Deltek

Deltek Open Plan® 8.4

Milestone Professional Interface Add-In Module

December 20, 2019

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The information contained in this publication is effective as of the publication date below and is subject to change without notice.

This edition published December 2019.

Contents

Overview

The Milestones Link tool allows you to use the powerful, flexible graphics of Milestones Professional with the strength of the Open Plan scheduling engine.

At the users request, the dates for the linked symbols in Milestones are “moved” to the accurate status for the dates in Open Plan.

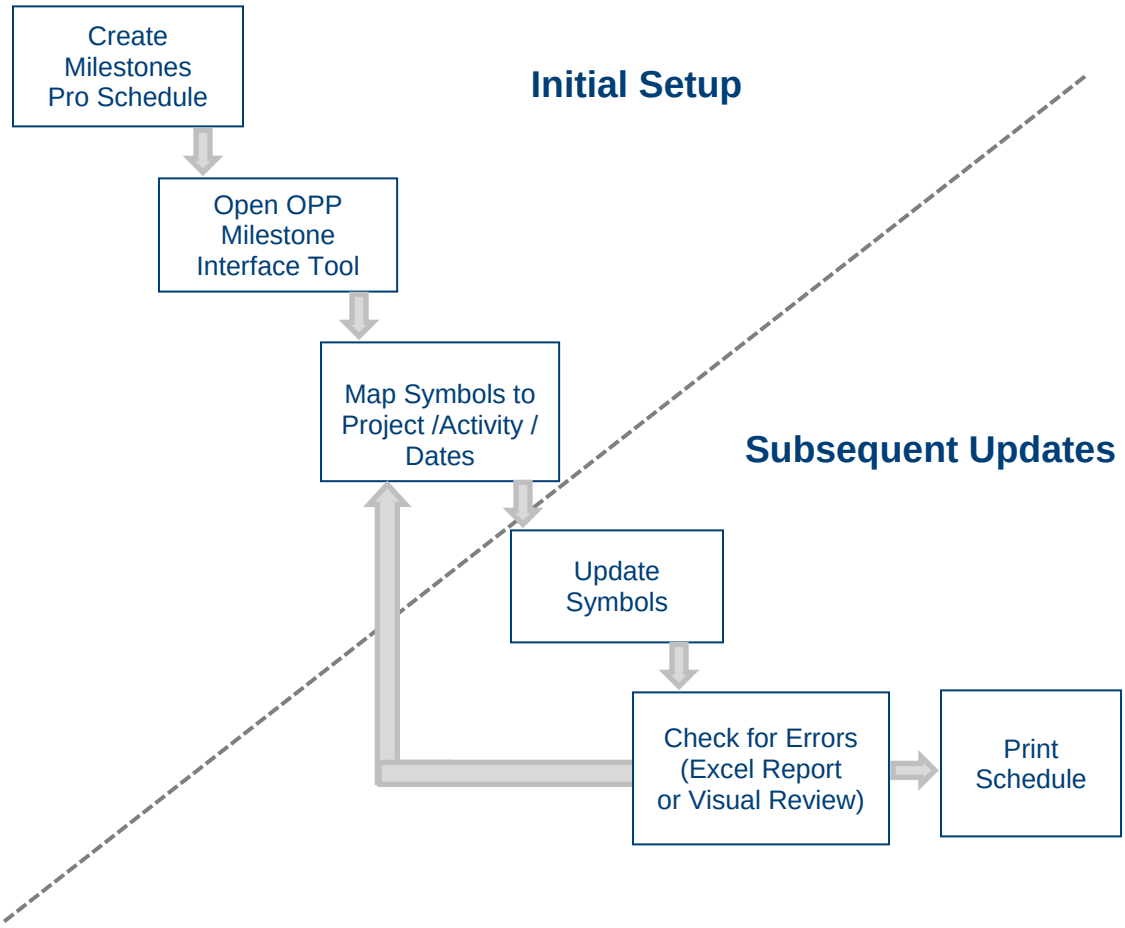
- Enables the use of Milestones Professional as an output tool for Open Plan project schedules
  - Extremely flexible symbology
  - Single-source data
  - “Executive Level” output, including extensive use of chart-color
- Symbol dates are updated via the Oracle database
  - This is controlled at the user level
  - You must have an Open Plan project open to update Milestones Professional files via the oracle database

Note: You must have a copy of Milestones Professional on your computer for the interface to work.

Process for Milestones Interface

You need to create the Milestones Chart before you can use the Linking tool. The Map Symbols process must be completed one time (initial setup) and then the Update symbols process can be repeated as many times as you desire.

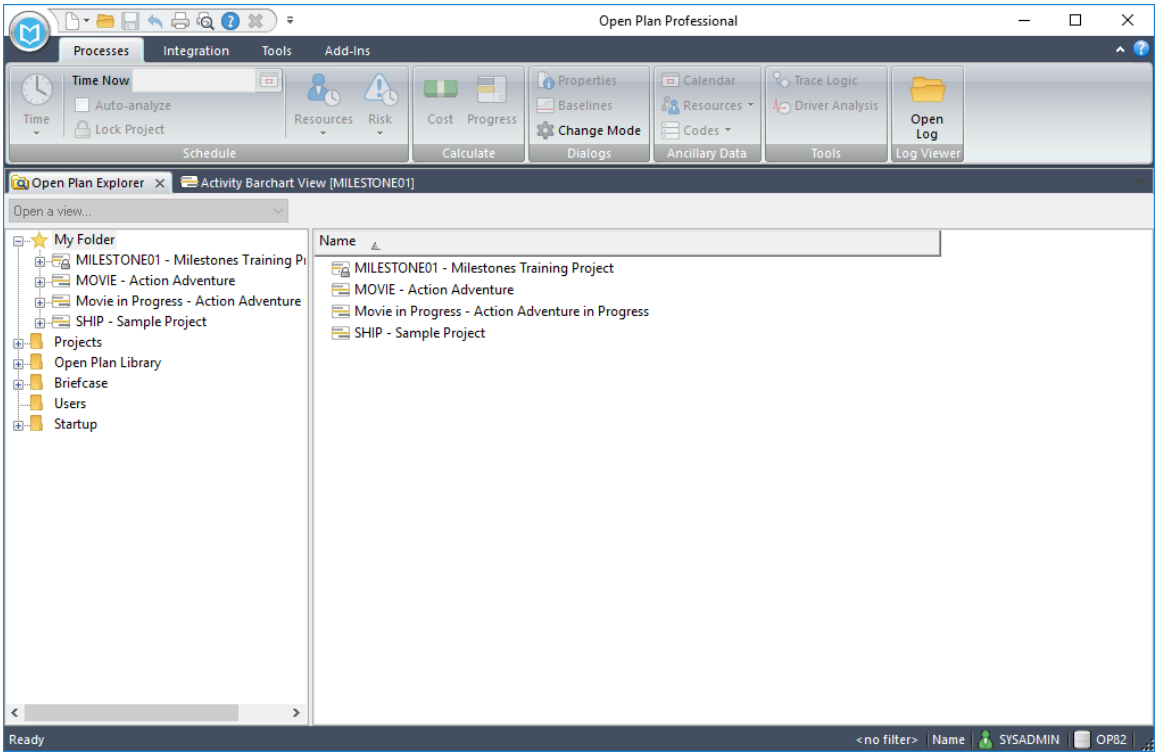
Updating tells the Milestones Link tool to move this symbol to the date specified in Open Plan.



Open Example Project in Open Plan

Let's open a sample Open Plan Project:

1. Select the **Projects** folder in the left pane.
2. Scroll the right pane to select the **MILESTONE01** project.
3. Right-click on the project and Select **Open** … **Read Only**.

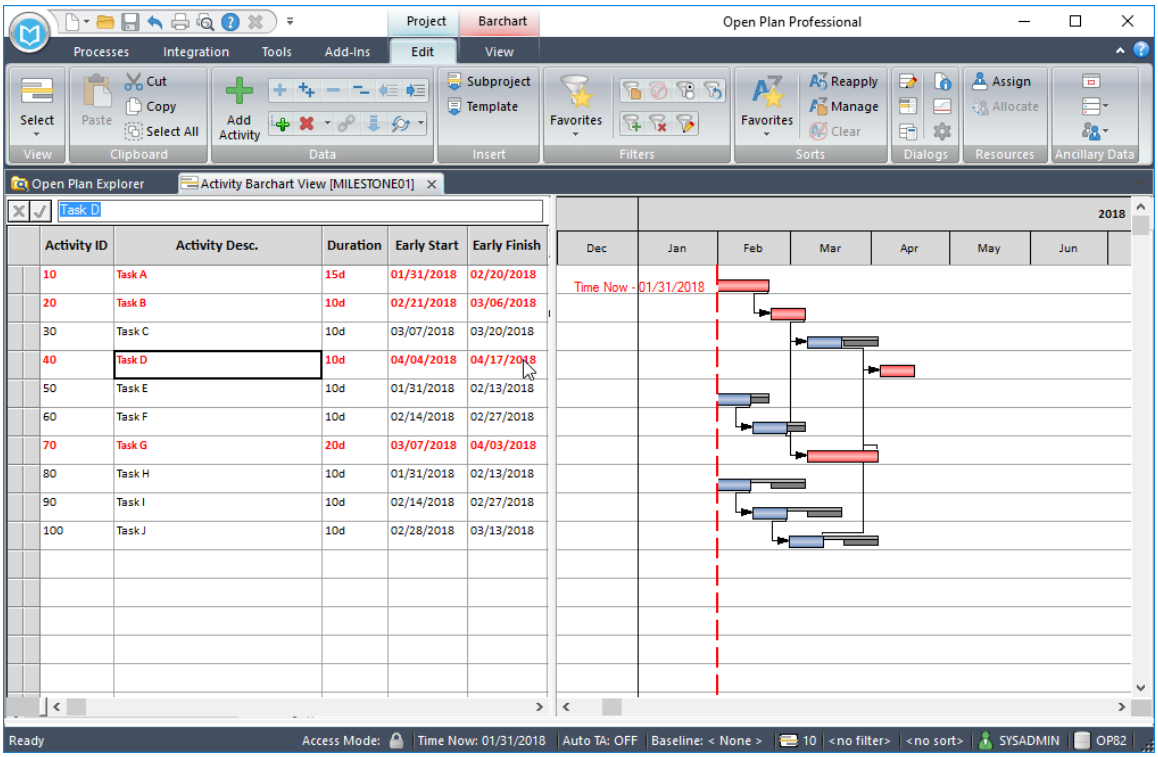


Sample Project (MILESTONE01) BarVW View

To see the BarVW view for MILESTONE01:

1. Double-click on the Views folder.
2. Double-click on the BARVW view.

Let's assume that we want to make a Milestones chart that presents the tasks of the first critical path – going from A-B-G-D.



Using Milestones Professional Sample File

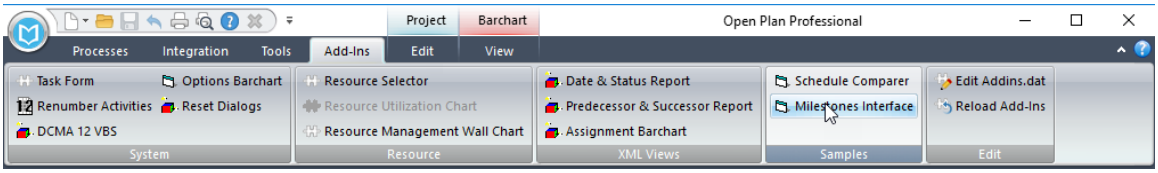
Instead of creating a Milestones Schedule from scratch, a schedule has already been created – we just need to open and make a copy for each user to work with:

1. Select **Start Programs** » **Milestones Professional 20xx**.
2. At the startup choices press **Cancel**. Close the blank schedule that is opened.
3. Select **File** » **Open** and browse to C:\Program Files (x86)\Deltek\Open Plan Professional 8.x\Sample Tools\VBAPPS\Milestones Interface Tool and open **Sample Interface Update.mlg**

Launch Milestone Interface Tool via Open Plan

To launch the Milestones tool:

1. On the Add-Ins tab, in the Samples menu, select **Milestone Interface**.



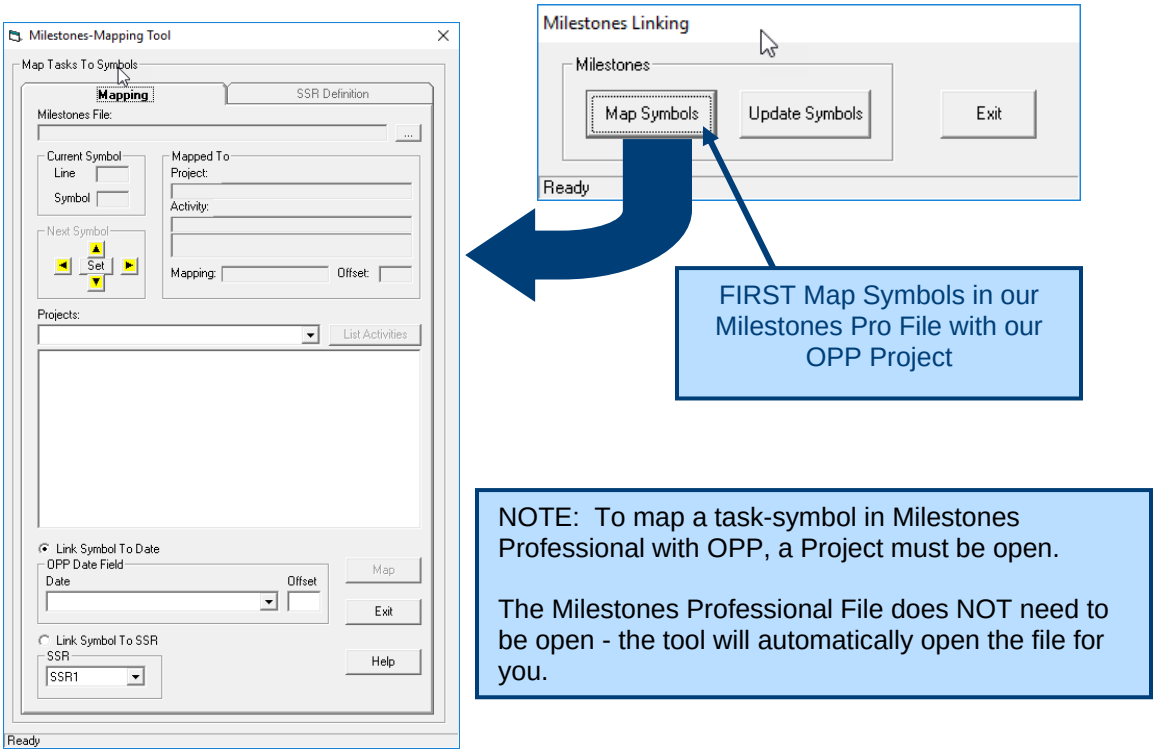
If the Milestones Interface command is not on the Add-Ins tab, select the **Edit Addins.dat** command in the Edit menu group and add this line to your Addins.dat file:

Tool19=Samples:Milestones Interface;%SYSTEMDIR%\Sample Tools\VBAPPS\Milestones Interface Tool\MilestonesInterface.exe

Note: If Tool19 is already in use, you may need to edit this part to provide an unused tool number.

Milestone Interface Dialog Boxes

There are two parts to the Milestone Link tool. ach button on the Milestone Linking dialog box will take you to another tool interface. Since you have not yet created any links, you should select the **Map Symbols** button.



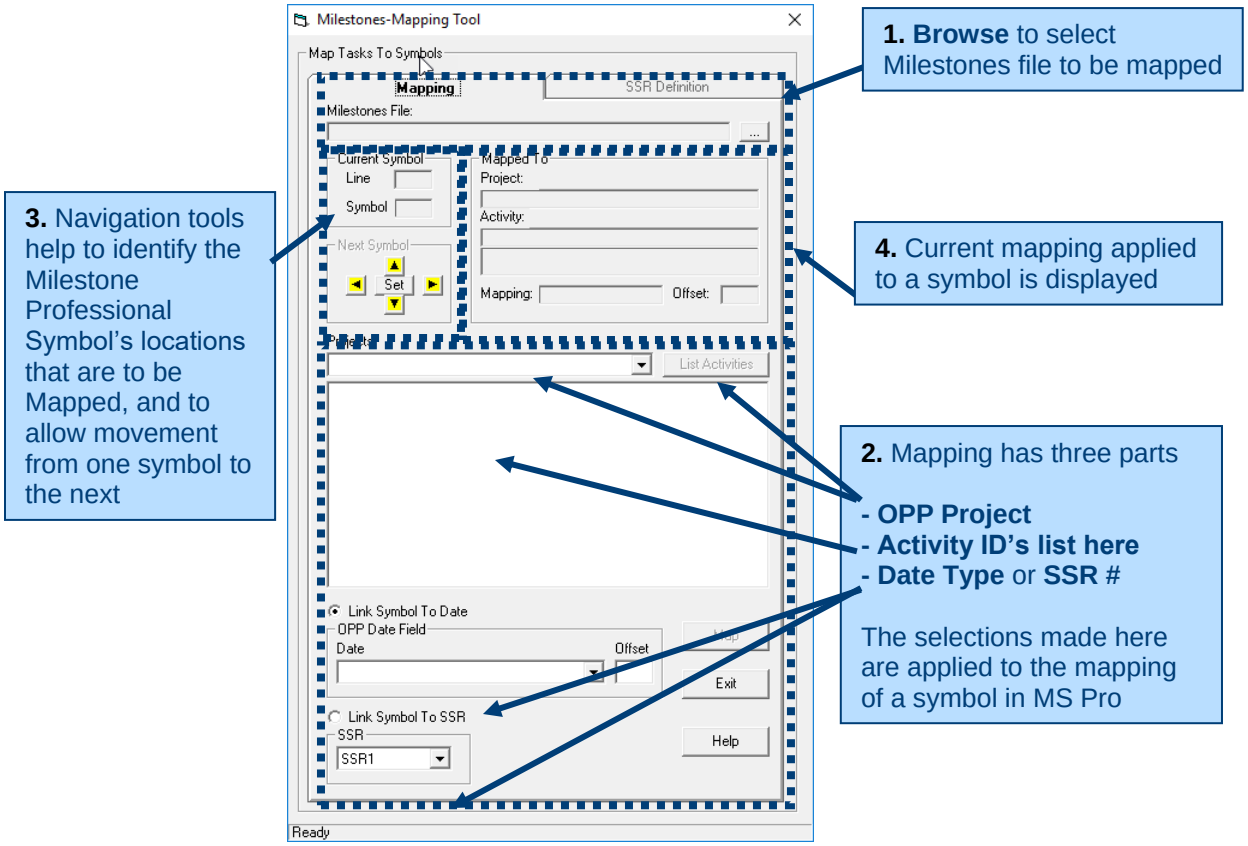
NOTE: To map a task-symbol in Milestones Professional with OPP, a Project must be open.

The Milestones Professional File does NOT need to be open - the tool will automatically open the file for you.

Milestone Mapping Tool Overview

Before you map any symbols, review each of the sections of the mapping tool.

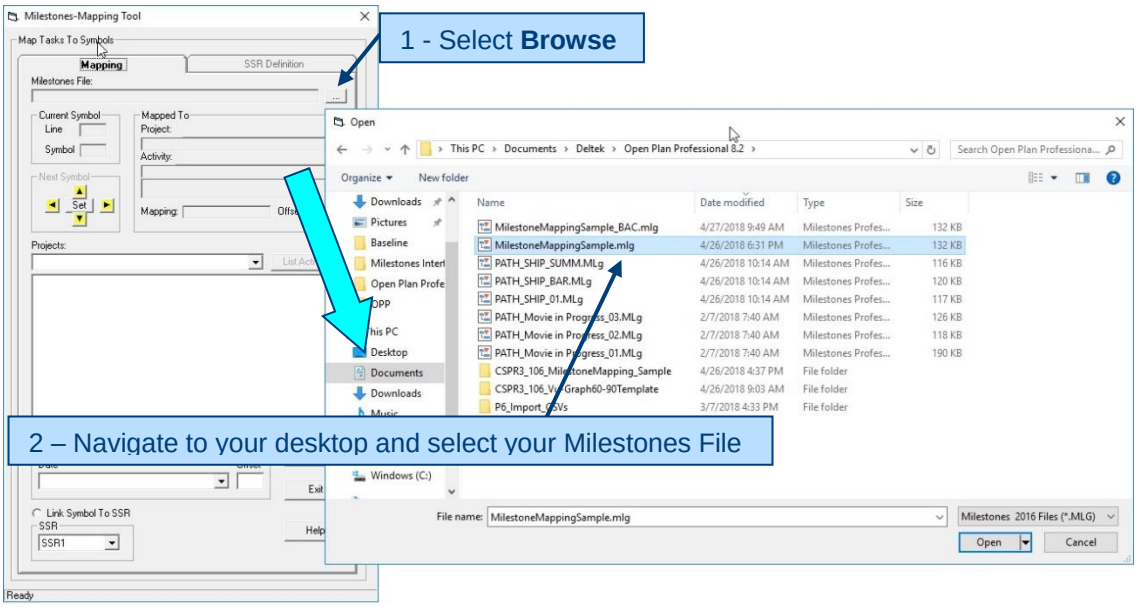
- Use the **Browse** button to select a Milestone file that will be mapped.
- Use the two boxes on the upper left side of the tool to navigate around the Milestones chart as you perform the mapping effort. The top box identifies the currently selected Line and symbol in the chart. The arrows and set key are used to move to other symbols in the chart.
- The boxes on the right show the currently applied mapping on any selected symbol. You can use this feature to examine a chart to ensure that the mapping is as you want it.
- The bottom half of the dialog box is used to select and apply mapping to a milestones symbol. The mapping is defined by three parts – the Open Plan **Project**, the **Activity ID** in the project, and either the **Date Field** on the activity or the **Schedule Status Rule** (SSR) for the symbol.



Browse to Select Milestones Chart

On the Mapping Tool the first thing you should do is click the **Browse** button to hook up with the Milestones file.

Next, select your **Sample Interface Update.mlg** file.



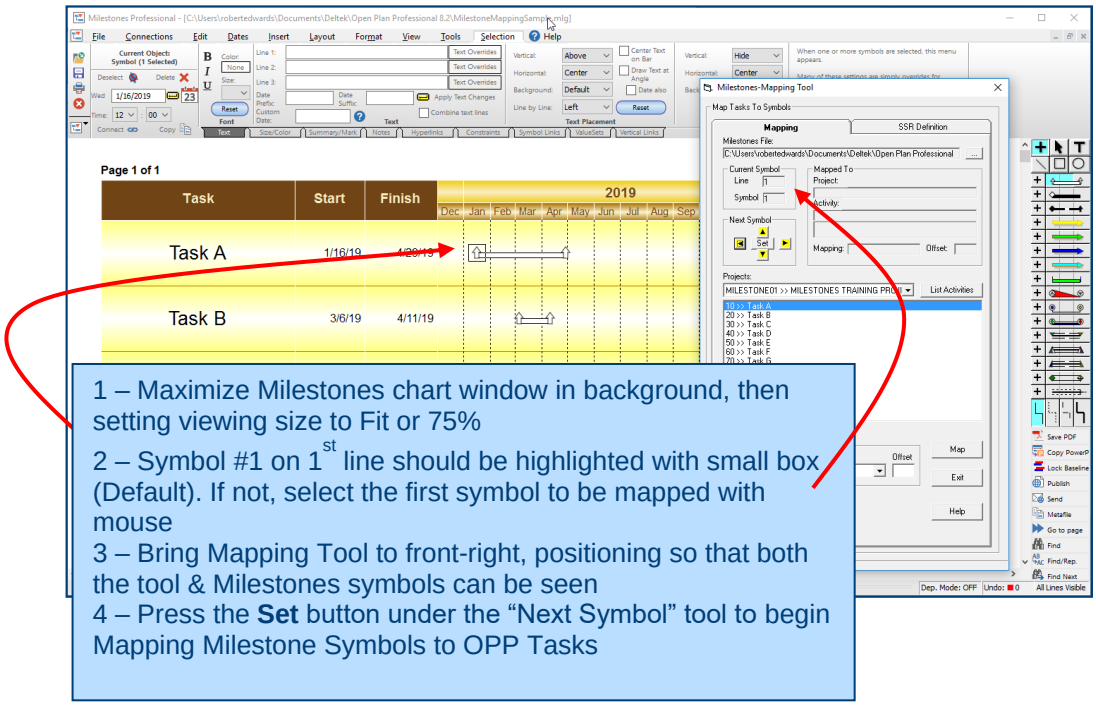
Getting Ready to Start Mapping

If not already open, the tool will launch Milestones and the selected file. Deltek recommends that you:

- Navigate to Milestones and maximize the screen.
- Select the first symbol for which the map to Open Plan is to be created. If it not clear which symbol is selected, you should press **F9** to redraw the screen.

Return to the Milestones Mapping tool and position the tool so that the tool and the area of the milestones screen that you will be working with are both visible.

Click the **Set** button (in the middle of the yellow Next Symbol navigation arrows) to “sync” the tool and the Milestones chart. The current symbol Line and Symbol # will be identified in the Current Symbol Box.



Initial Mapping Steps

Currently, the symbol is not mapped – the **Mapped To** boxes are all empty. You are now ready to select the three components required for the mapping:

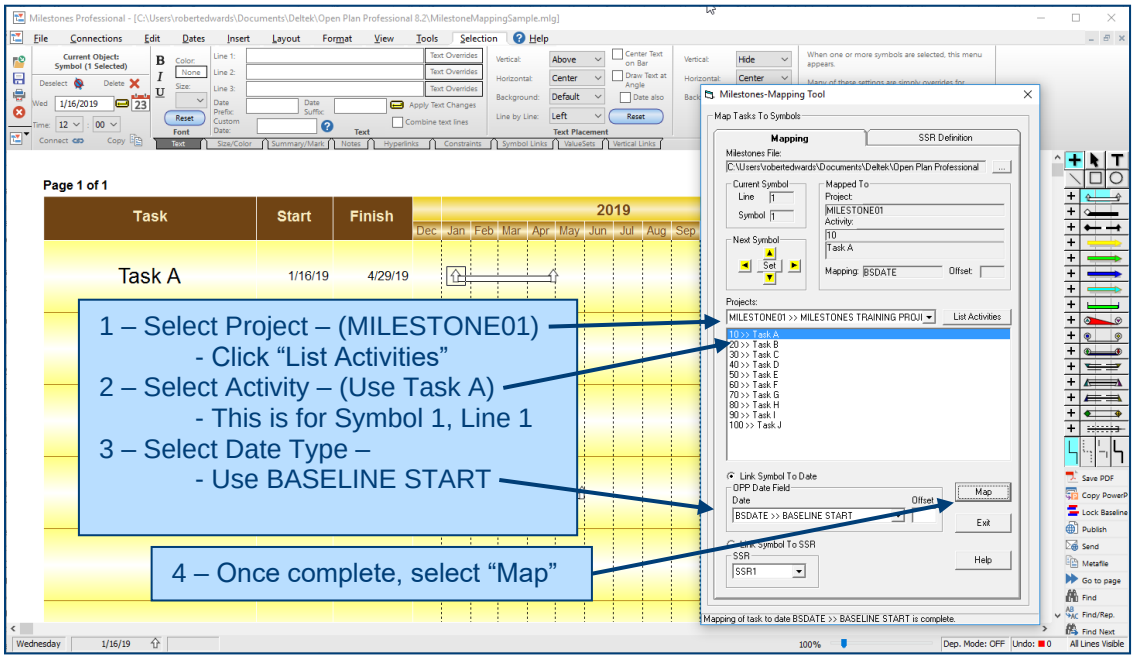
- Open Plan Project
- Activity ID
- Date Type

The Open Plan project is selected from the Projects drop down list which shows all the Open Plan projects to which you have access. You can type in the name (or at least the first few characters of the project name) to make it faster to select from the list. For our example, select **MILESTONE01**.

Next, you need to specify which activity is inside this project. Click on the **List Activities** button. This is Task A which you can see in the drop down list is task 10. Highlight that row.

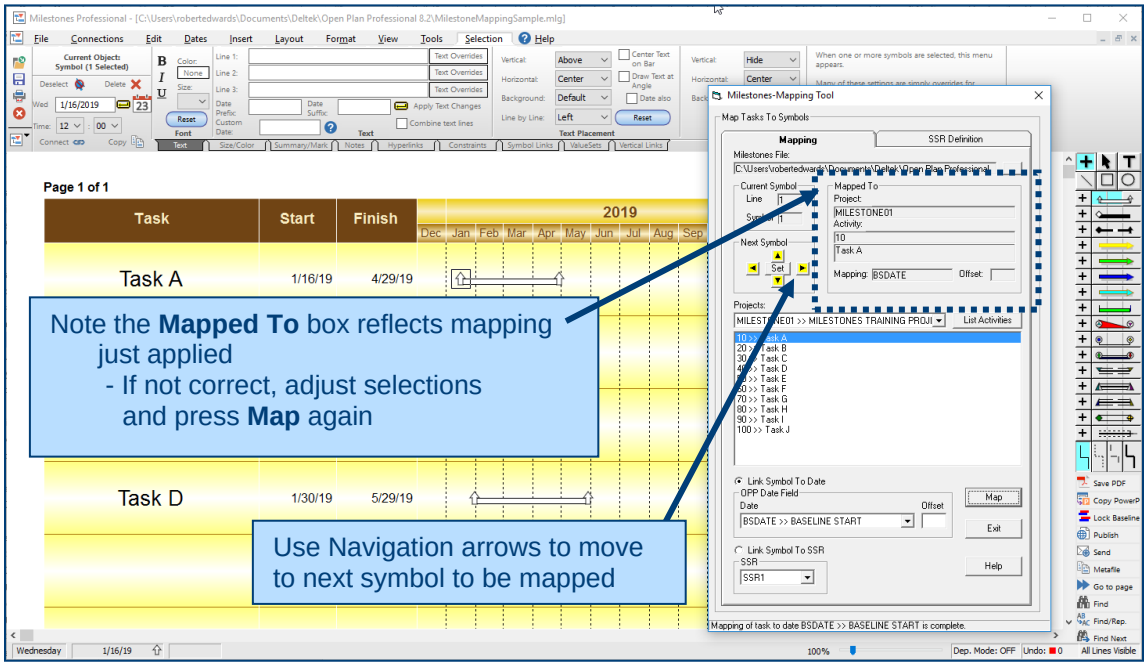
The last component of the description is the date type at which you want to position the symbol. The date types are selected from the drop-down. For our example, select **Baseline Start**.

Click the **Map** button to apply the selections.



Review the Applied Mapping

After you click the **Map** button, the **Mapped To** box is populated. If the Mapping is not correct, you can adjust the selections and click the **Map** button again.

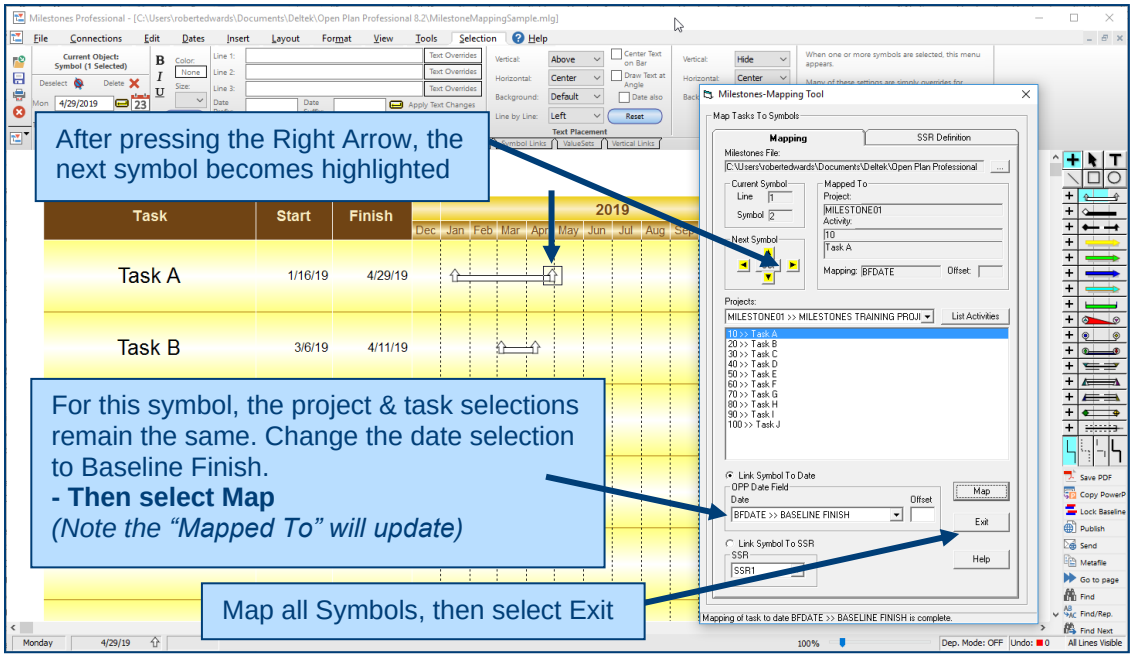


Mapping Additional Symbols

If the mapping is correct, you can use the Navigation arrows to move to the next symbol to be mapped. Click the right arrow to move to Symbol 2 on line 1 which can be seen in the Current Symbol box and can also be seen with the selection box around the selected symbol. For our example, you will map this symbol to the Baseline Finish of task 1.1.1.1. Select **Baseline Finish** from the date drop down and click the **Map** button.

Click the down arrow to move to the finish of the next task. Select task 1.1.1.2 (Task B) from the task list. Since you are at the finish, you do not need to change the date type – just click the **Map** button.

Click the left arrow to move to the start of Task B. Change the date type to **Baseline Start** and click the **Map** button. Continue to map all eight symbols on the chart.



Note: You can map symbols in a chart from activities in different Open Plan projects. To do so, open another project, list its activities, and map to the symbols.

Launching Update Tools

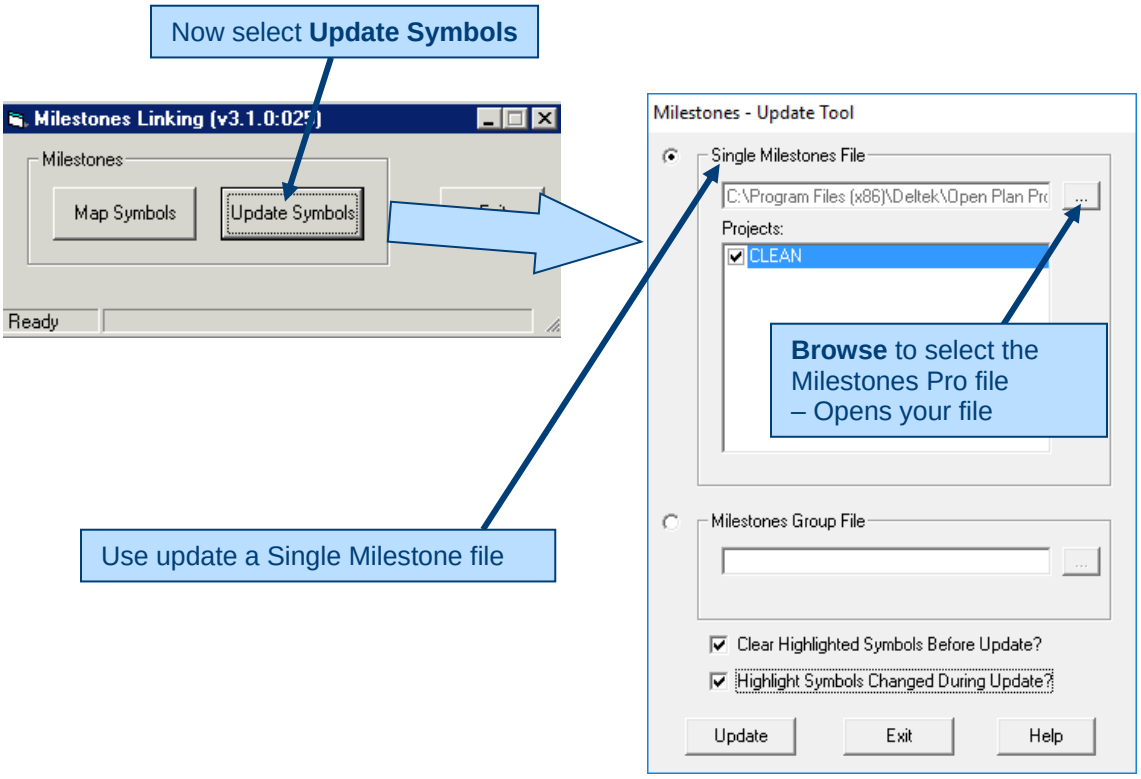
After mapping, the you can browse through the symbols using the navigation arrows, looking at the Mapped to box to ensure that the correct mapping of symbols is in place.

When you are satisfied that the mapping is correct, click the **Exit** button to return to the Milestone Linking Select Action dialog box.

Having completed the mapping, the next step is to update the symbols to position each symbol at the date from Open Plan.

Click the **Update Symbols** button. There are two options on the Update Tool:

- Update a single Milestones file
- Update a group of Milestones files



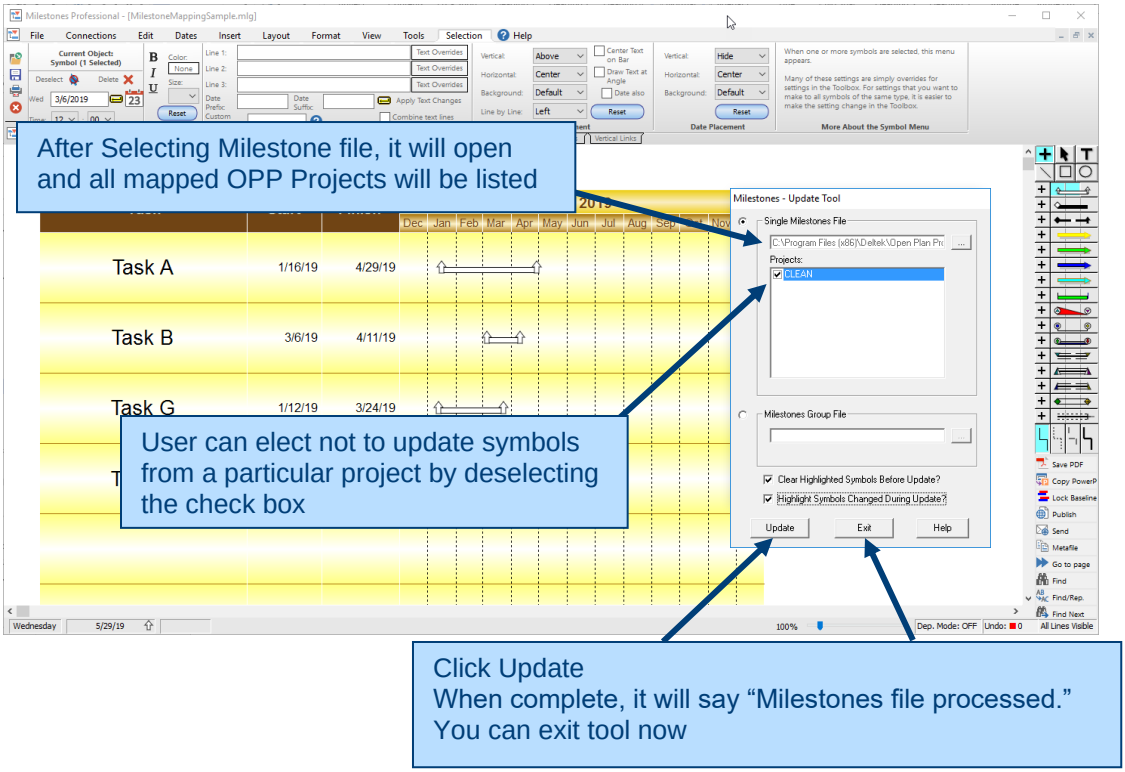
Note: While you do not need to save the Milestones Pro file for the tool to work, Deltek HIGHLY recommends that you do in case of mapping errors.

Milestone Update Tool

For this example, you will use the default setting to update a single Milestones file. Click the **Browse** button on the right side and navigate to the milestones file you want to update. Click **OK**.

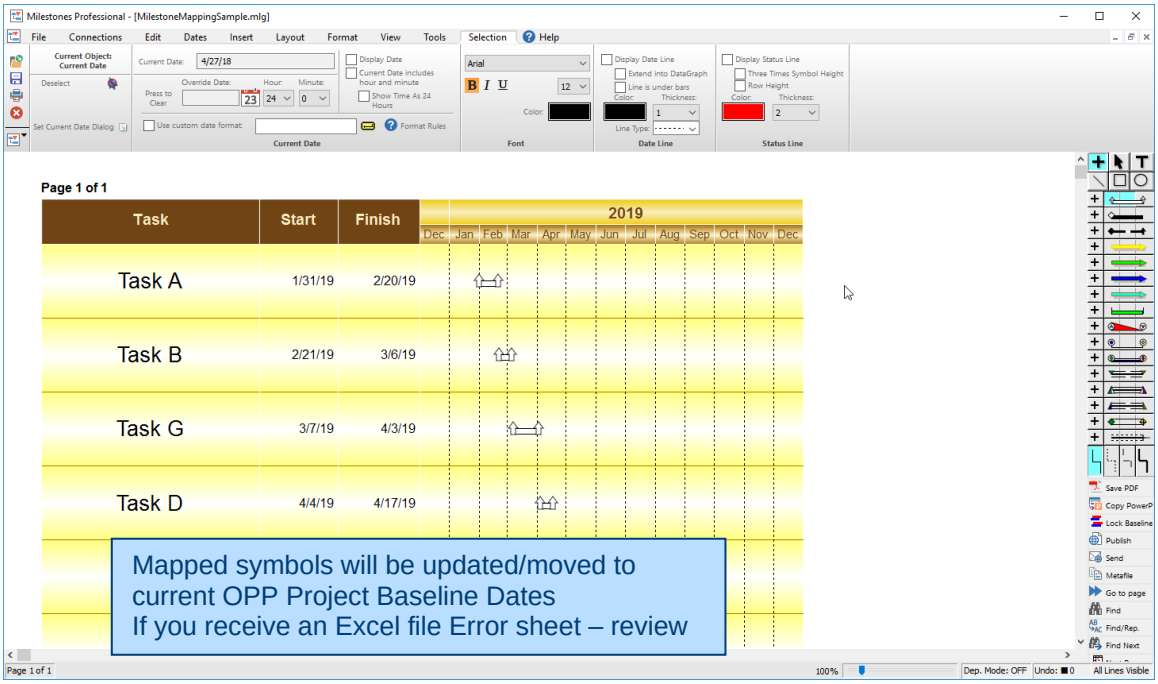
All the Open Plan projects that are mapped to this milestones chart are shown in the projects box. If you want to skip an update from one project, they can deselect the check box.

After selecting a file, the **Update** button at the bottom of the form is now active. Click **Update**. The tool updates the date for the symbols. If it encounters any errors, they are identified in an Excel spreadsheet.



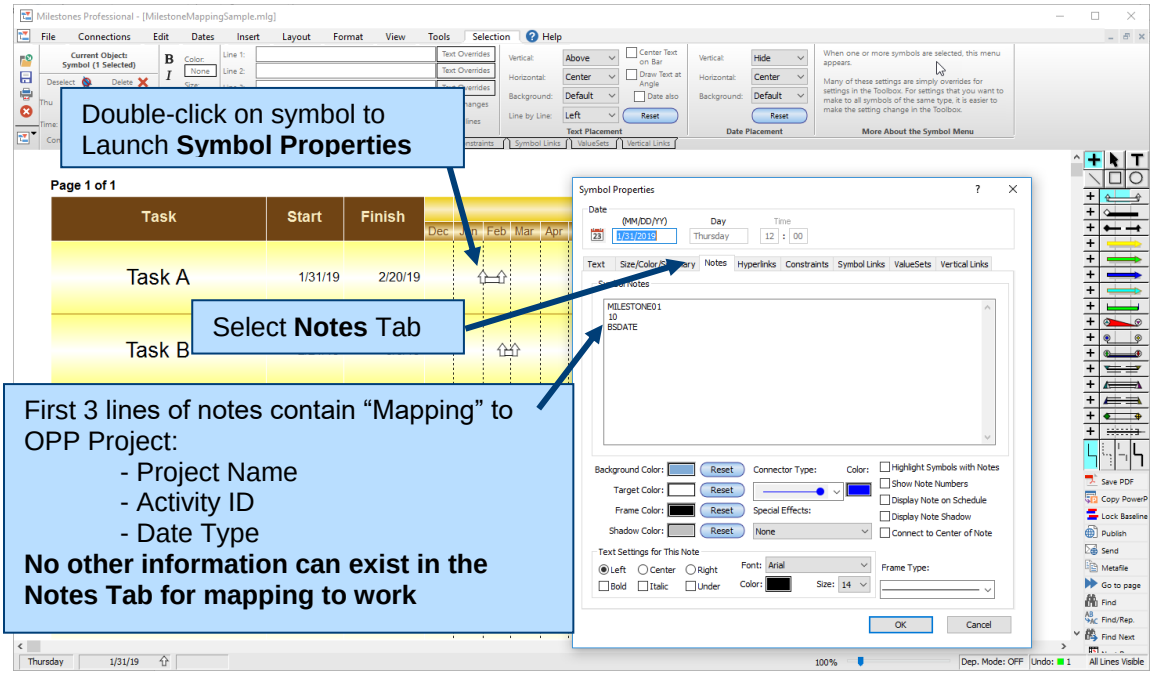
Updated Milestones File

When you look at the Milestones updated chart, you should see that the dates have been moved to baseline dates for each of the tasks.



Examine Details of Mapping

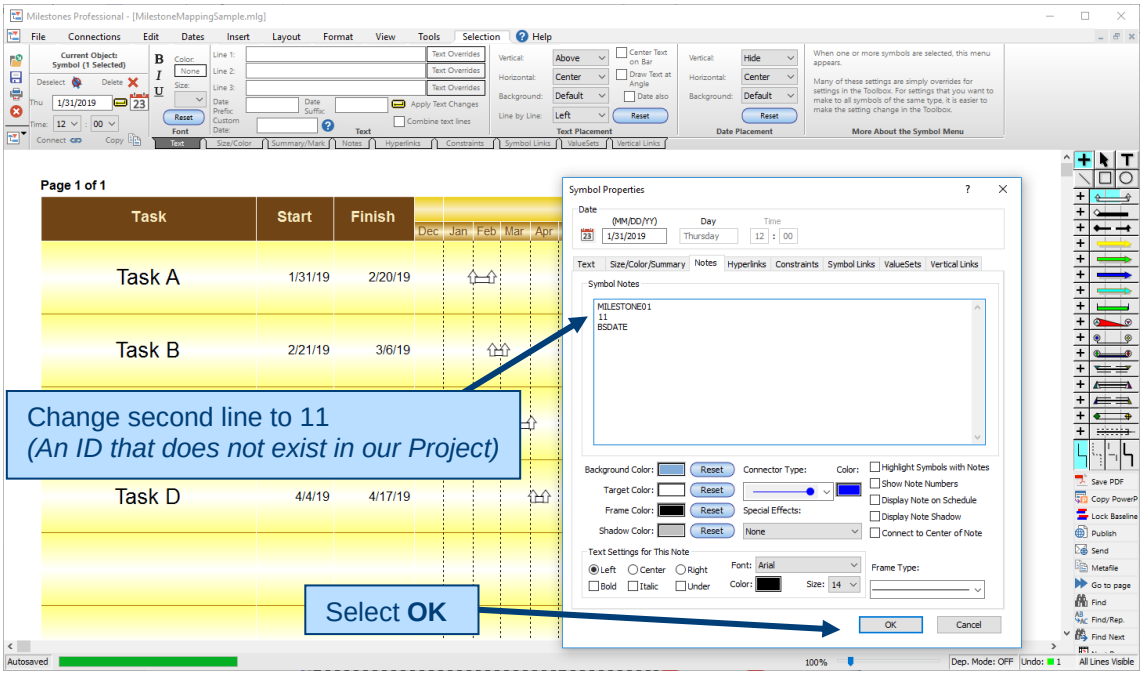
Let's examine the details of the Links. Make sure that you have selected the Arrow tool. Double-click on the first symbol to display the Symbols Properties dialog. Click on the Notes tab. The first three lines of the notes contain the mapping – Open Plan Project, Activity ID, and Date type. You can enter this data manually instead of using the Mapping Tool.



Users can manually enter/update "Mapped" Info via 'Notes Tab' or correct Mapping Errors with the OPP 'Map Symbols' Tool

Edit Mapping to Demonstrate an Error Report

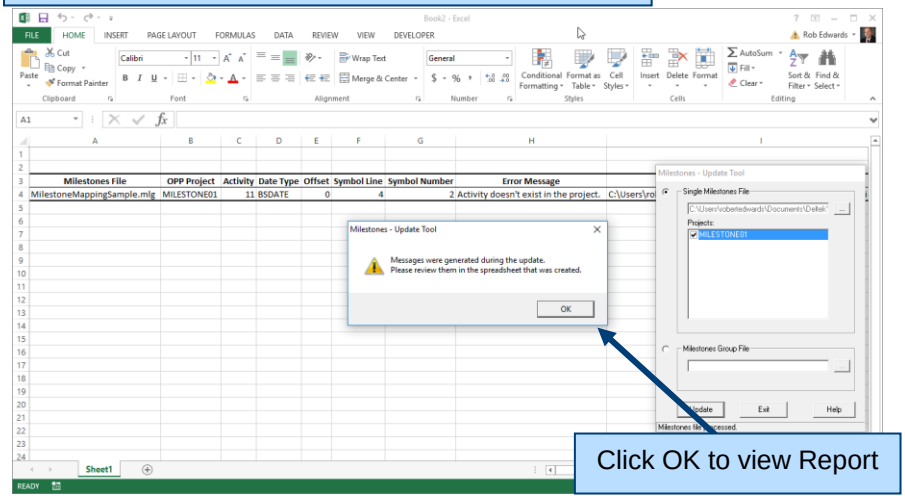
Let's modify the data to illustrate how the tool would handle an error in the mapping. Change the Activity ID to be **11**. Perhaps there used to a task 11 that was deleted from the project. Click **OK**.



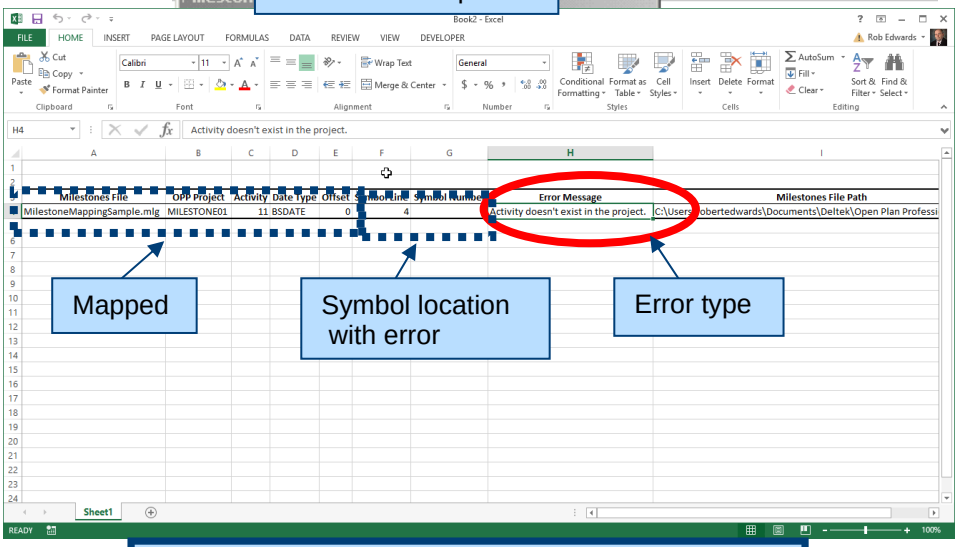
Update Tool Indicates if Error Occurs

Now return to the Milestone Link Tool – if not still in the Update Symbols tool select that button. Select the Milestones chart and click **Update**. An error displays.

Go to OPP and Rerun 'Milestones Interface' / 'Update Symbols' tool



Excel Chart opens

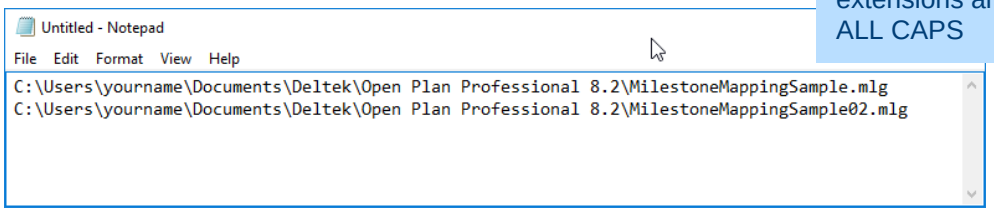


To find a symbol on a large file – use Edit/Find… "Symbol Notes Only"

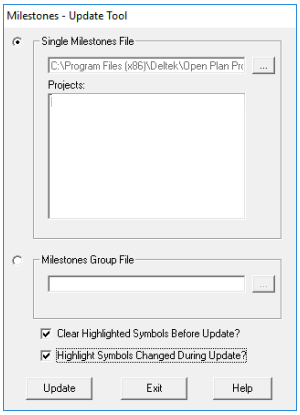
Update Group of Milestone Files

1) Set up csv file with list of Milestones files

Be Sure that extensions are ALL CAPS



2) Select the Milestones Group radio button and then Select the file from the ellipsis button, and then the Update button.



Show Progress Updates with Milestones Interface Rules

The Map to Date functionality allows you to get any symbol to the correct date, but an enhancement to that is a way to have the symbology adjust to changes as progress is entered into a project. The definition of Schedule Status Rules (SSR) allows you to accommodate changes in symbols with having to create a mapping for all possible combinations.

SSRs, similar to Bar types in Open Plan which are a hierarchy of symbols, allow the definition of many rules that are only executed when the dates for the symbols are valid. Each SSR can draw any of the symbols on the Milestones toolbox.

After the SSRs are defined, each set is associated with a Milestones chart. The definitions are stored in an .XML files in the user folders.

Schedule Status Rules (SSR's)

- Defining Schedule Status Rules (SSR's) allows you to show changing symbols from a "single mapping" to a "multiple mapping" … mapping to multiple Date Types.
- Definitions are similar to Bar Types in Open Plan
  - Hierarchy of symbology that is shown when dates are "valid"
  - Can use all symbology in the Milestones Chart toolbox
- SSR's are stored for each Milestones chart
  - Reused for subsequent updates
  - Can be shared with other Milestones Professional charts

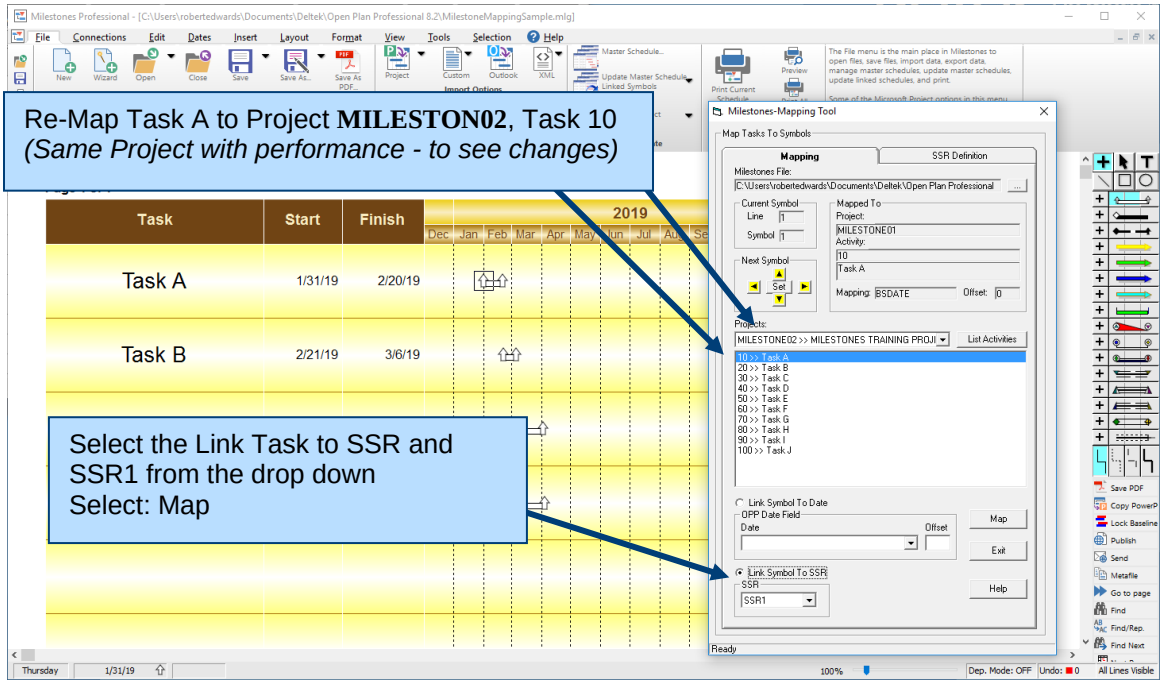
Warning – SSR Rules and Local User Folder

- Schedule Status Rules are stored in the local user's "My Documents\Deltek\Open Plan Professional 8.3" folder. (File name SSR.xml)
- When working in Citrix environments, care may need to be taken to make sure these are preserved and available on various servers.

Mapping to Schedule Status Rule with a Statused Project

Return to the Mapping Tool dialog and select project **MILESTON02** which is a progressed version of **MILESTON01**.

For the symbol 1 on Line 1, select the **Link task to SSR** radio button and then **SSR1** from the dropdown. Click **Map**. An error message displays that the SSR is not yet defined.



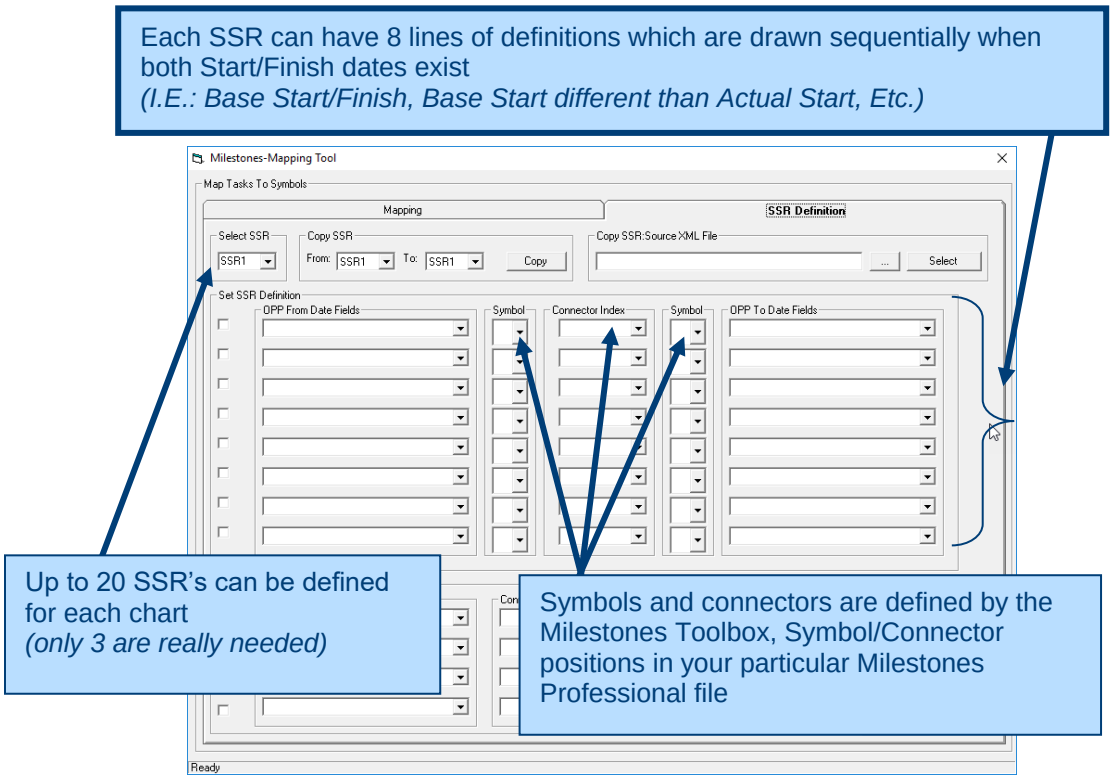
ERROR: Must Define SSR's prior to Mapping

Schedule Status Rule Definition Dialog Box

Click on the SSR Definition tab.

There are up to 20 SSR definitions that can be associated with each Milestones chart.

Each line of the SSR allows you to show two symbols and a connector. The symbols and the connectors are all from the Milestones toolbox. Each line is only drawn if both dates are valid. There can be up to 8 lines defined for each SSR.

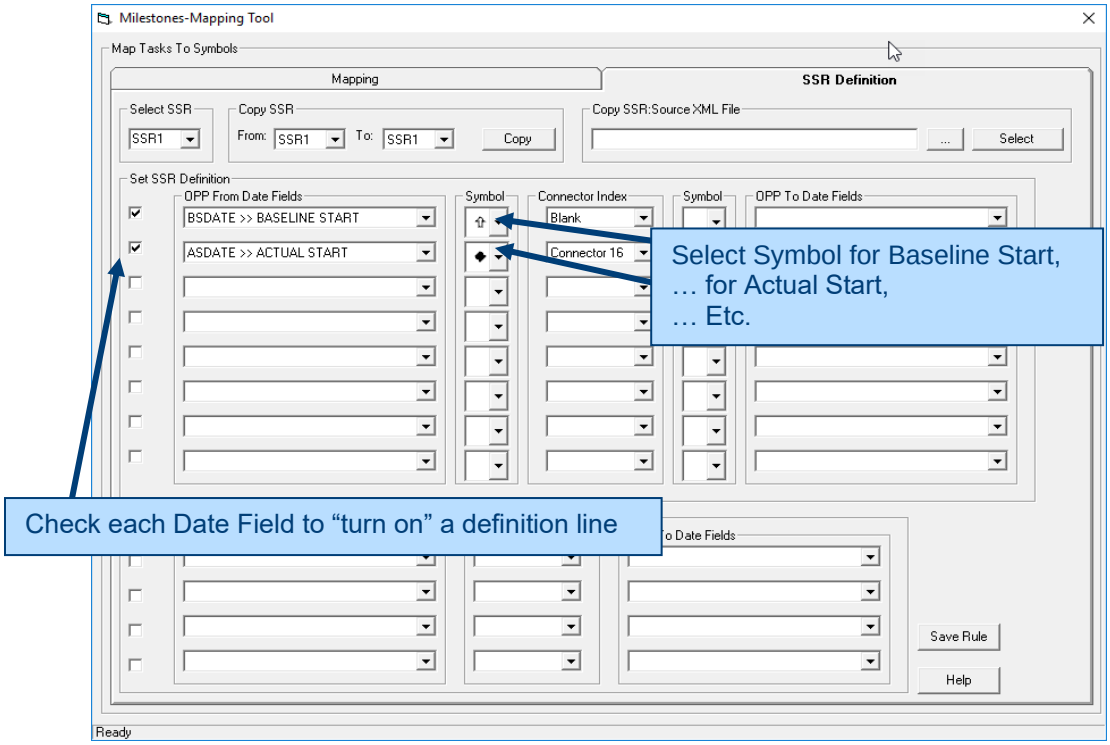


Define Schedule Status Rule 1 (SSR1)

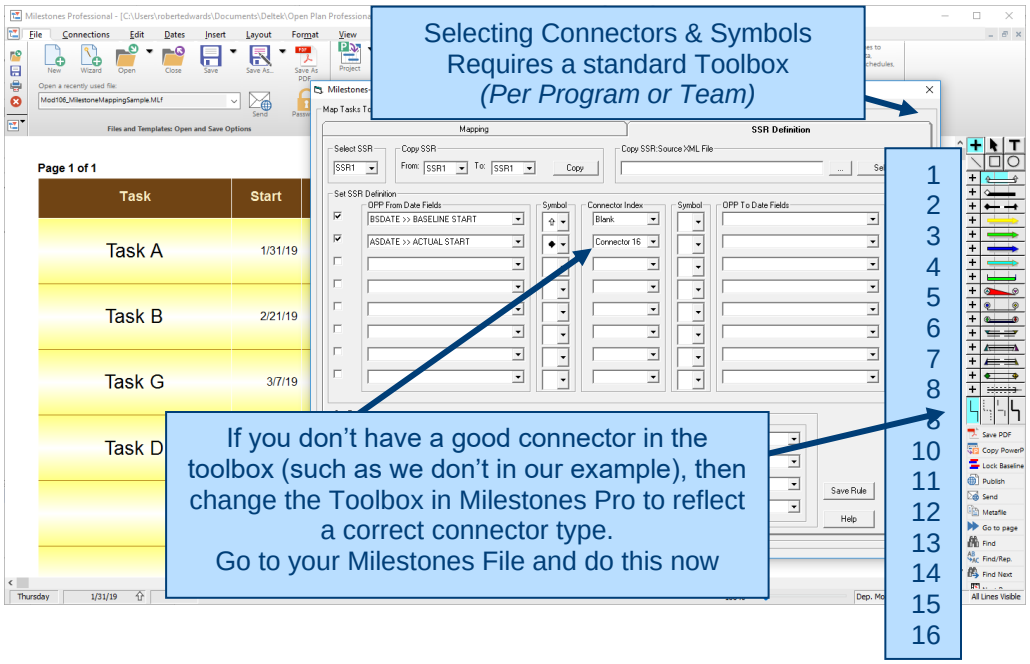
Click the Set SSR Definition box next to the first line. Previously, you were drawing the Open “doghouse” at the **Baseline Start** for this task, so you will start with that in the Open Plan From Date.

In the Symbol drop-down, select **symbol 1** in the tool box. You do not need (or want) a second date and symbol on this line.

Click the check box to turn on line 2. In the **From Date** select the **Actual Start** date.



On the second line, you need to show the Actual Date as slipped from the baseline. You have already selected the **Actual Start** date from the drop-down and now you select the **Solid Diamond** shape. It would be nice to select a dashed line (at bottom of symbols) to show the slip, but there is no Horizontal Connector like that defined. Go into Milestones and redefine the **Bar 16** to be as desired.


Selecting Connectors & Symbols
Requires a standard Toolbox
(Per Program or Team)
If you don't have a good connector in the toolbox (such as we don't in our example), then change the Toolbox in Milestones Pro to reflect a correct connector type.
Go to your Milestones File and do this now
Page 1 of 1
Task
Start
Task A
1/31/19
Task B
2/21/19
Task G
3/7/19
Task D
SSR Definition
Mapping
Save Rule
Help
1
2
3
4
5
6
7
8
10
11
12
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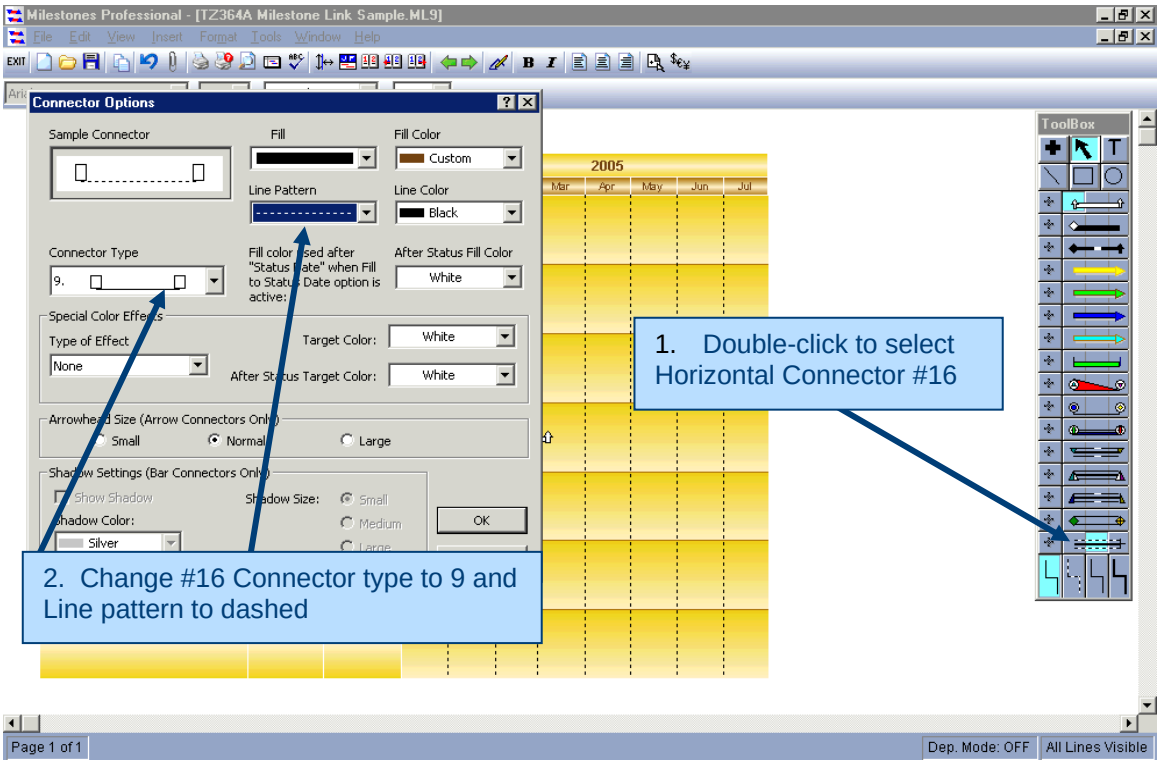
14
15
16

Make Horizontal Connector 16 a Low Dashed Line

Double-click on Connector 16 to display the Connection Options dialog box. Change it to **Connector Type 9** with a dashed **Line Pattern**.

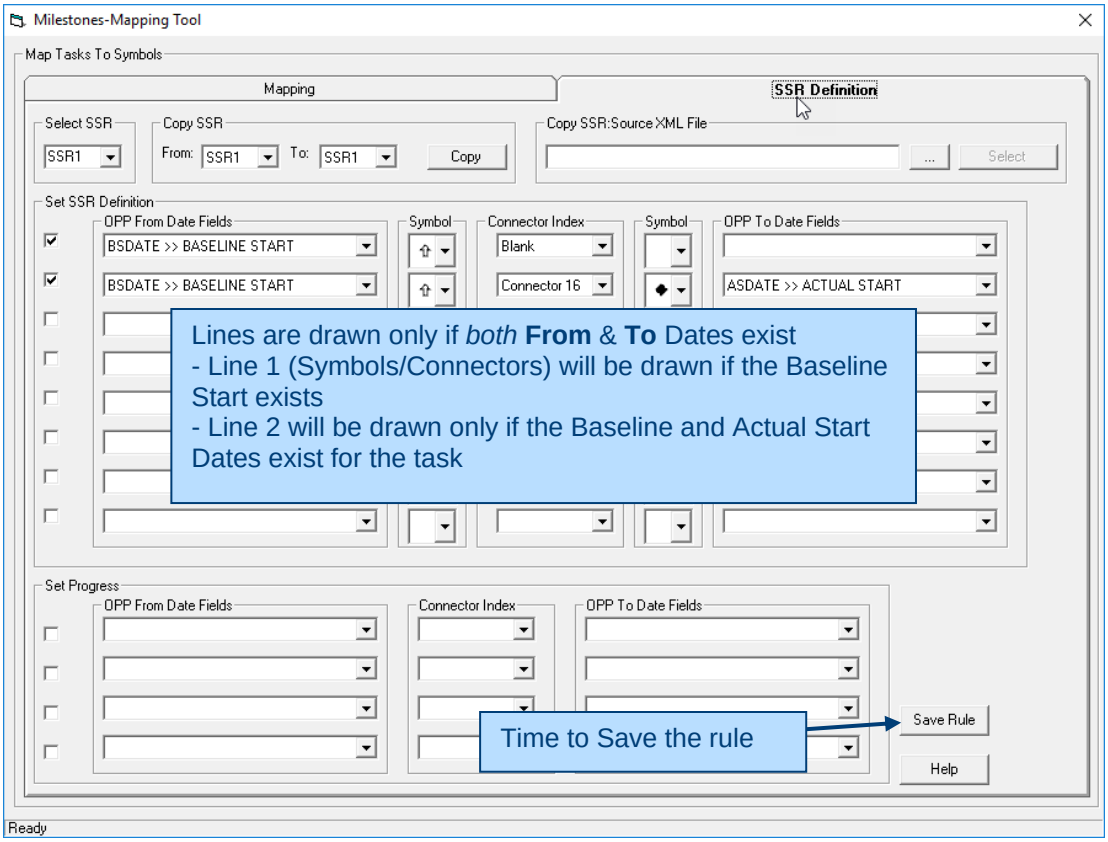


Define Schedule Status Rule 1

On Mapping tool, select **Connector 16** to go between the two symbols. Select a hollow “Doghouse” for the Baseline symbol and choose the **Baseline Start** date from the drop-down.

Each line of an SSR definition is only drawn if both dates on the line are valid. Empty dates such as the one on the first line are considered valid, so the line will be drawn as long as the Open Plan From date is valid. Therefore, the first line of this SSR will be drawn as long as there is a **Baseline Start Date** for the mapped activity.

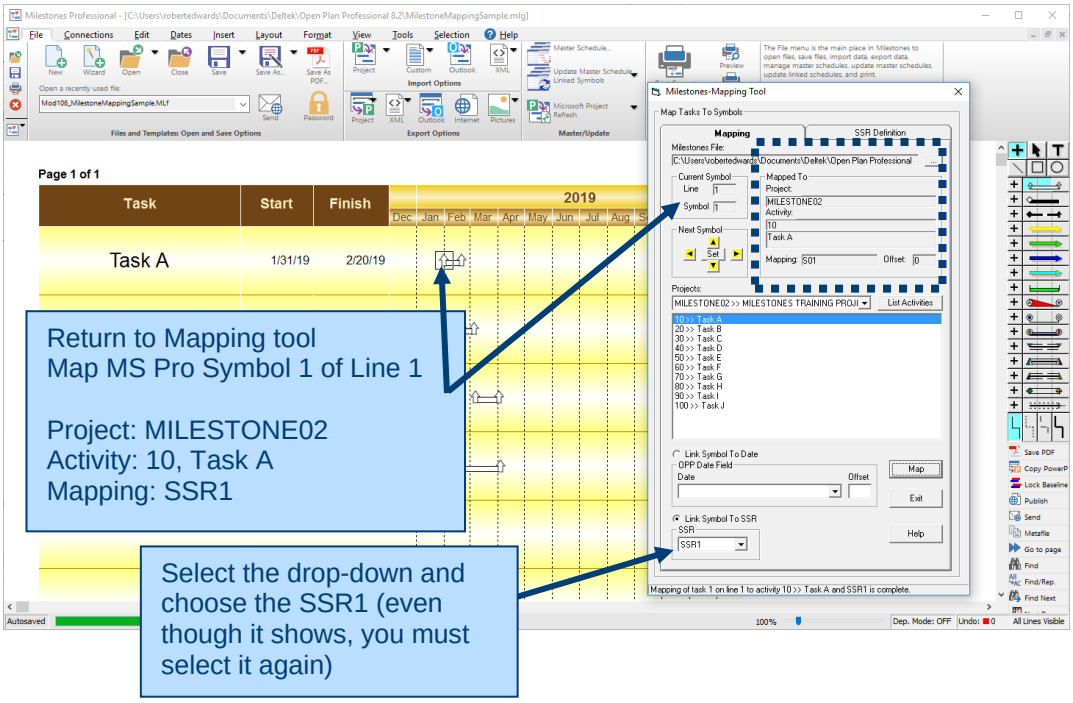
The second line will only be drawn if there is both a Baseline Start and Actual Start dates.



Mapping to Schedule Status Rule 1

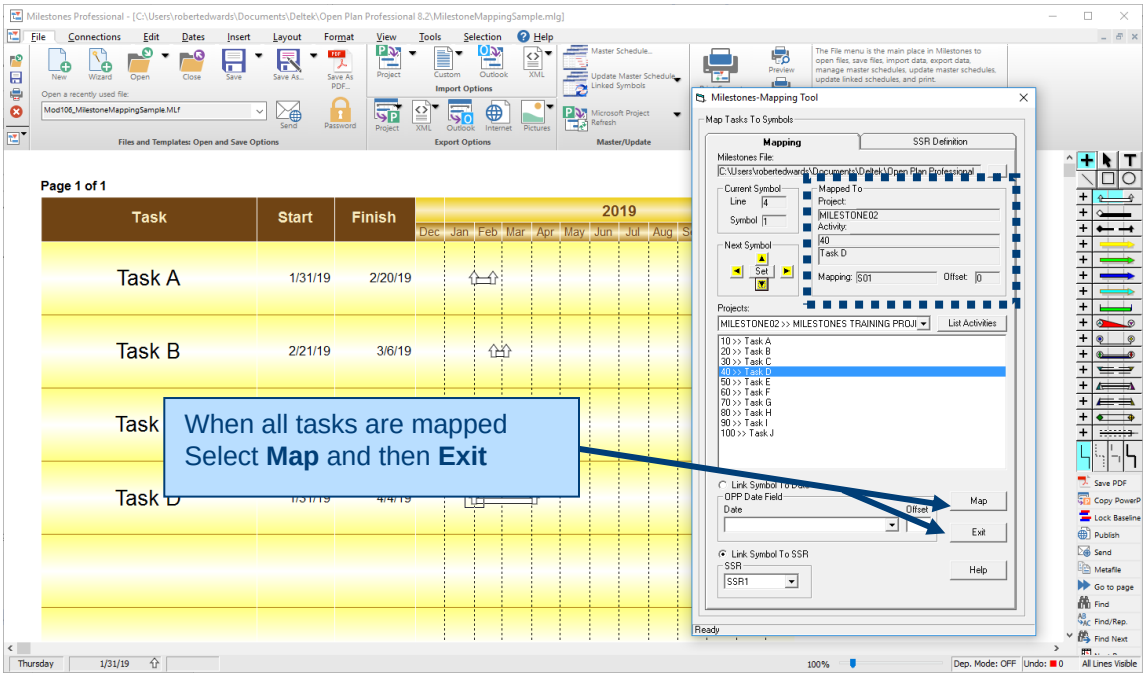
After defining the SSR, return to the Mapping tab. When the Save dialog displays, click **Save the SSR definition**.

Next, map the first symbol to **MILESTONE02, Activity 10** and select **SSR1**. You can see the mapping in the gray box in the upper right area.



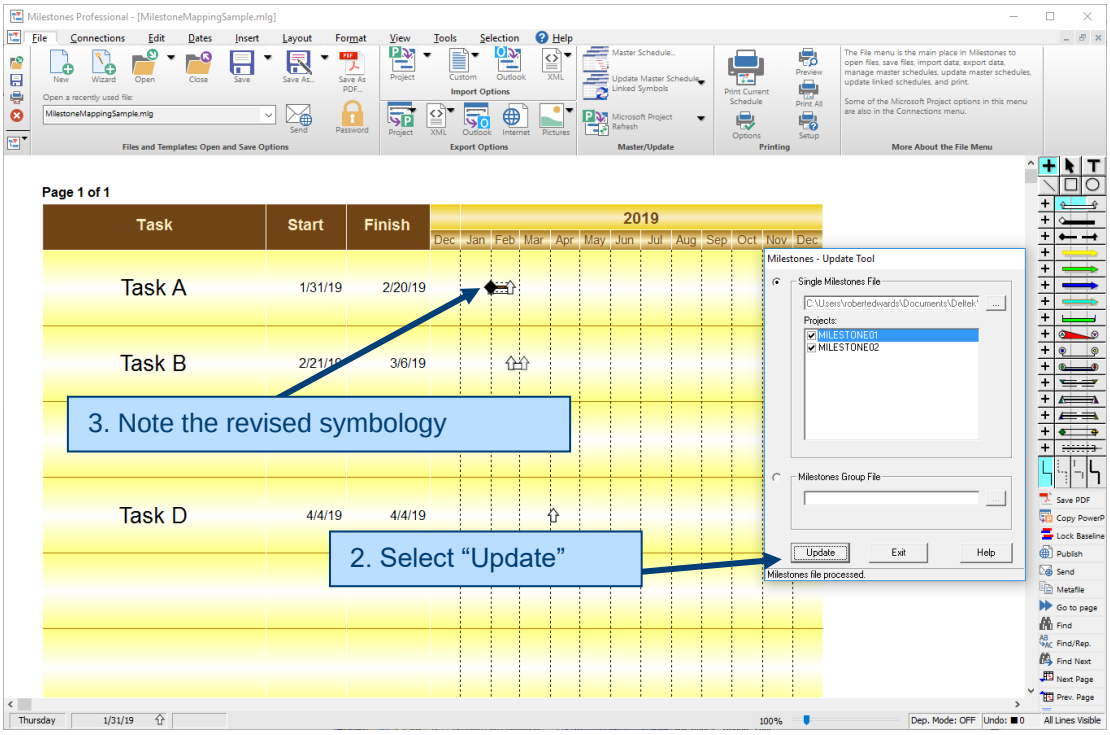
Exit Mapping Tool After Mapping Symbols

Continue mapping the beginning symbol of each task.



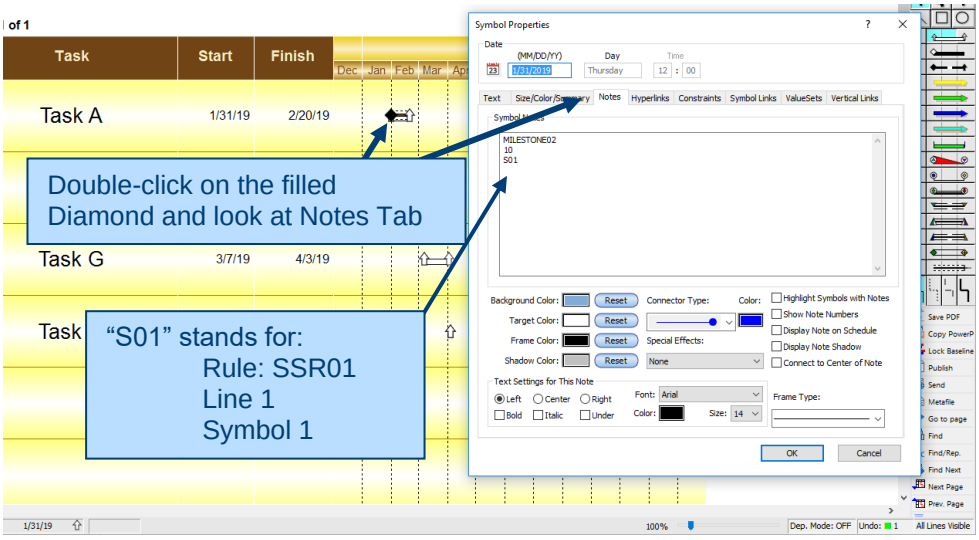
Update with the New Mapping

After updating the Milestones chart, you can see the result of the SSR: You can see two symbols now.



Update Symbology and Mapping

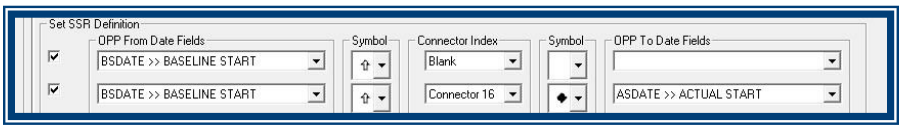
Double-click on a symbol in Milestones to view the mapping that is created by the tool. The format tells you which SSR is used, which line of the SSR, and which of the two symbols on that line are represented by the symbol.

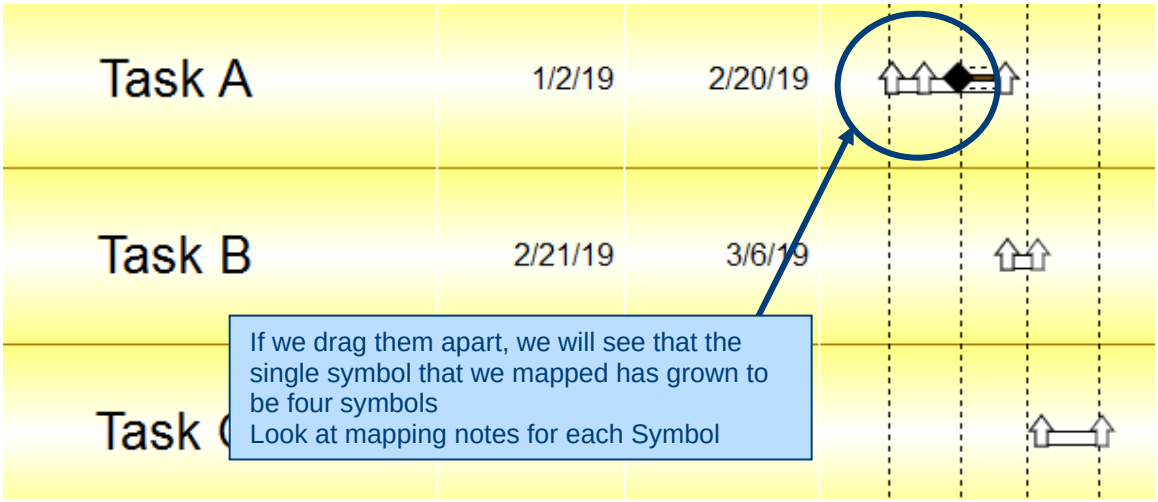


Multiple Symbols Created by SSR

If you drag the symbols apart, you can see that multiple symbols are actually painted over one another.

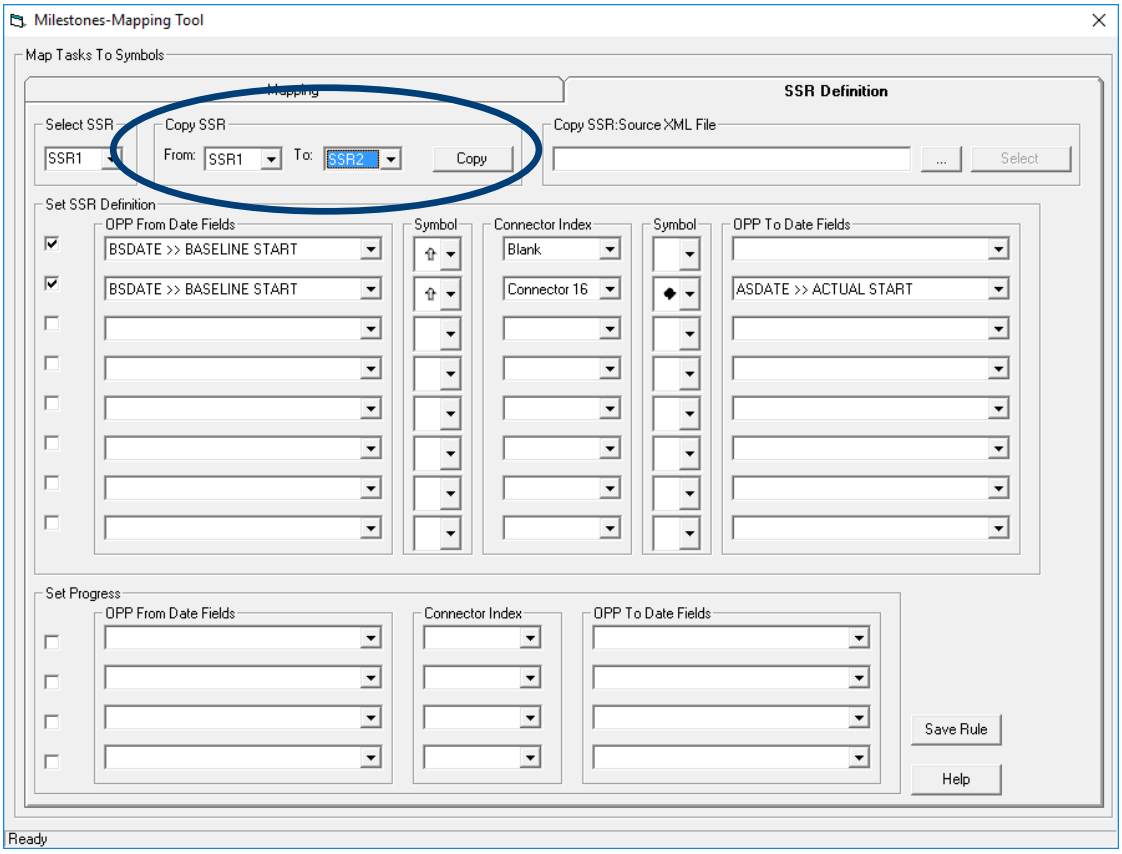
You can delete the extra symbols – just make sure you keep the one with the S01 mapping. The system will recreate the other symbols after updating again.





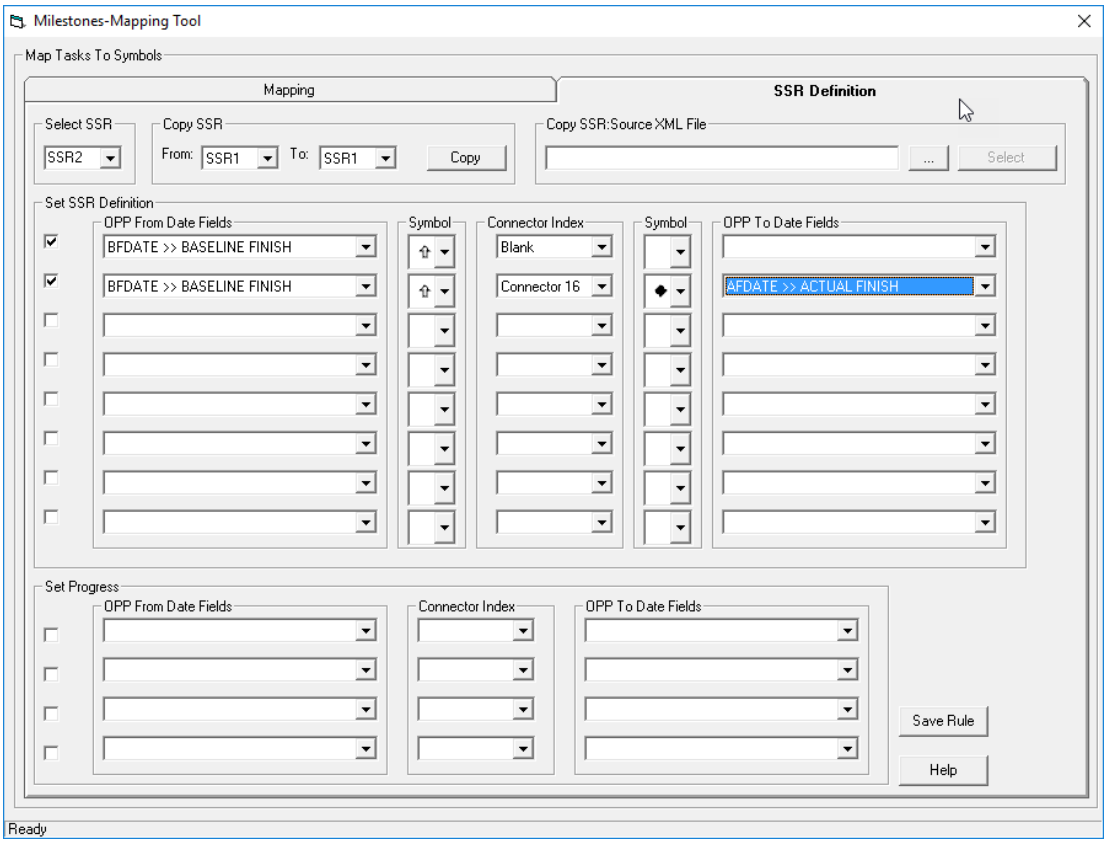
Copy SSR1 to SSR2

One way to make an SSR definition for the Finish date is to copy **SSR1** into **SSR2** and then make changes.



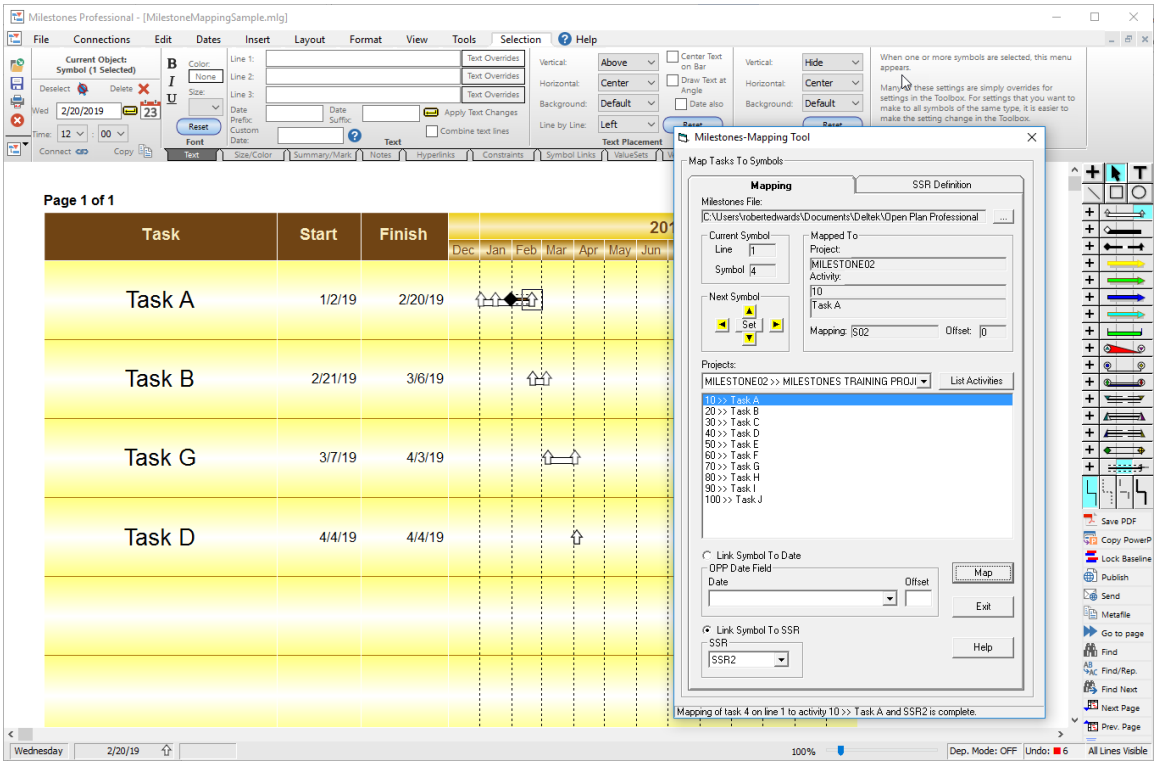
Modify SSR2 to Display Finish Dates

Next, you will make all the changes to show **Finish** dates instead of **Start** dates



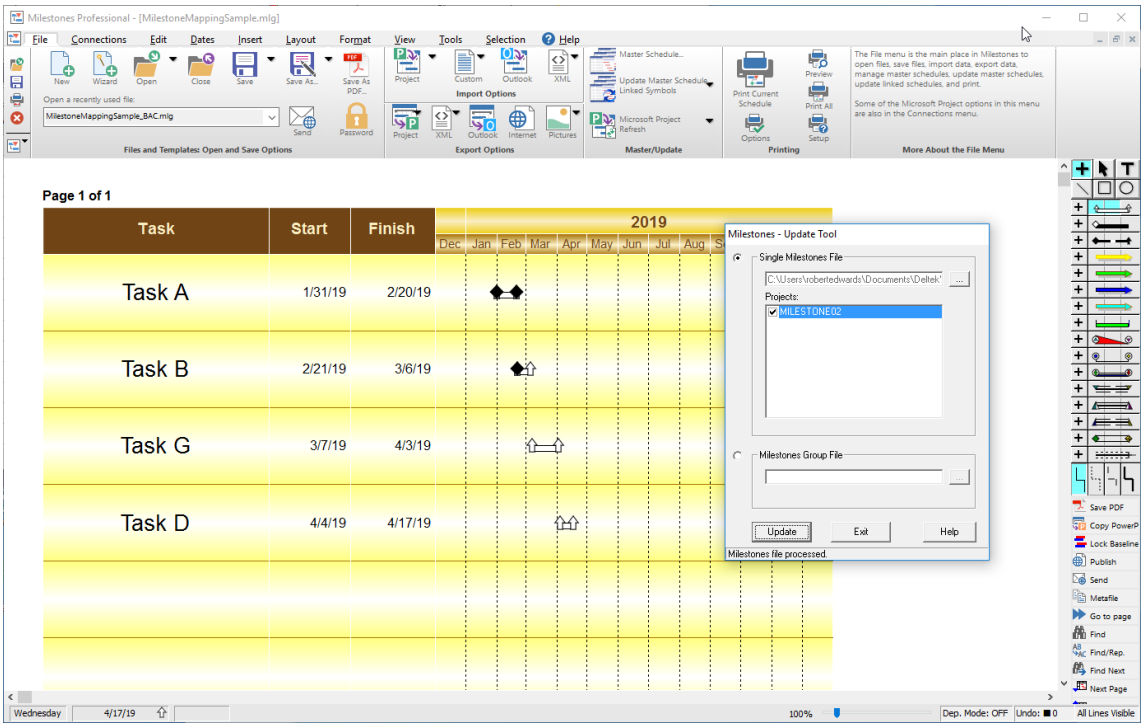
Map Finish Symbol to Train_106a, Task 10, SSR2

On the Mapping tab, map the second symbol to **MILESONTE02**, **Activity 10**, and **SSR2**.



Updated with SSR2

After updating, you should now be able to see the multiple symbols for both start and finish.



Default Open Plan Schedule Symbolic Logic

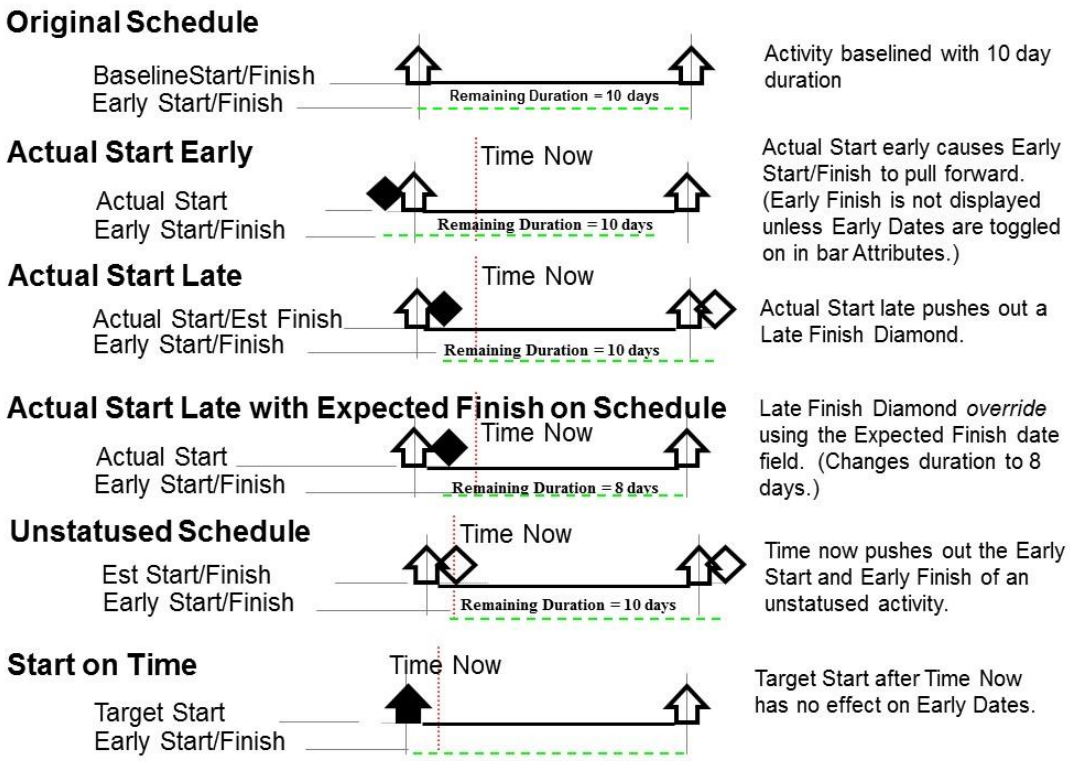
The SSR that you defined do not cover all conditions that might be encountered. For example, what symbology do you want to show if the Task actually starts on the Baseline date?

The chart shows the Open Plan Standard Doghouse and Diamonds symbology.

Not all Milestones charts need to use this same symbology. That would be contrary to the richness of the graphics in Milestones. Even using other symbology, you may elect to use a version of the SSR.

Deltek recommends creating some standards. These will rely on the Toolbox and positions within that of symbols and connectors.

Here is an example of doghouse and diamonds:

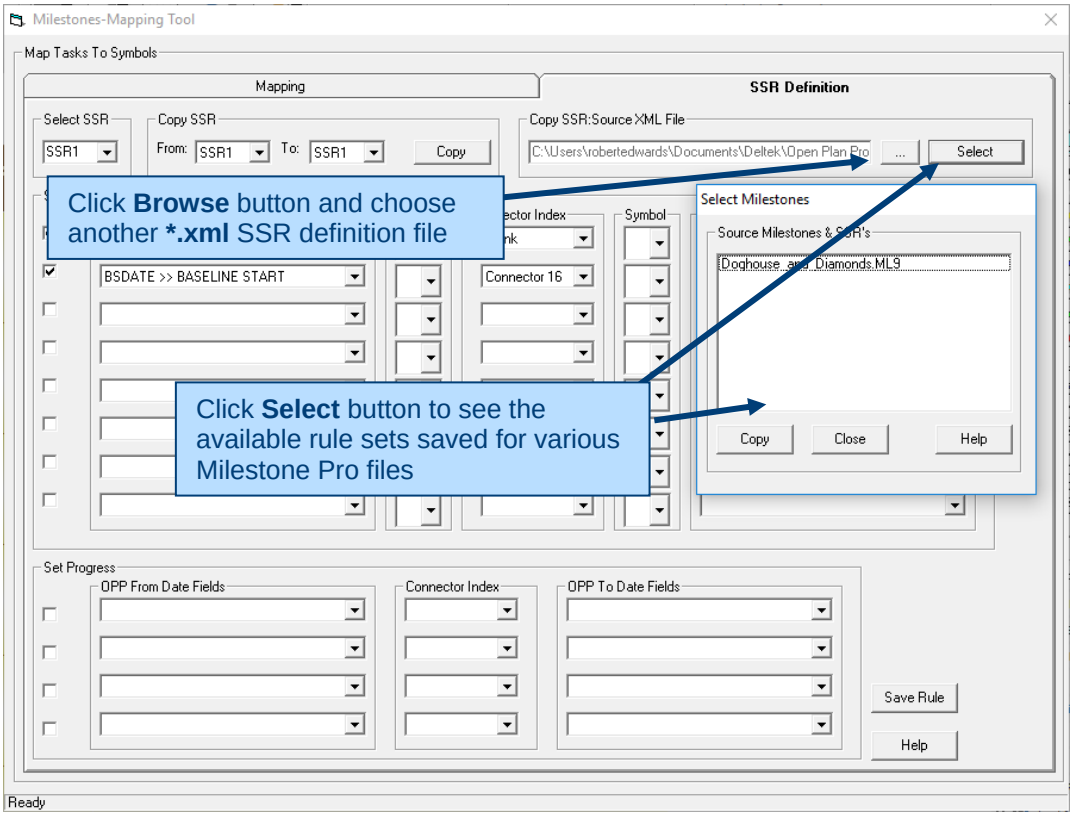


Import SSR Set from another XML File

After you develop standards, you can copy the SSR definition from one user or chart to another.

Each user's SSR.xml file can contain rules for use with multiple Milestones Pro files.

Use the **Browse** button in the upper right of the mapping tool to select another SSR.xml file to load then click the **Select** button to see the rule sets saved in the xml file. They are listed by the Milestone Pro files with which they are associated.



SSR Rules and Milestones Toolbox

- SSR rules use the symbol & connector positions in the Milestones Toolbox. Common toolboxes for multiple files is highly recommended.
  - The Toolbox can be copied from a template. Right-click on the Toolbox header and select **Copy Toolbox**. Right-click on the toolbox in the other Milestones chart and select **Paste Toolbox**.
  - You should adjust for any specific program requirements.
- If you have an existing Milestones chart, it may be easier to adapt the SSR symbols/connectors than modifying the Milestones chart/toolbox.

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