SimWalk PRO

Simulation for urban design, evacuation, traffic & architecture
Powerful analysis of people flows in the built environment
What is SimWalk PRO in a nutshell?

SimWalk PRO is a general-purpose pedestrian simulator for people flow analysis in normal and evacuation scenarios.

Compatible with all the major planning software formats (.dx, .dwg, BIM etc.).

Additional modules for evacuation (real-time hazards) and traffic.
Optimize the infrastructure efficiency and pedestrian comfort

Evaluate and improve the efficiency of people flows in planned or existing facilities.

Capacity planning for the next decades of the facility life cycle.

Prevent potential costly refurbishment costs already during the planning and implementation phase.

Integrate commercial and architectural demands through crowd flow analysis.
From city areas to large buildings to street passages

SimWalk PRO is flexible simulation software for large-scale scenarios down to small-scale operational evaluations.

Smart routing capability (travelling, shopping etc.) and attractiveness simulation (attractive, dangerous areas).

Group modeling and integrated international pedestrian types.
Leading technology and usability

SimWalk PRO includes the most advanced pedestrian algorithms, a best-in-class user interface, 3D visualization as well as scalable cloud performance.
Normal flows and evacuation behaviour of pedestrians

SimWalk PRO delivers modeling of normal flows as well as evacuation and emergency behaviour.

Hazard features allow to simulate fires or explosions and respective pedestrian behaviours during simulation run time.

With the Event/Action Handler emergency exits and other actions can be triggered and controlled.
Traffic modeling for intermodal simulation studies

The SimWalk Road Traffic Simulator (RTS) allows to model all areas where car traffic and pedestrian interaction must be analyzed.

Conduct capacity analyses at intersections, ramps, pavements, crossings, intersection corners, roundabouts, metro and station entrances - all in the same SimWalk model.
3D visualization custom-made

Different levels of 3D visualization deliver captivating presentations of simulation results.

Simulation data can be exported to other 3D or statistics tools in different formats.

Video captures, screenshots and other visual analytics complement the 3D tools.
Comprehensive analytics

Heat maps, charts and other statistics provide a comprehensive tool set to analyse simulation results.
Scalable performance for every customer need

64-bit architecture and parallel processing provide high performance computing on desktop workstations.

Optional cloud and high-performance cluster computing allow scalable simulation calculation.
SimWalk PRO modeling & simulation loop

1. Plan adaptation
2. Data analysis
3. Model building
4. Analysis
4. Simulation
Summary SimWalk PRO

SimWalk PRO is a pedestrian simulation solution deployed worldwide by consultants, engineering companies and authorities.

Comprehensive feature set for the effective and fast simulation and analysis of pedestrian flows in all environments.

Provision of near real-time simulation through high-performance computing capabilities.