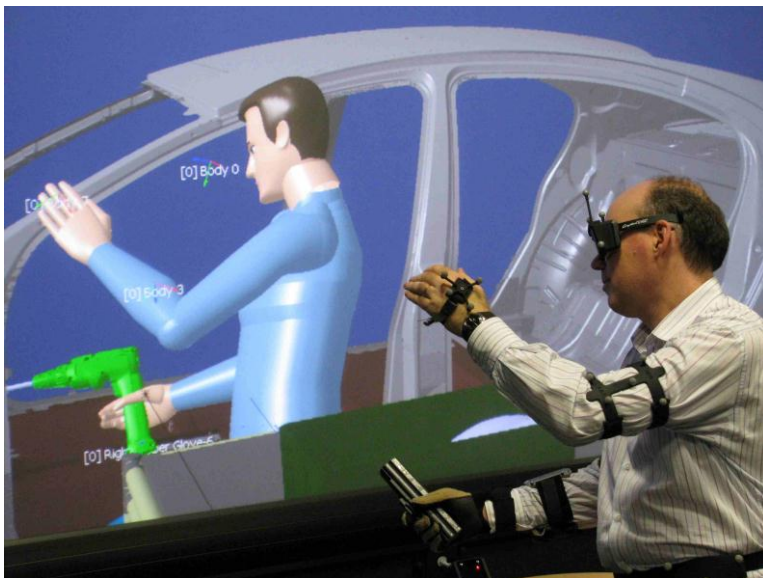


RTID Human **Real-Time Interaction for Delmia Human**



RTID Human "Real-Time Interaction for Delmia Human" is a software add-on to Delmia V5™. It enables interactive real-time simulation with digital human capabilities inside a virtual environment.

Using RTI for Delmia, the users can simulate **manual operations** in:

- ⇒ **Accessibility** testing
- ⇒ **Visibility** study
- ⇒ **Ergonomic** assessment
- ⇒ **Workplace** simulation
- ⇒ **Collaborative work**

The User Benefits are: reduction of the time needed for producing human animations, increased productivity, increased quality, lower development effort.

Key Features

- ⇒ **Easy calibration**
- ⇒ **Stop on collision cues**
- ⇒ **Combination with V5™ KIN mechanisms**
- ⇒ **Record postures as a Delmia V5™ Human Task / Move Activity**

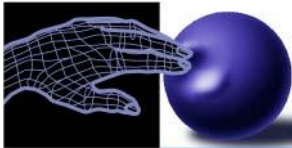
Technical Requirements

- ⇒ Delmia V5™, MHT & MHB
- ⇒ Supported releases: R18/R19/R20/R21/R22
- ⇒ Hardware: valid configuration certified by Dassault Systemes
- ⇒ Haption IPSI Server

Real-Time Interaction and Simulation

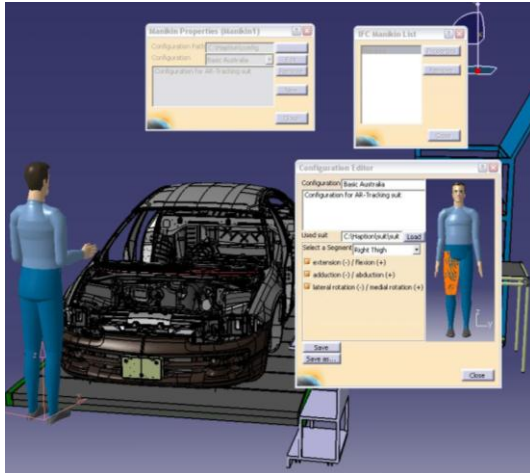
RTID Human offers functionality for:

- Simulation set-up
 - Select any kind of manikin present in your Delmia Ressources
 - Activate/deactivate individual joints
 - Identify tools and moving parts
 - Automatically load the 3D data into the interactive physics simulation
- Manipulation device management
 - Optical tracking system for real-time motion capture; currently supported are ART™, VICON™, MotionAnalysis™, and Trackd™
 - Inertial Sensor: Xsens™
 - Cyberglove™ for hand of the manikin
 - 6D mouse from 3Dconnexion

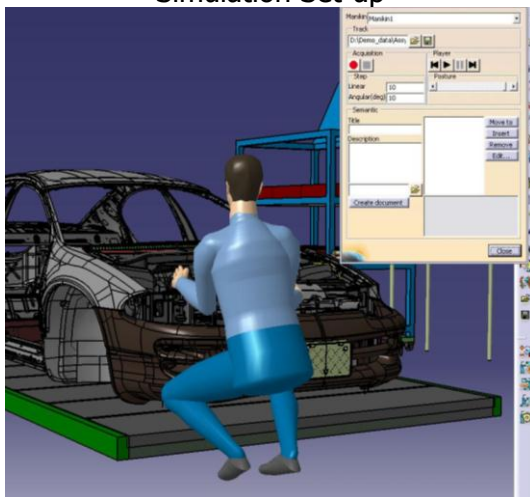


haption VIRTUAL TOUCH

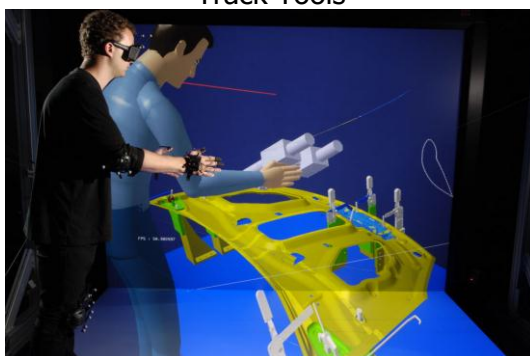
Product|Software



Simulation Set-up



Track Tools



Virtual Reality

- Haption's force-feedback devices Virtuose and Inca
- Simulation process control
 - Start, stop, pause, resume
 - Attach/detach manipulation devices to 3D objects
 - Automatically calibrate the operator using motion tracking equipment, attach/detach the virtual manikin with one click
- Real-time physics simulation
 - Scale the operator's movements to the virtual manikin
 - Integrate the virtual manikin's kinematics, including joint limits
 - View collisions and stop/glide/pivot on contact point
 - Update the Delmia viewer in real-time
 - Animate up to 4 manikins simultaneously
- Simulation capture and recording
 - Record the virtual manikin's postures as joint angles in real-time
 - Create a Human Task based on the recorded postures, for later replay and analysis

Real Time Movement and Kinematics Constraints

RTID Human's constraint-based solver drives the Delmia V5™ manikin in real-time without inverse kinematics, thus generating more accurate and realistic postures.

Real-Time Recording Trajectory

Using RTID Human, you can record the postures of the manikin as a Human Activity program, and use standard Delmia Human functions to replay, edit, and analyse it.

RTID Human and Virtual Reality

Combine RTID Human with a stereoscopic display such as Head Mounted Display (HMD) or projection system (Cadwall, CAVE™) for a unique, fully immersive experience! With the new scripting functionality of IPSI, you can even drive the whole simulation session from the VR environment.