

## How to synchronize Microsoft Project file with SharePoint task list

This post will show you how to synchronize tasks from your Microsoft Project planning with SharePoint. This typically addresses users/companies that do not want to invest in the full version of Project server, but would like to share task list and project information with some stakeholders.

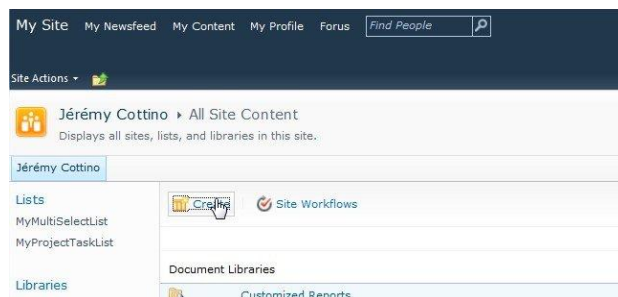
### Create a Microsoft Project simple project

Here is a very simple project that contains 2 summary tasks with 3 subtasks.

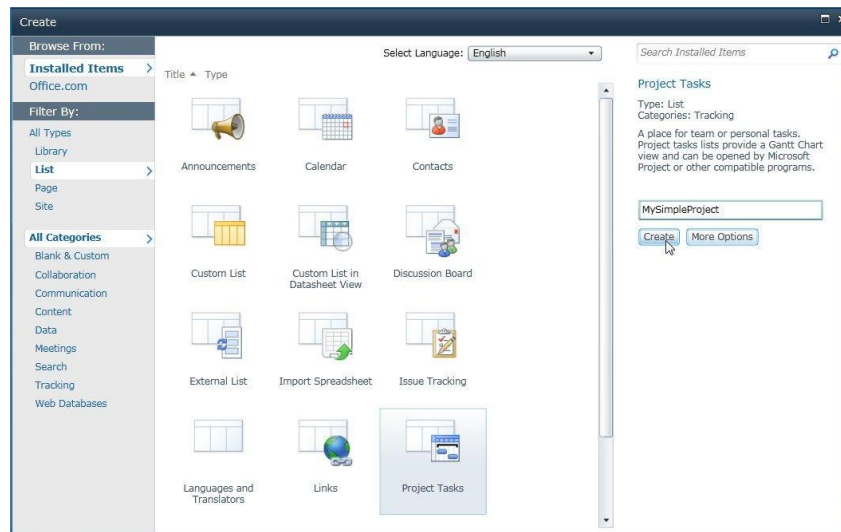
	Task Name	Duration	Start	Finish	Predecessors	Resource Names
0	<b>MySimpleProject</b>	<b>11 days</b>	<b>Tue 05.07.11</b>	<b>Tue 19.07.11</b>		
1	Phase 1	6 days	Tue 05.07.11	Tue 12.07.11		
2	Task 1.1	4 days	Tue 05.07.11	Fri 08.07.11		Jérémy Cottino
3	Task 1.2	2 days	Mon 11.07.11	Tue 12.07.11	2	Jérémy Cottino
4	Milestone of phase 1	0 days	Tue 12.07.11	Tue 12.07.11	3	Jérémy Cottino
5	Phase 2	5 days	Wed 13.07.11	Tue 19.07.11		
6	Task 2.1	2 days	Wed 13.07.11	Thu 14.07.11	4	Jérémy Cottino
7	Task 2.2	3 days	Fri 15.07.11	Tue 19.07.11	6	Jérémy Cottino
8	Milestone of phase 2	0 days	Tue 19.07.11	Tue 19.07.11	7	Jérémy Cottino

### Create a task list in SharePoint

Open your SharePoint site, go to 'view all site content' and click on 'Create'



## Create a list from 'Project Tasks'

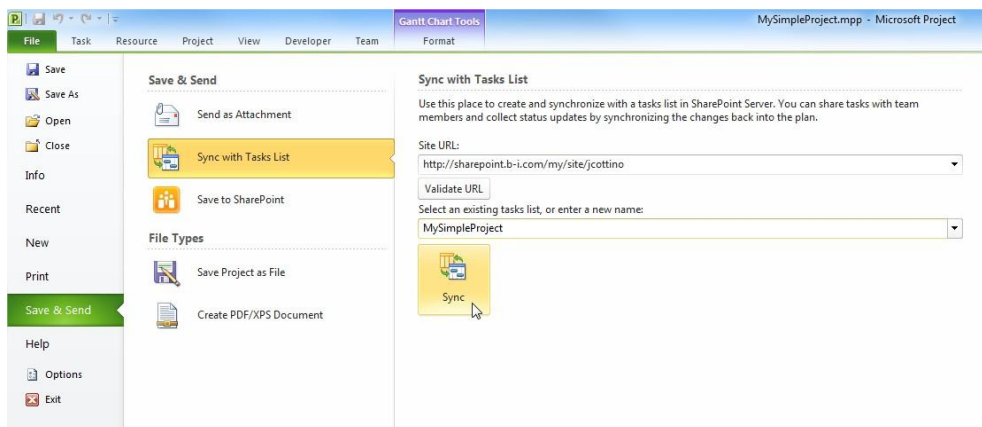


Note that you can also use simple task list, for which there are small differences in the views provided.

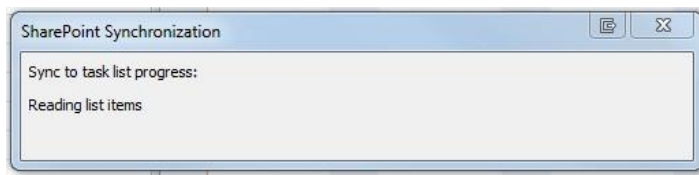
## Synchronize Project tasks to SharePoint

In Microsoft Project, click on the 'File' tab, select 'Save & Send' and then click on 'Sync with Tasks List'.

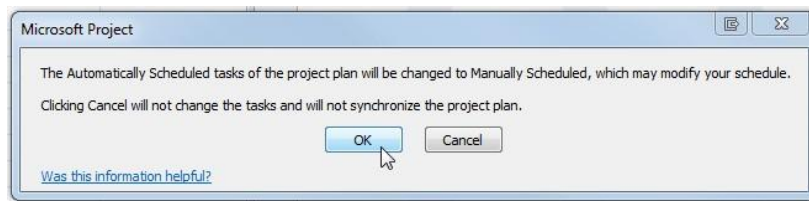
Type the site URL, and select your list.



Click on 'Sync'.

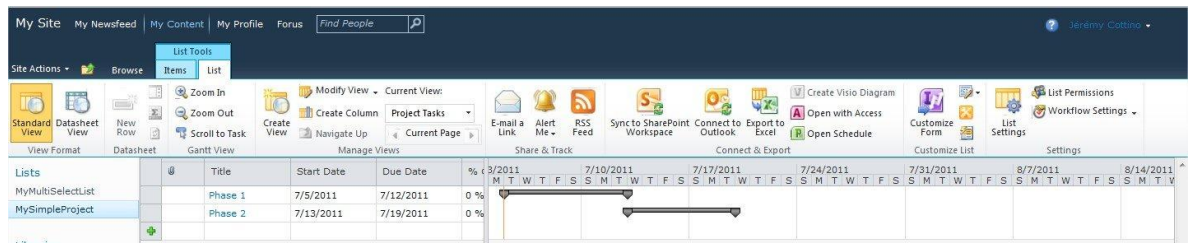


The following warning message will pop up. This is one of the limitations of the standard Microsoft Project to SharePoint synchronization - only Manually Scheduled tasks can be synchronized. Microsoft Project will convert all your tasks from Automatically Scheduled to Manually Scheduled.

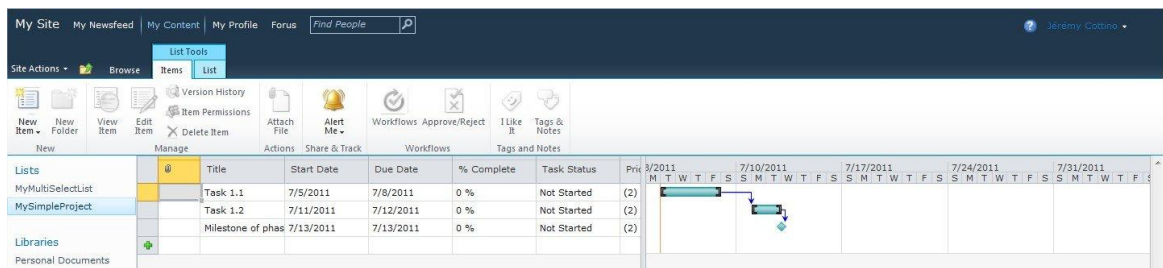


Open your SharePoint list and check synchronization

Summary tasks are supported and displayed.

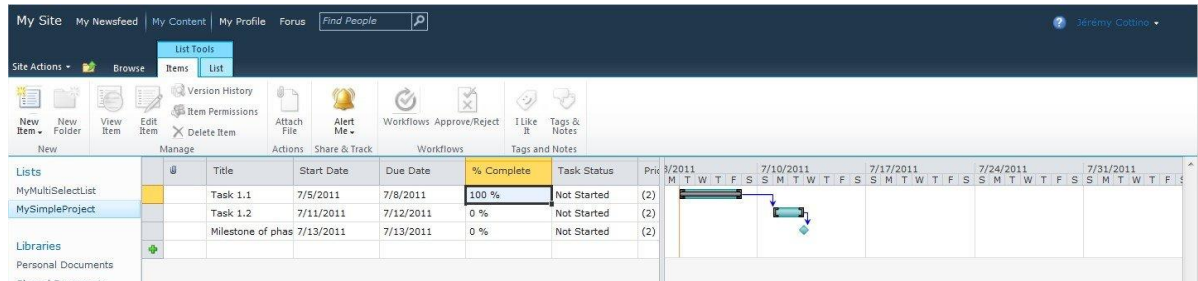


If you click on one of the summary tasks, you will find all sub tasks.

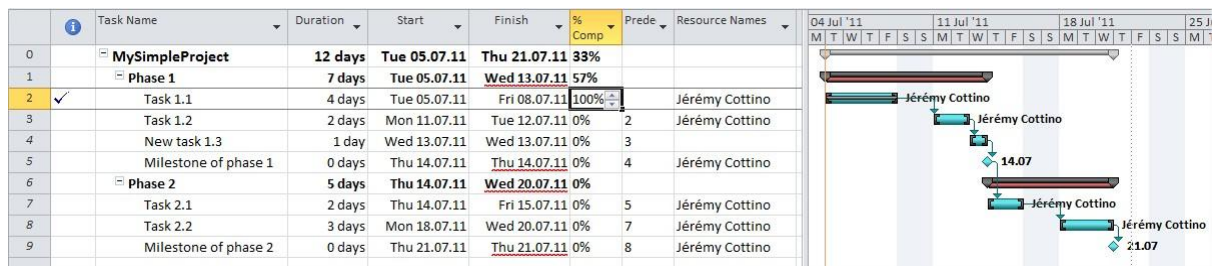


## 2-way Synchronization

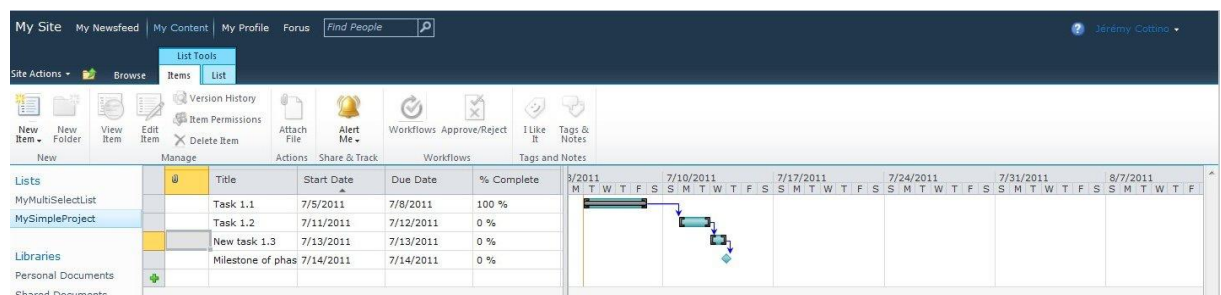
Make a change on SharePoint, for e.g. update task % complete for task 1.1 to 100%



On the other hand, create a new task in Microsoft Project (New task 1.3)

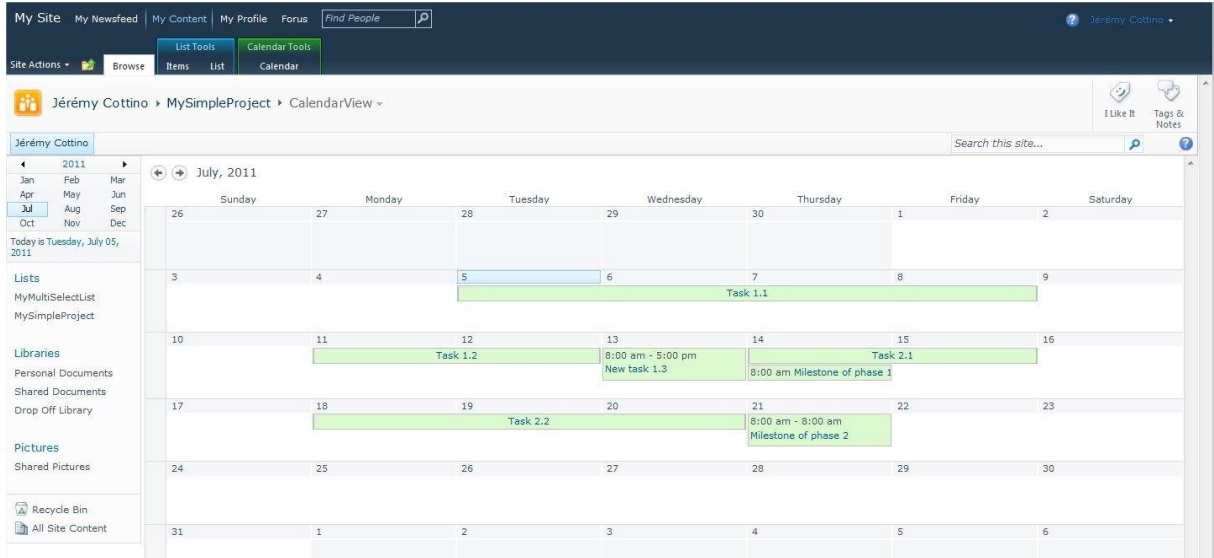


Run synchronization, and check the update in SharePoint/Microsoft Project.



Available view in SharePoint

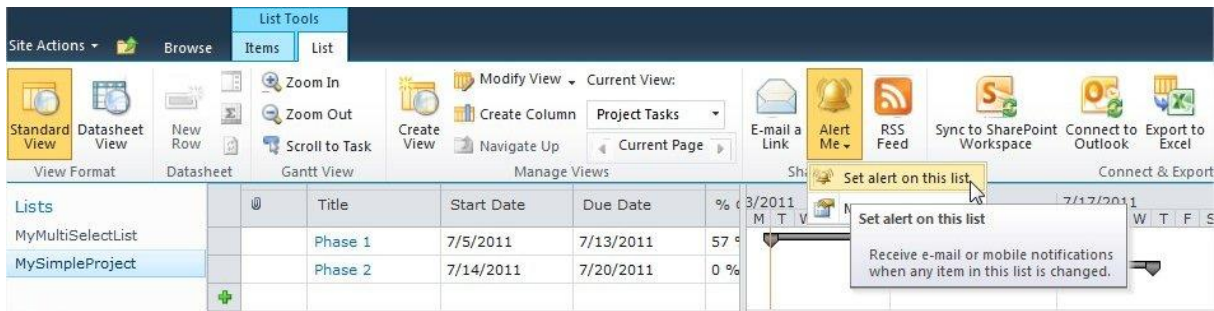
We already saw the default Gantt view; you can also create a calendar view



Receive update notification

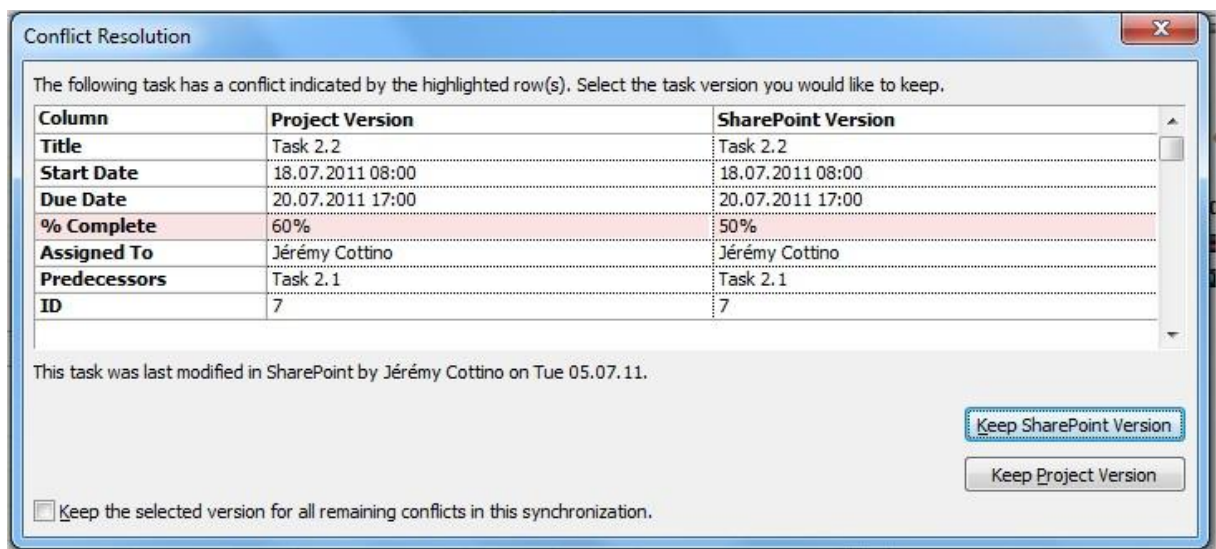
There is a standard feature in any SharePoint list or document library that allows the user to be notified of any changes that occur to any item in a list.

To subscribe to notifications, open the 'List' option and click on 'Alert Me'. You will then have to select the frequency of notifications and the type of modification to be reported.

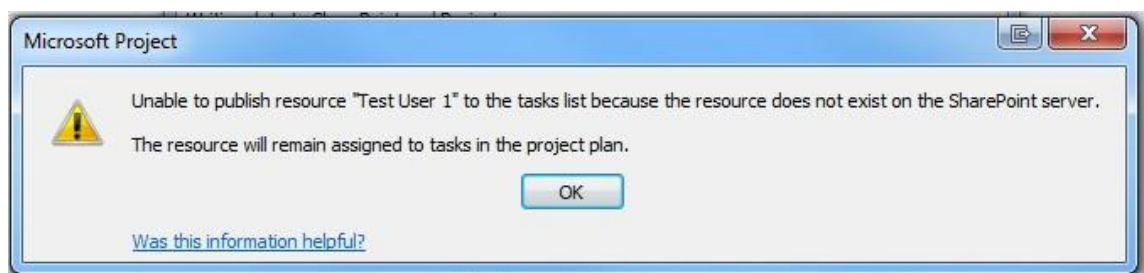


## Synchronization issues

You can face some synchronization issues; the first of which is the conflict. The same item has been modified both in SharePoint and Microsoft Project. In this example the %complete has been modified on both sides with different values. The synchronization process pops up the conflict resolution window to help you to resolve this issue.




Another synchronization issue is related to resource assignment. SharePoint can only synchronize resources that exist within its environment. In this example the user named "Test User 1" is assigned to a task in Microsoft Project, but as it does not exist in SharePoint, the synchronization cannot be completed. The resource assigned to this task is therefore removed in SharePoint.

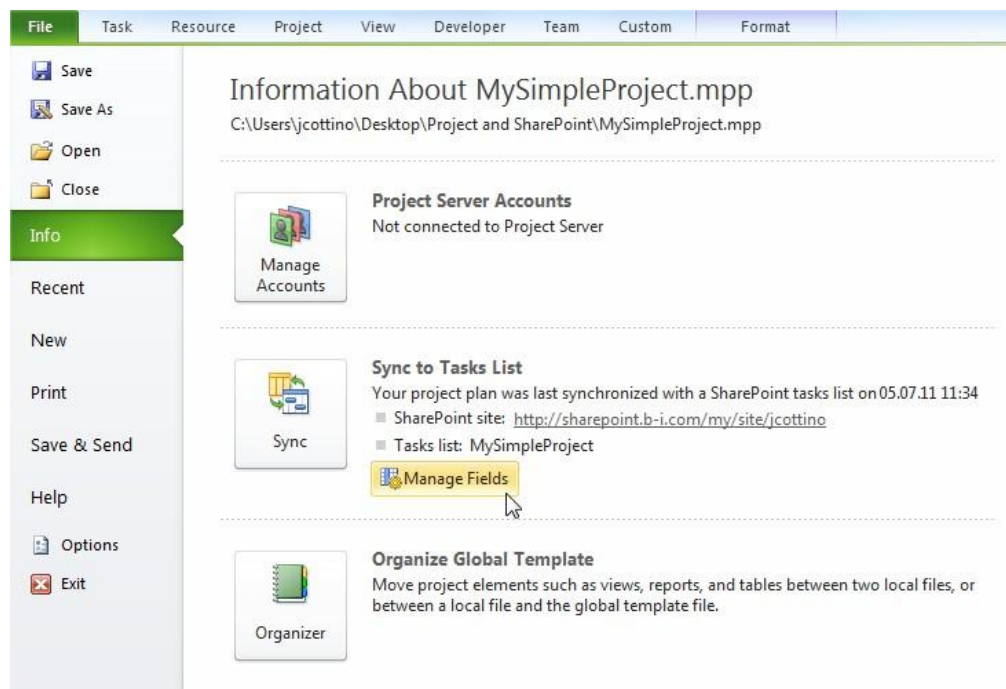


## Manipulate Custom Fields

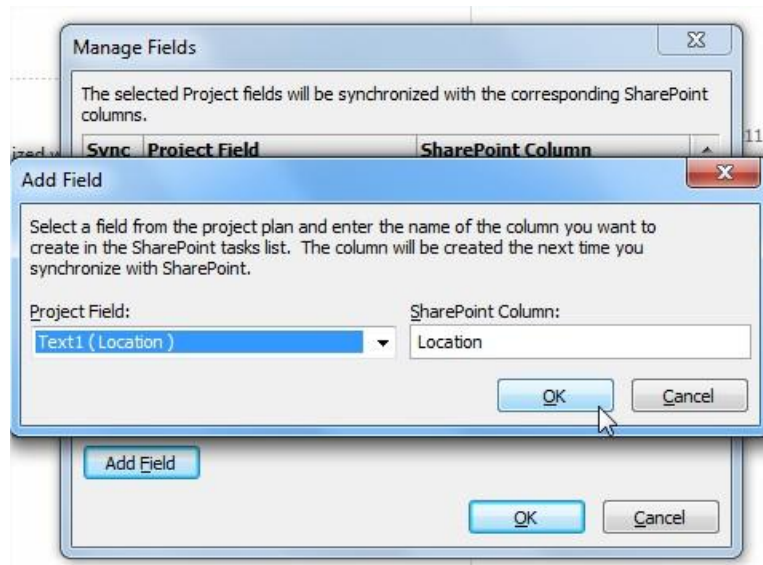
You can create custom fields in Microsoft Project and synchronize them with SharePoint. In the following example, I have created a text column called 'Location' and assigned some values.

		Location	Task Name	Duration
0			[-] <b>MySimpleProject</b>	<b>12 days</b>
1			[-] <b>Phase 1</b>	<b>7 days</b>
2	✓	Onsite	Task 1.1	4 days
3		Onsite	Task 1.2	2 days
4		Offshore	New task 1.3	1 day
5		Onsite	Milestone of phase 1	0 days
6			[-] <b>Phase 2</b>	<b>5 days</b>
7		Offshore	Task 2.1	2 days
8		Offshore	Task 2.2	3 days
9		Onsite	Milestone of phase 2	0 days

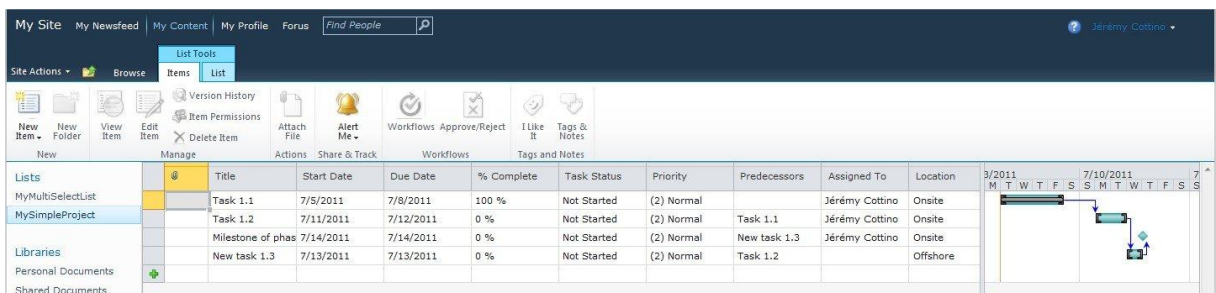
In Microsoft Project, select the 'File' tab, and then click on 'Manage Fields'.



Select the 'Text1 (Location)' project field. The corresponding column in the SharePoint list will then be created upon the next synchronization.



Modify the SharePoint List view to display the new field. Location is now displayed and synchronized.



## Restrictions

Here are the restrictions of such synchronization processes:

- Only works with SharePoint Foundation or SharePoint Server 2010
- Only works with Project Professional
- Only works when Project Professional is not connected to Project Server
- Synchronized tasks become Manually Scheduled tasks (cannot keep Auto Scheduled)

Comparison between this method and Project Server

	Project Sync	Project server
<b>Synchronization</b>	2-way	2-way
<b>Tasks</b>	Yes	Yes
<b>Task work</b>	Yes	Yes
<b>Project meta data</b>	Task fields	Yes
<b>Resource assignment</b>	Yes	Yes
<b>Work</b>	No	Yes
<b>Portfolio/program level rollup</b>	No	Yes
<b>Field mappings</b>	Task only	Project, Task, Resource
<b>Task modes</b>	Manual only	Auto or Manual
<b>List mapping</b>	Yes	No
<b>Projects per site</b>	Single	Multi