

Milestones PROFESSIONAL[®] TUTORIALS

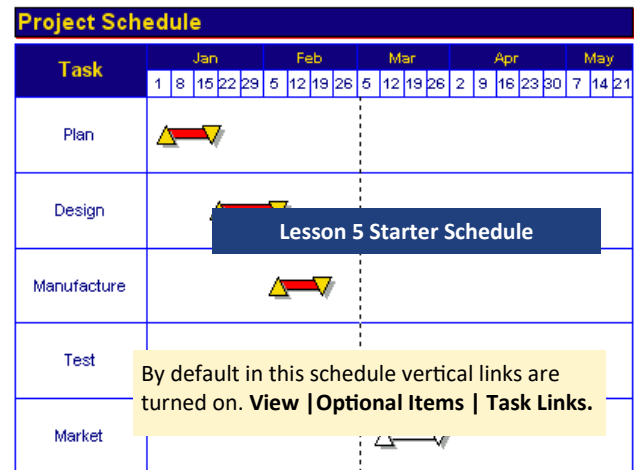
Lesson 5 – Work with dependencies

In this lesson you will learn how to:

- Set up dependencies for a project
- Add dependencies across multiple pages.
- Adjust tasks and the entire schedule using *Shift All Dates*
- Adjust the schedule using dependencies

Open the schedule for this lesson

1. On the toolbar, choose **File**.
2. In the **Files and Templates: Open and Save Options** section select **Open Samples or Lessons**. The **Open a Sample Chart** dialog displays.
3. Under **Select a Folder below to Open**, select **Lessons**. The Lesson schedules will display in the window to the right.
4. Pick **Lesson 05 Starter Schedule.mlj**.
5. Save the schedule to an accessible folder on your computer. Choose the **File** tab. In the **Files and Templates: Open and Save Options** section, choose **Save As...** In the menu that displays choose **Chart**. Name, then save the schedule.



Set up dependencies for the project

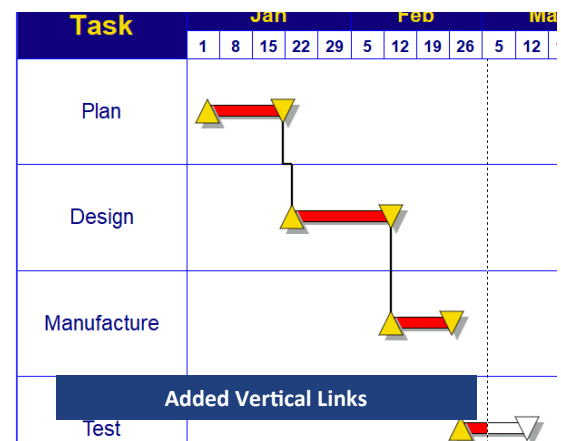
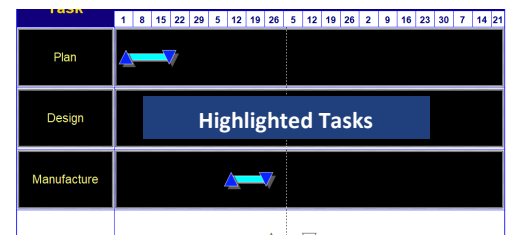
Here are the dependencies you are going to set up with vertical links for this schedule:

- Once **Plan** is finished **Design** begins, then once **Design** is finished **Manufacture** begins.
- **Test** can't be started until **Design** is finished.
- **Market** can't be started until **Test** is finished.

Add a Vertical Link from "Plan" to "Design" and "Design" to "Manufacture"


There are three methods to add vertical links. Method 1- the insert menu.

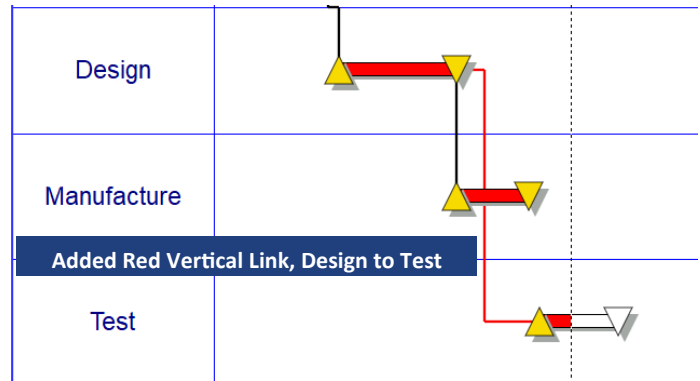
1. Click the (↖) **Arrow** tool in the toolbox.
2. Click once on the [L] **black vertical link** in the Toolbox.
3. While holding the **Shift** key on the keyboard, click once on the word **Plan**, and then once on the word **Manufacture**. Now, release the **Shift** key. The Plan, Design and Manufacture task rows should be highlighted in black.
4. Next click the **Insert** tab.
6. In the **Vertical Links** section select **Vertical Links between selected task rows**. The **Create Vertical Links/Dependencies** dialog box displays.
7. For **Type of Symbols to Link** choose **Link normal symbols**.
8. For **Direction to Link** choose **Downward**.
9. For **Type of Link** choose **(FS) - Finish to Start** (connects the end symbols on one task row to the start symbols on the next task row).
10. Check on **Display Vertical Task Links**.
11. Select **OK**. Then click away from the schedule to de-select. Vertical links will be added.



Add a vertical link From "Design" to "Test"



The second method for adding a vertical link is using the Toolbox.

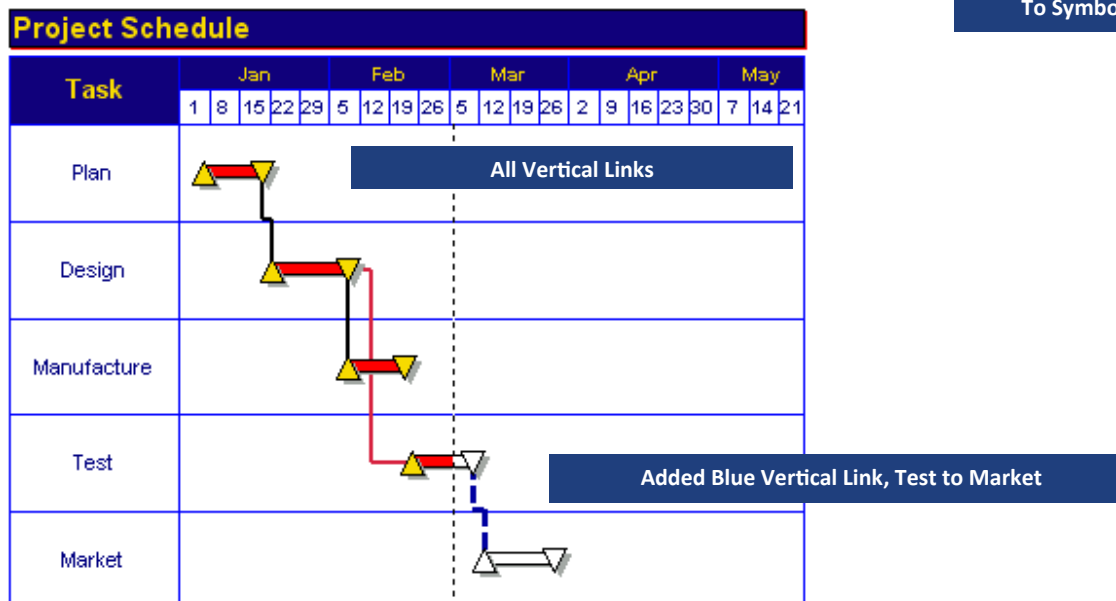
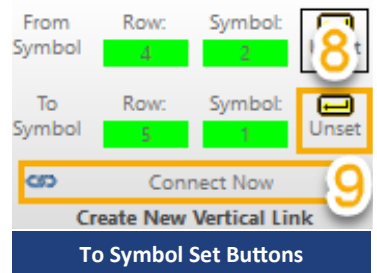
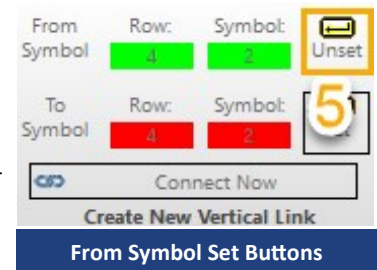
1. Click the (+) **Plus** tool in the Toolbox.
2. In the schedule, click once on the **end symbol of Design** (gold upside down triangle). It will highlight with a box around it.
3. In the Toolbox, click the  **red vertical link**.
4. In the schedule, click once on the **start symbol of Test** (gold triangle). The vertical link will be added.



Add a vertical link From "Test" to "Market"

The third method for adding vertical links is using the Toolbar. This is the most effective option to insert a vertical link across multiple pages of a schedule.

1. Click the (↖) **Arrow** tool in the toolbox.
2. Select the  **blue dashed vertical link** in the Toolbox.
3. On the schedule select the **end symbol of Test** (white upside down triangle.) This is considered the **From Symbol** of the vertical link.
4. The Toolbar changes to the **Selection** tab. At the bottom of the toolbar choose the **Vertical Links** tab.
5. In the **Create New Vertical Link** section of the toolbar, select the **Set** button next to the **From Symbol** location. (Milestones notes the row the symbol is on and the symbol's order number on the row.) Once the **Set** button is selected, the **From Symbol** locations will be highlighted in green.
6. On your schedule select the **start symbol of Market** (the white triangle). This is considered the **To Symbol** of the vertical link.
7. The toolbar changes to the **Selection** tab. The **Vertical Links** tab should be selected. If not, select it.
8. In the **Create New Vertical Link** section of the toolbar, select the **Set** button next to the **To Symbol** location (Milestones notes the row the symbol is on and the symbol's order number on the row.) Once the **Set** button is selected the **To Symbol** locations will be highlighted in green.
9. To complete the connection select the  **Connect Now** button. The vertical link will be added.

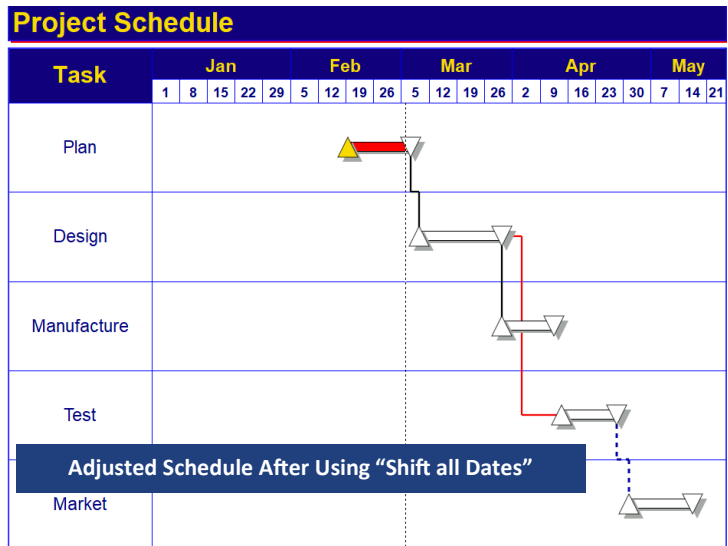


Adjust the entire schedule using *Shift All Dates*

Suppose an entire project schedule needs to be moved forward because it cannot start at the scheduled time. One option is to use the *shift all dates* option.

To shift the entire schedule use Shift All Dates.

1. Click the **Dates** tab.
2. In the **Date Range Tools** section choose **Shift all tasks dates**. The **Shift all Dates for Schedule** dialog box displays.
3. For **Number of Working Days to Shift**, enter **45**.
4. Select **Forward** so that it is selected.
5. Uncheck **Reset Schedule Start and End Dates by the Same Amount**.
6. Uncheck **Shift Curtain Dates by the same amount**.
7. Click **OK**. The schedule has been shifted ahead 45 days.



Adjust the schedule using dependencies

Turn on Dependency Mode

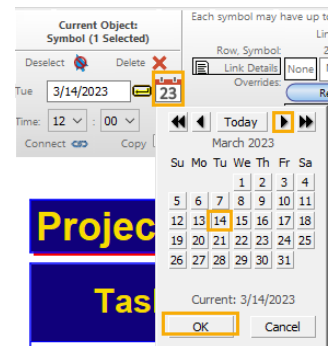
Dependency mode is a global setting which controls whether or not dependent symbols will move when a parent symbol moves.

1. Click the **Dates** tab.
2. In the **Date Related Setting** section check on **Dependency Mode**. Now dependent symbols will move when a parent symbol moves.

Adjust the schedule

The schedule shows the **Plan** stage to be completed the week of March 5th the actual day **March 7th**. However, the **Plan** stage will finish one week late, the week of March 12th, the actual day **March 14th**.

1. Click the (↶) **Arrow** tool.
2. Click on the **end date symbol for Plan**. The toolbar changes to the **Selection** tab **Current Object: Symbol**.
3. In the first section of the Toolbar select the **Calendar** icon next to the symbol's date. A calendar displays.
4. Click **March 14th** on the calendar. All of the dependent tasks have shifted forward by the same amount of time.



Change the length of "Design"

Since the **Plan** stage has slipped we'll cut 1 week from the **Design** step.

1. Click the (↶) **Arrow** tool in the toolbox.
2. Click and drag the **end date symbol of Design** to the left.

The date will display next to the cursor as the symbol is moved or view the status bar at the bottom left of the Milestone's window to see the date as the symbol moves.

Release the mouse when the symbol is on **March 30th**. All of the dependent tasks have shifted Backwards by the same amount of time.

