PEDESTRIAN DYNAMICS®3.1 WHAT'S NEW?

For all leading architects, engineers and consultants... our crowd simulation software is now more comprehensive than ever!

APPLICATION AREAS

Pedestrian Dynamics® is applicable in a wide scale of domains:

- Railway Stations
- Stadiums & Arenas
- Airports
- Cities
- Malls
- Theme Parks
- Events
- Ships

Pedestrian Dynamics®
Crowd Simulation Software

INTRODUCTION

INCONTROL is proud to announce version 3.1 of Pedestrian Dynamics® crowd simulation software.

In close collaboration with our professional – and academic users we significantly improved our crowd simulation software, Pedestrian Dynamics®.

To meet our customers' needs we focus on increasing the user–friendliness of the software.

The new version enables you to:

- Do a more detailed analysis with additional output statistics
- Develop railway station models quicker
- Edit and save agent profiles or use default profiles based on literature
- Simulate agent flow on Meso or Macro level

We invite you to continue reading in order to learn more about the new features of Pedestrian Dynamics®:
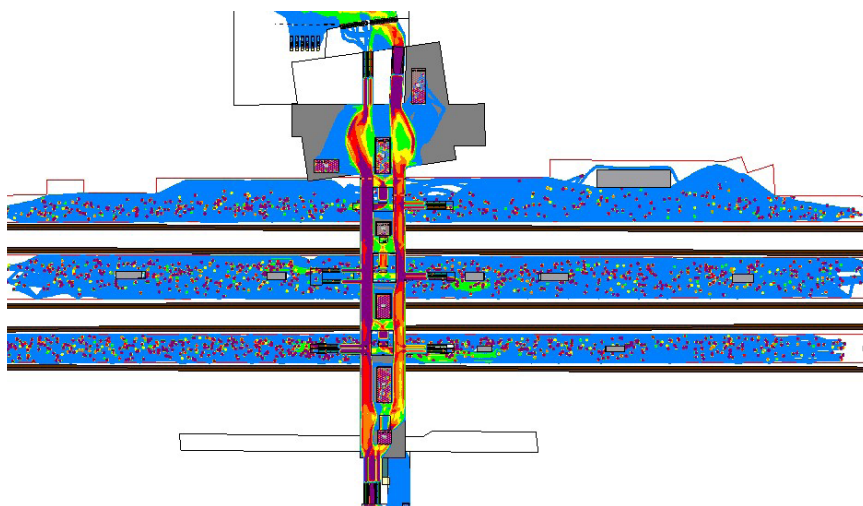
- New output
- Default and editable agent profiles
- Demand profiles and routing based on origin destination matrices
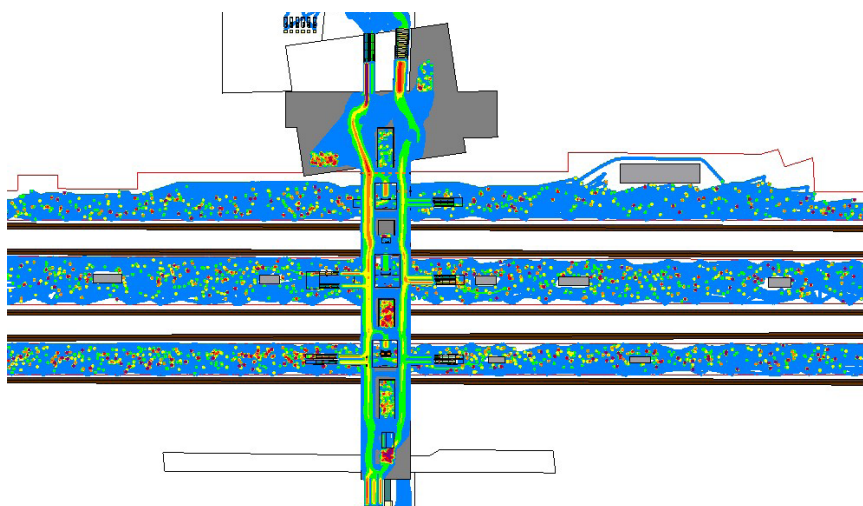- Spiral stairs
- Meso and Macro mode

WHAT'S NEW IN PEDESTRIAN DYNAMICS® 3.1?
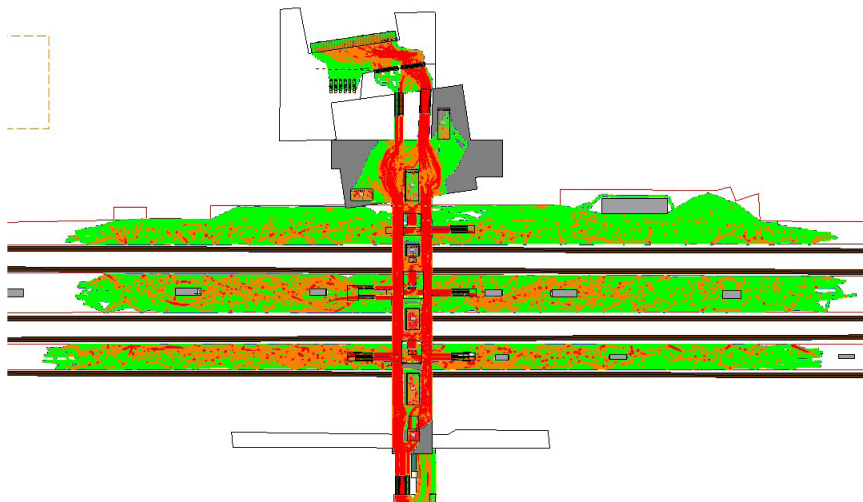
Cumulative mean density

Cumulative high density (time above)

Space utilization maps (time occupied)

New output statistics are added to do an even more detailed crowd flow analysis to evaluate not only the accessibility and safety of planned environments but also to analyze the usability and cost. You can create heat maps that can be either grid– or agent based.
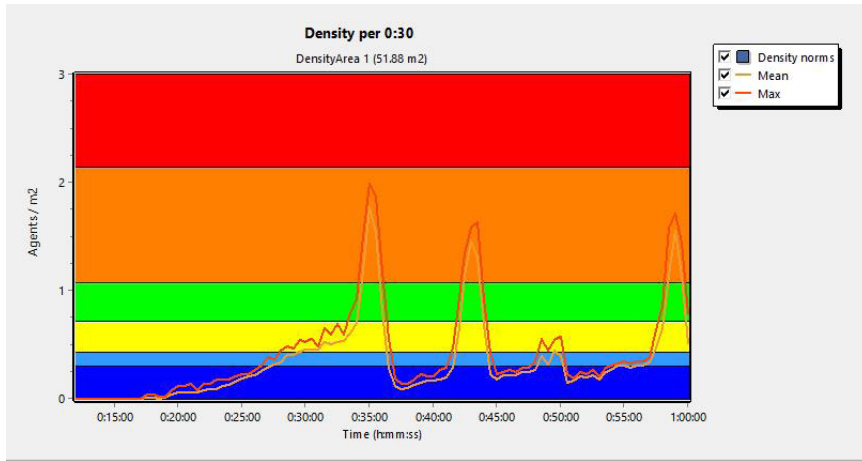
Cumulative mean density
Show the average density (in colour) of an area in a certain time interval.

Cumulative high density (time above)
Show the time (in colour) that an area density has exceeded the threshold value.
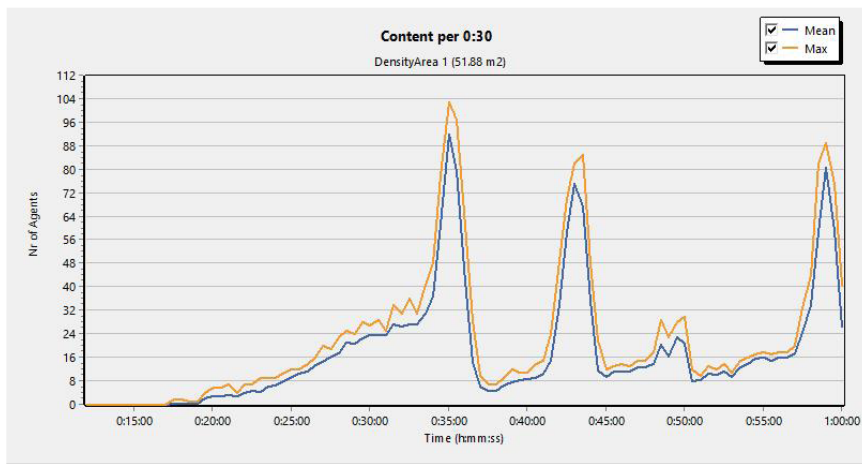
Space utilization maps (time occupied)
Showing the use (in colour) of the area as time occupied.

Density of selected area

Density of selected area
Showing the average and maximum density in a selected area over time.

Content of selected area

Content of selected area
Showing the amount of agent in a selected area over time.

Social cost settings

Social cost settings
The user can set the value and weight of the parameters for social cost functions.

Generalized journey times
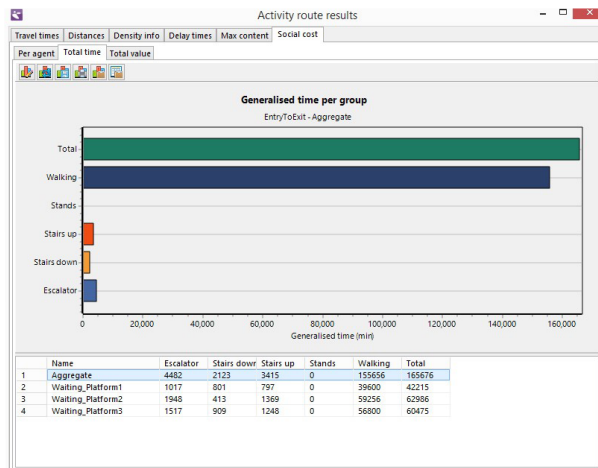
Generalized journey times
Shows the histogram of the generalized journey time of agents.

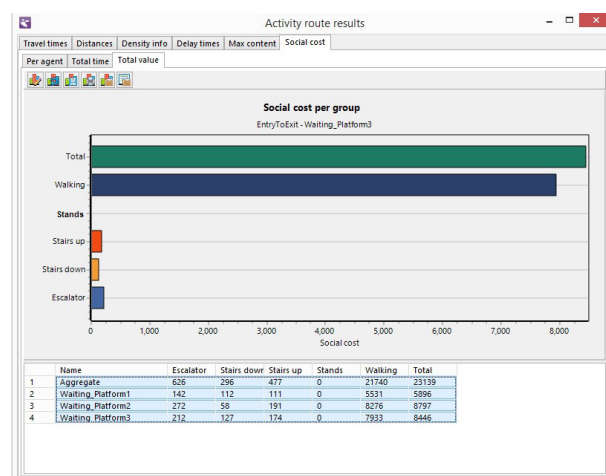Generalized journey times (per groups)

Generalized journey times (per group)
Shows the generalized journey time of agents and a breakdown of different funtional groups.

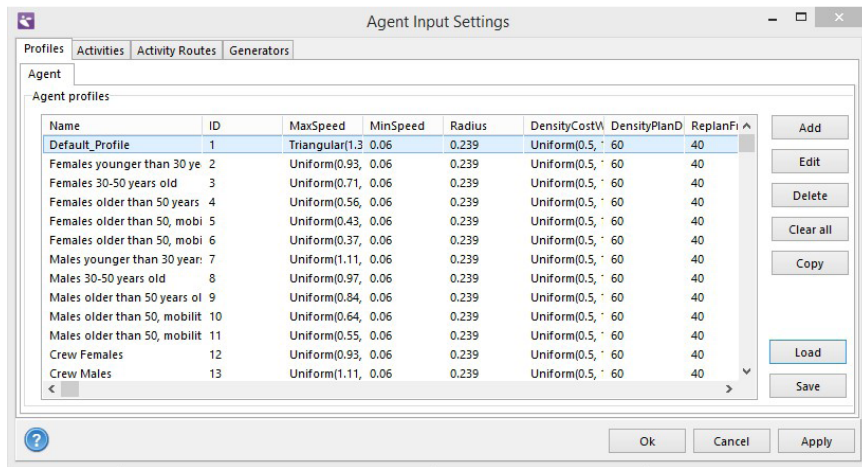Social costs

Social costs
Shows the social cost of agents in a (by the user selected) currency and a breakdown of the result over different functional areas.

Default agent profiles

DEFAULT AND EDITABLE AGENT PROFILES
Default sets of predefined profiles based on well–known academic research papers (e.g. Fruin, Daamen, IMO) can now be loaded and edited by the user. Using agent profiles you can define the walking behaviour of groups such as, tourist, persons of restricted mobility and commuters. It is now possible to save profiles created by the user and load them in another model or to share them with other users.
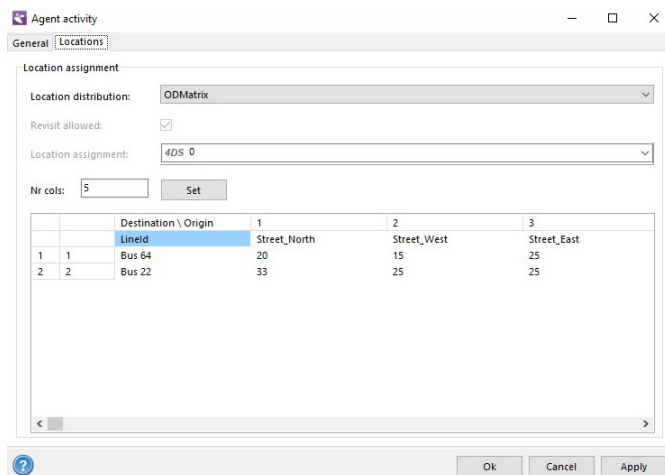
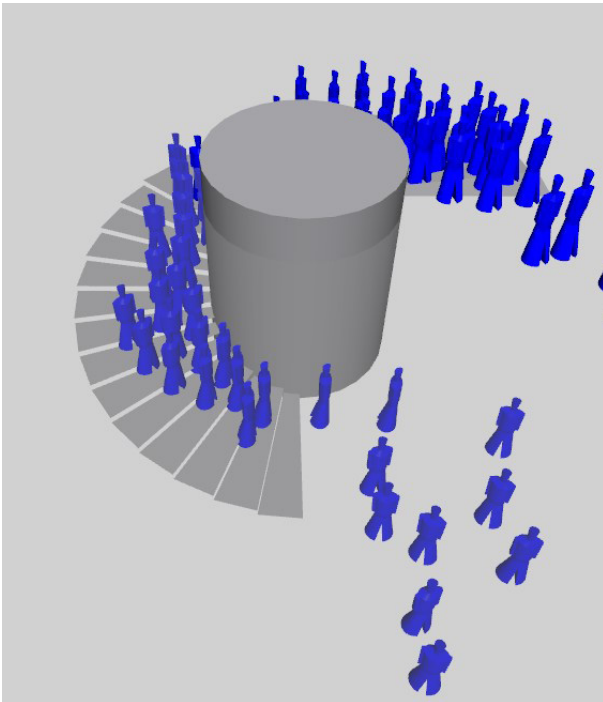Agent activity settings used OD Matrix option

DEMAND PROFILES AND ROUTING BASED ON ORIGIN DESTINATION MATRICES
Next to the activity based routing agents can now also be routed based on origin destination matrices. The origin destination Matrix (OD Matrix) is entered as table in an agent activity. Beside street entries and exits also specific bus lines or trains defined in the transportation input can used as origin or destination. More functionality is introduced in the agent generator to easily create demand profiles based on the agent activities. This makes it easy to create demand based on an origin destination matrix.
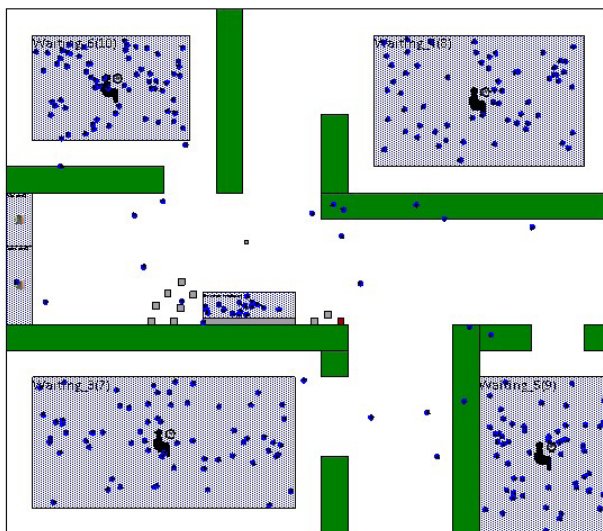
Spiral stairs

SPIRAL STAIRS

The user can now also model a wide range spiral stairs. The user can set the size, inner radius, start− and end−angle and the size of steps.

Mesoscopic agent simulation

SIMULATE IN MESO OR MACRO MODE

The option to model at meso level is improved. At meso level agents walk the shortest path to their destination and do not avoid other agents. To do a high level analysis new functionality to model at macro level is introduced. In macro mode agents have no interaction and move in straight lines from one activity location to another.

CONTACT US FOR MORE DETAILED INFORMATION OR A DEMONSTRATION OF PEDESTRIAN DYNAMICS® 3.1:

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