

Milestones PROFESSIONAL[®] TUTORIALS

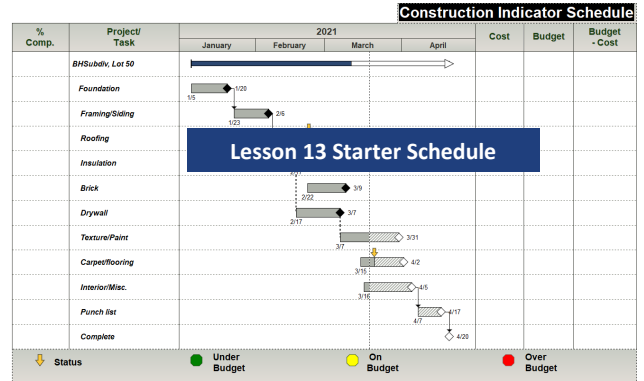
Lesson 13 - Calculation/Indicator and % Complete Columns

In this lesson you will learn how to:

- Create a percent complete SmartColumn with a percent complete pie.
- Change the percent complete of a task.
- Create two Values SmartColumns (columns which contain values.)
- Enter values in to the Values Smart Columns.
- Create a Calculation/Indicator SmartColumn and set conditions for symbols to appear.

Open the schedule for this lesson

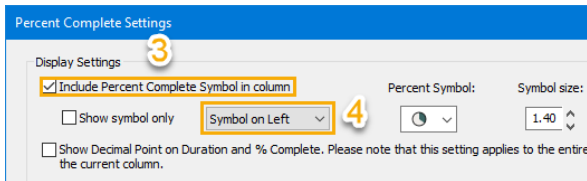
1. On the toolbar, choose **File**.
2. In the **Files and Templates: Open and Save Options** section select **Open Samples or Lesson**. The **Open a Sample Chart** dialog displays.
3. Under **Select a Folder below to Open**, select **Lessons**. The Lesson schedules will display in the window to the right.
4. Pick **Lesson 13 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.



Create a percent complete SmartColumn with a percent complete pie

Percent complete is used for showing and maintaining a project's progress. By default, this column will show progress based on the current date (here, the vertical dotted line). To establish progress differently, a status symbol (here, the gold arrow symbol) can be used to manipulate the progress of project tasks.

1. Using the (**↶**) **Arrow** tool in the toolbox, click the **% Comp. column heading**. The toolbar will change to the **Selection** tab with **Current Object: Column Heading**. Choose **Switch to Column**.
2. In the **Column Type and Format** section click the **(none)** down arrow in the field showing (none). Scroll and choose **Percent Complete**. The **Percent Complete Settings** dialog box displays.



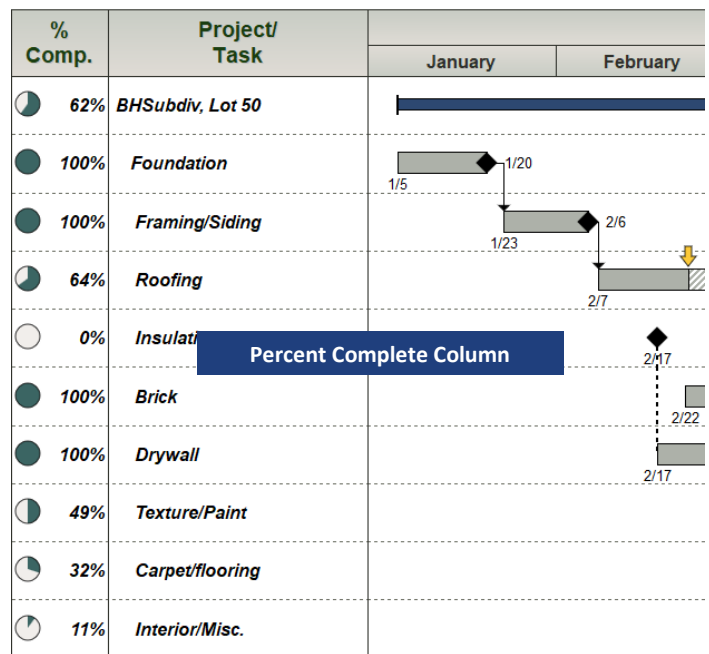
3. For **Display Settings** check on **Include Percent Complete Symbol in column**.

The percent complete symbol is shape #97 in toolbox. For this schedule it is already set-up. If a percent symbol is not set-up the selected symbol in the dialog box will become symbol shape #97.

4. Choose **Symbol on Left**.

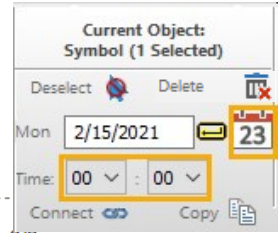
For the most accurate % complete, Allow Hourly Accuracy Date/Time settings and Allow Minute Accuracy Date/Time settings have already been selected in the Percent Complete Settings Dialog

5. Click **OK** to return to the schedule. The schedule will now have a % value and a % complete symbol for each task in the % Comp. column.



Change the percent complete of a task.

1. Click the (↶) **Arrow** tool in the Toolbox.
2. Go to the **Roofing** task, click on the **status symbol (gold arrow)**, the toolbar is now active for that symbol. Use the calendar icon, changing the date to **2/15/2021**. Then the **Time to 00.00**. Notice the change in the bar shading, % Comp. column value is now 31% and the percent complete symbol has changed.




3. Click the (T) **Text** tool in the toolbox.
4. Move the cursor to **Roofing** task, in the **Percent Complete** cell back space through the 31 % complete text.
5. Enter **75** (for 75%). Then press **Enter** on the keyboard. Notice that the status symbol moved to match the new percent.

Constructi


% Comp.	Project/ Task	2021			
		January	February	March	April
64%	BHSubdiv, Lot 50	[Gantt bar spanning Jan to Apr]			
100%	Foundation	1/5 - 1/20			
100%	Framing/Siding		1/23 - 2/6		
75%	Roofing		2/7 - 3/3		
0%	Insulation		2/17		
100%	Brick		2/22 - 3/9		
100%	Drywall		2/17 - 3/7		
49%	Texture/Paint			3/7 - 3/31	
32%	Carpet/flooring			3/15 - 4/2	
11%	Interior/Misc.			3/16 - 4/5	
0%	Punch list				4/7 - 4/17
0%	Complete				4/20
↓ Status		● Under Budget		● On Budget	

Create Two Values SmartColumns

The Cost and Budget columns will be changed to Values SmartColumns.

1. Click the (↶) **Arrow** tool in the toolbox.
2. Click the **Cost column heading**. The toolbar will change to the **Selection** tab with **Current Object: Column Heading**. Choose **Switch to Column**. 
3. In the **Column Type and Format** section click the (none) **down arrow** in the field showing (none). Scroll and choose **Values**. The **Indicators for Values Column** dialog box displays.
4. Click **OK** because you only want to display the values that will be entered..
5. Also on the toolbar, in the **Column Type and Format** section under **Decimal Places**: Select **0** and check on **Currency**.

Now, do the same for the Budget column.

1. Click the **Budget column heading**. The toolbar will change to the **Selection** tab **Current Object: Column Heading**. Choose **Switch to Column**. 
2. In the **Column Type and Format** section click the (none) **down arrow** in the field showing (none). Scroll and choose **Values**. The **Indicators for Values Column** dialog box appears.
3. Click **OK** because you only want to display the values that will be entered.
4. On the toolbar, in the **Column Type and Format** section under **Decimal Places**: Select **0** and check on **Currency**.

Enter values into the Values SmartColumns

1. Click the (T) **Text** tool in the toolbox.
2. Click once in the cell of the **Cost** column for the **Foundation** task row and enter **500**.

Cost and Budget values for the BHSubdiv, Lot 50 task row are automatically totaled because the schedule is outlined. This setting is under **Layout** menu. In the **Other** section (choose **Summary Bar Settings...**).

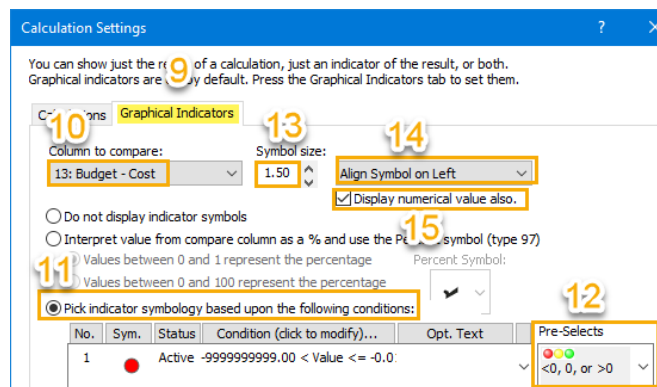
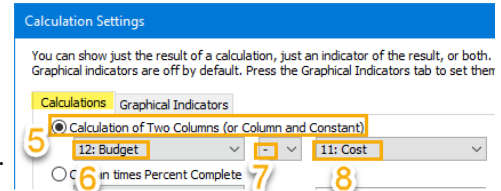
3. Click **Enter** or **the down arrow key** on the keyboard, to get to the next task row's **Cost** cell and enter the following values for all tasks. Framing/Siding **400**, Roofing **600**, Insulation **800**, Brick **700**, Drywall **500**, Texture/Paint **450**, Carpeting/Flooring **385**, Interior/Misc. **485**, Punch List **950**, Complete **625** (Do not press enter or the down arrow key simply click out of the schedule. This prevents adding a second page)
4. Continue entering the following values for **Budget**. Foundation **200**, Framing/Siding **800**, Roofing **500**, Insulation **800**, Brick **700**, Drywall **400**, Texture/Paint **600**, Carpeting/Flooring **400**, Interior/Misc. **600**, Punch List **1200**, Complete **800** (Do not press enter or the down arrow key simply click out of the schedule. This prevents adding a second page)

		2021				Cost	Budget	Budget - Cost
% Comp.	Project/ Task	January	February	March	April			
64%	BHSubdiv, Lot 50					\$6,395	\$7,000	
100%	Foundation					\$500	\$200	
100%	Framing/Siding					\$400	\$800	
75%	Roofing					\$600	\$500	
0%	Insulation					\$800	\$800	
100%	Brick					\$700	\$700	
100%	Drywall					\$500	\$400	
49%	Texture/Paint					\$450	\$600	
32%	Carpet/flooring					\$385	\$400	
11%	Interior/Misc.					\$485	\$600	
0%	Punch list					\$950	\$1,200	
0%	Complete					\$625	\$800	

Create a Calculation/Indicator SmartColumn and set conditions for symbols to appear

Now, define the **Budget-(minus) Cost** column as a **Calculation/Indicator SmartColumn** which subtracts the **Cost** column values from the **Budget** column values. Then display symbols based on those values.

- Use the (↶) **Arrow** tool in the toolbox,
- Click the **Budget - Cost** column heading. The toolbar will change to **Current Object :Column Heading**. Choose **Switch to Column**.
- In the **Column Type and Format** section under **Decimal Places**: Select **0** and check on **Currency**.
- In the **Column Type and Format** section click the (none) dropdown **down arrow** in the field showing (none). Scroll and choose **Calculation/Indicator**. The **Calculation Settings** dialog box displays.
- On the **Calculation** tab choose **Calculation of Two Columns**.
- Under **Calculation of Two Columns** in the first box click the down arrow scroll and choose: **12: Budget**.
- In the second box click the down arrow, scroll and choose the (-) **minus** sign.
- In the third box click the down arrow, scroll and choose: **11: Cost**.
- Click the **Graphical Indicators** tab to set up indicators and values to display in the column
- For **Column to Compare**, choose **13: Budget - Cost**.
- Choose **Pick indicator symbols based upon the following conditions**.
- Choose **Pre-Selects** (the value parameters and stoplights are already set-up). Click the down arrow to see the preset parameters: Red symbol **Cost > Budget**; a green symbol **Budget > Cost**; and a yellow symbol when the **Budget = Cost**.
- For **Symbol size** choose **1.50**.
- Choose **Align Symbol on Left**.
- Check on **Display numerical value also**.
- Press **OK** to see the completed schedule.



% Comp.	Project/ Task	2021				Cost	Budget	Budget - Cost	
		January	February	March	April				
64%	BHSubdiv, Lot 50	[Gantt bar from Jan to Apr]				\$6,395	\$7,000	●	\$605
100%	Foundation	[Gantt bar from Jan 15 to Jan 20]				\$500	\$200	●	(\$300)
100%	Framing/Siding	[Gantt bar from Jan 23 to Feb 26]				\$400	\$800	●	\$400
75%	Roofing	[Gantt bar from Feb 27 to Mar 3]				\$600	\$500	●	(\$100)
0%	Insulation	[Gantt bar from Mar 27 to Apr 3]				\$800	\$800	●	\$0
100%	Brick	[Gantt bar from Mar 9 to Mar 16]				\$700	\$700	●	\$0
100%	Drywall	[Gantt bar from Mar 17 to Mar 24]				\$500	\$400	●	(\$100)
49%	Texture/Paint	[Gantt bar from Mar 27 to Apr 3]				\$450	\$600	●	\$150
32%	Carpet/flooring	[Gantt bar from Apr 2 to Apr 9]				\$385	\$400	●	\$15
11%	Interior/Misc.	[Gantt bar from Apr 10 to Apr 17]				\$485	\$600	●	\$115
0%	Punch list	[Gantt bar from Apr 17 to Apr 24]				\$950	\$1,200	●	\$250
0%	Complete	[Gantt bar from Apr 24 to Apr 31]				\$625	\$800	●	\$175

Schedule With Calculation Indicator Column

↓ Status
● Under Budget
● On Budget
● Over Budget