

# Process Simulator 2019 SP3 Features Webinar



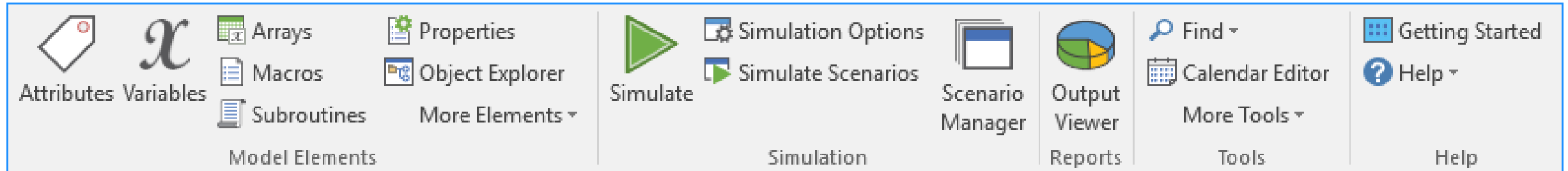
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7/2019 Version 10.3.0.4090  
Process Simulator 2019 SP3 Features Webinar  
For Software Version: 10.3.0.4090  
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Orem, UT 84097  
801-223-4600

# Agenda

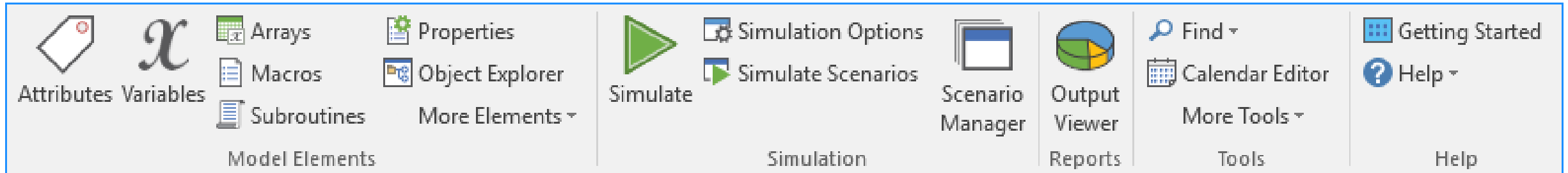
- Ribbon Enhancements
- Properties Enhancements
- Model Compilation Speed Increase
- On-page and off-page connectors
- Referenced vs. non-referenced sub-models

# Ribbon Enhancements

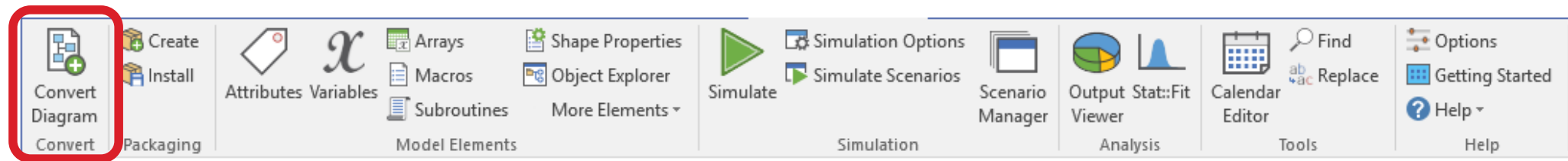


# Ribbon Enhancements

## New Ribbon



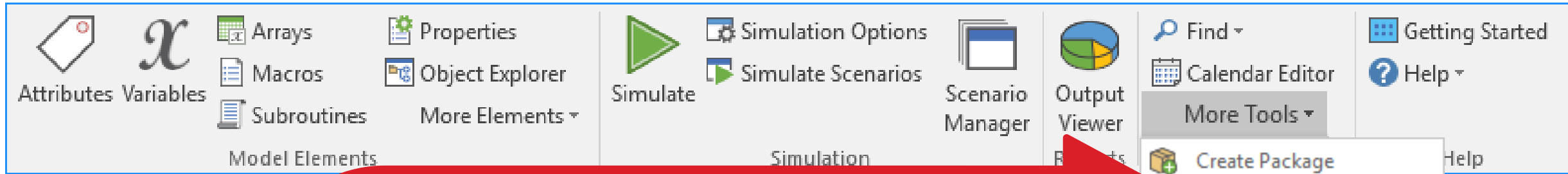
The convert button only shows up when there is something to be converted.



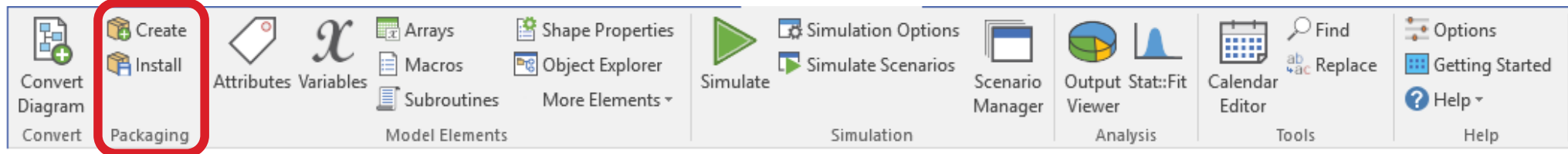
## Old Ribbon

# Ribbon Enhancements

## New Ribbon



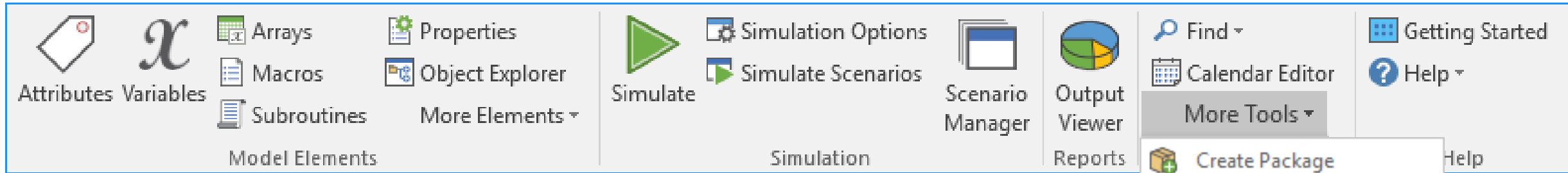
You can find Packaging Options when you go to More Tools



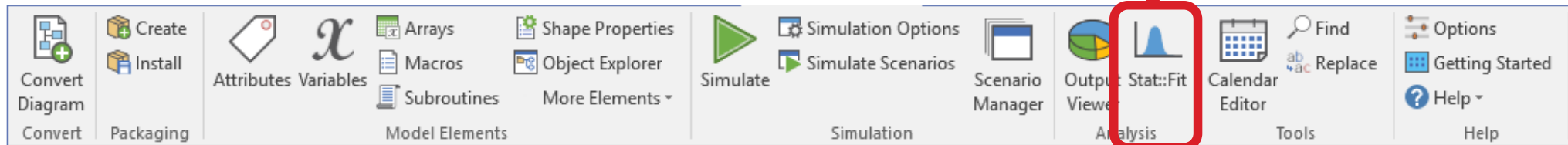
## Old Ribbon

# Ribbon Enhancements

## New Ribbon



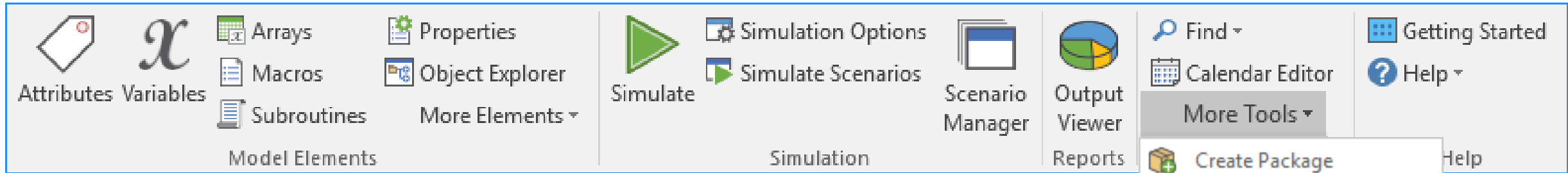
Stat::Fit moved to More Tools



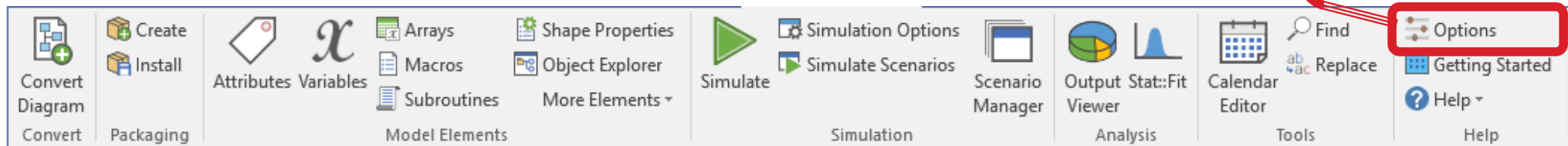
## Old Ribbon

# Ribbon Enhancements

## New Ribbon

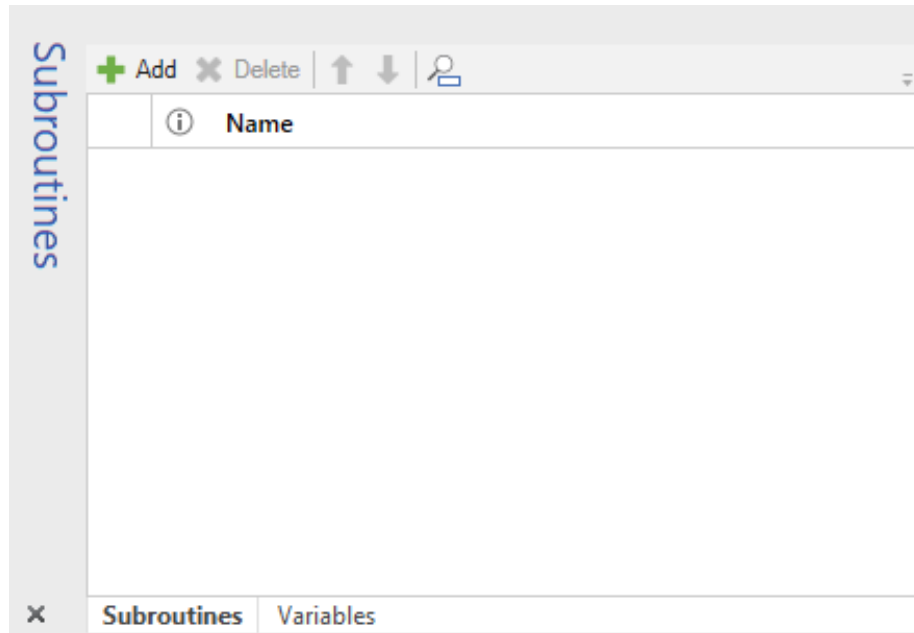
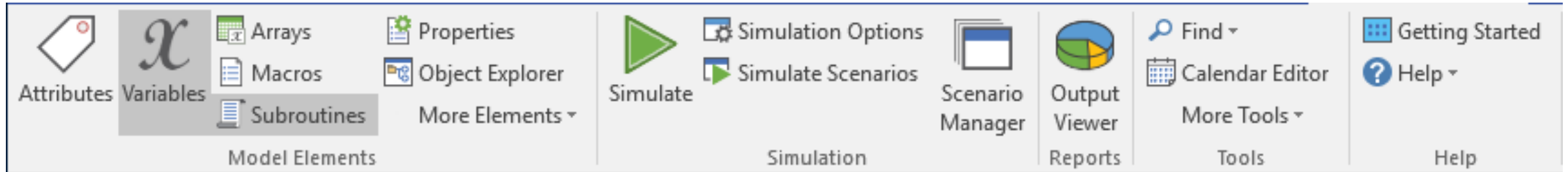


Stat::Fit moved to More Tools



## Old Ribbon

# Ribbon Enhancements

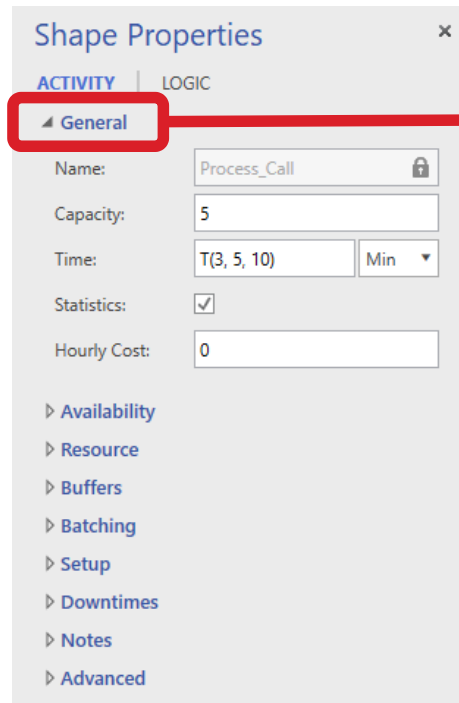


Buttons in the ribbon are now toggle buttons

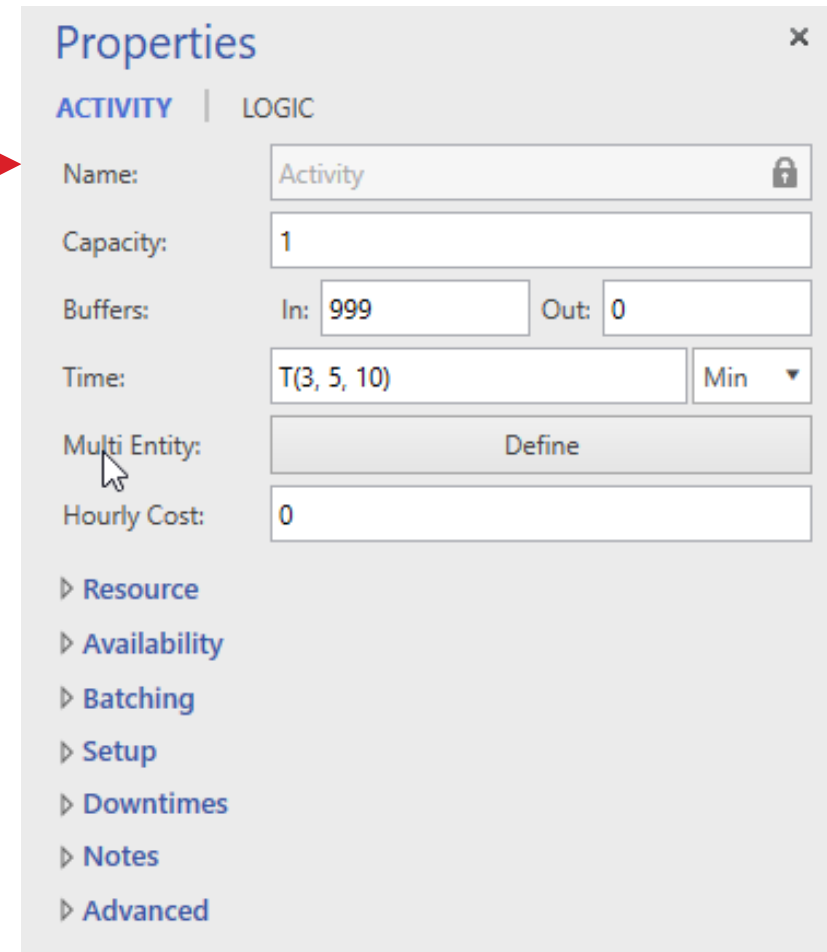


# Properties Enhancements

Old Properties Window



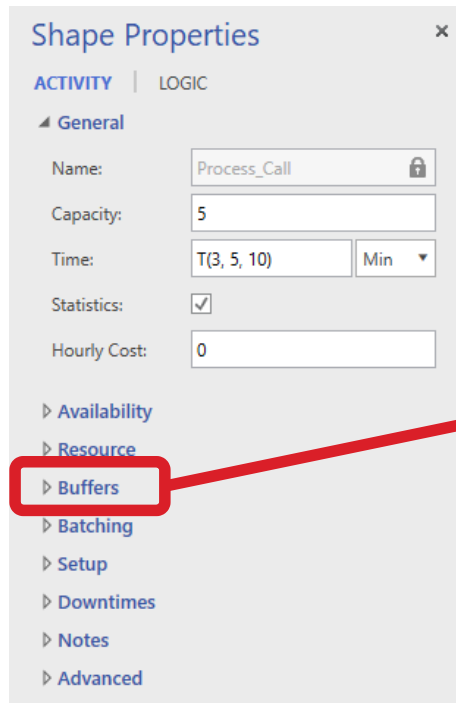
New Properties Window



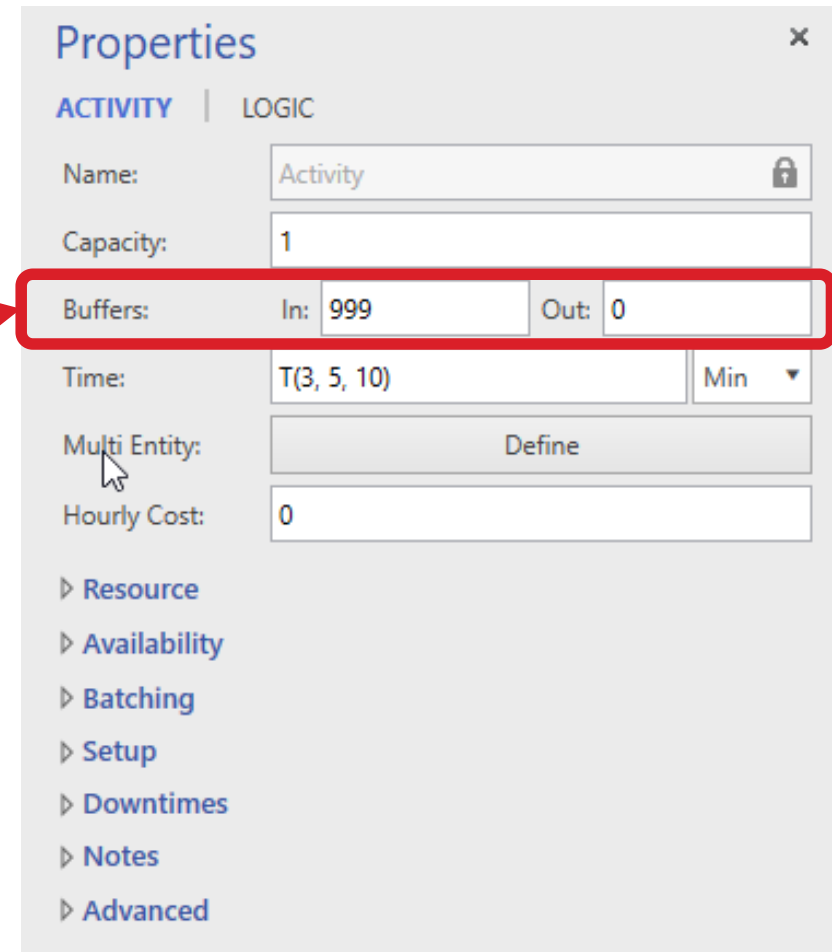
There is no General Tab

# Properties Enhancements

Old Properties Window



New Properties Window



Buffer options moved up

# Properties Enhancements

## Old Properties Window

The screenshot shows the 'Shape Properties' dialog box with the 'ACTIVITY' tab selected. The 'General' section is expanded, showing fields for Name (Process\_Call), Capacity (5), Time (T(3, 5, 10) with a 'Min' dropdown), Statistics (checked), and Hourly Cost (0). A sidebar on the left lists other sections: Availability, Resource, Buffers, Batching, Setup, Downtimes, Notes, and Advanced.

## New Properties Window

The screenshot shows the 'Properties' dialog box with the 'ACTIVITY' tab selected. The 'General' section is expanded, showing fields for Name (Activity), Capacity (1), Buffers (In: 999, Out: 0), Time (T(3, 5, 10) with a 'Min' dropdown), and Hourly Cost (0). A new 'Multi Entity' field is highlighted with a red box, containing a 'Define' button. A sidebar on the left lists other sections: Resource, Availability, Batching, Setup, Downtimes, Notes, and Advanced.

Multi Entity Options added

# Properties Enhancements

The screenshot displays the 'Properties' dialog box for an activity, with the 'ACTIVITY' tab selected. The 'Multi Entity' section is highlighted with a red box, and a 'Multi Entity' sub-dialog box is open, showing a table of entities.

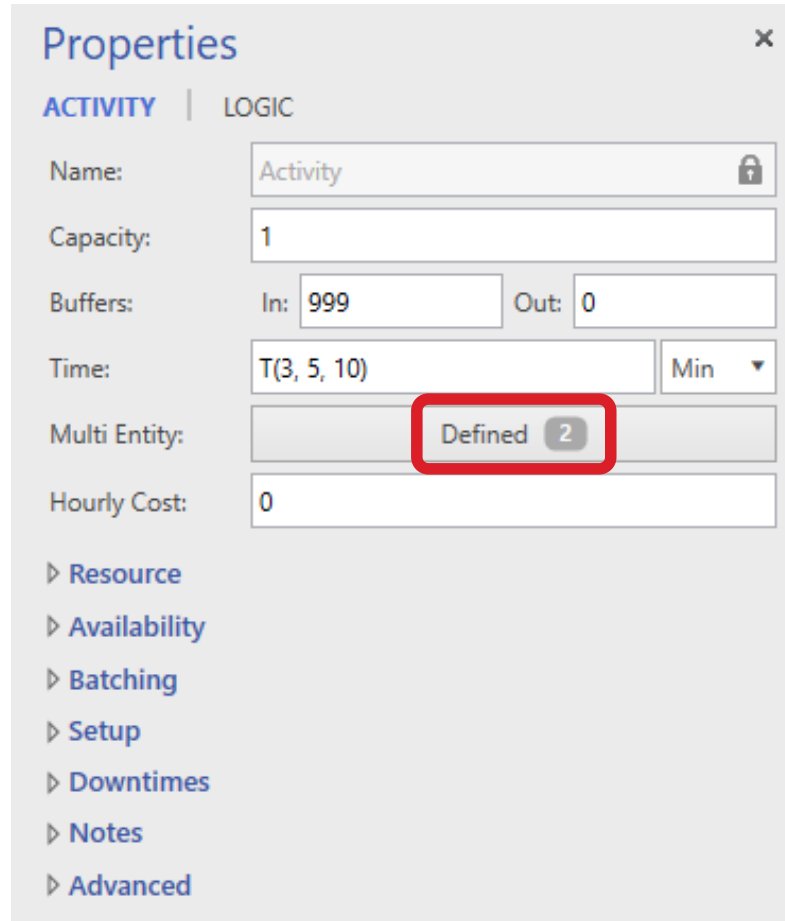
**Properties Dialog (ACTIVITY tab):**

- Name: Activity
- Capacity: 1
- Buffers: In: 999, Out: 0
- Time: T(3, 5, 10) Min
- Multi Entity: Define
- Hourly Cost: 0
- Resource, Availability, Batching, Setup, Downtimes, Notes, Advanced (all collapsed)

**Multi Entity Dialog:**

Entity	Time	Resource	Priority	Keep
1	Work_Unit	5 Min	0	<input type="checkbox"/>
2	Work_Unit_2	15 Min	0	<input type="checkbox"/>

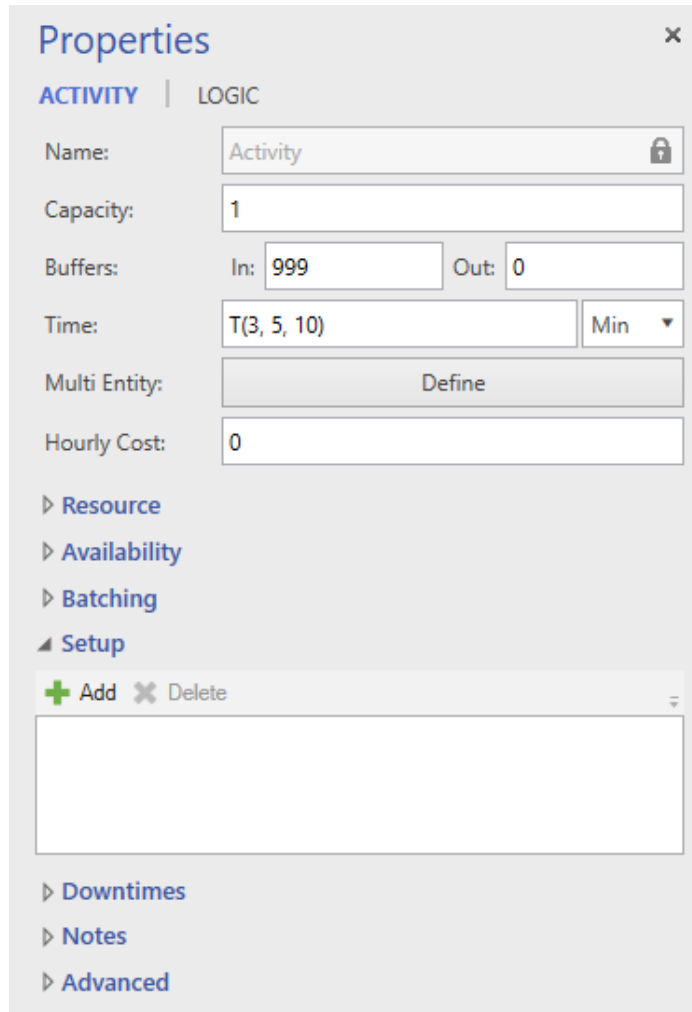
# Properties Enhancements



The screenshot shows the 'Properties' dialog box for an activity. The 'ACTIVITY' tab is selected. The 'Name' field is 'Activity' and is locked. The 'Capacity' is 1. The 'Buffers' are 'In: 999' and 'Out: 0'. The 'Time' is 'T(3, 5, 10)' with a 'Min' dropdown. The 'Multi Entity' field is highlighted with a red box and shows 'Defined 2'. The 'Hourly Cost' is 0. The left sidebar contains expandable sections: Resource, Availability, Batching, Setup, Downtimes, Notes, and Advanced.

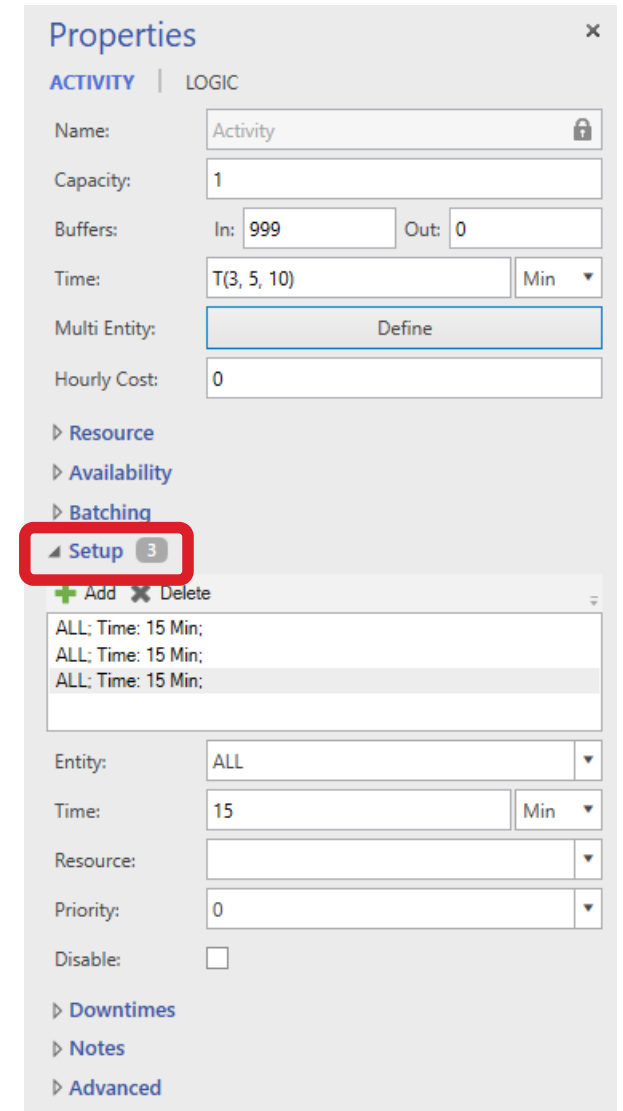
Once Multi Entities have been defined you can see an indicator in the Properties Window

# Properties Enhancements



The screenshot shows the 'Properties' dialog box with the 'ACTIVITY' tab selected. The 'Setup' section is expanded, showing a table with columns for '+ Add' and 'X Delete'. The table is currently empty. Other fields include Name: Activity, Capacity: 1, Buffers: In: 999, Out: 0, Time: T(3, 5, 10) Min, Multi Entity: Define, and Hourly Cost: 0.

Indicators in the Properties Window show how many Setup times were defined



The screenshot shows the 'Properties' dialog box with the 'ACTIVITY' tab selected. The 'Setup' section is expanded, showing a table with columns for '+ Add' and 'X Delete'. The table contains three rows, each with the text 'ALL: Time: 15 Min;'. The 'Setup' section is highlighted with a red box, and a small '3' is visible next to it, indicating the number of items defined. Other fields include Name: Activity, Capacity: 1, Buffers: In: 999, Out: 0, Time: T(3, 5, 10) Min, Multi Entity: Define, and Hourly Cost: 0.

# Properties Enhancements

The screenshot shows the 'Properties' window for an activity. The 'Downtimes' section is collapsed, indicated by a small upward-pointing arrow next to the label. The 'Downtimes' list is empty, and the 'Add' and 'Delete' buttons are visible above it.

Indicators in the Properties Window show how many Downtimes were defined

The screenshot shows the 'Properties' window for an activity. The 'Downtimes' section is expanded, indicated by a small downward-pointing arrow next to the label. A red box highlights the 'Downtimes' label and the count '3'. The list below contains three entries, each with the text: 'Unscheduled; Freq: 30 Min; Time: 15 Min;'. The 'Add' and 'Delete' buttons are visible above the list.

# Properties Enhancements

Properties

ACTIVITY | LOGIC

Name: Activity

Capacity: 1

Buffers: In: 999 Out: 0

Time: T(3, 5, 10) Min

Multi Entity: Define

Hourly Cost: 0

- ▶ Resource
- ▶ Availability
- ▶ Batching
- ▶ Setup
- ▶ Downtimes
- ▶ Notes
- ▶ Advanced

Once logic is added an indicator shows there is logic in the logic window

A preview of the logic window can be seen by hovering the mouse over the ... indicator

Properties

ACTIVITY | LOGIC

Name: Activity

Capacity: 1

Buffers: In: 999 Out: 0

Time: Properties

Multi Entity: ACTIVITY | LOGIC

Hourly Co

- ▶ Resour
- ▶ Availab
- ▶ Batchin
- ▶ Setup
- ▶ Downti
- ▶ Notes
- ▶ Advanc

Wait 5 min

- ▶ Notes
- ▶ Advanced



# Properties Enhancements

Properties

ACTIVITY | LOGIC

Name:

Capacity:

Buffers: In:  Out:

Time:  Min ▾

Multi Entity:

Hourly Cost:

▶ Resource

▶ Availability

▶ Batching

▶ Setup

▶ Downtimes

▲ Notes

▶ Advanced

Once notes are added an indicator shows there is information in the Notes tab

Properties

ACTIVITY | LOGIC

Name:

Capacity:

Buffers: In:  Out:

Time:  Min ▾

Multi Entity:

Hourly Cost:

▶ Resource

▶ Availability

▶ Batching

▶ Setup

▶ Downtimes

▲ Notes

This activity represents the bottleneck of our production process

▶ Advanced

# Properties Enhancements

Properties

ACTIVITY | LOGIC ...

Name: Activity

Capacity: 1

Buffers: In: 999 Out: 0

Time: T(3, 5, 10) Min

Multi Entity: Define

Hourly Cost: 0

- ▶ Resource
- ▶ Availability
- ▶ Batching
- ▶ Setup
- ▶ Downtimes
- ▶ Notes ...
- ▶ Advance

This activity represents the bottleneck of the system

By hovering the mouse over the ... indicator it is possible to see the text inside the Notes window

# Properties Enhancements

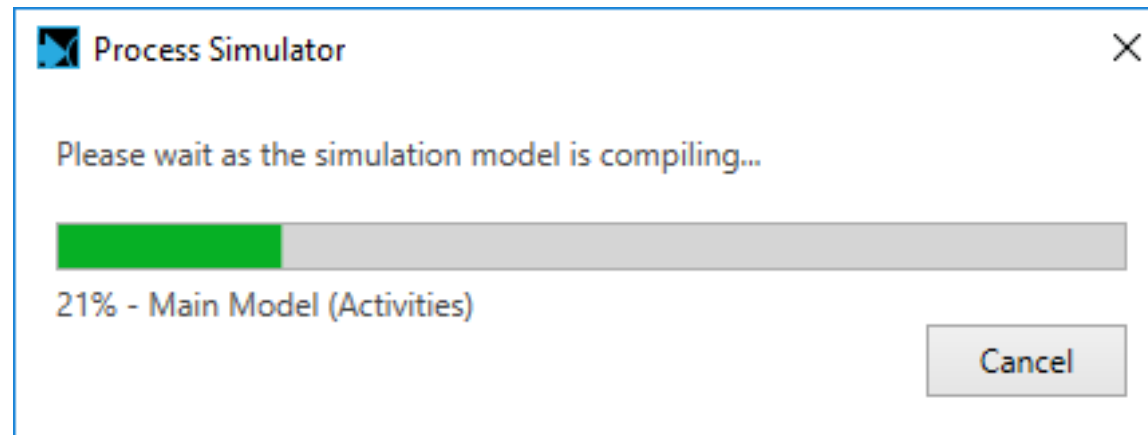
The screenshot shows a 'Properties' window with the following fields and sections:

- ACTIVITY** | LOGIC ...
- Name: Activity (locked)
- Capacity: 1
- Buffers: In: 999, Out: 0
- Time: T(3, 5, 10) Min
- Multi Entity: Defined 2
- Hourly Cost: 0
- Resource
- Availability
- Batching
- Setup 3
- Downtimes 2
- Notes ...
- Advanced

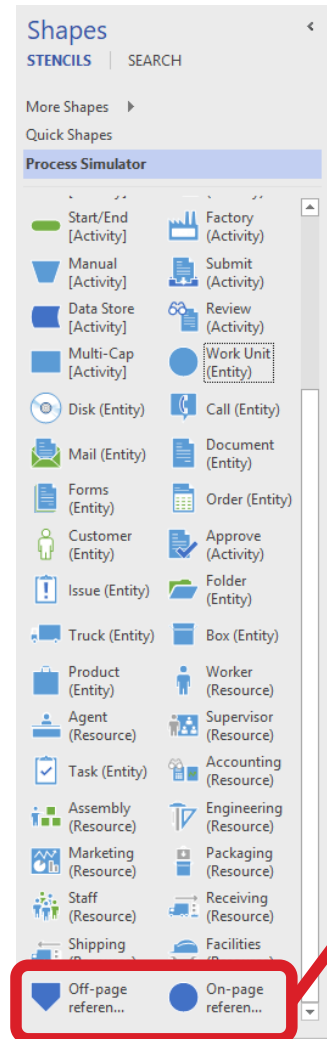
With multiple indicators you can see all that is in the Property Window just by glancing at it

# Model Compilation Speed Increase

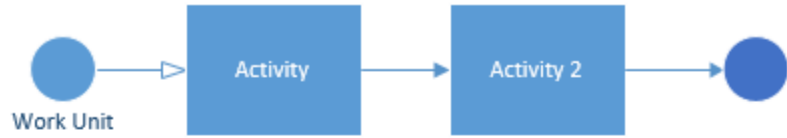
- Compiles 20-30% faster than Process Simulator 2016.



# On-page and off-page connectors



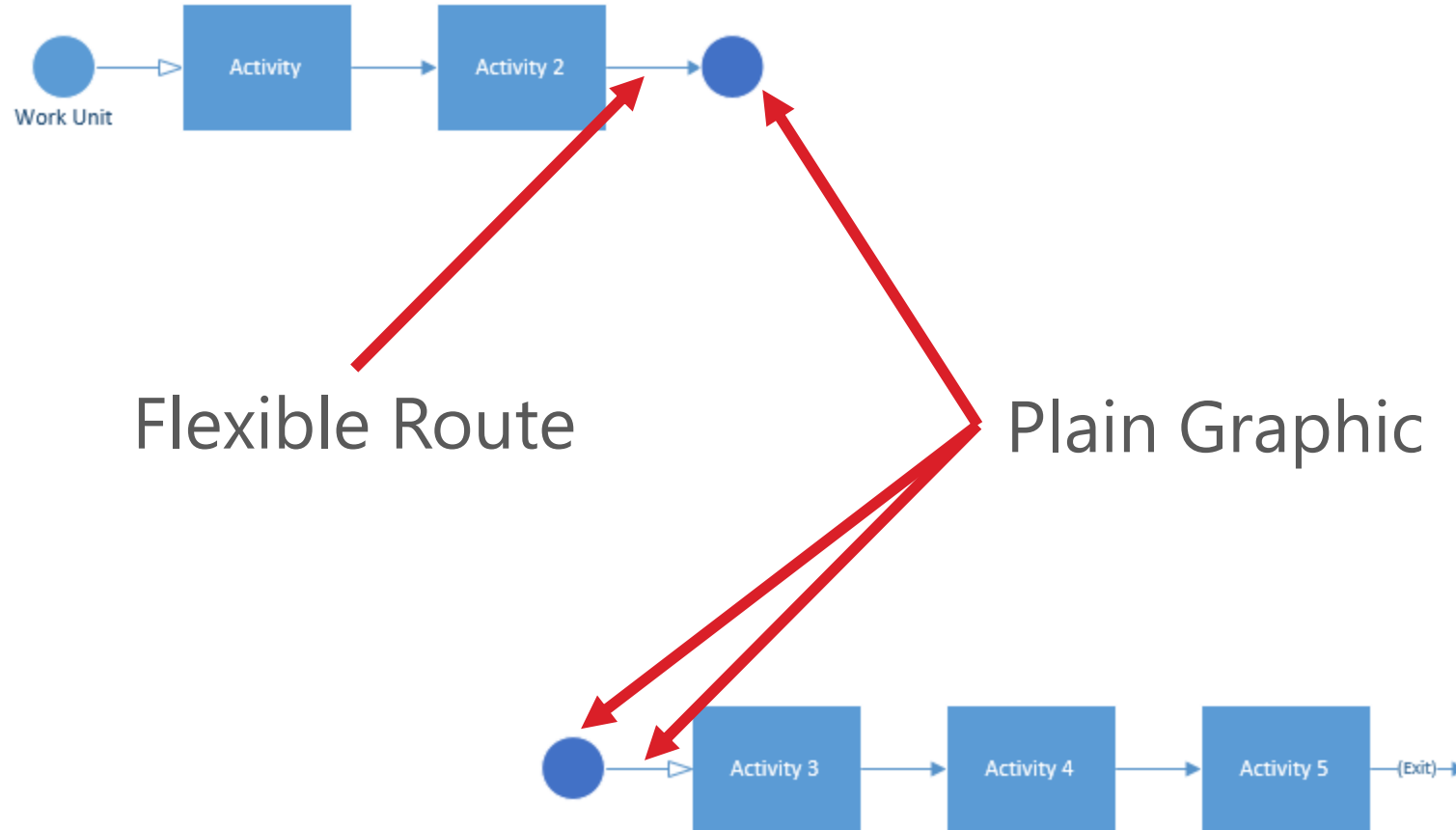
# On-page connectors



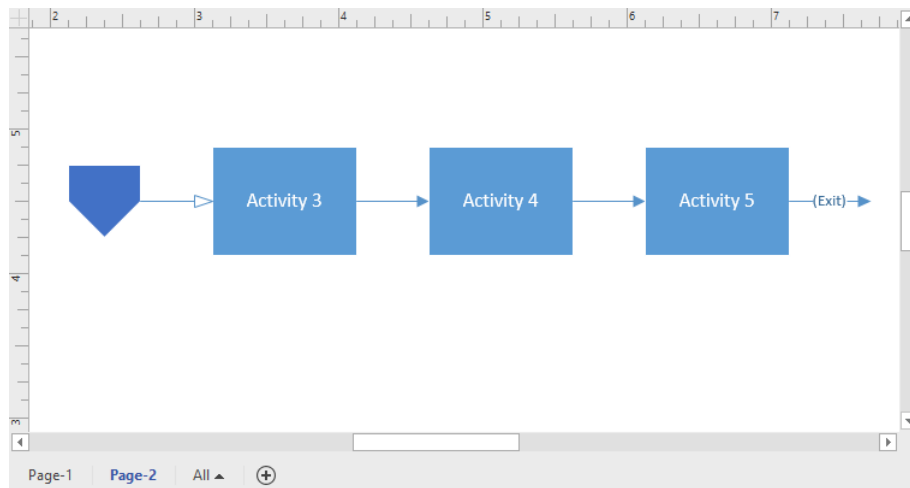
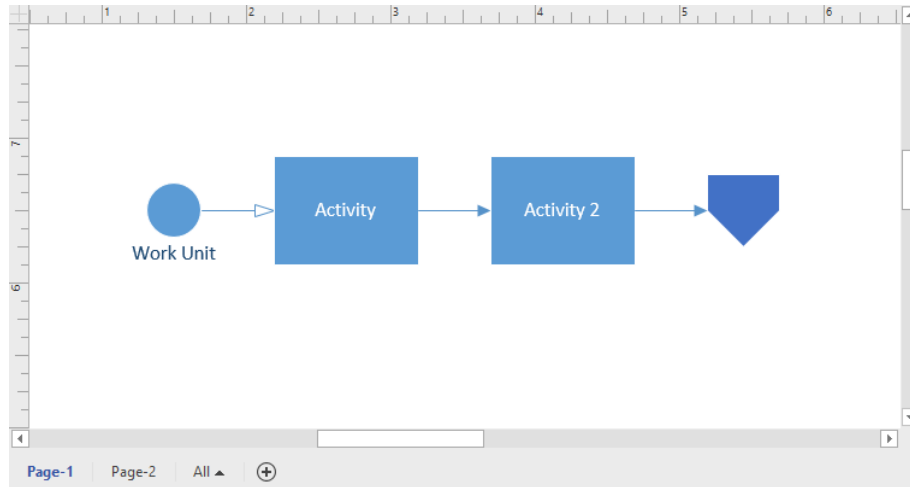
Used when we want to connect different flow charts on the same page



# On-page connectors



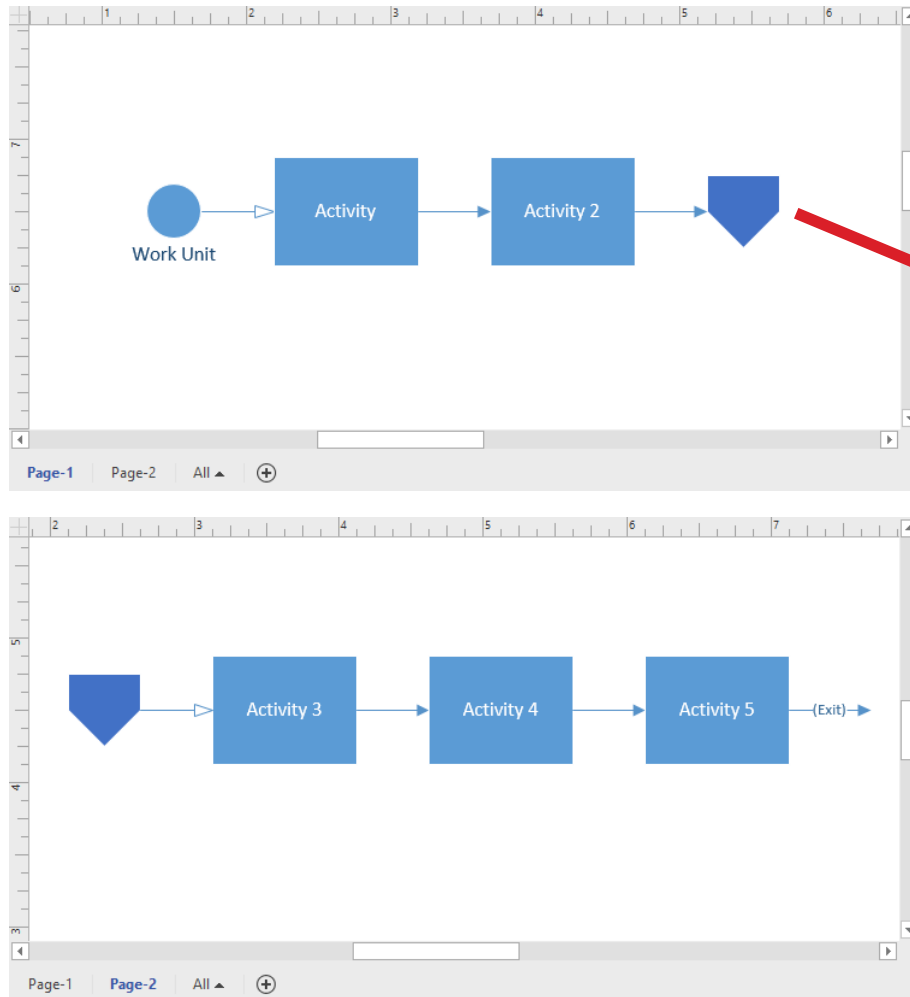
# Off-page connectors



Used when we want to connect different flow charts on different pages



# Off-page connectors



Off-page reference

Connect to

New page

Name:

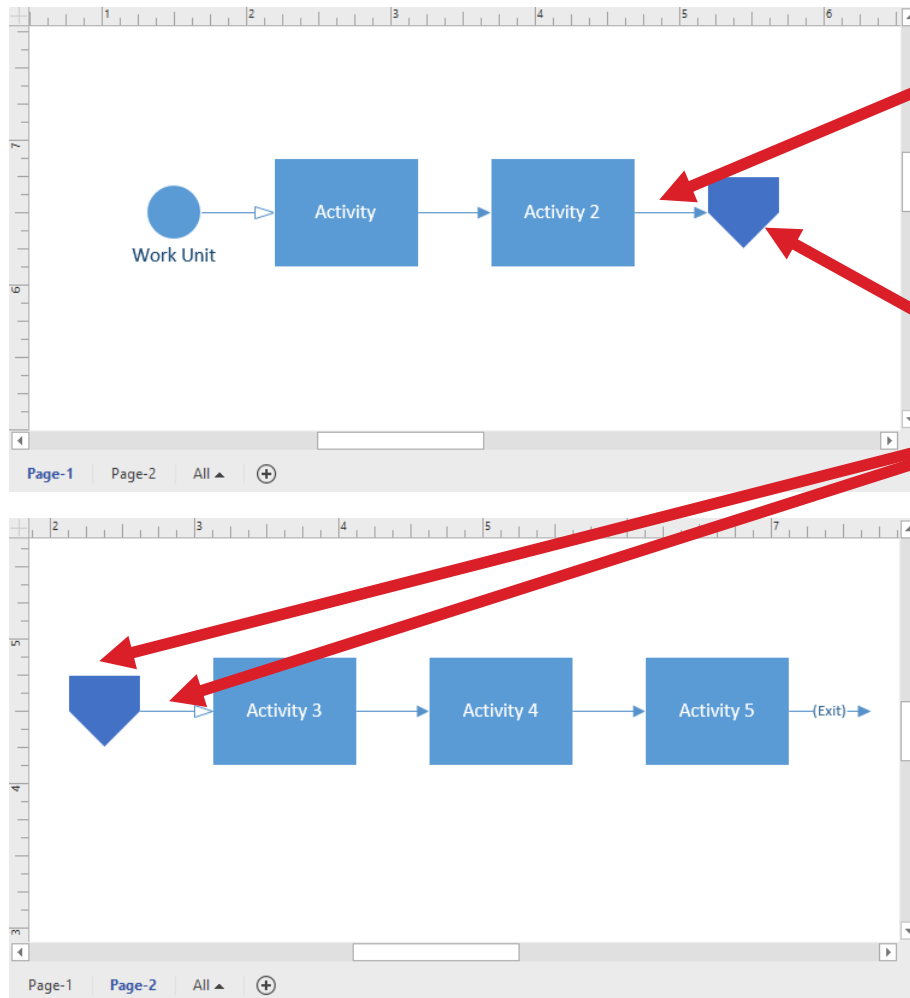
Existing page

Drop off-page reference shape on page

Keep shape text synchronized

Insert hyperlinks on shape(s)

# Off-page connectors



Flexible Route

Plain Graphic

# What are Hierarchical Models?

- Hierarchical models are simply models that are built on top of models (or submodels).
- It's a way of rolling-up detailed processes into high level views, or “black box-ing” areas of your model at a higher level.

# Creating a Submodel

- Process Simulator allows you to model detailed processes and link them to a higher level process or summary view.
- The first step is to create a sub model. This sub model could be an entirely separate Visio (.vsdx) file, or simply another page within your existing model.

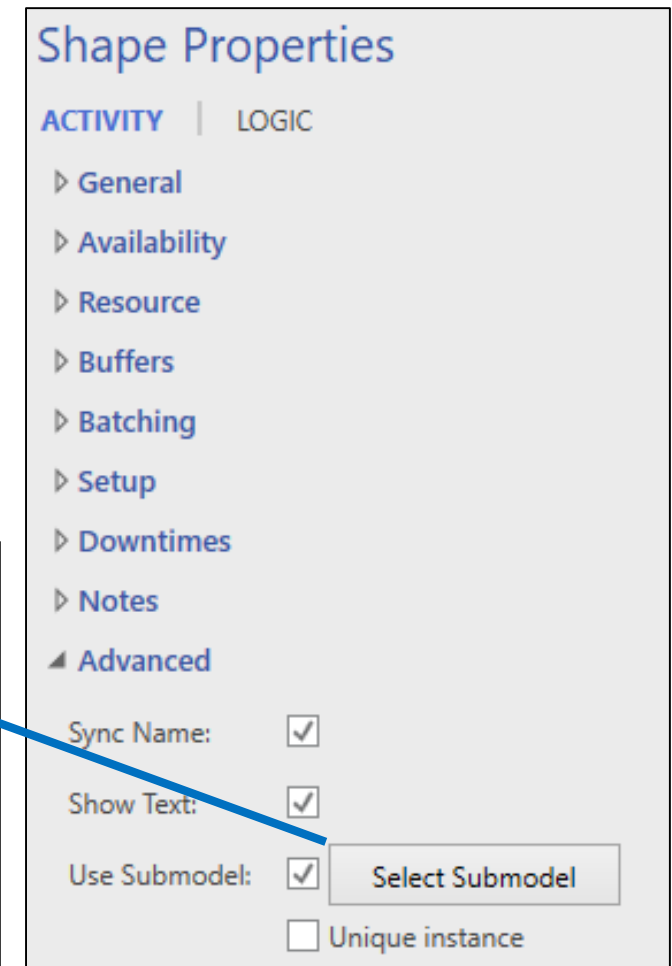
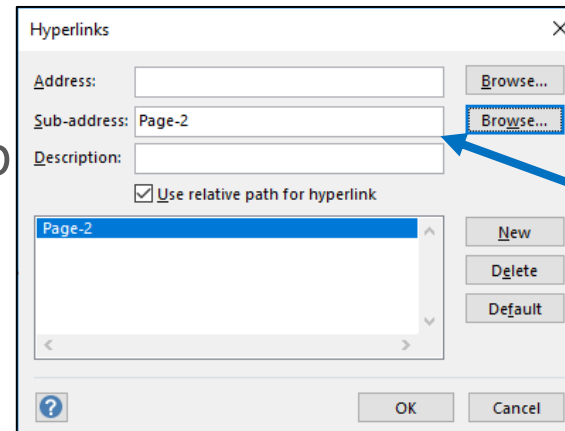
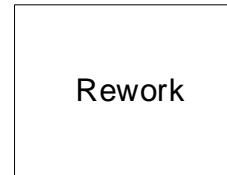
- To create a sub-model within your current model, select the New Page icon at the bottom of the Visio screen.



- On the New Page (i.e. Page-2), you can create a separate model.
- The second step will be to create a link between the two pages.

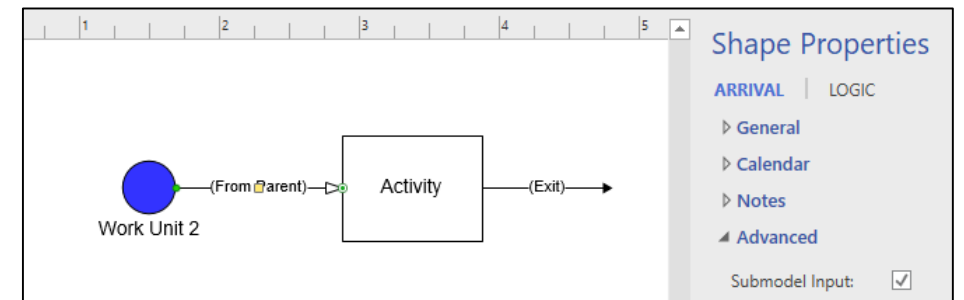
# Defining a Submodel

- Select the parent activity you wish to link to a sub model
- Select Advances in the Shape Properties. You can Enable or Disable the use of this submodels within your Process Simulator logic by selecting or deselecting "Use Submodel"
- Check Use Submodel. And Select the sub model to use.
  - Enter the Visio file name or the Page name and click OK
  - For pages within the same .vsdx, use the "Sub-address" field
  - To link to other .vsdx files (on a hard drive or network drive), use the "Address" field



# Hierarchical Modeling Rules

- If the Submodel checkbox is checked for an activity, there must be a sub model defined.
- Entities enter a sub model at an activity that has either:
  - No incoming routing connection
  - An arrival connection with “Input to Submodel” checkbox checked
- Entities either exit the model from their sub model, or route back to the parent if the “Output from Submodel” checkbox is checked.



# Hierarchical Modeling Rules

- Two activities can share the same sub model
- If the sub model is unique to each activity we must check "Unique Instance."

Advanced

Statistics:

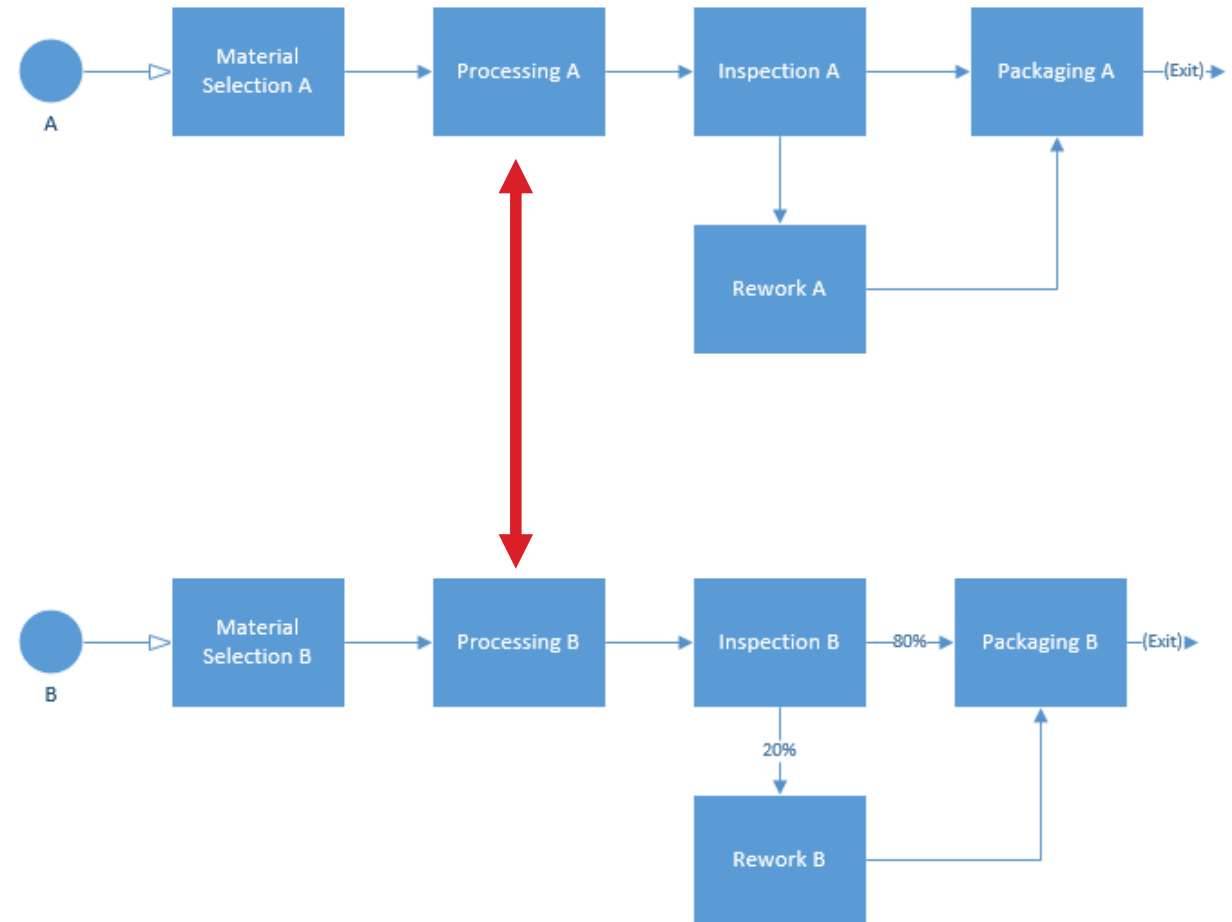
Sync Name:

Show Text:

Use Submodel:  [Edit Link](#)

Unique instance

Submodel Prefix:



# FINISHED

- Thanks for attending this training course! We hope it was helpful.
- Remember, help is only an email or phone call away.
- Good luck and happy modeling!

Technical Support  
888-776-6633  
support@promodel.com  
6 am - 6 pm M-F, Mountain Time