Facing great challenges at commercial venues regarding crowd safety, capacity and commerce? Analyze crowd behavior with simulation software!

**TECHNICAL KEY FEATURES**

- Simulate up to 100,000 individuals
- Quick & easy modeling
- Applicable to every kind of infrastructure & venue
- Analyze an area up to two square kilometer
- Realistic crowd movements with unique agent properties
- Amazing 3D visualization
- Detailed output results
- Import drawing & models based on industry standards

**HOW DO CROWDS USE THEIR SPACE?**

Shopping malls, theme parks, expositions and other commercial venues are all dealing with the same challenge: How do crowds use their space? Commercial attractive areas and catering locations need to be placed logically in order to serve everyone and of course to increase sales. Passageways must provide sufficient capacity for all visitors and the venue has to be evacuated safely and quickly in case of emergency. And in complex urban settings, the demands of other stakeholders (police, local authorities) can impose other constraints.

In addition to all these challenges, there is no such thing as an ‘ordinary day’. Sales, special events, the weather and other variables affect the number of visitors and the visitor flows.
Simulation software is the solution for simulating visitor flows in complex infrastructures and can be used to evaluate the performance and safety of a venue. Simulation software enables you to:

- Determine commercial attractive areas for retailers and catering business;
- Determine lead an waiting times for catering facilities, toilet facilities, entrances, and so on;
- Evaluate the capacity and safety of passages, walkways and turnstiles;
- Gain insight in the effect of special events or shows on specific locations in your venue;
- Test and compare different scenarios, such as demanded infrastructures by police, (partial) evacuations and in- and outflow of visitors;
- Gain insight into the complete infrastructure, visitor flows, bottlenecks and (safety) risks;
- Present the infrastructural design of your shopping mall, theme park or venue, including visitor flows in a 2D and 3D visualization to your stakeholders;
- Determine the evacuation times and develop evacuation and contingency plans;
- Save time and money by testing various functionalities during the design phase.

Simulating visitor flows has gained ground the last few years. An important reason is that safety of visitors has become one of the main issues within all kinds of infrastructures. In addition it provides answers to complex, logistical issues related to commerce and capacity management. Many different parties, such as event organizers, architects, authorities and emergency services, are already using simulation software to support their mission. INCONTROL offers its own simulation platform Pedestrian Dynamics.

The project experience and knowledge of the INCONTROL developers and engineers are used for the ongoing development of the software. Together with the network of INCONTROL, which will be used optimally at all times and made available for every customer, INCONTROL offers state-of-the-art simulation solutions. Examples of projects include: Optimizing visitor flows at the “end of the day” show at theme park ‘De Efteling’. Analysis of visitor flows in the Chinese pavilion at the World Expo 2010 in Shanghai.