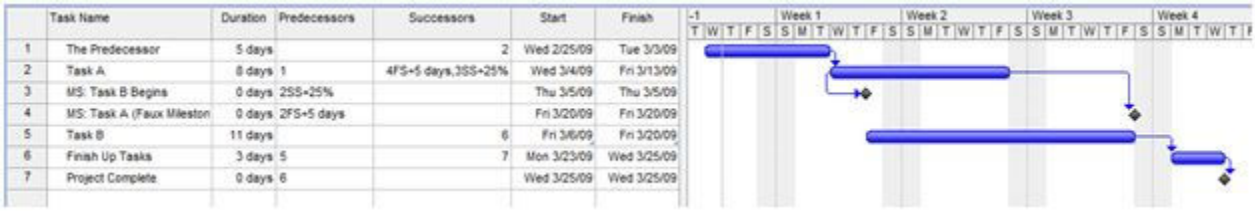
The idea is that sooner or later, Task A could run so long that it will impact someone. Now, if "Task A" doesn't get completed in a timely manner, the Project Complete milestone will push out accordingly.

An argument is that if Task A increases in duration, Task B must also increase in duration: Test may start when integration is 25 percent complete, and testing will finish five days after the completion of integration. The task to test (Task B) becomes a "hammock task" with dates automatically driven by changes to Task A. I'll give you the steps for creating a hammock task in a future article.

Since Microsoft Project doesn't allow a single task to drive both the start and finish of the same successor activity, two faux milestones are added after Task A, indicating the start of Task B

(test) and the expected completion of Task B. These are identified in Figure 6 as the two MS (milestone) tasks. To make the completion of Task B contingent on the duration of Task A, create a hammock task driven by the two milestones. The Hammock task (Task B) is created from the milestones to account for the lag in start and completion. The start and complete criteria for Task B are totally within the control of the user who specifies this information using the two milestones. Using the hammock task scenario, the new schedule appears in Figure 6.

Figure 6: The use of the a hammock task for Task B.



	Task Name	Duration	Predecessors	Successors	Start	Finish
1	The Predecessor	5 days		2	Wed 2/25/09	Tue 3/3/09
2	Task A	8 days	1	4FS+5 days,3SS+25%	Wed 3/4/09	Fri 3/13/09
3	MS: Task B Begins	0 days	2SS+25%		Thu 3/5/09	Thu 3/5/09
4	MS: Task A (Faux Mileston	0 days	2FS+5 days		Fri 3/20/09	Fri 3/20/09
5	Task B	11 days		6	Fri 3/6/09	Fri 3/20/09
6	Finish Up Tasks	3 days	5	7	Mon 3/23/09	Wed 3/25/09
7	Project Complete	0 days	6		Wed 3/25/09	Wed 3/25/09

When the duration of Task A increases, the duration of Task B will follow suit without user intervention (Figure 7).

Figure 7: Task A dates drive hammock task B dates.

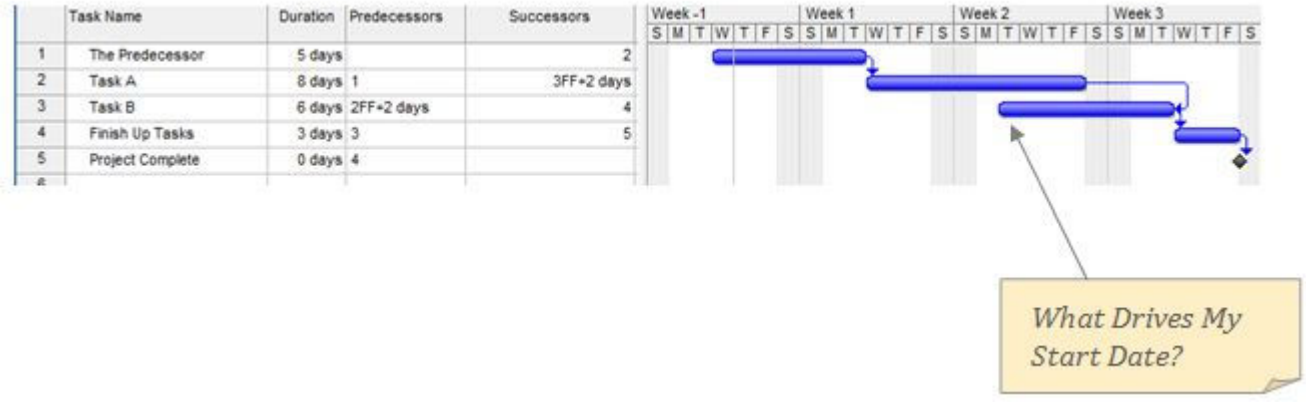
	Task Name	Duration	Predecessors	Successors	Start	Finish
1	The Predecessor	5 days		2	Wed 2/25/09	Tue 3/3/09
2	Task A	20 days	1	4FS+5 days,3SS+25%	Wed 3/4/09	Tue 3/31/09
3	MS: Task B Begins	0 days	2SS+25%		Tue 3/10/09	Tue 3/10/09
4	MS: Task A (Faux Mileston	0 days	2FS+5 days		Tue 4/7/09	Tue 4/7/09
5	Task B	20 days		6	Wed 3/11/09	Tue 4/7/09
6	Finish Up Tasks	3 days	5	7	Wed 4/8/09	Fri 4/10/09
7	Project Complete	0 days	6		Fri 4/10/09	Fri 4/10/09

The finish date for Task B will still change even if Tasks A and B are in process.

A Finish to Finish Relationship

Consider a Task B that may start at any time, but must finish concurrently with Task A plus two days (Figure 8).

Figure 8: Task B with a finish-to-finish predecessor.



If the owner of "Task B" decides an additional 10 days will be needed (making the duration of "Task B" 16 days), this drives the start date of Task B to the left. This doesn't appear to be a problem, unless this drives the start of "Task B" to before today. However, there will come a time when the duration of Task B becomes so long that it may start prior to the start of its

predecessor (Task A). Of course, this isn't logical. A successor activity generally doesn't start prior to the commencement of the predecessor. In this example, Task B (Test) could certainly not start prior to Task A (Integration) without changing the meaning of the terms. If there's no predecessor to drive the start of Task B, why not simply start it on day one of the project? Answering that question will establish a start constraint for Task B. Some task must drive the start of Task B. Determining that task will create the needed finish-to-start predecessor to start Task B; and a hammock task can be created just like above.

More than likely, the logic behind a finish-to-finish predecessor is that tasks will run in parallel: Testing will be done about two days after completion of integration. This drives the finish date of Task B and the project completion date in the example. We're handed the reciprocal problem -- what will drive the start date?

When considering business rules, task relationship may be start-to-start or finish-to-finish. To preserve schedule logic, you also need to drive detail tasks with a Finish-To-Start successor.

Jim Aksel, PMP, PMP-SP, MVP, is the Director of Project Management for Celeris Systems, based in Southern California. He has been working in the aerospace and commercial sectors since 1976 with stints at Boeing, General Electric, Toshiba-America, Rockwell Collins, Raytheon, Northrop Grumman, and others. His leadership involves both domestic and international management. Contact Jim at jim.aksel@celeris-systems.com.

Sorting out Overdue Tasks from Waaaayyyy Overdue Tasks

Michael Nathan, PMP

Recently, a colleague asked how he could tell at a glance which overdue tasks were at least 50% complete and which were less than 50% complete.

- If <50% complete, show red alert (red circle icon)
- If at least 50% complete, show yellow alert (yellow warning icon)

Now perhaps there's a more elegant way to do this, but using the brute force method, here's how I solved it.

Step 1. Customize four fields [Number 1], [Number 2], [Number 3] and [Flag 1] as follows.

Late (field number1). The number fields are used to identify specific conditions, which are then aggregated into the Number 1 or "Late" field, which is exposed on the Gantt view in Figure 2.

Formula: [Number2] Or [Number3] Or [Finish]>Now() Or [Flag1]

>49% (field number2) is used to detect if a task is late and at least 50% complete:

Formula: [Finish]<[Current Date] And [% Complete]>49
And [% Complete]<100

<50% (field number3) is used to detect if a task is late and less than 50% complete:

Formula [Finish]<[Current Date] And [% Complete]<50

Flag 1 is used to detect if a task is complete:

Formula: [% Complete]=100

Step 2. Set graphical Indicators for field [Number 1] (renamed "Late") as shown in Figure 1.

Step 3. Expose only the Late (number 1) field on the Gantt chart.

A note on logic: Field number 1 uses the previous three fields to capture all possible conditions and produce an indicator based on the values found in each of them. Field 1 says, look at all these fields to see if this item is not yet due. Then if it is not yet due, do nothing. If field Number 3 is true, show a red dot. If Field Number 2 is true, show a yellow diamond.

Sample results are shown in Figure 2.

Figure 1: Graphical indicators

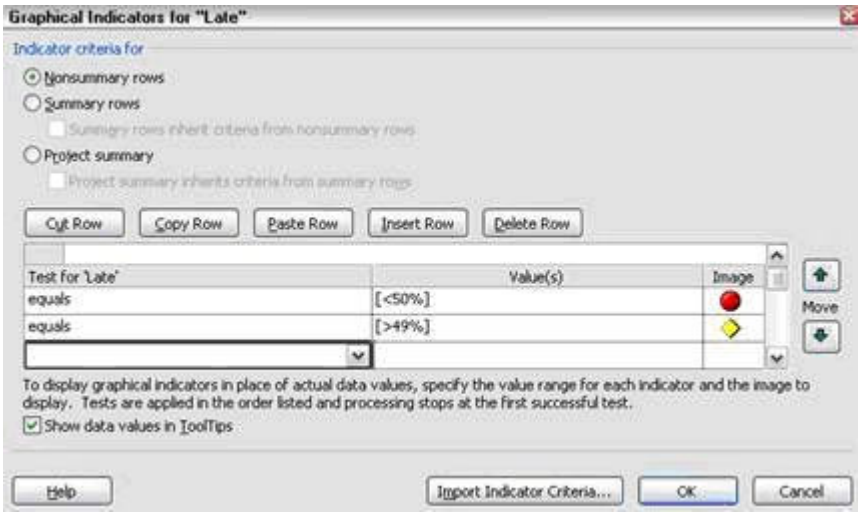


Figure 2: Sample results.

	% Complete	Task Name	Late	Start	Finish	Actual Work	Work
	38%	a		4/1/08	4/1/08	3 hrs	8 hrs
	63%	b		4/2/08	4/2/08	10 hrs	16 hrs
✓	100%	c		4/3/08	4/3/08	8 hrs	8 hrs
✓	100%	d		4/4/08	4/4/08	8 hrs	8 hrs
	0%	e		4/21/08	4/21/08	0 hrs	8 hrs

Mike Nathan, PMP, is a career project manager with the information services firm of Wolters Kluwer. His current responsibilities include leading project success with the Advanced Technologies team within the Global Platform Organization, a shared services unit. Prior to his five-year association with Wolters Kluwer, Mike was a key participant in establishing the CapGemini (then CapGemini Ernst & Young) Project Management Center of Excellence. This program produced 90 PMP-certified project managers in two years. Mike continues to mentor his peers in the "art" of project management, the tools that make it run and the ninja secrets which only come from years of getting dirty in the trenches. Reach him at mike@nathanconsulting.com.

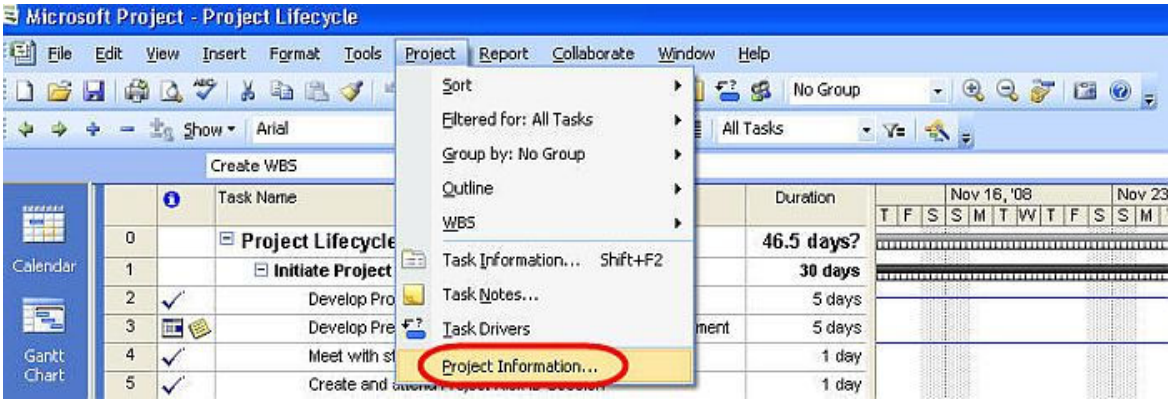
The 30-Second Report

Sam Huffman, PMP

Reports, Views, Tables and Visual Reports all give you great options for communicating project information. They also require time to explore and configure. But there is one reporting tool within Microsoft Project designed to give you on-demand status, that requires no configuration and that's perfect for keeping historical information.

I want to show you the Project Statistics dialog box and how to use it in making a project journal -- a readable, visual history of progress and of learning. Find Project Statistics by first selecting Project from the menu, and then Project Information. See Figure 1.

Figure 1: Open Project Information from the Project menu item.



At the bottom of Project Information, click on the Statistics button. See Figure 2.

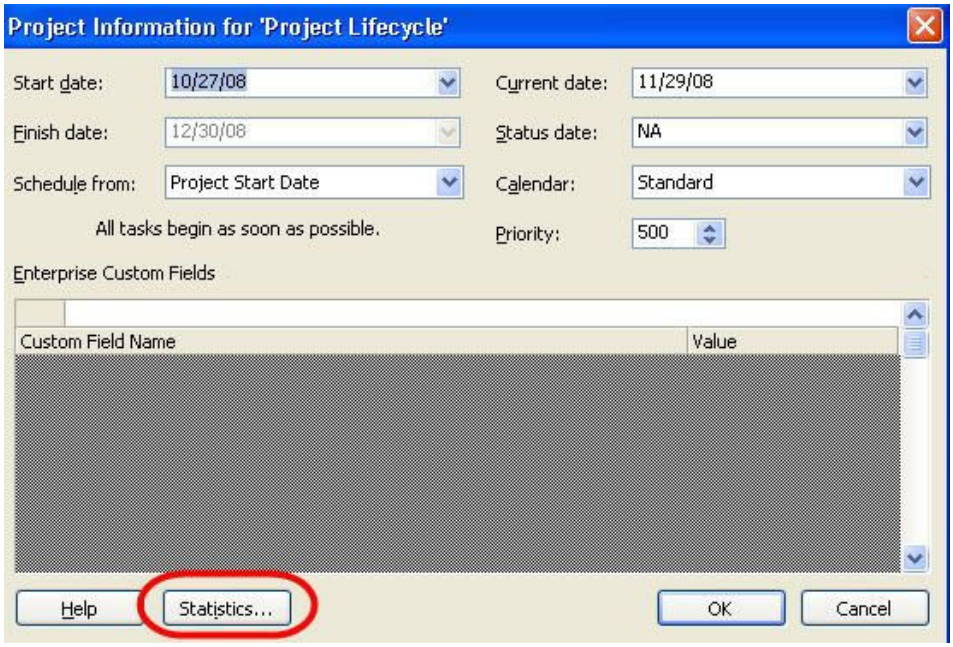
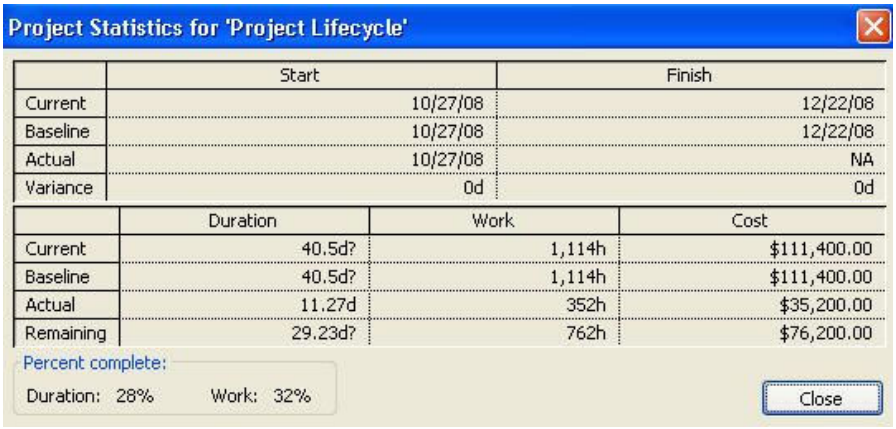


Figure 2: Click on the Statistics button.

This action brings up Project Statistics for your review. Please note that this information is the current status of your Project file. See Figure 3.

Figure 3: Project Statistics offers you the status of the project.

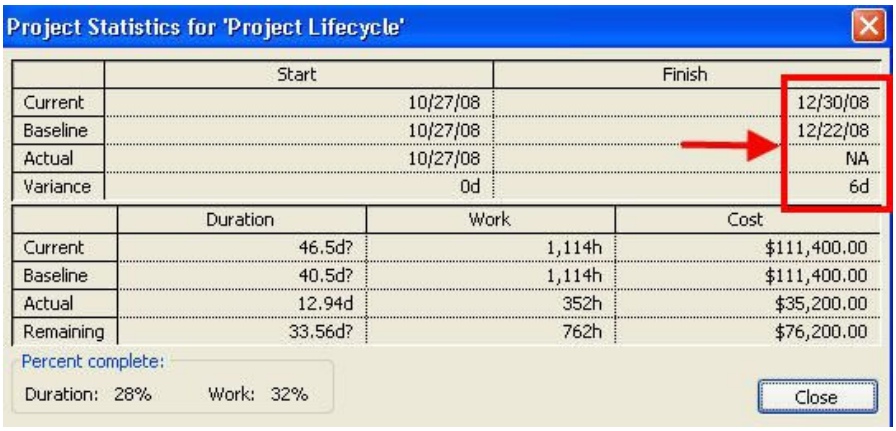


Note how much information is listed! While small, this dialog box is also packed with information you need to know, particularly if you're evaluating progress or documenting the evolution of the project. Pasting this information into a word processor *prior* to entering updates and then again after making updates allows you to easily compare them and evaluate the differences.

To copy Project Statistics into your word processor, you must first copy it onto Windows Clipboard. You copy the dialog box onto the Clipboard by first ensuring Project Statistics is the active window, then by pressing Alt-Print Screen on your keyboard. Paste the data into the word processor with Ctrl-V.

Once the Project Statistics are in your word processor, you can make comments explaining the difference. Here's an example that explains the difference between Figures 3 and 4: "There was a delay of work during the Thanksgiving holiday of 6 days. Costs are stable as is the amount of work, but the schedule has slipped over a week due to the delay."

Figure 4: Status after the delay.



I recommend you try this 30-second reporting technique for a new perspective on project documentation. It allows you easily to create and keep a visual running history of your project.

Sam Huffman, PMP, has been delivering training for The Versatile Company since 1996. Prior to joining Versatile, he gained insight into Microsoft Project while working at Microsoft as a member of the Microsoft Project development and support team. During his tenure at Versatile, Sam has honed his instruction skills by delivering programs for thousands of people. His reputation for delivering practical wisdom with an upbeat style makes him one of Versatile's most requested instructors. Sam may be reached professionally at sam.huffman@versatilecompany.com or personally at projectmanagementinfo@comcast.net.

Your membership gains you:

- **Learning and networking opportunities** that take place in person through regional chapter events and online, through the new MPUG portal.
- **Professional development opportunities**, including publishing, chapter leadership, mentoring, and training activities. Plus, you can earn PMI PDU credits with your participation!
- **Access to the Members-only library**, with archived presentations, how-to articles, templates and other Microsoft Project and Project Server tools.
- **Access to the MPUG career center** and job board.
- **A weekly subscription to the MPUG e-newsletter**, which delivers informative articles, profiles, project management news and downloads, jobs, cartoons, and event alerts, delivered to your inbox.
- **Special discounts and opportunities** exclusively for members.

As a Microsoft Project practitioner you need to stay informed, networked, and fully resourced to remain at the top of your game. After all, you are your best asset. As the only official association for Microsoft Office Project, MPUG membership is essential to staying competitive.

Best, the price of an individual, annual membership is only US$119 — far less than the price you'd have to pay for a day's worth of Project training.

New membership: www.mpug.com/Pages/IndividualRegistration.aspx
Renew your membership: http://www.mpug.com/Pages/renewal.aspx

What other members are saying:

"I wanted to let you know that I really enjoy reading your MPUG 'Ask the Expert' articles."

"Since joining MPUG several years ago, I have consistently received excellent value from my membership. It's clear to me that MPUG offers — bar none — the best PM professional development value available in the market today."

JOIN OR RENEW TODAY!