

# Gantt chart using excel

[Engineering](#), [Project Management](#)



Project-Management with Gantt-Charts OpenOffice. org 2. 0 Calc [Projekt-Management und Gantt-Diagramm mit OpenOffice. org 2. 0 Calc and Comment creer un diagramme de Gantt avec OpenOffice. org] [1. 1] First editions: [2005-06-06 and 2003-01-03] First English edition: [2005-11-09]

Contents Contents

Contents.....	
..... 1 Copyright and trademark information.....	
Feedback.....	
..... 2	
Acknowledgments.....	
..... 2 Modifications and updates.....	
3	
Overview.....	
..... Starting the Process.....	
..... 2 Converting the simple bar-chart into a Gantt chart.....	5
Using the chart as a graphic in other applications.....	9
Extending Gantt charting for Project Management.....	11
About the macro.....	
..... 12 Example: Planning a	

relocation..... 13

Controlling the

Project.....

.. 17 Public Documentation License, Version 1.

0..... 19 Project-

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example In illustration 1, the subtasks of the relocation-process appear on the y-axis, and the time line on the x-axis.

The bars show when a task should start and when it will be finished. Blue bars show tasks which have been completed. Yellow bars show work which still must be done. Project-Management with Gantt-Charts 5 Starting the Process Starting the Process To chart a project, all the sub-tasks must first be collected in a spreadsheet. In this simple example there is the name of the task, the start-date and the duration in calendar days: Illustration 2: Task list This simplified project consists of eight subtasks “ Task 1” to “ Task 8”. Next, begin creating the chart by selecting Insert—Chart: Illustration 3: Create the chart

From the dialogue “ AutoFormat Chart” define the selection range. Neither the first row (containing the column label) nor the first column (containing the task name) should be included as data. Project-Management with Gantt-Charts 2 Starting the Process Click “ Next ;;” , and choose the Chart type: Illustration 4: Choose chart type Choose the horizontal bar-chart and click “ Columns” to indicate that the data are arranged in columnar form. Note: This changes the assignment of the axis in OpenOffice. org Calc. Now the horizontal axis is called “ Y” and the vertical axis is called “ X”. Click “ Next ;;” and choose the variant “ Stacked”:

Illustration 5: Create chart with stacked bars Project-Management with Gantt-Charts 3 Starting the Process Click “ Next ;;” once again and enter chart and axis titles: Illustration 6: Adapt chart labeling The first Gantt Chart appears as follows: Illustration 7: Bar chart The task names are on the vertical axis (“ Task 1” to “ Task 8”) and the time line is on the horizontal

axis. Project-Management with Gantt-Charts 4 Converting the simple bar-chart into a Gantt chart Converting the simple bar-chart into a Gantt chart In order to edit the properties of an element in the diagram,. double-click the chart to select it.

Next, right-click to open the context menu and gain access to the chart properties: Illustration 8: Edit diagram properties Note: Ensure that no element in the diagram is selected, because otherwise the axis-properties can not be edited Project-Management with Gantt-Charts 5 Converting the simple bar-chart into a Gantt chart Select the y-axis, which now is the horizontal time line. (One could also select the horizontal axis using a left-click then right-click to open the context menu and finally choose Object Properties ... to format this axis. ) Set the Minimum to the real start-date, In this example this is 01/01/05.

Furthermore the axis should get the start date, so check the checkbox "Automatic" in the line " Axis at": Illustration 9: Adjust the time line This produces a chart as follows: Illustration 10: Gantt chart Project-Management with Gantt-Charts 6 Converting the simple bar-chart into a Gantt chart The orange bar symbolizes the time up to the start of the task. This bar should be made invisible. For this select the orange bar with a left-click, and then open its Object Properties after a right click. Under the tab " Borders" choose Style - Invisible, and under the tab " Area" choose Fill - None.

Now the chart presents itself as follows: Illustration 11: The completed Gantt chart Project-Management with Gantt-Charts 7 Converting the simple bar-chart into a Gantt chart Project-Management with Gantt-Charts 8 Using the chart as a graphic in other applications Using the chart as a graphic in other <https://assignbuster.com/gantt-chart-using-excel/>

applications To use the Gantt-chart as a picture in another application, save the whole Calc document as HTML. This generates not only the HTML-file, but also a jpeg-file containing the chart which can then be included in other documents, such as anOpenOffice. org impress presentation.

Remember to give the graphic a more descriptive name than, the the name suggested when the document is exported to HTML so that it can be found easily later Project-Management with Gantt-Charts 9 Using the chart as a graphic in other applications Project-Management with Gantt-Charts 10 Extending Gantt charting for Project Management Extending Gantt charting for Project Management In order to manage a project, still more information is needed. The progress of any task should be tracked as a percentage of the task and displayed in the chart, and the dependencies of the subtasks should also be documented.

Furthermore the start-date should be determined automatically based on these dependencies. To be able to create such a plan easily, a template was made by the German Native Language Community ( <http://de.openoffice.org/> ) called `pjm_template.ots`. Illustration 12: Calc template `pjm_template.ots` The current version of Gantt. zip contains the example spreadsheet and the spreadsheet itself can be downloaded from [http://documentation.openoffice.org/HOW\\_TO/spreadsheet/pjm\\_template.ots](http://documentation.openoffice.org/HOW_TO/spreadsheet/pjm_template.ots) Note: This template uses macros and upon opening displays a security warning. Therefore, macros must be enabled to use the file.

The file, created from the template, contains the following columns: • • • • •  
• • • • “ Info” - Information about the progress of the task “ No. ” - unique number of the task. It is recommended to count in intervals of 100, to be <https://assignbuster.com/gantt-chart-using-excel/>

able to add tasks later on “ Activity” - description of the task “ Start” - start-date of the task “ Duration” - planned or actual duration of the task in calendar days “ End” - end-date of the task. This gets calculated based on the start-date and duration. “ Progress” in percentage “ Done” - Duration \* progress “ Undone” - expected time remaining: Duration - Done 11 Project-Management with Gantt-Charts

Extending Gantt charting for Project Management • “ Predecessor” - List of tasks, which have to be completed, before this task can start. Separation is made by spaces. The column titles in the first row can be labeled freely, but the columns must not change their position. Some columns have a colored background: • • gray: these columns contain formulas, which are calculated automatically light blue: these columns can be edited manually, they can possibly be changed by the macro. It is recommended to use the last row for the end of the project. Thus new tasks, which are inserted above, are displayed in the chart automatically.

About the macro The macro is named “ update” and is written in OpenOffice.org BASIC. The way it works follows this sequence: ? ? Add duration and end-date, if they are missing For each row of the table 1. Where the task has not yet started (Progress ;= 0) Search for rows, whose number corresponds with the value in the column “ Predecessor”. For those not familiar with project management terms, a predecessor is an activity that must be completed (or be partially completed) before a specified activity can begin. ( See <http://www.apm.org.uk/page.asp?categoryID=4&29=0> for definitions. a) Determine latest possible end-date of these rows b) Set the successor start-date to this end-date ? ? Where the task is finished (Progress = 100%)



1. Determine duration from start-date and end-date Illustrate information of task ? The meaning of this list of steps is described later on in this document. The macro expects that the first row contains the headlines, the tasks start in row 2 and the columns are in the same place as in the example. Additional columns (for comments or some other purpose) must be located at the end. Note: The maximum number of predecessors is limited to 9. Project-Management with Gantt-Charts 2 Extending Gantt charting for Project Management Example: Planning a relocation This section describes the process of relocating from one city to another city and is based upon the template, pjm\_template. ots. The first step is to create a list with all subtasks: Illustration 13: List of subtasks In preparing the set of tasks, getting mail forwarded was missed. So we inserted the activity “ Forwarding request” in row 8 after the fact. Therefore this activity has the number 650. Inserting a row does not automatically copy any formulae, thus all the formulae must be copied to each cell in the new row manually.

Project-Management with Gantt-Charts 13 Extending Gantt charting for Project Management Next insert the start-date for the not-dependent tasks, as well as duration and expected enddate: Illustration 14: Insert start- and end-date House-hunting starts on 01/03 and should be finished by 31/08. For all the other tasks the duration is given. Now, define the dependencies of the tasks. The relocation (700) for example can not start before the new leasing contract is signed (400) and the relocation is organized (500). The tasks 300-9999 have no dependencies, thus there are no start-dates for these tasks.

Illustration 15: Define dependencies Next insert the start-date for the not-dependent tasks, as well as duration and expected enddate: Project-

Management with Gantt-Charts 14 Extending Gantt charting for Project Management Illustration 16: Insert start- and end-date House-hunting starts on 01/03 and should be finished by 31/08. For all the other tasks the duration is given. Now define the dependencies of the tasks. For example, relocation (700) can not start before the new leasing contract is signed (400) and relocation is organized (500). The tasks 300-9999 have no dependencies, thus there are no start-dates for these tasks.

Illustration 17: Define dependencies As 20% of house-hunting are already done, and the current apartment is already canceled, the progress is 20% and 100% respectively. Project-Management with Gantt-Charts 15 Extending Gantt charting for Project Management Illustration 18: Calculated duration At this point call the macro by clicking on the button “ Update”. The duration and end-dates are calculated, and the column start is completed. Illustration 19: The appropriate chart The organization of the relocation, the registration at the office and the opening of an account can be done simultaneously.

On the other hand the bank account can not be moved immediately, because the current apartment is not yet relocated. Project-Management with Gantt-Charts 16 Extending Gantt charting for Project Management Controlling the Project During any project, start by implementing several subtasks. To begin a subtask, insert the start date in the column “ Start”. Set the progress to a value greater than zero (1% e. g. ), so that “ Update” will no longer change this date. If a task is completed, insert the real End-date, delete the duration and set the progress to 100%. When calling “ Update” the next time, the required duration will be calculated.

After each change in the table, invoke the macro " Update" to update the table accordingly. The " Info" column shows the current status of the project:

Illustration 20: Table during project-controlling House-hunting has begun and is on schedule according to the progress The apartment has already been canceled, the task is completed. Cancelling the bank's order is due and not

on schedule, this means, that the end-date is prior to the current date. All the other tasks are not due yet, they are not marked. Project-Management

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