

## Calculating Utilization for Rooms Scheduled in Microsoft Outlook

The following instructions will describe how to calculate utilization for a single room that has its events and meetings recorded in a Meeting Maker calendar. The result will show the percent time utilization by comparing the scheduled hours in a room to the actual hours available.

In order to calculate time utilization for rooms, you must first export the calendar's data to a text file (part one of these instructions) and then manipulate the data in Microsoft Excel (part two).

Please note that these instructions:

- Show calculations for one month's room usage for one room only\*
- Require intermediate knowledge of Microsoft Excel
- Are based on the menus for Meeting Maker v.8.6.0b43 run on Windows XP Professional

### \*Additional Resources

If you are interested in creating summaries for multiple rooms and/or larger date ranges, using formulas that incorporate named cell ranges would be more ideal than the formulas shown in these instructions. For more information on ranges, please refer to Microsoft Office help "Define named cell references or ranges".

Examples of more complex summaries are available on the Space Utilization Initiative website at <http://www.provost.umich.edu/space>. These include formulas that calculate utilization by date, day of week, or comparing room to room.

You may also send your raw data to the Space Utilization Initiative team and be provided a summary report of your data similar to the examples on the website. For this service or any questions, please contact the Space Utilization Initiative team.

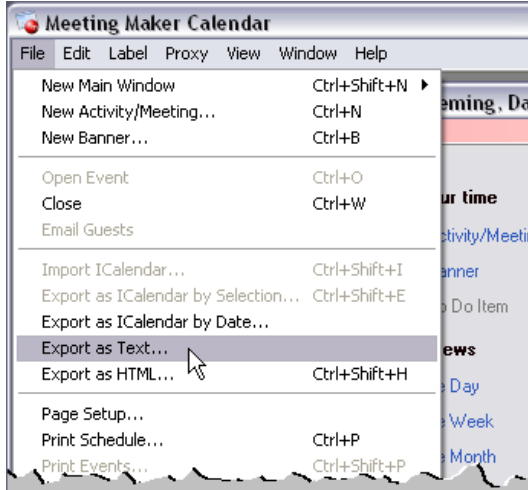
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**Part One: Export calendar data from Meeting Maker to a text file**

1. Open the calendar for the room you wish to get time utilization information from.
2. Go to file and click “Export as text...”



3. Uncheck “Contacts” and “To-Dos” and specify the date range of the data you’d like export and click OK. In this example, we are looking at the calendar month of June.



4. A folder navigation dialog box will pop up. Navigate to the folder to which you’d like to save the file. Name the file and click the “OK” button.

**Part Two: Calculating in Microsoft Excel**

1. The text file should now be in the location you specified above. Open the file with Microsoft Excel and resave the file as an Excel workbook. The file should look similar to the following:

	A	B	C	D	E	F	G	H	I
1	Time Zone	USA Eastern (USA)							
2	Events								
3	Title	Location	Date	Start Time	Duration	Private	Flexible	Label/Color	Agenda/No
4	Faculty/Student coffee		6/1/2007	12:00	1:30	0	0		
5	Project status		6/4/2007	10:00	1:00	0	0		-----
6	Brown bag series		6/4/2007	12:00	1:30	0	0		
7	Administrative staff meeting		6/5/2007	8:00	1:00	0	0		
8	Candidacy discussion		6/5/2007	8:30	1:30	0	0		-----
9	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
10	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
11	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
12	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
13	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
14	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
15	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
16	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
17	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
18	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
19	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
20	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
21	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
22	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
23	Faculty lunch meeting		6/6/2007	12:00	1:30	0	0		
24	Study group		6/27/2007	12:00	5:00	0	0		
25	All staff meeting		6/28/2007	8:00	2:00	0	0		
26	Faculty/Student coffee		6/29/2007	12:00	1:30	0	0		

2. Format document to resemble the image below. Rows 1 and 2 as well as some columns have been removed. Additionally a new column titled “Duration (converted)” has been added

	A	B	C	D	E
1	<b>Title</b>	<b>Date</b>	<b>Start Time</b>	<b>Duration</b>	<b>Duration (converted)</b>
2	Faculty/Student coffee hour	6/1/2007	12:00	1:30	
3	Project status	6/4/2007	10:00	1:00	
4	Brown bag series	6/4/2007	12:00	1:30	
5	Administrative staff meeting	6/5/2007	8:00	1:00	
6	Candidacy discussion - week	6/5/2007	8:30	1:30	
7	Faculty lunch meeting	6/6/2007	12:00	1:30	
8	Thesis defense	6/7/2007	8:00	4:00	
9	Thesis defense	6/7/2007	8:00	4:00	

3. In the empty cell underneath the “Duration (converted)” column heading, you will need to convert the duration recorded in column D to a numeric value. The formula in this example is =D2\*24.

	A	B	C	D	E
1	<b>Title</b>	<b>Date</b>	<b>Start Time</b>	<b>Duration</b>	<b>Duration (converted)</b>
2	Faculty/Student coffee hour	6/1/2007	12:00	1:30	=D2*24
3	Project status	6/4/2007	10:00	1:00	
4	Brown bag series	6/4/2007	12:00	1:30	
5	Administrative staff meeting	6/5/2007	8:00	1:00	

4. Copy this formula down for the remainder of the meetings and change the format to “Number” with two decimals. The worksheet should appear similar to following:

	A	B	C	D	E
1	<b>Title</b>	<b>Date</b>	<b>Start Time</b>	<b>Duration</b>	<b>Duration (converted)</b>
2	Faculty/Student coffee hour	6/1/2007	12:00	1:30	1.50
3	Project status	6/4/2007	10:00	1:00	1.00
4	Brown bag series	6/4/2007	12:00	1:30	1.50
5	Administrative staff meeting	6/5/2007	8:00	1:00	1.00
6	Candidacy discussion - wee	6/5/2007	8:30	1:30	1.50
32	Study group	6/27/2007	12:00	3:00	3.00
33	All staff meeting	6/28/2007	8:00	2:00	2.00
34	Faculty/Student coffee hour	6/29/2007	12:00	1:30	1.50

5. To get useful summary/utilization statistics, you will need to do the calculations on a separate sheet. Insert a new worksheet into the workbook and set up the structure similar to the following:

	A	B	C	D
1	<b>Conference room utilization</b>			
2	<b>Total time available in hours</b>			9
3				
4				
5	<b>Day</b>	<b>Date</b>	<b>Total hours used</b>	<b>Time utilization</b>
6	Friday	6/1/2007		
7	Saturday	6/2/2007		
8	Sunday	6/3/2007		
9	Monday	6/4/2007		
33	Thursday	6/28/2007		
34	Friday	6/29/2007		
35	Saturday	6/30/2007		

6. Under the "Total hours used" column, you will need to use a SUMIF function to sum the total hours of meetings used for a specific date. In this example, the formula is:

**Formula structure:**  
 =SUMIF(range, criteria, sum\_range)

**Exact formula for this example:**  
 =SUMIF('Calendar'!\$B\$2:\$B\$33, Summary!B6, 'Calendar'!\$E\$2:\$E\$33)

	A	B	C	D
1	<b>Conference room utilization</b>			
2	<b>Total time available in hours</b>			9
3				
4				
5	<b>Day</b>	<b>Date</b>	<b>Total hours used</b>	<b>Time utilization</b>
6	Friday	6/1/2007	=sumif(	
7	Saturday	6/2/2007	SUMIF(range, criteria, [sum_range])	
8	Sunday	6/3/2007		

**Formula explanation:**  
 In this example, the formula sums the total hours used ('Calendar'!\$E\$2:\$E\$33) for a specific date (Summary!B6) within a specific date range ('Calendar'!\$B\$2:\$B\$33). The dollar sign is used in the formula to prevent the cell references from changing when you copy the formula down. The part of the cell reference preceded by the "\$" will not change.

**Please note** this example shows the calculation of June’s usage only. If you want to create a summary document to which you would add data monthly, this formula would not be ideal. Using named ranges rather than referring to them by the actual cell locations would be more ideal. For more information on ranges, please refer to Microsoft Office help “Define named cell references or ranges”. For examples of more complicated summaries, please visit the Space Utilization Initiative website at <http://www.provost.umich.edu/space>.

7. Copy the formula down for the remainder of the rows.
8. In the “Time utilization” column, divide the numbers of hours used that day by the total hours available for the room. In this example, the total number of hours available is 9, noted in cell C2.

	A	B	C	D
1	<b>Conference room utilization</b>			
2	<b>Total time available in hours</b>		9	
3				
4				
5	<b>Day</b>	<b>Date</b>	<b>Total hours used</b>	<b>Time utilization</b>
6	Friday	6/1/2007	1.5	=C6/\$C\$2
7	Saturday	6/2/2007	0	

9. Copy the formula down and change the cell format to percentage. Your summary page should appear similar to the following:

	A	B	C	D
1	<b>Conference room utilization</b>			
2	<b>Total time available in hours</b>		9	
3				
4				
5	<b>Day</b>	<b>Date</b>	<b>Total hours used</b>	<b>Time utilization</b>
6	Friday	6/1/2007	1.5	17%
7	Saturday	6/2/2007	0	0%
8	Sunday	6/3/2007	0	0%
9	Monday	6/4/2007	2.5	28%
10	Tuesday	6/5/2007	2.5	28%
11	Wednesday	6/6/2007	1.5	17%
12	Thursday	6/7/2007	2	22%
34	Friday	6/29/2007	1.5	17%
35	Saturday	6/30/2007	0	0%

If you have any questions, please contact the Space Utilization Initiative team by email at [space.utilization@umich.edu](mailto:space.utilization@umich.edu) or by phone at (734) 763-9973.