

## Gantt Notes

www.gantt.com

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**Gantt** runs as an application (in a separate window) within smartapp.com. To view saved files close the Gantt window and you will be in the File Central work space.

## Storage & Saving

smartapp.com provides you with storage space (5 GB) for free and you can also link to additional cloud storage providers: Google Drive, Skydrive and Dropbox. To add one of these click on “Add Provider” in the upper left corner of the **File Central** window.

Save your files on the **SmartDrive** drive as I have had difficulties successfully saving to or reading from my Google Drive.

## Templates

There are numerous templates available at the cost \$1 each, or, subscribe to “iQ Templates Subscription” and use most of the templates for free. It is better, however, to take the time to build your own.

## Work space

With a file open click on the maximize button to get a larger view of the workspace.

Click and slide the vertical line between the activity list (left) and the gantt chart (right) to suite the view you are looking for.

## Setting up your project

Start with a new/blank schedule. Set the **Project Properties** by clicking on the project name (called Untitled by default). From here you can set or adjust:

- The project name
- Time and calendar settings (click on various tabs for settings)
- Industry and location
- Time properties (hours, days)
- Currency information
- Resources
- Notes
- Links

Menus:

- |            |  |
|------------|--|
| Project    | - Save, print and export   |
| Edit       | - Undo, redo, cut & etc.   |
| View       | - Turn on or off different columns   |
| Actions    | - Functions for working with activities                                      |
| Baselines  | - Create baselines here  |
| Extensions | - Load and run extensions from 3rd party developers (use at your own risk)   |
| Help       | - Various help resources   |
| Autosave   | - turn this on or off (always save manually even if you have this turned on) |

## Toolbar

A collection of commonly used commands (Copy, print, save...)

When you are working in one of the activity cells (with information already added) you will be able to:

- Insert (a new activity) above, insert below, or delete that activity
- Indent or un-indent an activity
- Move the activity up or down
- If you select 2 or more activities (select an activity number and hold down the control key to add more to your selection.
- Zoom in or zoom out
- **Properties** - adjust the details of that task

It may be helpful to assign different colours to different aspects of your project; for example, each process or department may have a unique colour.

To change the colour characteristics of an activity select the activity's properties and go to the colour tab to change the default colours.

## Example project:

- 1) **Create**, name and save a new Gantt project.
- 2) **Enter** all of the activities from your Activity List into Gantt. For my bicycle example I am going to list every item of the sample WBS. As you are doing this turn on the WBS column from the view menu and note how the numbering changes.
- 3) **Indent** activities as required. As you indent the activities your structure becomes one of summary activities (control points) and sub activities
- 4) **Link** your activities - by default they are linked Finish to Start
- 5) **Duration**. By default the program assumes each activity will have a 1 day duration. Change the durations match those in your Activity Duration Estimates document. You can type in the duration to the right of the activity name in the duration column or you can also select an activity and click on the properties button in the tool-bar.

Durations can be added in hours(h), days(d), weeks(w) and months(m). Just add the corresponding letter after the value.

- 6) **Add Resources**. There are 2 types of resources in Gantt; 'Work' - people and equipment - and 'Material' - materials.

Turn on the resources column (from the view menu) and click on the empty cell to add a resource. Do this for every activity that requires resources. Do not add in the cost at this point.

Note that these resources may appear beside the activity bar of the Gantt chart. You can turn this on or off in the view menu.

7) **Calendar.** Click on the calendar icon (left side of the workspace) to adjust the working hours in a day. By default Gantt uses the 'None' calendar with the settings we set (or accepted) in the project properties when we created the document.

- Change the calendar settings in the 'Task Properties' panel under the Advanced tab.
- You can select individual dates in a calendar to adjust for holidays and other events that might affect your working hours.
- You can create new calendars if necessary; for accommodating part-time works for example.

If you know the finish date of a project you can set it in the project properties. Click on your file name and change the 'Plan From' setting to 'Finish Date'. Gantt will adjust your schedule to start as late as possible to meet the project deadline.

8) **Dependencies.** You can add, remove and change the dependencies of an activity in the properties panel under the predecessors tab. By default all dependencies are set to finish-to-start and without any lead or lag. To add a lag (time after the previous activity) add a positive number here and to create a lead (time before the completion of the previous activity) add a negative number here.

9) **Constraints.** In the Advanced tab of the activity properties panel you can change the constraint of an activity. By default Gantt uses the 'as soon as possible' constraint. Do not select "Must start/finish ..." as this forces Gantt to ignore dependencies. When you change a constraint from the default setting an icon will appear in the information column to the right of your activity name.

10) **Task Types.** When working with Gantt there are 3 variables we work with elements: units (resources), duration and work. The relationship between the three is:

- Work = Duration x Units (resources)**
- or- **Duration = Work / Units (resources)**
- or- **Units (resources) = Work / Duration**

We can adjust 2 of these and the program will calculate the 3rd.

**Fixed Units** - if a resource can only work 50% of the time on a specific task Gantt will automatically re-calculate the duration of the task to take twice as long

**Fixed Duration** - As you assign single or multiple resources to the task Gantt will automatically calculate the appropriate resource allocation percentage to ensure the task is completed within the duration.

To have the program calculate the resources this way we need to change the Type from 'Fixed Units' to 'Fixed Duration'.

**Fixed Work** - Assume an activity is going to take ten hours to complete and that we can schedule the task over five days. If a single resource is responsible for completing the task Gantt will schedule the

resource to work two hours a day for the five day duration.

Note the “effort driven” check box is selected by default. By turning this off you tell Ganttter not to make any of the above calculations.

11) **Start & Finish Dates.** Select the cell of either the start or finish date and select the day from the calendar pop-up panel. When you select dates in this manner you apply a Constraint to the activity as described above. You should see a constraint icon in the information column indicating this. Note that this may limit the movement of the activity should the predecessors move

12) **Cost.** Assigning cost to activities and resources.

Turn on the cost column in the view menu and type in the cost (budget) associated with each activity. These costs are items such as overhead or other costs associated with the activity that are not resource costs. Note how the total of sub-activities is added in the summary activity.

Now add cost values to your resources. These values will be added to the costs you previously entered.

- To see the full sum of your budget turn on the view of the ‘Root Summary Task’ from the view menu.

13) **% Complete.** To track the progress of your project.

Enter in the % complete into the cell beside your activity. As you enter a value a gray line appears indicating this percentage and the overall completion is added in the Root Summary Task bar.

14) **Activity Deadlines.** Set an activity Deadline in the properties panel. The date you select will appear as a red diamond shape. If this date is passed and the activity is not completed a constraint icon will appear in the information cell.

15) **Milestones.** Create a milestone by setting the duration of an activity to 0.

16) **Critical Tasks.** The activities that cannot be delayed without delaying the entire project. To view the critical tasks select “Highlight Critical Tasks” from the view menu. The critical tasks are shown in red. Note that this may not necessarily be the critical path of your project.

17) **Risks.** Select the Risks input screen by clicking on the Risks icon on the left side of the interface. Type in a risk name in the Risk column. The best way to add and edit the attributes of the risk is to select its properties from the tool bar. In this panel you can:

In the general tab

- Change the name
- Describe the cause of the risk
- Give the risk a category
- Assign an owner
- If it is: Relevant - Addressed - Has Happened

In the Expected tab

- Indicate the expected probability & severity
- Indicate it's affects: Schedule, Cost or Quality
- Describe the response to the risk

- The priority of the risk (to change this deselect the “Detect using Probability and Severity” check box.

In the Tasks tab

- Assign a risk to one or more tasks

When a task (activity) has a risk associated to it a yellow thunderbolt icon will appear in the information cell.

Once you have created risks and assigned them to an activity they will appear (as a thunderbolt) in the properties panel when you are working in the task view.

18) **Baseline.** Gantt baselines are like a snapshot of your project at a given time; they allow you to compare your project as it is now to what it was.

Typically you would set a baseline as soon as you have locked the schedule and budget and are about to begin. At this point go to the baseline menu and select Manage Baselines. Create a name (“Project Start”, or a date, a significant event, for example) and then click add. Once you’ve added one or more click save.

As your project progresses and you wish to compare it’s current status with that of a baseline select that baseline from the Baselines menu. When you do this a gray bar will appear on the chart indicating where the activities were on that date.

Also, in the activity work area 3 new columns will appear showing you the values of the cost, work and duration for when the baseline was set.

19) **Auto Level Resources.** Not recommended as this can not be undone once the file is saved (it is selected from the actions menu). Do this manually if necessary.

20) **Printing.** The default action when you click print is for Gantt to generate a PDF file and then download it. There are no options for customizing this.