PTV Viswalk

Realistic multi-environment
pedestrian simulation software.

PTV GROUP

Realistic multi-environment pedestrian simulation software

PTV Viswalk, the microscopic pedestrian simulation software, depicts pedestrians and their interaction with each other. The software enables urban and traffic planners, fire safety officers, and managers of railway stations, airports, and event venues to effectively model and solve pedestrian interaction challenges. Among other things, they can use the software to check passage widths, sizes of waiting areas, travel and waiting times, and ensure safety and comfort.

Your Benefits

Intuitive handling
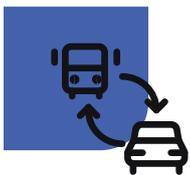Crowd simulation and evaluation are integrated in one user interface

Import options
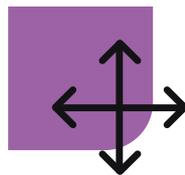Import geometrical data from CAD (DWG), BIM (IFC) for large models

Efficient calculation
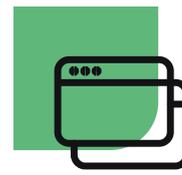Mass motion: Simulate over one million pedestrians in one model

Intermodality
Model how pedestrians interact with vehicles, buses, and cyclists

Flexible route decisions
PTV Viswalk allows flexible and complex modelling of route decisions

Analyze multiple scenarios
Develop multiple scenarios and compare evaluations

Customers who are satisfied with PTV Viswalk

(FCL) FUTURE CITIES LABORATORY   HATCH   ProRail   TYLin   WSP

Key Functions

Simulating pedestrians in cities

PTV Viswalk's crowd simulation is realistic: It simulates behavior of passengers, pedestrians, spectators, and evacuees – with each other and with other road users, such as cars, buses, trains, and cyclists. The pedestrian flow simulation combines analysis and visualization, making it easy to understand the traffic model.

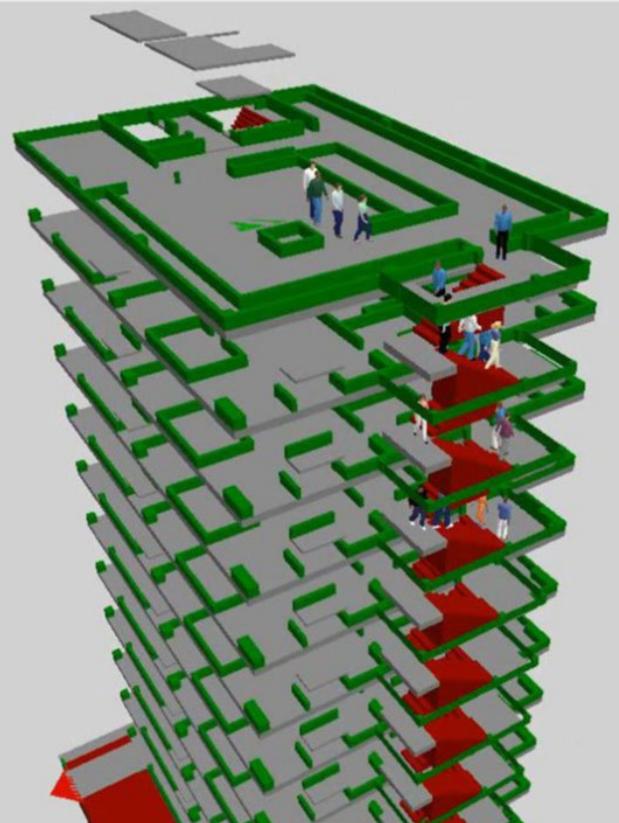## Pedestrian flow simulations in rail stations, stadiums, and airports

The microscopic, individuals-based simulation with PTV Viswalk gives you a comprehensive overview of the dynamics and paths of pedestrians in intersections. Simulate passenger flows in railway stations, shopping malls, or airports to analyze transfer times and determine capacities of existing or planned infrastructure.

Crowd simulation in event planning

With PTV Viswalk, you simulate human walking behavior, and identify bottlenecks that may lead to unnecessary waiting times. You can also examine operational processes, such queue lengths at the entrances and ticket counters, and the resulting waiting times. Based on the crowd flow simulation, you can adjust the event plan and ensure a smooth and safe event with a positive visitor experience.

Crowd and pedestrian flow simulations of evacuations

How long does it take to empty a building in case of a fire? PTV Viswalk provides information about the time needed, and helps you evaluate evacuation scenarios. Simulate and visualize emergencies in 3D and analyze the effectiveness of different measures. With PTV Viswalk crowd simulation, you can check route decisions, behavior patterns, and effectiveness of measures to speed up fire evacuations.

Related Products

MULTIMODAL TRAFFIC SIMULATION
PTV Vissim

The world's leading multimodal traffic simulation software PTV Vissim digitally reproduces the traffic patterns of all road users. Trusted by planners and engineers around the globe, PTV Vissim evaluates and improves the performance of your traffic facilities.

MULTIMODAL TRANSPORTATION PLANNING
PTV Visum

With PTV Visum, the standard for macroscopic simulations and macroscopic modeling of transport networks and transport demand, public transport planning you create transportation models that provide insights for long-term strategic planning and short-term operational use.

ADAPTIVE SIGNAL CONTROL
PTV Balance & Epics

Optimize traffic light control at individual intersections and across entire networks with the adaptive traffic control systems for better traffic flow, reduced travel times and congestion for all road users, fewer emissions, and less noise.

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