



# **RELEASE HIGHLIGHTS**

## **Pedestrian Dynamics 4.4**





# Release Pedestrian Dynamics® 4.4

## ENHANCE YOUR SIMULATION EXPERIENCE WITH PEDESTRIAN DYNAMICS® 4.4!



As a global recognized software company delivering Digital Twin, InControl Enterprise Dynamics is dedicated to advancing software development to meet the needs of our users. We are excited to introduce the latest enhancements in our Crowd Management Software, Pedestrian Dynamics® 4.4.

Pedestrian Dynamics® is a sophisticated and user-friendly software application crafted for creating and executing expansive crowd simulation models within complex infrastructures. Whether you are in the (pre-) design phase or managing day-to-day operations, Pedestrian Dynamics® provides a comprehensive solution to assess the performance, safety, and sustainability of your city, (sport)venue, (public)transportation throughout its life cycle. Frequently customers are requesting dashboards to predict and control operations.

### Key Features of Pedestrian Dynamics® 4.4:

1. Enhanced User-Friendliness: We've improved the Movie Creator and introduced new drawing tools, ensuring a more intuitive and streamlined user interaction.
2. Expanded Functionality: Pedestrian Dynamics® 4.4 now supports the import and export of user functions, empowering you with greater flexibility and interoperability.
3. Visual Clarity: We've revamped default colors for Frequency and Time above density map graphs, making it simpler to differentiate between various graph types.
4. Optimized Performance: Enjoy improved performance that facilitates seamless collaboration with other software, enhancing overall efficiency in your simulation endeavors.

In this document, we highlight the details of these new features and improvements. Explore these enhancements and experience the improved capabilities of Pedestrian Dynamics® 4.4 for your crowd management simulations.

You can find a complete list of all the improvements and bug fixes [here](#).

# New Features and improvements

## Improved Movie Recording

The Movie recorder now automatically adds a suffix to the name of the recording, preventing overwrites and splitting large recordings into manageable files.

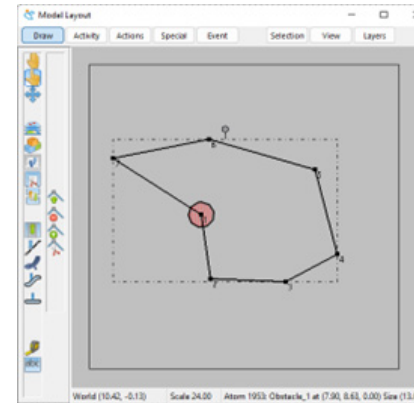
Depending on the Codec you are using the output-video can be a huge file. Large recordings will be automatically split into several files with an updated suffix (\_1, \_2, etc.). If you are using a high-quality codec, you can deactivate this functionality.

## New Drawing Tools

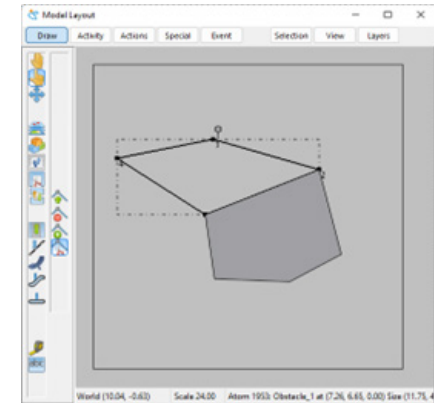
We continually strive to streamline the model building, seeking ways to minimize modeling time and enhance user-friendliness.

After importing data from CAD, BIM, or other sources, manual adjustments are often required in the environment. In CAD drawings, examples may arise where wall elements continue, and you need to create an opening. We have introduced new buttons to simplify the manipulation of elements.

These additions facilitate tasks such as splitting polygons or polylines and combining them as needed. The split polyline function is now accessible on the left toolbar when selecting elements like obstacles. In addition to inserting, adding, and deleting points, a new "Cut" option is available. Users can choose the desired points for cutting the element, with a red circle marking the initial point. For polygons, two points must be indicated. These improvements aim to make your modeling experience more efficient and straightforward.

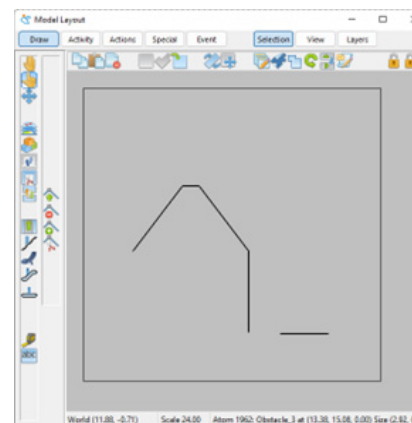


Split polygons: Before cut

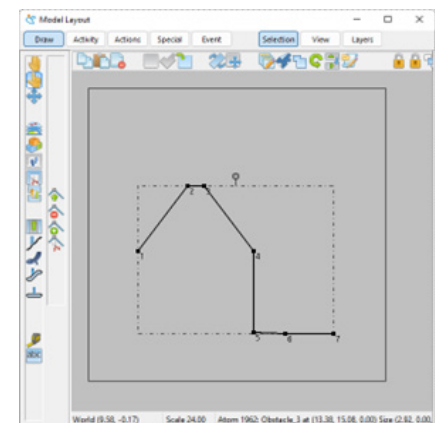


Split polygons: After cutting

Combining polylines or polygons can make your environment simpler and easier to navigate. The new combine button can be found on the Selection toolbar at the top of the Model Layout.



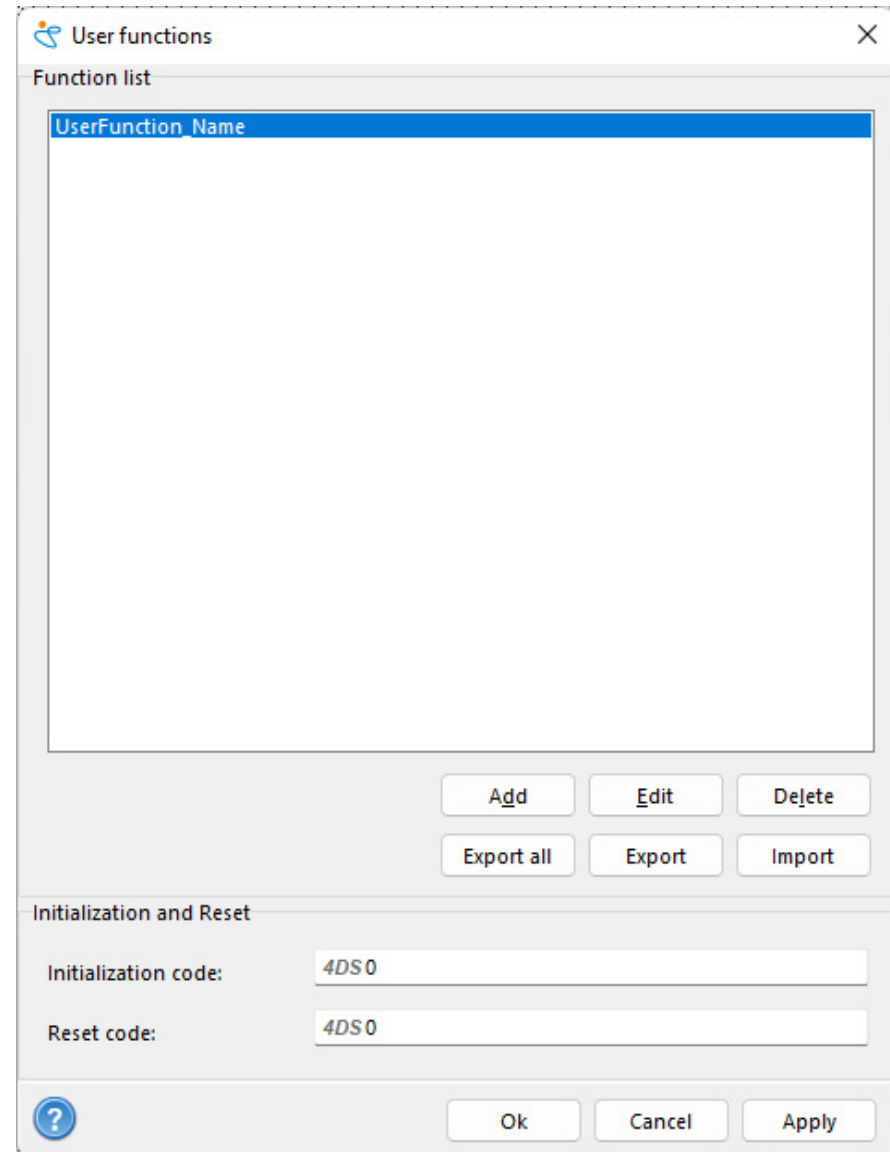
Combine polylines: Before combining



After combining

### Improved Import and Export Functionality for User Functions

Previously, incorporating functions from one model into another involved a manual copying process. To enhance the user friendliness, we have introduced export and import functionality within the User Function Editor. This feature enables users to seamlessly export or import all user functions or selectively choose specific functions for greater flexibility and efficiency.

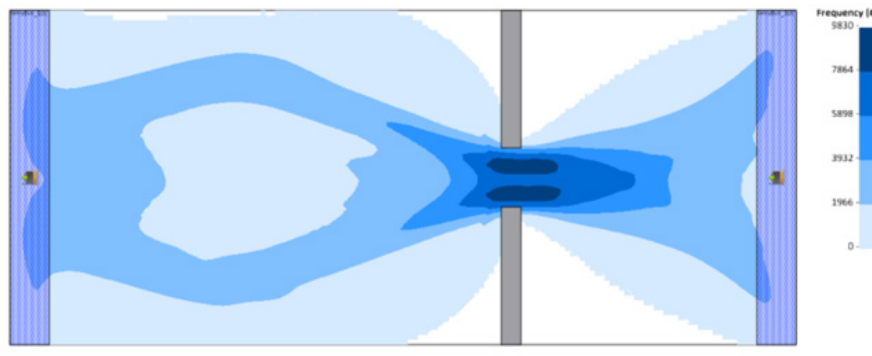


The image shows a software dialog box titled "User functions" with a close button (X) in the top right corner. The dialog is divided into several sections:

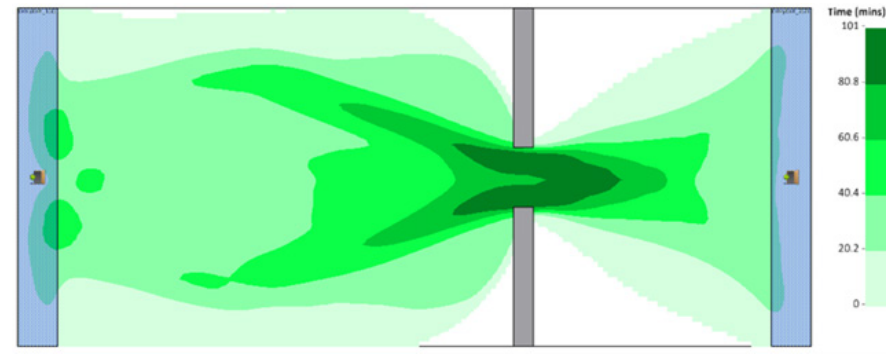
- Function list:** A large rectangular area containing a table with a single header row labeled "UserFunction Name". The table is currently empty.
- Buttons:** Below the function list, there are two rows of buttons. The first row contains "Add", "Edit", and "Delete". The second row contains "Export all", "Export", and "Import".
- Initialization and Reset:** A section at the bottom with two text input fields. The first is labeled "Initialization code:" and the second is labeled "Reset code:". Both fields contain the text "4DS0".
- Footer:** At the very bottom, there is a help icon (a question mark inside a circle) on the left, and "Ok", "Cancel", and "Apply" buttons on the right.

### New Default Colors for Frequency and Time above Density Map Graphs

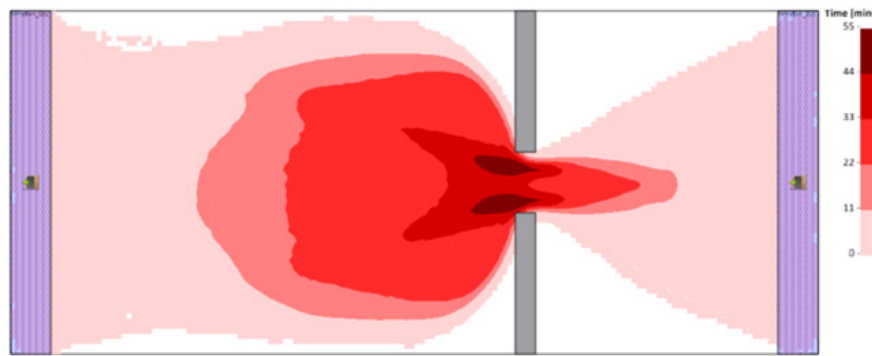
Updated color scheme for Frequency and Time above density map graphs, aiming to improve clarity and ease of distinguishing between different graph types.



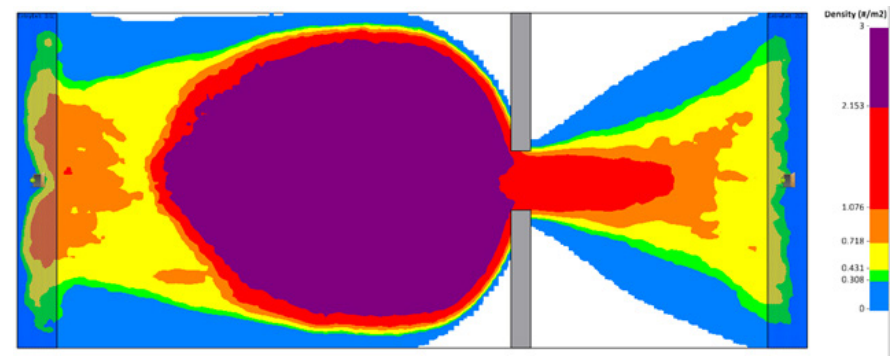
For the Frequency map we have chosen a blue color scheme



For the Occupancy maps we have chosen a green color scheme



For the Time Above density (E Level) we have chosen a red color scheme. Note that the E Level in the density map is also indicated with a red color.



The density map still has the same default color scheme as in previous versions of Pedestrian Dynamics