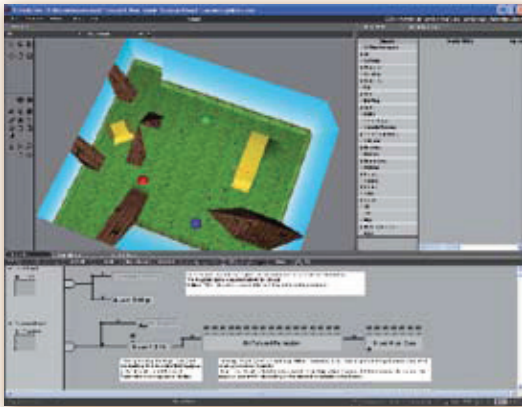


# AI Library

Bring Life To Your Applications



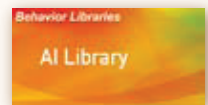
The Artificial Intelligence Library for Virtools Platform brings a new dimension in realism and credibility to your 3D experiences.

This add-on library of building blocks is especially geared to managing autonomous characters.

The AI Library lets development teams create applications with all the power of AI directly in Virtools' platform. The Artificial Intelligence Library offers a host of behaviors to help make your autonomous characters smarter.

Now you can develop characters capable of evaluating their environment, making choices and acting on their decisions.

Create crowd behaviors and individual characters that seek out objects, navigate through environments without letting down their guard, fight other characters, etc. The add-on library lets you bypass long, risky development cycles. By using high-level behaviors, Virtools users get access to complex technology without leaving the platform's graphical development environment.



## AI Library New Features

- Generate Pathfinding for 3D Complex Environment using high level tools specially geared for Games Developers
- Add Playable Characters to your prototype or game using autonomous agents thanks to AI library 2.0
- Take Benefits from User Friendly tool for Path Data Generation.

## Key features

- 20 BBs with documentation
- High-level character behaviors (run away, hide, etc.)
- 3D Pathfinding: dynamic collision management and environment management (doors, elevators,...)

## Building Blocks For Enhanced Gameplay

The AI Library includes two types of building blocks, first to give independent characters insight into their environment with visual and aural sensory abilities, and then manage characters' subsequent actions with high-level behaviors (follow, run away, hide, etc.). The AI building blocks are used just like standard Virtools building blocks, with parameters for adjusting criteria such as stealth, auditory capabilities and group dynamics.

The building blocks are accompanied by several tools for creating routines that speed up production, primarily for computer-generated data needed for characters to evaluate their environment.

## Technical requirement

### Hardware

- Pentium III or equivalent
- 1Gigabyte (GB) of RAM
- DVD ROM drive
- Monitor capable of displaying 1024 by768 in 16 bit color (65536 color/ Hi-color)
- Pointing device (mouse, trackball...)
- Direct3D or OpenGL compatible 3D graphic card with 128 MB of RAM
- DirectSound compatible sound card (not a requirement but recommended)
- You should ensure you have the latest official drivers for your graphics card

### Software

- Microsoft Windows (2000, XP)
- Microsoft DirectX 9.0C for DirectX compatible 3D graphic accelerator cards
- For OpenGL, an OpenGL 2.0 compatible graphics card and driver
- Microsoft Internet Explorer 6.0 (for the Online Reference)

## Reduce Production Cycle And Development Risks

Creating autonomous, reactive characters is a complex task. Character integration is usually done late in the production cycle, when it is most difficult to test and validate new concepts, and tweak behaviors and gameplay. Given the foundations of the Virtools platform - based on attributing behaviors to objects - autonomous character management becomes just another logical step in the overall development process.

The AI Library relies on Virtools' intuitive development methods, to let you trigger smart character behavior by assembling the appropriate building blocks. Create characters who can navigate around a 3D environment and dynamically avoid obstacles and other characters, or move through doors, elevators and other zones capable of influencing pathways.

The AI Library offers sophisticated character control to avoid repetitive, predictable behavior. The module not only takes into account criteria like choosing the shortest or most inconspicuous path, but also allows for management of large numbers of independent characters. The necessary data is automatically generated via "pathdata."

Production, tests and tuning are faster and more reliable. In only a few hours, the AI Library lets you create dozens of autonomous characters to enhance your 3D experiences with greater realism.