Detailed Features

ANIMATION SYSTEM
- included features: BLENDING (n-way blend between object vertex); DATA-CONVERSION (3DSmax data-exchange plugin to export motion capture or hand animation data); PHYSICS (i.e. clothes animation); BONE CONTROL (real time orientation and positioning for bones, i.e. to move head and eyes of character, or to correctly place feet on floors or stairs); ANIMATION SHARING (reduces memory consumption impro-ving data management, reduces production cost by sharing animation among different models)
- skeletal animation system uses shaders to apply skins and bones transformations (there's no limit on number of bones)
- support of X and Fbx animation
- support of Matrix or Skin Animations
- rendering and skinning are made through the "material shader" used on the animated character, leading to high-level rendering performances
- in-game crowds can be managed using blending on each model animation. Availability of 3DSmax "Animation Studio" plugins to export/optimize and organize animations on each character
- full integration with 3DSmax (version 9 or later)
- possibility to use models and animation exportes in X format (text and binary), created using any 3D Graphic Editor (Max, Maya, Blender, Lightwave, etc...)

AI SYSTEM
- Basic AI Behaviour (BAB) includes: follow a path (Path Finding), target a point (Target Point), chase (Chase) a moving element, Face Opponent, Stand, Engage, React, etc...
- AI can move along closed paths or on a grid of points (points sequence can be edited using 3DSmax or with any X format compatible editor)
- NPC, CARs or enemies can follow preset scripts or move accor-ding to BAB, choosing the next point to target
- Path Finding system can be used for Enemies, NPCs, Cars
- Path Finding & Target Point heavily reduces AI calculations for collision with floor and object
- AI interactions (each other and with Player): characters stop each other; cars wait for people to cross; characters and cars collide, push and interact with main character; Enemies escape and chase a target; characters wait (basic interactions) or change direction; cars crash when colliding; etc...
- crowds can be created using same AI behaviour or different behaviours
- AI LOD: the engine automatically adapts characters LOD to reduce frame-rate impact
- AI Behaviour Editing: possibility to update and customize basic or included AI behaviours
-Scalable Obstable Detection: Floor Update (separated from obstacles); Obstacle (obstacle can be detected with proximity, bounding spheres, or using triangles)