

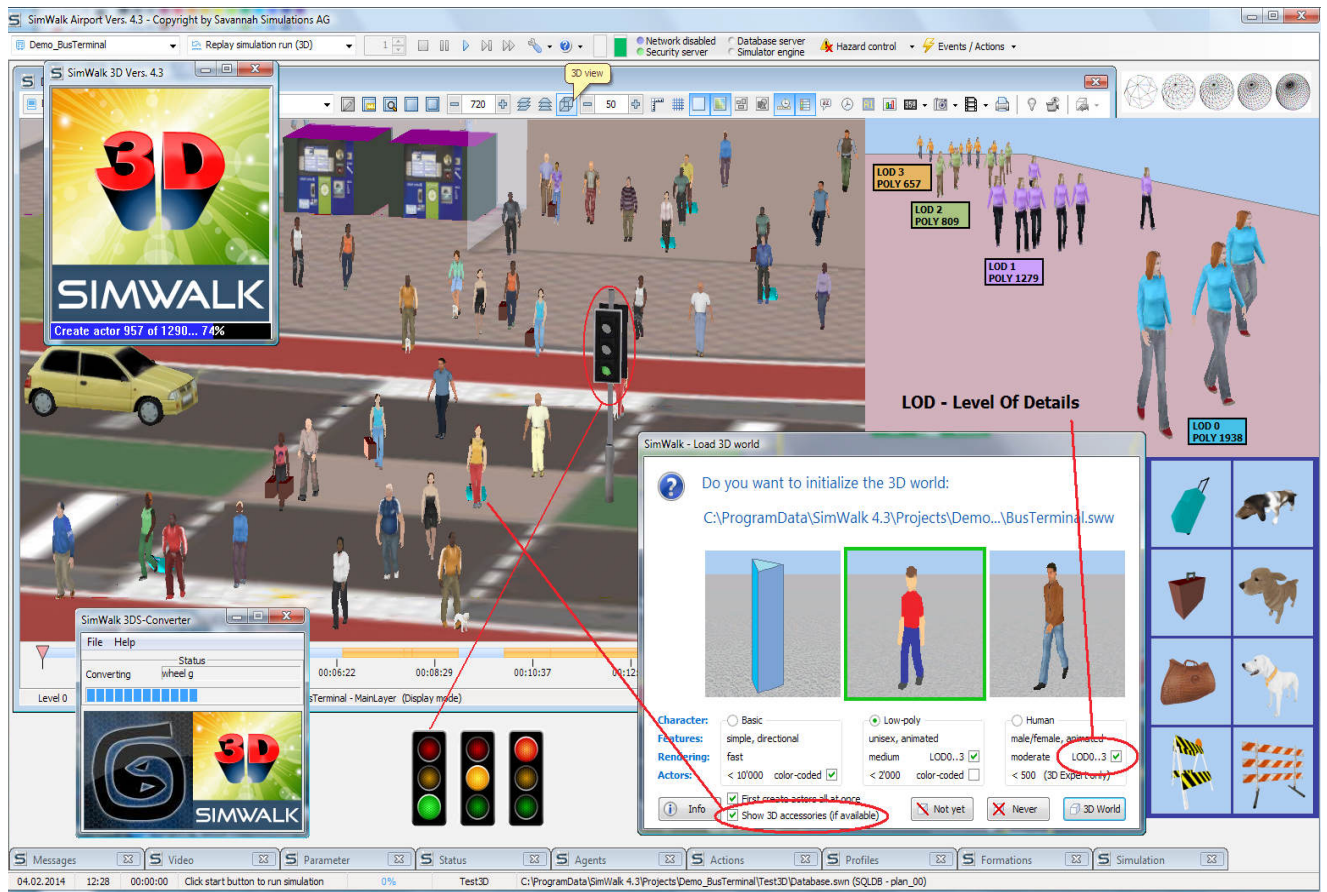
Windows 8 compliance, AutoCAD 2013 support and waypoint Excel matrix import

Version 4.3 provides a lot of smaller improvements, bug fixes, and performance enhancements. The major noteworthy features are Windows® 8 compliance, AutoCAD® 2013 support, enhanced CAD and 3D capabilities, and an easy to use Excel® waypoint matrix import.

1) Enhanced Graphic Capabilities

SimDraw, the integrated drawing board of SimWalk, has got some new features to improve and beautify CAD drawings and layouts:

- Fast and powerful 32-bit graphics engine
- High-performance alpha blending with user defined transparency
- Pixel, line and polygon antialiasing with user defined sub-pixel accuracy
- Flexible supersampling implementation for maximum rendering quality
- New brush style to fill closed shapes with pre-defined pattern or any texture from a graphic file
- Arrow-style corner points (grips) to better draw and move rectangles, circles, and ellipses
- Douglas-Peucker polyline simplification algorithm to reduce the number of points in a curve
- Convert and save Bézier, Spline and Freehand lines as optimized polyline
- Copy one or more selected shapes from one layer to another to simplify a complex drawing
- Import of AutoCAD® 2013 (version AC1027) DWG/DXF files



2) Improved 3D visualization and rendering

3D-Easy now implements some optimization techniques like viewing frustum culling and dynamic LOD (level of detail) for faster and more stable rendering. Also 3D accessories and baggage for actors are supported. A new interface to the Event/Action Handler allows influencing the 3D visualization while a simulation runs. The major improvements are:

- New Function: Do not render 3D objects outside the viewing frustum of the camera (frustum culling).
- New Function: Use different level of details (reduced polygon count) depending on the distance to the camera.
- New Function: Create 3D actor all at once (before simulation starts) or on the fly (during simulation).
- New SimAnimation to find, preview, and load animated bitmaps into the 3D world.
- Interaction with the Event/Action Handler to dynamically change textures of 3D objects.
- Show or hide actor's 3D baggage depending on carry or checked-in state.
- User defined or random accessory position (back, front, left, right, or both sides).
- Extrude any polygon inside another polygon to build 3D walls (e.g. for a balustrade).
- Punch out any polygon inside another polygon to build 3D holes (e.g. for a staircase).
- New options for 'Atmospheric effects' (like fog) and 'Wire frame' rendering.

The screenshot displays the SimWalk 4.3 interface. On the left, a 3D view of an airport terminal with a red flight path. In the center, a 'SimWalk Simulation Report' dated 23.01.2014, featuring a 'Warnings and Errors' section with several warning messages about agent blocking. On the right, a Microsoft Excel spreadsheet titled 'Routes Pernot.xls' is open, showing a table of waypoints and agents. A 'SimWalk - Table Import' dialog box is overlaid on the Excel spreadsheet, with 'Import data from' set to 'Excel table file (.xls/.xlsx)' and 'Waypoint matrix' checked. Below the dialog, a table of agents is visible:

Id	Agents	Level	Start	Waypoint	Tmin	Tmax	Tdel	Tdep	Group	Wtyp	Profile	Darr	Ddep	Tv
1	1 hide	0	Entrée 1 (OG)	POI 1 (OG)	60	180	30	45	1	0	0	0	0	0
2	1 hide	0	Entrée 1 (OG)	POI 2 (OG)	60	180	30	45	1	0	0	0	0	0
3	1 hide	0	Entrée 1 (OG)	POI 3 (OG)	60	180	30	45	1	0	0	0	0	0
4	1 hide	0	Entrée 1 (OG)	POI 4 (OG)	60	180	30	45	1	0	0	0	0	0
5	1 hide	0	Entrée 1 (OG)	POI 5 (OG)	60	180	30	45	1	0	0	0	0	0
6	1 hide	0	Entrée 1 (OG)	POI 6 (OG)	60	180	30	45	1	0	0	0	0	0
7	1 hide	0	Entrée 1 (OG)	POI 15 (OG)	60	180	30	45	1	0	0	0	0	0
8	1 hide	0	Entrée 1 (OG)	POI 18 (OG)	60	180	30	45	1	0	0	0	0	0
9	1 hide	0	Entrée 1 (OG)	POI 16 (OG)	60	180	30	45	1	0	0	0	0	0
10	1 hide	0	Entrée 1 (OG)	POI 19 (OG)	60	180	30	45	1	0	0	0	0	0
11	1 hide	0	Entrée 1 (OG)	POI 20 (OG)	60	180	30	45	1	0	0	0	0	0
12	1 hide	0	Entrée 1 (OG)	Sortie (OG)	60	180	0	0	1	1	0	0	0	0
13	1 hide	0	Entrée 1 (OG)	POI 1 (OG)	60	180	30	45	2	0	0	0	0	0

3) New Features in SimWalk

SimWalk has some new features which should help to reduce the plan building effort, increase the simulation replay speed, and give more detailed warnings or errors in case of inconsistencies in the layout or the plan:

- Pre-simulation check will indicate problems in the model before the simulation starts
- Catch all errors and warnings while a simulation runs and optionally show it after in a list
- New section 'Warnings and Errors' in the Simulation Report will document inconsistencies
- Import waypoint matrix in the Agents Plan Builder in Excel® file format (.xls or .xlsx)
- A waypoint matrix defines all routes from start via any waypoints to an exit in tabular form
- Fast and thread-save virtual grid to read and replay simulation runs from database in pages
- Improved method to handle manual timeline relocating in virtual page / replay mode

Free DEMO Download:
www.simwalk.com/download.php