

IFC Core and Human are a software add-on for Dassault Systemes Catia™ V5. It enables interactive real-time simulation and digital human capabilities inside a virtual environment, while maintaining all basic functions. The user can simulate assembly simulation with force feedback and human operation: Accessibility testing, Visibility study, Operator training, Ergonomic assessment, Workplace simulation, Collaboration work

#Virtual Reality #Ergonomic #Dassault

3D REAL-TIME INTERACTION AND SIMULATION

- ✓ IFC Core: realtime animation of part with collision detection
 - ✓ Simulation set-up: Easy control start, stop, resume
 - ✓ Realtime Animation of part with physics:
 - ✓ Create physics (selecting tool: working zone)
 - ✓ Animate and visualize clash in realtime
 - ✓ Support for haptic interface
 - ✓ Support weight
 - ✓ Create container
 - ✓ Manage the tolerance
 - ✓ Output record a track
 - ✓ Read Kin description, and animate the kinematic in realtime
- ✓ IFC Human : Realtime Animation of full human with physics:
 - ✓ Scale operator motion, integrate manikin's kinematics
 - ✓ Easy calibration, and attach/detach manikin
 - ✓ View collisions points on contact points
 - ✓ Animate up to 4 manikins
 - ✓ Output: store a human posture
- ✓ Supported devices:
 - ✓ Optical tracking system: ART, Vicon
 - ✓ Inertial system: Xsens
 - ✓ Force feedback: Haption's product Virtuose
 - ✓ Glove: Manus, Cyberglove
 - ✓ 3d mouse: 3Dconnexion
 - ✓ On request input stream



TECHNICAL SPECIFICATION

PC Configuration	Dassault Systemes supported configuration, with minimum 32 G of RAM, quad-core, and dedicated Ethernet for the realtime input device
Supported Released	V5-6R2019 to V5-6R2025
PREREQUISITE	
Haption	1 license of IPSI Server
Dassault Systèmes	IFC Core: MD2 + FIT, SPA, DM3, KIN IFC Human: IFC Core + HBR

