

Project Managers Specialty Guide to MS Project Issues

Editing the Plan

Always remember that almost anything you do can IMMEDIATELY be UNDONE. If you make a mistake, go to EDIT menu, pick UNDO if available. Project does not have multiple levels of undo, so as soon as you do anything else, you can only undo that last action. You can, of course, always close the plan without saving changes and it will revert to the last saved version when reopened.

Sharing the Project Plan

Shared Directory Access

Shared Directory Access works if each person pays strict attention to the file when it opens as READ ONLY. This indicates someone else is in the file and any modifications will NOT be able to be saved into the existing file.

The benefit of using a Shared Directory Access approach is anyone can edit the file, if nobody else is already doing it, at their leisure.

The downside to a Shared Directory Access approach is going to edit the file and finding someone else beat you to it.

Routing Updates

Routing Updates works if you have one person responsible for maintaining the plan. This person would create a Routing List and email the first person on the list, who makes their changes and then emails the file to the next person on the list, etc., until the original person receives the file back at the end of the route. The fully edited file would then be published to the accessible area for everyone to view but not edit.

Routing is built in to Office. To use this feature:

Open the Project Plan

On the FILE menu, Pick SEND TO, then ROUTING RECIPIENT

Click on ADDRESS and pick the people to route to

Use the MOVE arrows to organize the order for routing

Enter a SUBJECT for the routing email

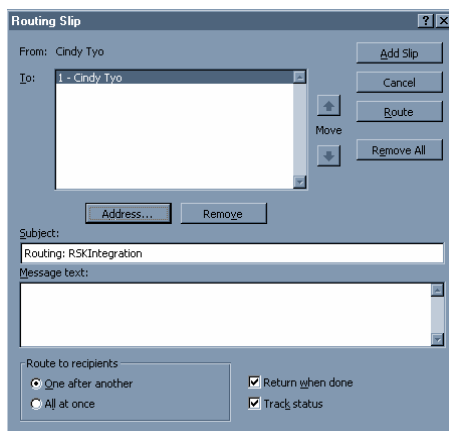
Enter a MESSAGE or leave blank, can be instructions if necessary

At the bottom, pick ONE AFTER ANOTHER

Leave the RETURN WHEN DONE box checked

TRACK STATUS will notify original sender as each person forwards file

To send, click ROUTE



When you receive a Routed file:
Open the file and make edits, save file
On the FILE menu, Pick SEND TO, then NEXT ROUTING RECIPIENT
Click OK

Dedicated Controller

Alternatively, one person can be responsible for receiving updates and edits from the other people and manually revise the project plan and publish it. The biggest drawback to this idea is the time involved for the individual required to make the revisions.

Adding and Deleting Tasks

Adding New Tasks

Click on the task you want to insert ABOVE
EITHER RIGHT CLICK and pick NEW TASK OR
Go to INSERT menu, pick NEW TASK
This inserts a new, blank task

Pasting Copied Tasks

After you've copied a task
Click on the task you want to insert ABOVE
EITHER RIGHT CLICK and pick PASTE OR
Go to EDIT menu, pick PASTE OR
Click on the PASTE button in the button bar OR
Hit the CONTROL KEY and the V KEY together
This inserts the copied task into the plan

Deleting Tasks

Click on the task you want to delete
Hit the DELETE key on your keyboard
Answer YES to the confirmation question
This deletes the selected task from the plan

Resource Change Impacts

Because there are so many resources used repeatedly throughout the plan, it's imperative to consider how your edits and updates will impact the other Project Managers resource usage. After every resource update, check the allocation and make sure your change hasn't over allocated that resource again.

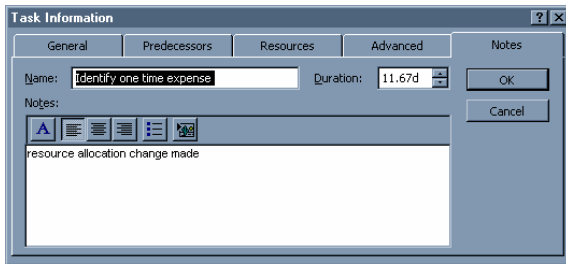
Communication is the Key

If you see a note attached to a task, make SURE you read it in case it's important to any of your tasks which might be dependant on the annotated task.

If you have something important to communicate to the other team members, annotate the tasks.

Task Notes

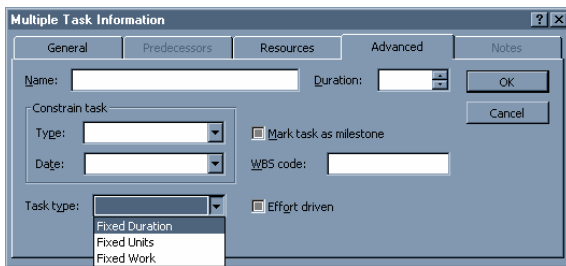
Click on the task you want to annotate
EITHER RIGHT CLICK and pick TASK NOTES OR
Go to PROJECT menu, pick TASK NOTES
This attaches the note to that task



What to Control

Choosing what to “fix” in your plan is essential. Your particular plan has been set to Fixed Duration so no resource assignments impact the task durations.

To assign which type of “fix” for each task:
Click on the task, or highlight multiple tasks together
EITHER RIGHT CLICK and pick TASK INFORMATION OR
Go to PROJECT menu, pick TASK INFORMATION OR
Hit the CONTROL KEY and F2 KEY together
Click on the ADVANCED tab
Pick the TASK TYPE from the drop down menu



Fixed Duration

When a duration is fixed, adjusting the resources will not impact the task timing.

Fixed Units

When a unit is fixed, adjusting the resources will recalculate the task duration to expand or contract based on the addition or subtraction of resources.

Fixed Work

When the work is fixed, adjusting the resources or duration will impact the other.

Ordering Tasks: Links and Constraints

With a plan as date driven as yours, it's important to include some form of constraint or linkage between tasks. That way, as a task duration is modified, the tasks which are affected will automatically be updated. This is essential if your tasks are predecessors to other people's tasks so they will be warned of slipped dates or reschedules.

Linking

The most often used linking for tasks "steps" them. As one task ends, another may begin, but not before then. You can add "lag time" to the end of a task, or "lead time" to the beginning of a task, if you need to create a buffer for possible date slippage. This type of linking is called Finish-to-Start (FS). You can use this type of linkage for summary tasks as well.

There are three other linking types:

1. Start-to-Start (SS) where both tasks begin together
2. Finish-to-Finish (FF) where both tasks end together
3. Start-to-Finish (SF) where the predecessor task begins after the subordinate task ends.

Based on the tasks in your plan, the typical (FS) type of linking would be the correct choice.

To create an (FS) task link:

Click on the PREDECESSOR TASK (the first task)

Holding the CONTROL KEY, Click on the DEPENDANT TASK (the second task)

EITHER pick the LINK button from the button bar OR

Go to EDIT menu, pick LINK TASKS OR

Hit the CONTROL KEY and F2 KEY together

This will link the two tasks

To UNLINK tasks which are linked:

Click either task item involved in the link

Click the BROKEN LINK button in the button bar OR

Go to EDIT menu, pick UNLINK TASKS

This breaks the linkage between the two tasks

Constraints: Date Driven Restrictions

Constraints are related to specific date restrictions. Someone going on vacation who is vital to a task being completed, for instance, would require a constraint be placed on the task so it cannot begin until that person has returned from their vacation.

The default constraint applied to all tasks is the As Soon As Possible (ASAP) constraint. This constraint is flexible and can, obviously, change the task start date if an opening in the plan becomes available. Using the Fixed Duration prevents MS Project from changing your dates, regardless of the default constraint.

Assigning the Start No Earlier Than (SNET) constraint is flexible as well, as it tells Project the task may be scheduled to begin later than the scheduled date. Again, using Fixed Duration prevents MS Project from changing your dates, regardless of the assignment of this constraint type.

The only real need to assign a constraint is where there is an absolute requirement based on a date. There are eight total constraint types, the other six are below (they are all defined on page 55 of the Project book):

1. As Late As Possible (ALAP)
2. Finish No Earlier Than (FNET)
3. Finish No Later Than (FNLT)
4. Start No Later Than (SNLT)

- 5. Must Finish On (MFO)
- 6. Must Start On (MSO)

To assign a constraint to a task:

Click on the task you want to constrain

EITHER RIGHT CLICK and pick TASK INFORMATION OR

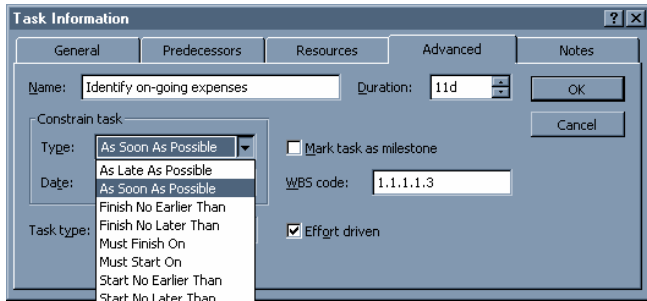
Go to PROJECT menu, pick TASK INFORMATION OR

Hit the CONTROL KEY and F2 KEY together

Click on the ADVANCED tab

Pick the TYPE of constraint from the drop down menu

Pick a DATE, or let Project assign the current start or finish date



To review constraints in the plan (in Gantt Chart View):

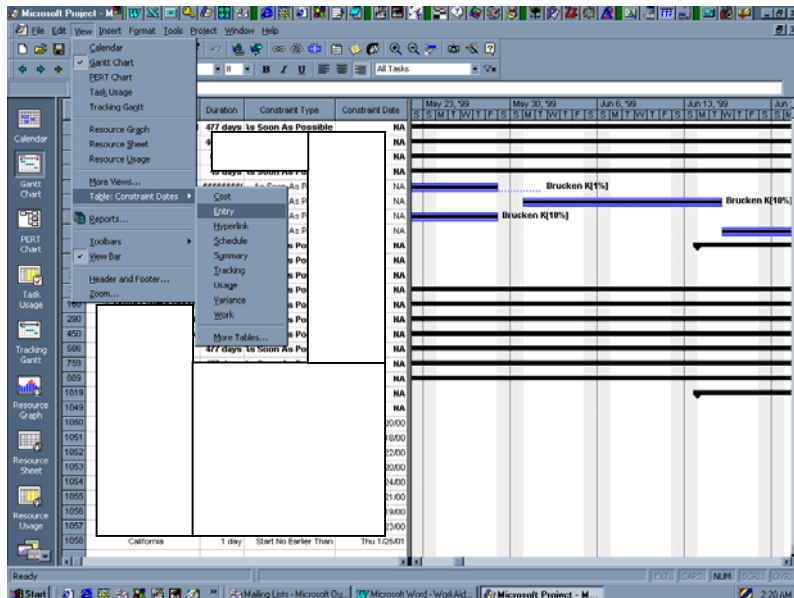
Go to VIEW menu, pick TABLE: ENTRY, pick MORE TABLES

Pick CONSTRAINT DATES from the list

Click APPLY

To view the “normal” Gantt Chart View again (from Constraint Dates):

Go to VIEW menu, pick TABLE: CONSTRAINT DATES, pick ENTRY



To remove a task constraint:

Every task is constrained in some manner. You can set the task back to the default constraint of As Soon As Possible which effectively “removes” the constraint.

Resource Allocations

This is, honestly, the only really big issue with your plan. Everything else is merely cosmetic. This is the entire reason for doing the plan in the first place, to allow management to see an outline of the projected work and the allocation of resources to do the work.

Unfortunately, this is also the messiest portion of your plan because everything is assigned to a few people, mostly managers.

We've discussed, together, some ways to manage the over allocation of resources in your plan. Here are those ideas, again, along with some other considerations for future development and as editing occurs.

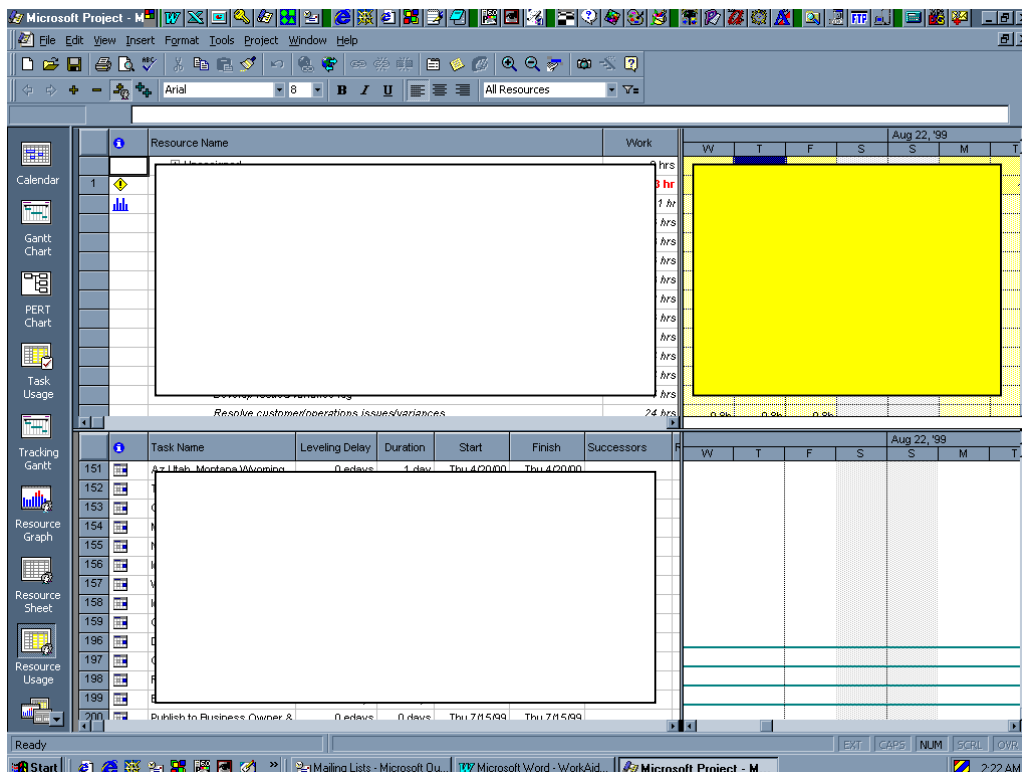
Correcting Over Allocations

Before you can correct an over allocation, you have to identify the resources that are over allocated and where they're scheduled. Then you can plan the appropriate manner to change their allocation.

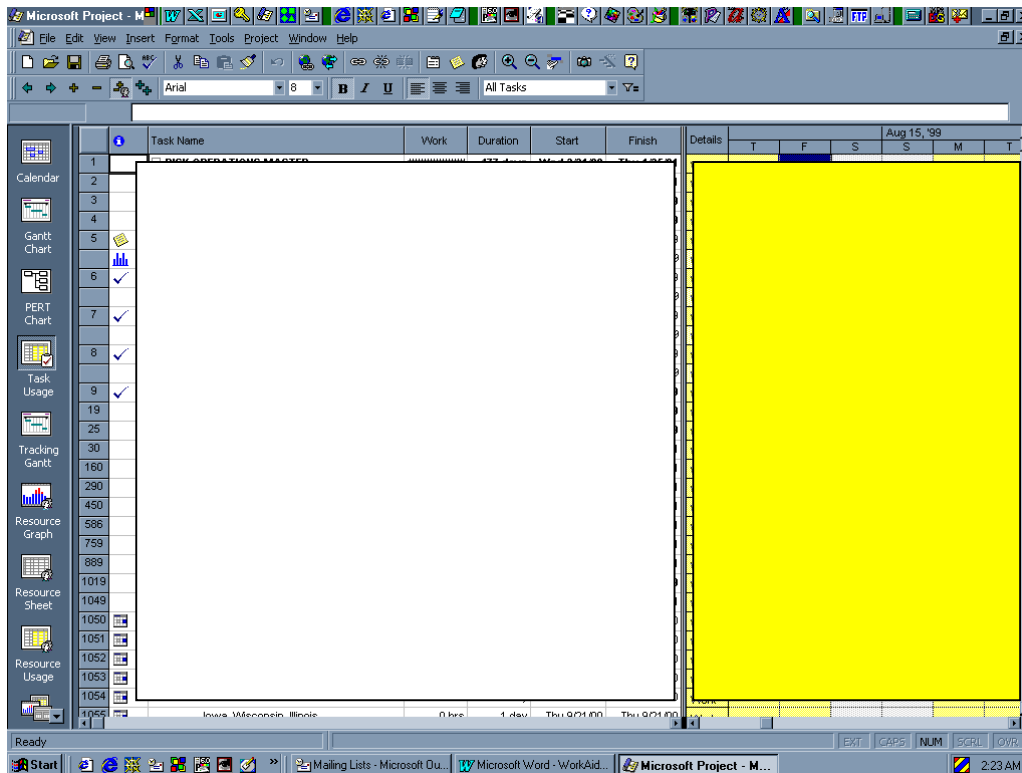
To view the resource allocations for your plan:
Go to VIEW menu, pick MORE VIEWS
Pick RESOURCE ALLOCATION from the list
Click APPLY

What you'll see is a four-way split window showing resource names and assigned tasks in the upper left window with the hours per day listed in the upper right window and the tasks view in the lower left window with the resource Gantt chart view in the lower right window. These four window views are related to each other, notice how the information changes in the windows as you click different areas.

Any resource that is colored red in the upper left window is over allocated.



Another great way to view resources and tasks together is to look at the TASK USAGE view. This lists the resources directly under their associated tasks and makes it incredibly easy to actually edit the work hours assigned to the resource.



There are various ways to correct over allocations. We've discussed assigning the resource as a percentage of the total resource "bank" available for the task and we've discussed limiting the overall availability of different resources for the entire plan. These are outlined below, along with some other suggestions.

NOTE: I'm not covering TASK ADJUSTMENTS for allocation correction as it's been made abundantly clear that the task duration is not adjustable in most, if not all, cases.

Decrease Resource's Work Hours on a Task

Go to RESOURCE USAGE view

Decrease the hours listed under WORK per task (since the entire plan is set to FIXED DURATION this will not change task duration, it will modify the % displayed for that resource in the Gantt Chart view)

I don't recommend doing this. It's better to adjust the time worked as described immediately below under Part Time.

Assign Resource to Work Part Time on a Task – *recommended for this plan*

Go to GANTT CHART view

Click on the task with the over allocated resource

EITHER RIGHT CLICK and pick TASK INFORMATION OR

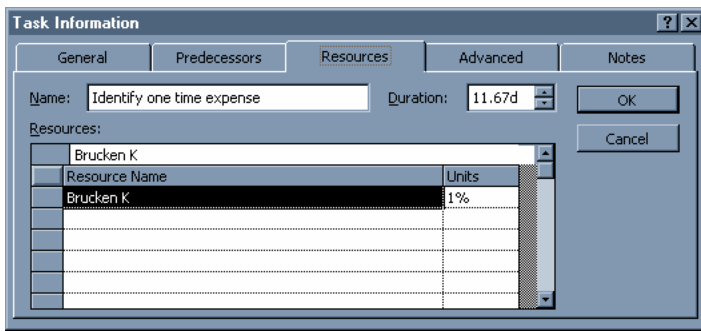
Go to PROJECT menu, pick TASK INFORMATION OR

Hit the CONTROL KEY and F2 KEY together

Pick the RESOURCES tab

Under UNITS, adjust the % of time the resource will devote to that task (this is a % of the resource's time for the entire period of time covered by this task)

Click OK



ALTERNATIVELY:

Go to TASK USAGE view

Click on the resource you'd like to edit the hours worked

Under WORK, change the number of hours

When switched back to GANTT CHART view, notice the % assignment for that task has changed but duration has not because the plan is FIXED DURATION

Change Resource's Working Time

Go to TOOLS menu, pick CHANGE WORKING TIME

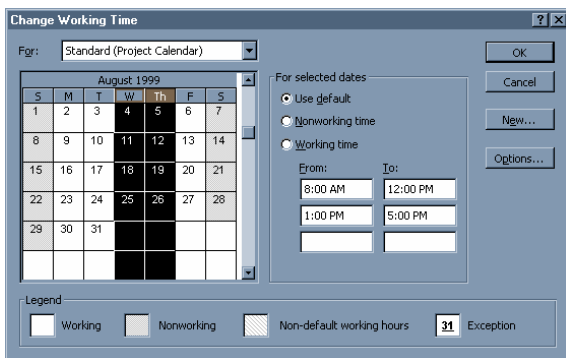
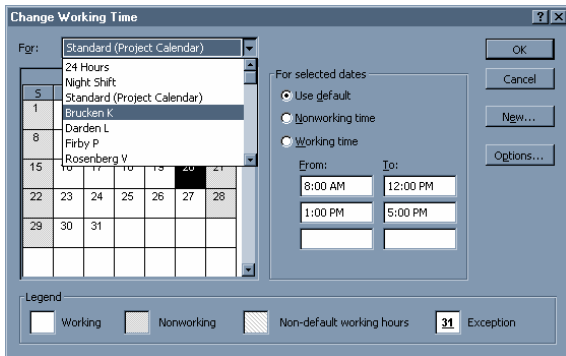
Under FOR, pick the resource from the drop down list

On the CALENDAR, select days to edit working time (to pick all dates under a day, click on the day – M for Monday's, etc.)

Click WORKING TIME (notice past dates become underlined and bold)

Adjust the FROM and TO under WORKING TIME

Click OK



Assign Under Allocated Resources to Tasks

Where over allocated resources are possibly not necessary to actually complete the task, consider replacing them with an under allocated resource instead.

Manager Assignments

Managers, unless directly doing the task themselves, should be scheduled as fractional percentages rather than 100% on the various tasks. Where a manager is in fact doing the actual task, they should be scheduled more reasonably based on the number of tasks they will touch in a given day. The majority of allocation in this plan is to a small number of people.

Worker Assignments

Frequently, assignment of tasks is not brought down to the actual worker level, which is where it belongs. There are a large number of the resources in the resource list with little or no allocation.