

# Creating Master Files

USING MICROSOFT PROJECT



## Definition

A Master File is a compilation of two or more subordinate files, usually with related information. The subordinate files, called subprojects, may be dependent on one another with deliverables and receivers but this is not a requirement.

The Master File allows for aggregation, grouping, sorting, and filtering by various custom fields within Microsoft Project. For example, if there are tasks in many schedules utilizing the same custom fields (such as an assigned responsible party or department), it is possible to use grouping features to aggregate all tasks in multiple files to the same responsible person or party.

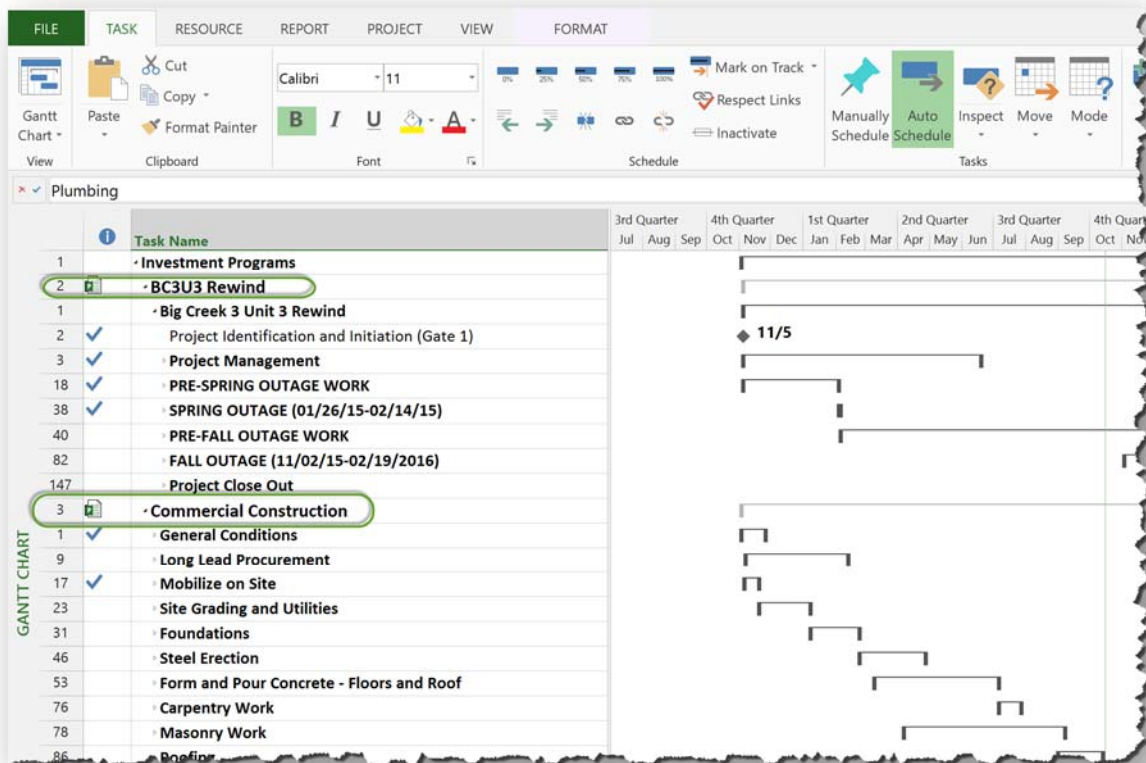


Figure 1 Example Maser Project File

## General Information

### Linked or Static

Master Files usually contain data dynamically linked to a subproject file; alterations to the subproject file automatically reflect in the master file. In this case, the files are linked. It is also possible to create a Master file that is at a specific point in time and only a copy of the subproject



contents appear in the Master (as they exist at the time of creation). Most uses of a Master Project involve dynamic linking.

### Master File Location

Although a Master File may exist in any location with subproject files from any other location, it is expedient to locate the master file and subproject files in one folder. This folder, and its contents, essentially becomes the Master File.

*Failure to follow this architectural guideline greatly increases the probability of file corruption and incorrect file references.*

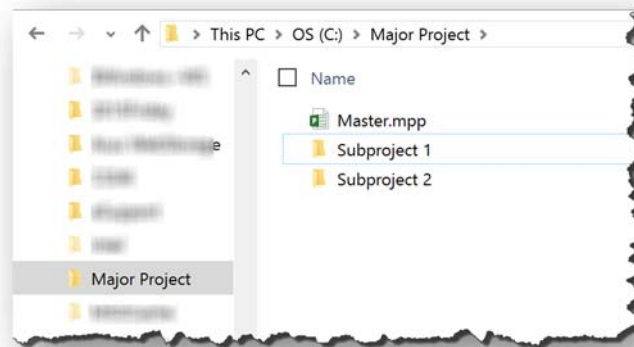
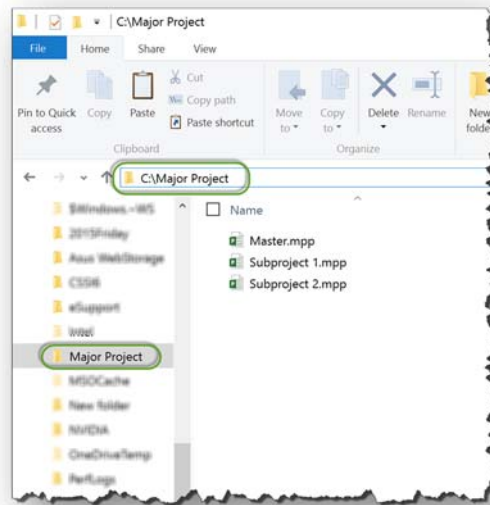


Figure 2 Master File and Subproject Architecture (two options)

It is acceptable to have a Master Folder with subproject folders, as long as the Master.mpp is in one folder and all subprojects are in folders subordinate to the Master.mpp folder. The folder containing the Master.mpp may be located on a network.



## File Naming

File names must remain static (to include their location). Although tempting to place status data in the file name (MySubProject yyyy-mm-dd.mpp), this practice automatically corrupts the Master file as soon as the status information changes.

It is better to make a copy of the entire *master project folder* and rename the entire folder with the status information:

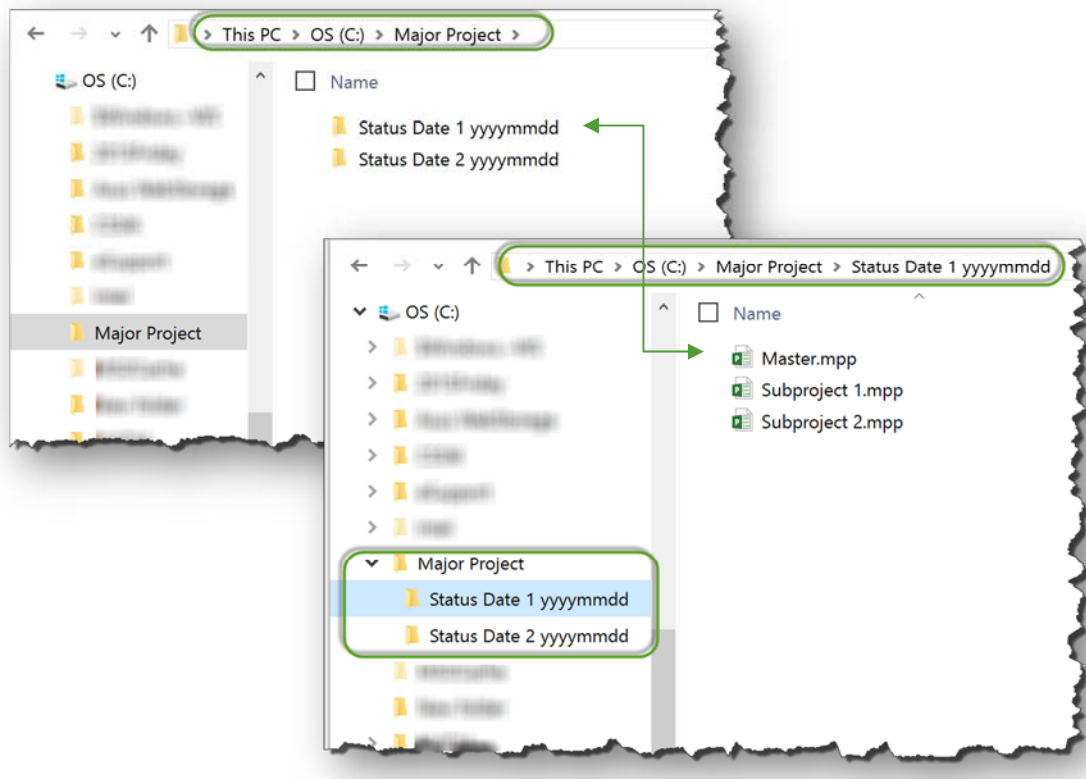


Figure 3 File Architecture with Status Date

## Procedure

### Create Location and Load Files

Determine the location for the Master.mpp, making a new folder as necessary. Generally, the folder is on a network location available to all stakeholders. It is acceptable to make this location on a local personal computer and then move the folder (along with all its contents) to a new network location. Making a local file, and then transferring it, often times reduces the time necessary for Master.mpp file creation.

Place all the files that will become the subprojects into the newly created folder location. This folder location may contain subordinate folders as long as the relationships and file names remain static.



## Create Empty Master File

If the subproject files are from a template, the master file uses same template.

Open a copy of the template and delete all tasks in the template. Sometimes it is necessary to make a copy of one of the files to be included in the master and rename it. This will preserve the customizations such as bar style formatting, formulas, tables, views, and custom fields (Text<sub>1</sub>, etc).

It is customary to have one task in this Master.mpp file indicating the name of the overall program containing all the subordinate project files.

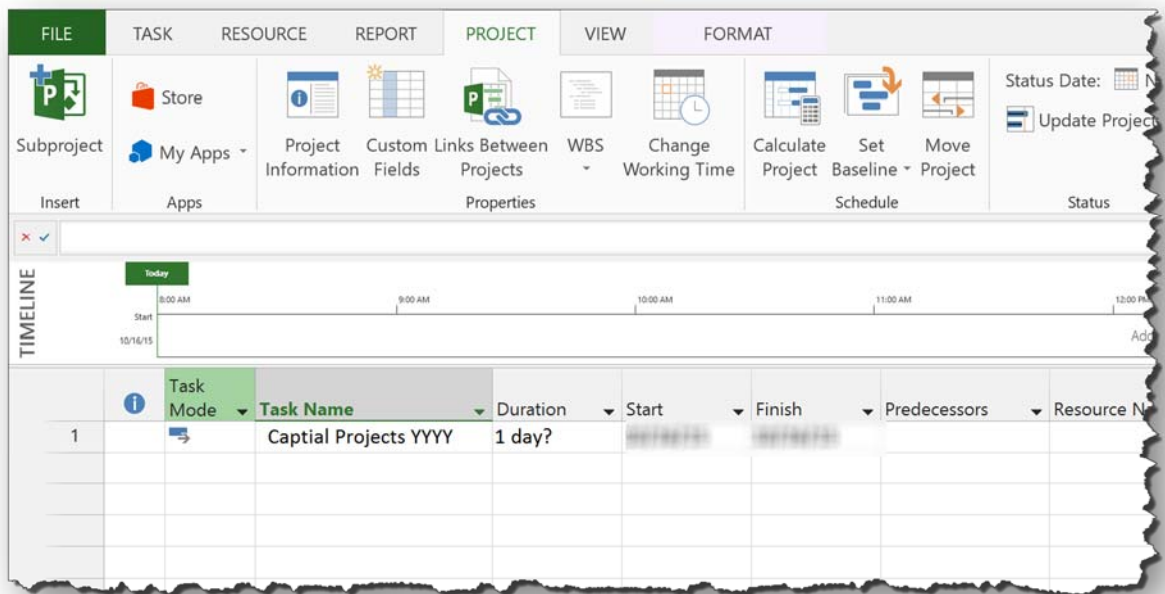


Figure 4 Clean Template with Single Task

Using File Save As... save a copy of the file to the desired location. It is customary to use the word “Master” as part of the file name.

## Insert Subprojects

Things to verify prior to creating a master:

1. All subproject have the same Project Start Date and that date matches the Master
2. Formulas for subproject custom text fields (such as Text<sub>1</sub>, Duration<sub>1</sub>, Finish<sub>1</sub>) match across each subproject. If there are discrepancies, make sure they are understood and are acceptable.
3. Status dates match and match the Master
4. Formulas and Lookup Tables in the subproject files and master files are consistent. Remember, in the master, you access these items for the Master only, not the subprojects.

With the new Master.mpp file open, select the task where the subproject will reside. Select Subproject from the Project Tab:



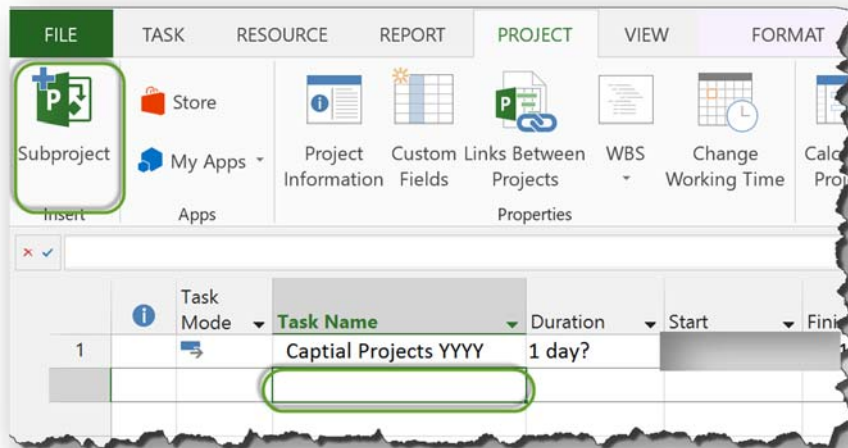


Figure 5 Insert Subproject

Browse to the same folder containing the master and select one additional project for inclusion in the Master.mpp:

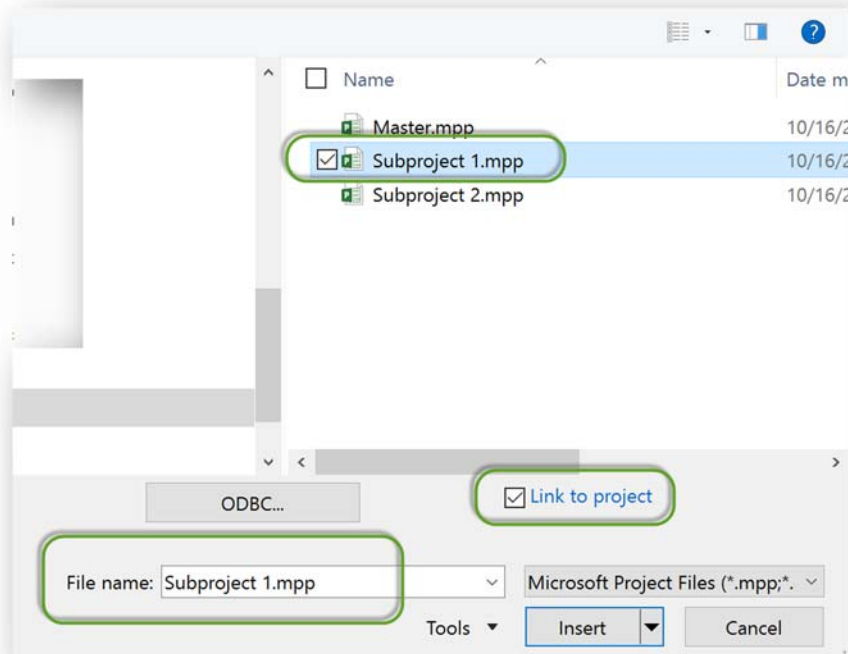


Figure 6 Specify Link Projects

If the content of Subproject1.mpp is to be dynamic (changes to Subproject1.mpp become visible in Master.mpp), then select the Link to project checkbox. This should be the default assumption.

Indent the file to the proper level of indenture before proceeding to the next file.



Repeat the insert/indent process as necessary for each project.

### Subproject File Location

Verify the correct files and locations by inserting the Subproject field into a convenient view. If a file name or location is incorrect, it is possible to correct the file location (including name) by editing the Subproject field.


| Task ID | Task Name              | Subproject File   | Duration |
|---------|------------------------|---|----------|
| 1       | Capitall Projects YYYY |   | 430 days |
| 2       | Subproject 1           | C:\Major Project\Status Date 1 yyyyymmdd\Subproject 1.mpp | 428 days |
| 3       | Subproject 2           | C:\Major Project\Status Date 1 yyyyymmdd\Subproject 2.mpp | 344 days |

| Task ID | Task Name              | Subproject File   | Duration  |
|---------|------------------------|---|-----------|
| 1       | Capitall Projects YYYY |   | 428 days? |
| 2       | Subproject 1           | C:\Major Project\Status Date 1 yyyyymmdd\Subproject 1.mpp | 428 days  |
| 3       | Subproject 3           | C:\Major Project\Status Date 2 yyyyymmdd\Subproject 3.mpp | 1 day?    |

Note: All files must trace back to the same template to ensure things like custom field formulas and other display characteristics will be the same in all files (including the master).

Note: The status date of the Master and all subordinate files must match for the Master to be meaningful.

Note: In order for this to work, the correct file must reside in the newly correct edit, see below. If the file does not exist in that location, Microsoft Project will raise an error.

Note: If the Microsoft Project icon  is not visible in the indicators column, then the file is not linked (the Subproject File field will also be empty).

### Create Cross Project Predecessors

Creating and maintaining predecessor/successor relationships between tasks in different files is the subject of a different paper.



For more information visit:

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