Creating Multiple offsets

If required, you have the possibility to create multiple offsets for the same segment and to decide which one will be the active offset at the current time.
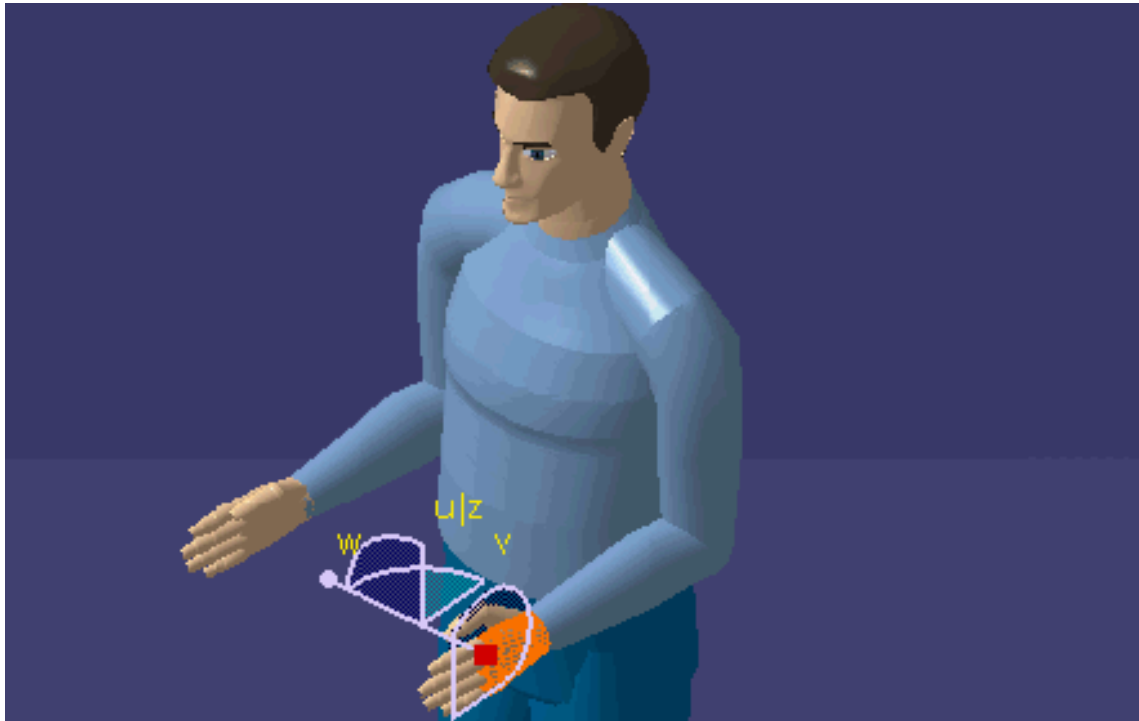
This is useful mainly in the manufacturing scenarios where the manikin is taking care of multiple tools within a same simulation or workstation. Each tool can then have its own offset specified on the manikin's hand. The offset command in the human builder workbench (also available within the Human Task Simulation workbench in the DELMIA portfolio) wi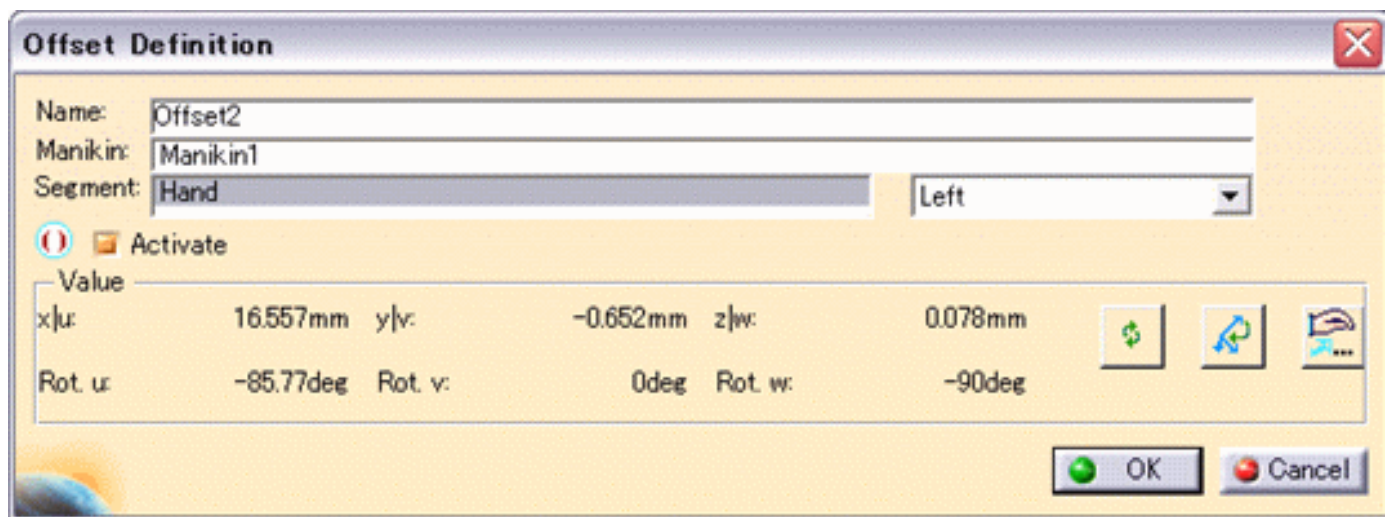ll create a new point identified by a small cross . This point is linked to the segment and will be used as an offset. If the segment selected is the pelvis (phantom segment), you will be able to set an offset directly on the H-Point location.

Offsets will now have a 3D representation in the 3D viewer. The hide/show command, as well as the name and color edition in the properties command of the contextual menu will be available. Also, this modifies a currently existing functionality: redefinition of offset.

An old file loaded into the new version of the program will create an offset and automatically activate where the old redefined offset was. Also, these offsets can be saved and loaded in the catalog.
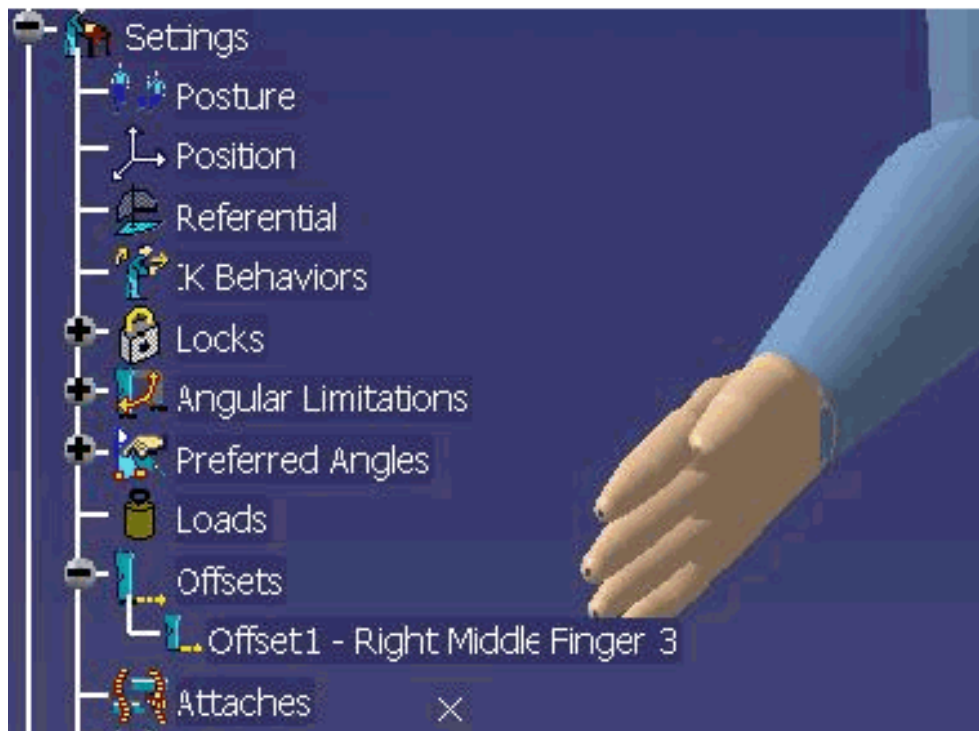
1. For creating an offset, select **Inserts a new offset** and a manikin's segment. The **Offset** dialog box opens:

Offset Definition

Name: Offset2
Manikin: Manikin1
Segment: Hand   Left

○ ☑ Activate

Value
x|u: 16.557mm   y|v: -0.652mm   z|w: 0.078mm

Rot. u: -85.77deg Rot. v: 0deg Rot. w: -90deg

● OK   ● Cancel

○ The **Name** field will allow you to modify the name of the offset at the creation and edition.

○ The **Manikin** field will allow changing the manikin on to whom the offset should apply, during creation, or allow the migration of an existing offset to another manikin at edition time. When selecting another manikin at creation, the compass will place itself at the currently active offset position, and when choosing a new manikin at edition, the compass will move to where the new offset is (effectively mirroring the offset position to the new manikin). Selecting OK, the old offset would disappear and a new offset would be created.

○ The **Segment** selector changes the segment onto which the offset will be placed during creation, or migrate to an already existing offset to the new segment at edition time (a segment on another manikin is also possible). When selecting a new segment at creation, the compass will go to the currently active offset, and when selecting a new segment at edition, the compass moves to the same relative position it had before on the new segment (mirroring the offset according to the new segment's position).

2. The **Offsets** will appear in the PPR tree, and in the 3D viewer in the form of a cross (X).

3. It is also possible to hide/show the offsets, either by selecting the offsets one by one, or all of them by choosing the father node Segments offsets.

4. When there is multiple offsets, to switch between them, right click on the offset, and Activate/Deactivate the offset