New version of the Pedestrian Library ................................................................. 2
SVN support ........................................................................................................... 3
Upload 3D and source files to RunTheModel.com ................................................. 4
New tools for controlling model execution ......................................................... 5
New example models ........................................................................................... 6
Other new features and improvements ................................................................. 7
New version of the Pedestrian Library

AnyLogic 6.8 introduces an updated version of the Pedestrian library. In the previous version of the library pedestrians would base their routes by only considering the configuration of the walls and obstacles in their simulated space. In cases of intense pedestrian traffic this could lead to congested pathways - "pedestrian jams". In the new version a pedestrian also considers the density of people in his neighboring area and along the natural path and may choose an alternate path based on the crowd of people in its way.

Our new algorithm produces accurate results even for pedestrian dynamics models having complex wall configurations and heavy pedestrian traffic. The new version of the Pedestrian library has been successfully tested and proven in several recent projects.

This model screenshot is based on the prior version where all pedestrians are selecting the same optimum path.

This model screenshot is from our new version. Pedestrians are selecting alternate paths based on observed congestion.

The model simulating tourists in a maze garden
SVN support

As of version 6.8 AnyLogic will support one more software versioning and revision control system - SVN (Subversion).

Previous versions of AnyLogic supported CVS (Concurrent Versions System, also known as the Concurrent Versioning System). So now you can choose which version control system to use for developing your projects in teams.

Version control system software allows several developers to collaborate despite being in different geographies and timezones. Version control uses a client/server architecture: a server stores the current version of a project, and clients connect to the server in order to "check out" a complete copy of the project, "update" it with the latest changes from the repository, then work on this copy and finally "commit" their changes.

You interact with SVN in the same way as with CVS: you can find SVN| Checkout, Share, Commit, Update commands added into AnyLogic File menu.
Upload 3D and source files to RunTheModel.com

You can now publish applets with 3D animation on runthemodel.com. No need in creating alternative 2D animations anymore - just upload your 3D models in one click, without any animation reworking.

In previous versions you could only upload executable model applet so that other users could run and play with it, but they were not able to get the model internals. And now you can upload the sources of your model. This way you can share your model to enable other modelers to download and work on it.
New tools for controlling model execution

We have added new toolbar options in AnyLogic 6.8 for enhanced control during model execution.

Now you can simulate the model until a specified moment of model time or for a specific time interval starting from the current moment (later on you can resume and continue the suspended simulation). Previously this required adding special events but now you can do the same by just clicking the arrow in the right part of the toolbar button **Run from the current state / Pause**, choosing the required option from the drop-down list, and specifying the time interval that you would like to run the simulation.

![New toolbar commands in the presentation window](image-url)
New example models

- **Population of the US** - This template can be used to create any models that deal with (geographically distributed) US population, e.g.: consumer markets, epidemiology, ecology, etc. The model uses a map of the US with a polyline for each state and a circle for each city. The model reads the population data from an Excel file. It places city populations at the corresponding city and distributes the non-city population evenly across the rest of the state. The model is scaled: each agent represents 2000 agents.

- **Adaptive Supply Chain** - A supply chain consists of: suppliers, producers, distributors and retailers. Once the average delivery time from a particular partner in the chain exceeds an expected level a search for an alternative partner begins. The consumers are modeled as agents, each one represents 2000 people. Consumers are distributed over the US territory according to population data.

- **Beer Distribution Game** - Business strategy game simulating the beer supply chain. The supply chain consists of the consumer, retailer, wholesaler and distributor. You can play as any member of the supply chain or any combination of them. At each step of the game you place an order for beer from your supplier based on your perceived demand and other factors. Your goal is to minimize your total cost comprised of inventory carrying cost and backorder cost.

- **Raster to AnyLogic Vector Converter** - This is not a simulation model, but a utility program that helps you convert raster images into AnyLogic polyline shapes that then can be used in simulation models. The model contains a world map. You can select the regions you need in your project, convert them to polylines and easily copy them into your model.

- **Flexible Manufacturing Supply Chain** - The supply chain model where each producer makes a finished product from raw materials supplied by another producer. The production stops when the amount of products at the producer's warehouse reaches a certain threshold. Raw material is ordered whenever its inventory level (+ on order amount) falls below the ordering threshold. A producer may choose between several alternative suppliers. Selection is based on supplier capacity and order backlog.

- **Madagascar Checkers**

New «How-To» models:

- Reading Table Function from a Text File
- Reading Agent Parameters from a CSV File
- Reading Model Parameters from Excel
- Synchronization of Chart Scales
- Creating Agent Populations Parameterized from a Database
- Loading Data from a Database and Using ResultSet
- Reading Data of Various Types from Fixed Cells in Excel
- Using Text File as a Log
Other new features and improvements

**Fixes**

- New implementation of the **Properties** view which increase performance (view refresh is quicker now) and fixes the "No more handles" error that occurred on some configurations.
- Fixed an error that occurred on invoking the method `moveTo(x, y)` of the agent that is currently moving along a specified polyline.
- Applets with 3D animation now will run successfully even after updating Java on your computer.
- Fixed an error with the dynamic changing of the speed of the agent moving in GIS space.

**Miscellaneous**

- Code parameters of library objects (with names starting with "On...") are now marked with a C icon ("Code") to distinguish them from parameters where dynamically evaluated expressions are specified (D icon, "Dynamic").
- Two improvements in Rail Library: implemented an algorithm choosing the shortest path and added the ability to move a train for a specified distance from a certain switch.
- Added functions for swapping agents in discrete space.
- When using the **Queue** connectivity element you can now feed several different fields/parameters with data from one column of a database table.
- New methods in polyline API: `randomPointInside()` and methods for obtaining min/max coordinates: `getXMin()`, etc.