



WHAT'S NEW?

FLEXSIM 2018

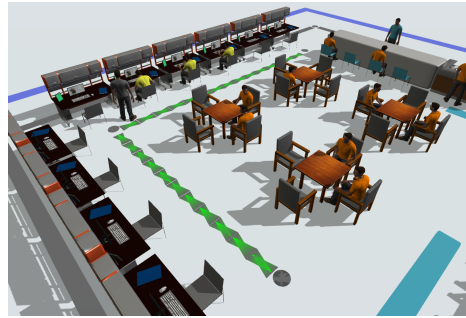
INTRODUCTION

This is an overview of the new features and improvements found in FlexSim 2018, the latest version of FlexSim's flagship simulation modeling package. This update reflects our commitment to regularly develop and refine our software, and this version includes a new module for simulating people-based systems, further improvements to data collection and analysis, and more.

Anyone can download FlexSim 2018 at www.flexsim.com and try it out under the free Express license. Users with current maintenance can upgrade their license through their FlexSim Account or within the FlexSim 2018 software.



PEOPLE MODULE



FlexSim latest module was designed for modeling non-producing systems that are based around people instead of items. Some examples include restaurants, grocery stores, and airports—any system that has a human interaction emphasis can make use of the features found in the People Module.

The module comes with all-new 3D objects and Process Flow activities that work together to model these systems or system components. The 3D objects represent the locations, staff, transports, and equipment that people will interact with as they go throughout the model. The Process Flow activities provide the logic to create, move, escort, and transport these people to where they need to go, which staff they will be with, and what equipment they will use.

It is highly recommended that you work through the People Module tutorials in the User Manual to get a better understanding of this new feature and how it works.

Watch a video on the new People Module at <http://flexsim.com/people2018>.



Custom Animations

Locations and Transports have templates already applied that add visual realism to the model—for example, when a person enters a Computer Desk location, they position themselves in front of the desk, sit down, and start typing at the computer.



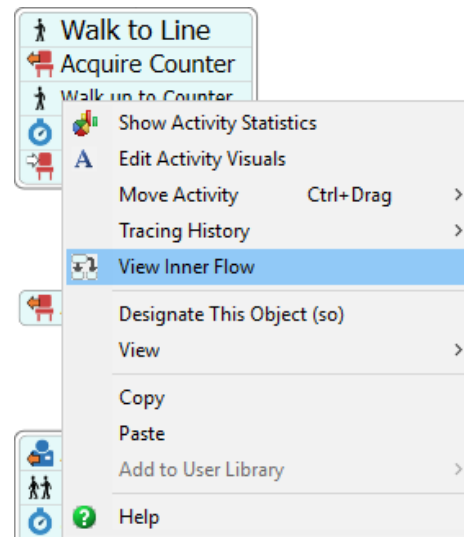
You can customize these existing templates to create different visual “instructions” to people that enter and exit these locations. The People Module comes with more than 60 animations to choose from as you tweak the template. There are also options to adjust how staff members stand, move, or animate around the person.

Powerful, Flexible Activities

The People activities do quite a lot in the model despite being a single activity in Process Flow. You can see the logic happening in the background by diving into the Inner Flow for each of these activities (right-click, then *View Inner Flow*). This Sub Flow shows all the Process Flow logic that

PEOPLE MODULE

is happening behind the scenes, giving you the option to customize the activities as needed.



Other

- Added many new animations for the operator and the Person flowitem (see below).
- Removed the basic Person flowitem and renamed TaskExecutorFlowItem to "Person."



DATA & ANALYSIS



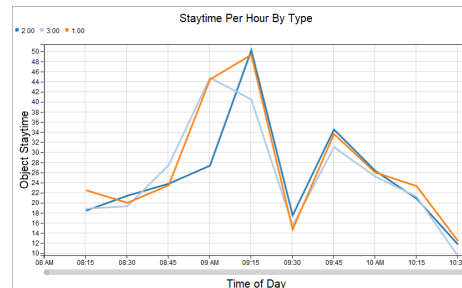
Dashboard Templates

In FlexSim 2017 Update 2, users were introduced to new data collection and charting tools. While these tools give fine-tuned control when collecting and extracting data, there is a learning curve involved in using them.

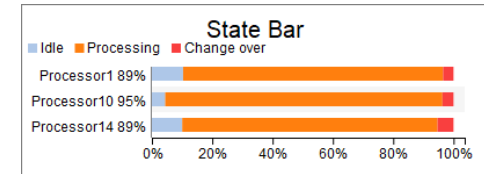
Thanks to the new Dashboard templates, that learning curve is all but gone. We've added 50 new templates that cover a wide range of statistics and charting types—simply drag a template onto the Dashboard, select the objects involved, and enjoy. The best part is that these templates make use of the new statistics tools in the background, so you still get to enjoy easier access to the data being used to display the chart.

Would you like to see your throughput per hour...by item type? It's in there, along with plenty more. Drag out a template and explore.

Watch a video covering the Dashboard templates at <http://flexsim.com/dashtemplates>.



States Options



There is a new *States* section in the Properties Window of State Templates. This area gives more control over how the various states are displayed in the chart, including name, color, and if the state is even visible or not. There is also an option to specify if the state is included in the utilization calculation—in the example below, the change over state is excluded.

States				
State Profile		Default		
	Display Name	Analysis	Visible	Color
idle - 1	Idle		✓	
processing - 2	Processing	Utilized	✓	
blocked - 4	Blocked		✓	
waiting for operator - 9	Waiting for operat		✓	
waiting for transport - 10	Waiting for transp		✓	
breakdown - 11	Breakdown		✓	
setup - 21	Setup	Utilized	✓	
change over - 31	Change over	Excluded	✓	

Install Template

Despite their simple interfaces, each Dashboard template is made up of several tools working in the background (such as Groups, Process Flows, Statistics Collectors, and Calculated Tables). If you'd like to use the template as a starting point for your own customized chart, you now have the option to "install" it (Advanced tab > Install).

Once installed, each of the components that make up the template are added to

DATA & ANALYSIS

the toolbox. For here, you can adjust the data being recorded, add event listeners, and make any other tweaks to get that perfect data set and chart for your simulation model. *Be aware that template installation cannot be reversed.*

Other

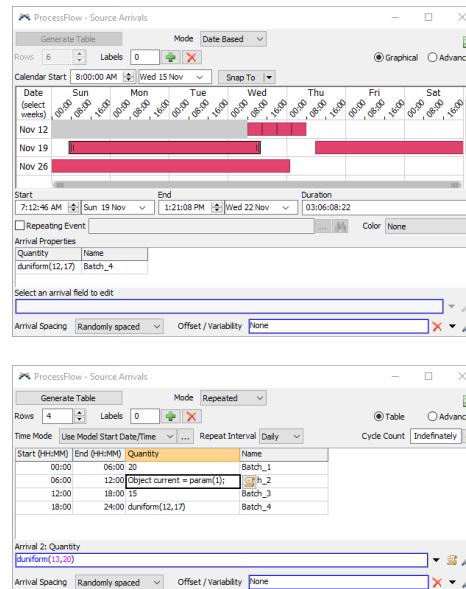
- Legacy charts are hidden in the Library by default—but they can be enabled through Global Preferences.
- Improved performance on both Statistics Collectors and Calculated Tables.
- Added a *By Lazy Interval* update mode to the Calculated Table. This option sets the Calculated Table to update on model reset and then at most once per update interval, if necessary.
- Added an *Ignore Warmup* option to Statistics Collectors.



MODELING

Date Time Source

This new Process Flow activity creates tokens according to an arrivals table. You have the option to create tokens through a date-based interface, or by a repeated daily or weekly schedule. This activity gives significant control over arrival schedules, including how they are spaced within each arrival and whether the arrivals start on time or not.



Other Process Flow

- Added a *Wait for Simultaneous Arrivals Before Entry* option to the Zone.

Excel Interface Improvements

OpData (Global Table)			
Col 1	Col 2	Col 3	
15.10	13.16	14.78	

The Excel Import/Export Interface has been improved, specifically where the data will be imported to. It's now easier to choose the destination for your imported data, either by browsing with the green "Add a table" button or by using the Sampler to pick a Global or Time Table. Once a table is selected, you'll see a preview of the data already in the selected table, along with a button to quickly open the destination table.

Visual Compatibility

- FlexSim is now compatible with DWG 2018 shapes.
- FlexSim is now compatible with the latest FBX file format, making it possible to use shapes from AutoDesk's Revit.

Other

- Added functionality to the List's pull method that allows you to pull an object or node directly, without writing SQL.
- Lists can now use arrays as partition IDs.



MODELING

- OptQuest can now run more than 10,000 solutions.
- Added a new pick option in the Global Table's *OnReset* trigger to restore default values.
- The Source now adds labels to items before calling the *OnCreation* trigger.
- TaskExecuters now connect to the DefaultNavigator when created.
- Updated many stochastic pick options to use `getstream()` as the default stream parameter.

