



RELEASE HIGHLIGHTS
Pedestrian Dynamics 4.5



Release Pedestrian Dynamics® 4.5

ENHANCE YOUR SIMULATION EXPERIENCE WITH PEDESTRIAN DYNAMICS® 4.5!



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® 4.5.

Pedestrian Dynamics® is a sophisticated and user-friendly software application developed for creating and executing large 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® 4.5:

- Enhanced User-Friendliness and Faster Model Building**
We've introduced a filter tool that allows you to select multiple elements easily. Combined with the multi-edit tool, this significantly reduces model setup time by enabling quick property adjustments.
- Expanded Functionality**
Elevators now support configurable availability, allowing you to create varied scenarios that better reflect different usage patterns.
- Improved Modeling Control**
A new feature enables precise control over agent paths, letting you specify which corridors agents use to reach their destinations.

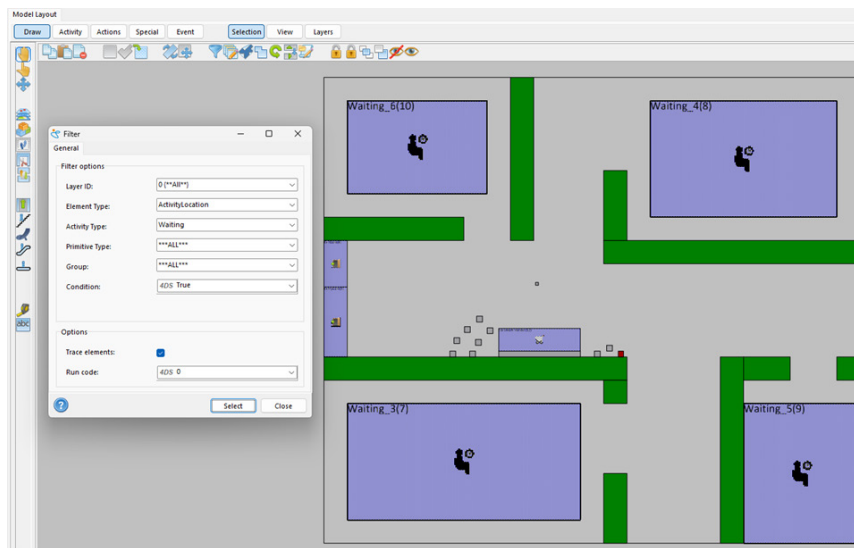
In this document, we highlight the details of these new features and improvements. Explore these enhancements and experience the improved capabilities of Pedestrian Dynamics® 4.5 for your crowd management simulations.

For a complete list of all updates and bug fixes, please visit this [link](#).

New Features and improvements:

Filter Tool

The filter tool enables quick and easy bulk selection of specific element types within your model. Once selected, you can use the multi-edit tool to modify properties across your selection, further reducing model-building time and enhancing efficiency.

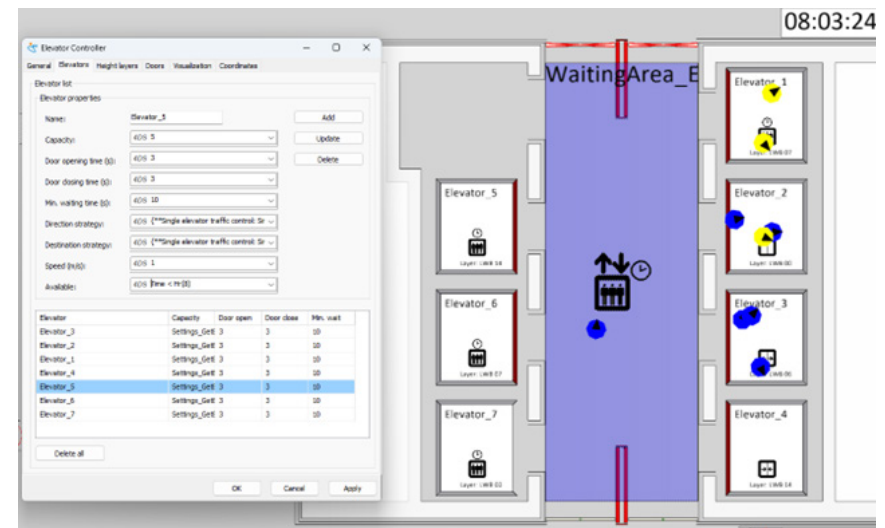


All Activity locations of the type Waiting are easily selected using the Filter tool.

Elevator Availability Setting

The availability setting for elevators can be accessed on the “Elevators” tab in the Elevator Controller GUI, which opens by double-clicking any elevator in the model. This setting allows you to easily configure scenarios where certain elevators are out of service. Because it supports 4DScript expressions, you can also create more complex rules, such as varying the number of available elevators throughout the day or adjusting availability based on the number of agents currently in the model.

If an elevator becomes unavailable during a simulation, it will prevent new agents from entering. Any agents already inside will still be transported to their destination floors, after which the elevator will remain idle.



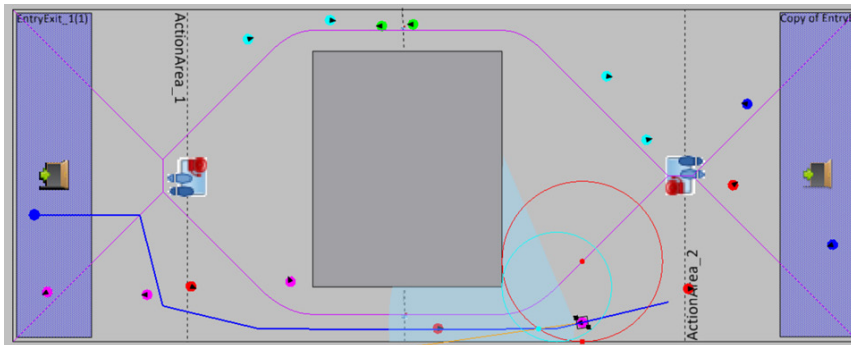
In this model, the three elevators at the left side are set to stop working after 8:00.

Function to Specify Agent Corridor Paths

The function `PD_SIM_IsActionAreaOnAgentRoute(e1, e2)` allows you to specify which corridor an agent will take by checking if Action Area e2 is on the agent's route. The Action Area should be a simple line that intersects a medial axis to clearly indicate the corridor.

In the figure below, agents crossing the side Action Areas are color-coded by corridor: Lime and Aqua for the top corridor, and Fuchsia and Red for the bottom corridor.

This feature provides greater control over agent movement, allowing for more precise modeling of agent routes.



The agents are colored after they pass the side action areas based on the corridor they are planning to use.

Autosave for Interact Window

When autosave is enabled in Preferences, all tabs in the Interact window are automatically saved to a backup file (.4DSi).

Within the Interact window, you can choose to "Save with Model," linking the current tabs to the model. When tabs are saved with the model, the generated .4DS file will have the same name as the model.

When you load the model, it will search for a .4DSi file with a matching name. If found, this file is automatically loaded into the Interact screen. Autosave will then apply to this model-specific .4DSi file.