



Planned - Actual - Expected

Guides for Merlin Project

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Planned values

Merlin Project calculates planned work and duration for each activity based on the [\[Given values\]](#). Planned values are read-only

The inspector outputs planned values for Start, End, Work, Duration, Elapsed Duration and Utilization in the **Actual Values** inspector.

If you have entered values in Given Start, Given End, Given Work, Given Duration and Given Utilization, the planned values will reflect them.

If not, Merlin Project will calculate them based on presets on dependencies, higher level activity groups or other default values.

Example

An activity is defined by **2 days** *Given work* to start due to its predecessor on Friday at 8am.

- **Planned Work** calculate as *Given Work*, thus **2 days**
- **Planned Start** calculate as Friday at 8am
- **Planned End** calculate as Monday at 5pm
- **Planned Duration** calculate as **2 days**
- **Planned elapsed Duration** calculate due to the weekend in between as **3.38 edays**
- **Planned utilization** calculate as **100%**

If you have defined cost rates on your resources, base or attachment costs on your activities, the **Planned Costs** will show up in the **Finance** inspector in the **Balance** tab.

Actual values

Actual values are the values you enter to record actual progress of your planning. You update this information as often as new information from your resources arises regarding the actual work or the completion level of the various assignments.

Insert a new column and type *Actual*. Merlin Project will list all columns with **Actual values** that are available for the project and its individual elements.

You can choose to show or hide them from the outline. **Actual values** are editable in the outline and the **Actual Values** inspector.

Example - activity just started

An activity is defined by **2 days** *Given work*. You want to update the activity to reflect 50% completion level.

- You select the activity
- Use the **Actual Values** inspector
- You select the correct date for **Actual Start**
- You select **50%** from the **Complete** list

This means:

- **Actual Work** calculates as half of *Given Work*, thus **1 day**
- **Actual Start** is the date you just entered
- **Actual End** is blank (the task isn't completely done yet)
- **Actually Completed Through** calculates the date until current completion.

Example - completing a started activity

An activity is defined by **2 days** *Given work*, which was recorded as 50% completed is now completed.

- You select the activity
- Use the **Actual Values** inspector
- Click on **100%**

This means:

- **Actual Work** is now as much as the original *Given Work*, thus **2 day**
- **Actual Start** is the date set
- **Actual End** is the date the remaining 1 day work would need to complete
- **Actually Completed Through** calculates the date until current completion, thus the same as **Actual End**.

Example - updating progress on a started activity

An activity is defined by **2 days** *Given work*, which was recorded as 50% completed, is now 75% Completed but needs some 1 more day work as originally estimated.

- You select the activity
- Use the **Actual Values** inspector
- Enter 75% in the **Complete** field
- Check the value in the **Remaining Work** field
- Adjust it from **4 hours** to **12 hours**

The overall activity will be adjusted and the new completion percentage will be calculated. It is now $100\% * \text{Actual Work} / (\text{Actual Work} + \text{Remaining Work}) = 50\%$

This means:

- **Actual Work** was originally 75% of the original *Given Work*, thus **1.5 days**
- **Actual Start** is the date set
- **Actual End** is blank (the task isn't completely done yet)
- **Actually Completed Through** calculates the date until 75% completion was achieved.

If you have defined cost rates on your resources, base or attachment costs on your activities, the **Actual Costs** will show up in the Finance inspector in the Balance tab.

Expected values

Expected values reflect both [Given](#) and [Actual values](#).

Expected values are read-only and you'll find them in the **Plan** and **Actual Values** Inspector.

When an activity is not yet started, expected values reflect the [Given values](#).

When an activity is started and actual values are entered, expected values reflect the [Actual values](#).

Example

An activity requires **2 days** *Given work*. It is not yet started.

This means:

- **Expected Work** calculates as *Given Work*, thus **2 days**
- **Expected Duration** calculates as *Given Duration*. If *Given Duration* is empty the duration it needs according to the *Given Work* and defined assignments.
- **Expected Start** calculates as *Given Start*. If *Given Start* is empty, the date it can be scheduled due to dependencies to predecessors or higher level groups.
- **Expected End** calculates as *Given End*. If *Given End* is empty, the date it can be scheduled to end due to dependencies to predecessors or higher level groups and its defined duration.

Example - activity started

An activity is defined by **2 days** *Given work* and by 50% completed.

This means:

- **Expected Work** calculates as *Actual Work* plus *Remaining Work*, thus **2 days**
- **Expected Duration** calculates as the duration until 100% completion.
- **Expected Start** calculates as *Actual Start*
- **Expected End** calculates the date until 100% completion

Example - updating progress on a started activity

An activity is defined by **2 days** *Given work* and as **50%** completed, remaining work was updated to **12 hours**. This recalculates a complete of **40%**.

This means:

- **Expected Work** calculates as *Actual Work* plus *Remaining Work*, thus **2.5 days**
- **Expected Duration** calculates the duration until 100% completion
- **Expected Start** calculates as *Actual Start*

- **Expected End** calculates the date until 100% completion of the new *Expected Work*

Example - completing a started activity

An activity is defined by **2 days** *Given work* and as 40% completed, *Actual work* was **1 day**, *Remaining work* **12 hours**. The activity was completed by a click to '100%'. This recalculates *Remaining work* to blank value, its amount will be added to the *Actual Work*.

This means:

- **Expected Work** calculates as *Actual Work* plus *Remaining Work*. *Remaining Work* is now 0, *Actual Work* is **2.5 days**. That means **Expected Work** is **2.5 days**
- **Expected Duration** calculates the duration until 100% completion
- **Expected Start** calculates as *Actual Start*
- **Expected End** calculates as *Actual End*

If you have defined cost rates on your resources, base or attachment costs on your activities, the **Expected Costs** will show up in the Finance inspector in the Balance tab.