

Animation Importer (AI 9)

BPA Delivery 6 for V5R19 &
Virtools4.0 (V5.6)

User's Guide

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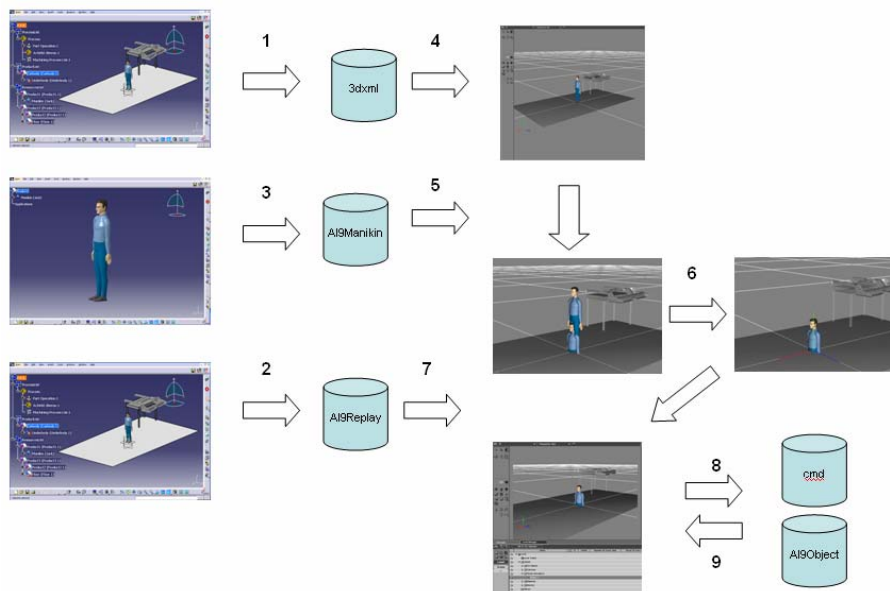
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Animation Importer deliverables



The Animation Importer deliverables are provided as an executable package including the following functions:

1. Export Geometric Models to 3DXML 

Function to export the geometric models to 3DXML that can be imported in Virtools

2. Export Animation Replay data to the Positions file 

Function to export the current animation replay data into the positions file which can be imported in Virtools.

3. Export the Manikins one by one 

4. Import Geometric Models from 3dxml (Virtools Functionality)

Function to import the Geometric Models into Virtools from 3dxml which is exported from CATIA or DELMIA.

5. Import a Manikin

Function to import a Manikin which is exported from CATIA

6. Replace the Manikins in Geometric models with Imported Manikins(Virtools Functionality)

Use Virtools' functions to replace the Manikins in Geometric models with the imported Manikins

7. Import Replay data from the positions file

Function to import replay data from the positions file.

8. Save Animation with Manikins

Function to save animation with the imported manikin.

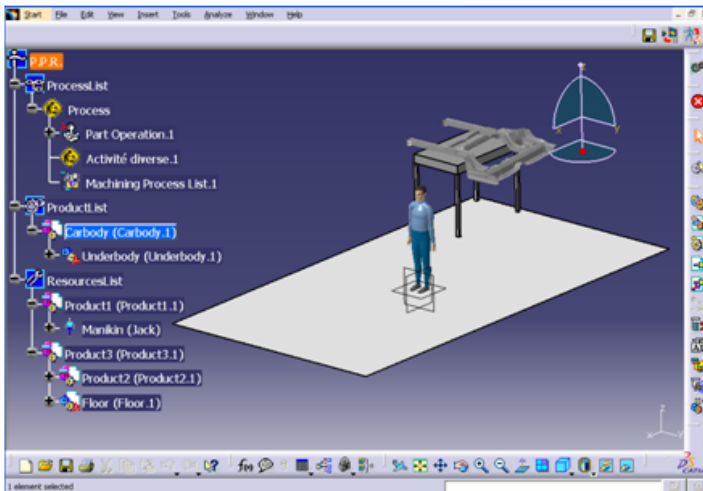
9. Load Animation with Manikins

Function to load the animation with Manikins

1,2 and 3 capabilities can be accessed through the use of a CATIA V5 Toolbar and 4,5,6,7,8,9 can be accessed in Virtools.

Export Geometric Model to 3DXML

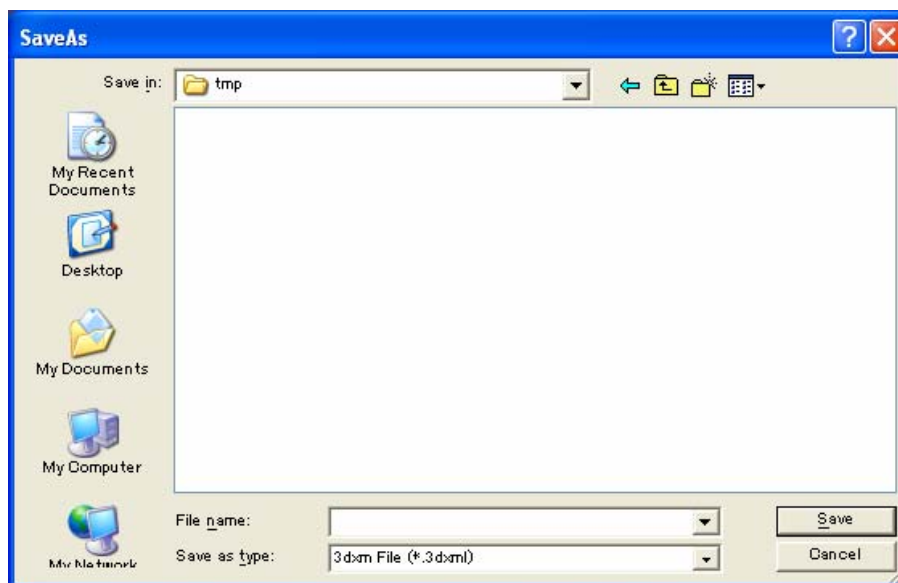
This function is to export geometric models to 3DXML that can be imported in Virtools.



Geometric Models



1. Select Function "Export Geometric Model as 3dxml" to launch a panel



2. Select the path and input a file name in "File name" field to save the models.

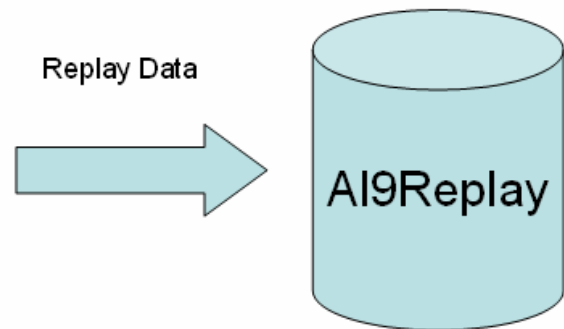
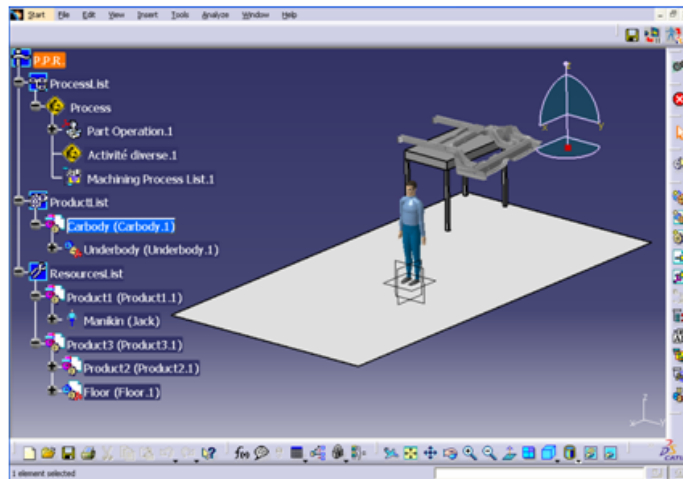
3. Press “Save” to save models

The current geometric models are saved to a 3DXML file.

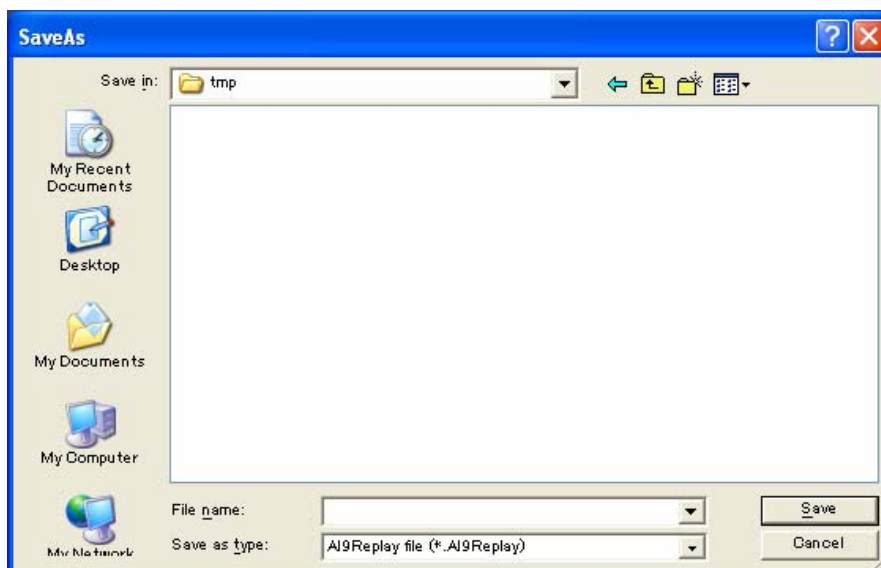
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Export Replay data to the positions file

This function is to export Replay data stored in CATIA or DELMIA to the positions file and the file can be imported to create a replay in Virtools.



1. Select Function "Export the Replay Data " to launch "SaveAs" dialog



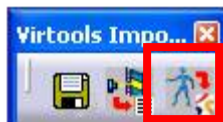
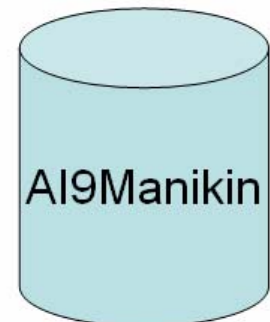
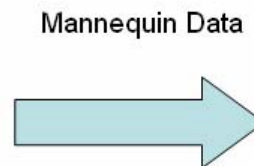
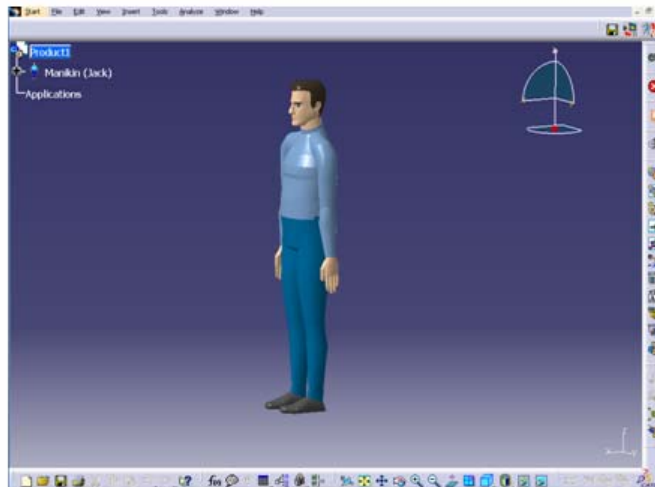
2. In the dialog, input a path and file name in the "File name" field.

3. Press “Save” to save the Replay data to the positions file

The Replay data is saved to a file with suffix “.AI9Replay”.

Export a Manikin

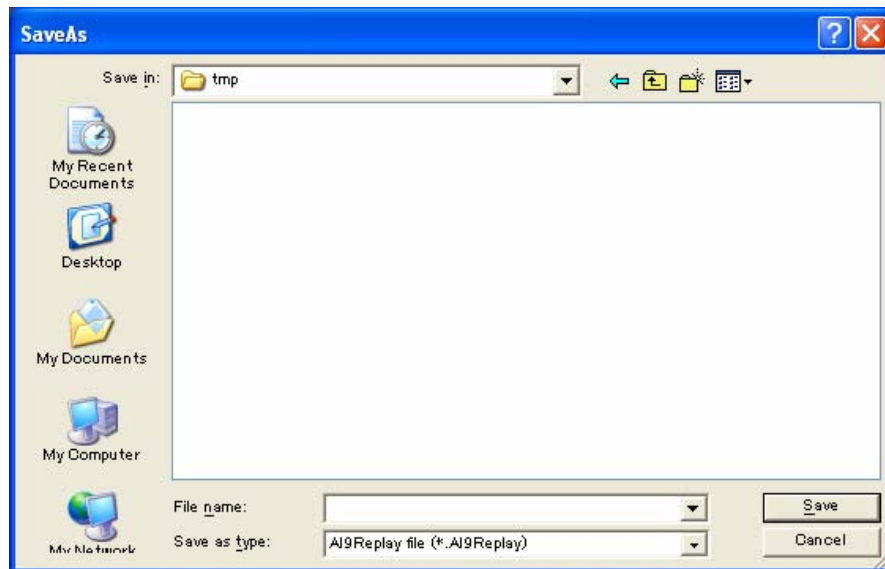
This function is to export one Manikin into a file that can be imported into Virtools to replace the Manikins in geometric model.



1. Open a Manikin in new windows.



2. Select Function “Export Manikin ” to launch “SaveAs” dialog
3. In the dialog, input a path and file name in the “File name” field.

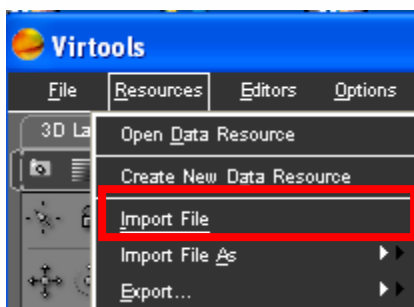
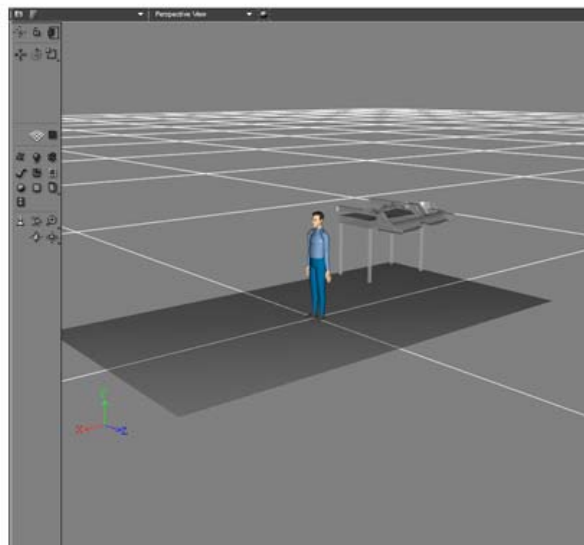
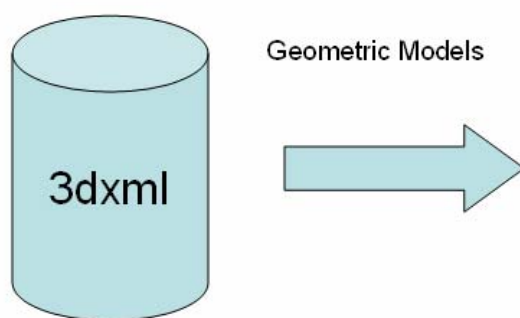


4. Press “Save” to save the Manikin

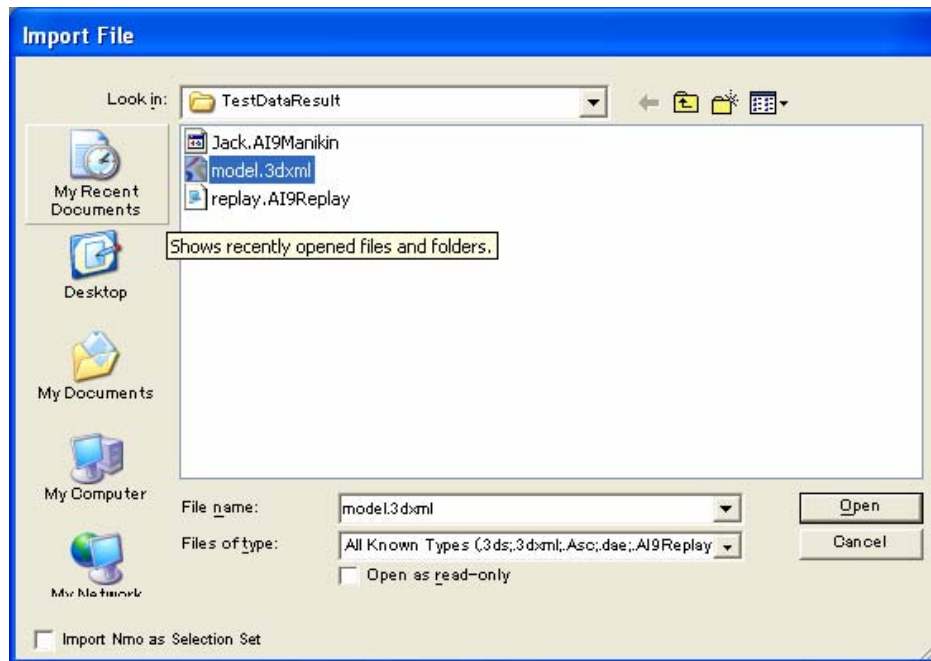
The Manikin data is exported to a file with the suffix “.AI9Manikin”.

Import 3dxml geometric Models in to Virtools (Virtools functionality)

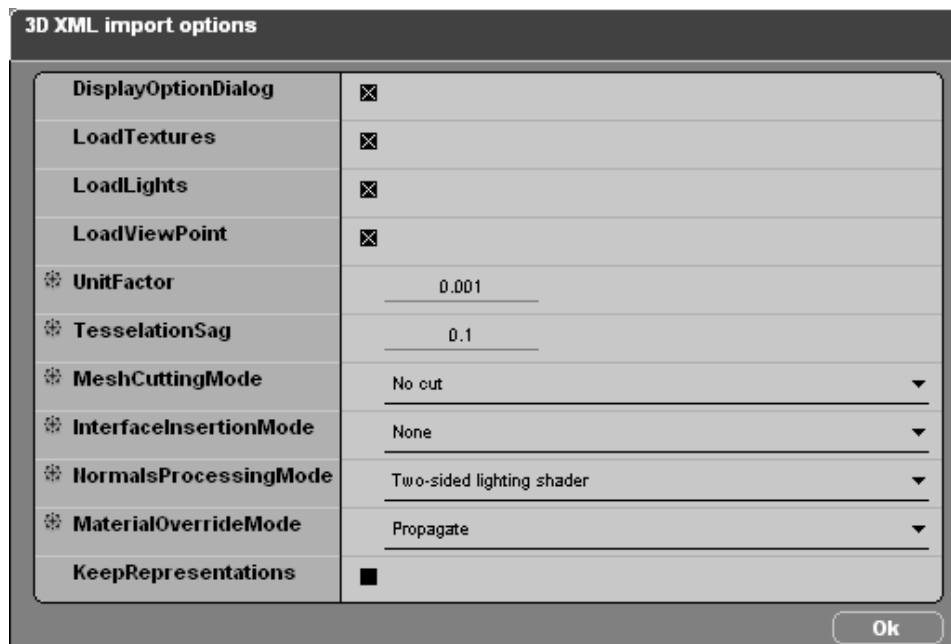
This function is to import geometric models from 3dxml which is exported from CATIA or DELMIA.



1. launch "Import File" dialog with "Resources->Import file"

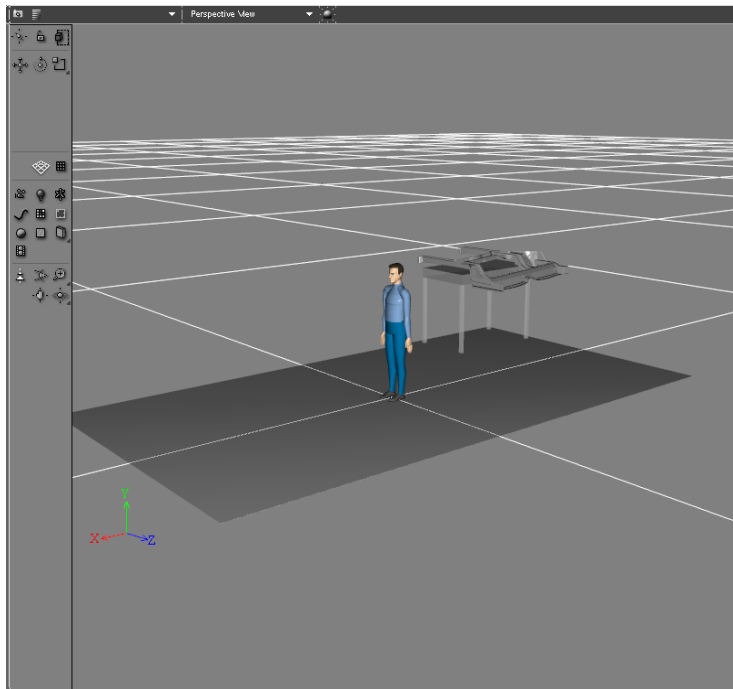


2. Select a 3dxml file which includes the geometric model that is exported from CATIA or DELMIA
3. Press “Open” to open a “3D XML import options” panel

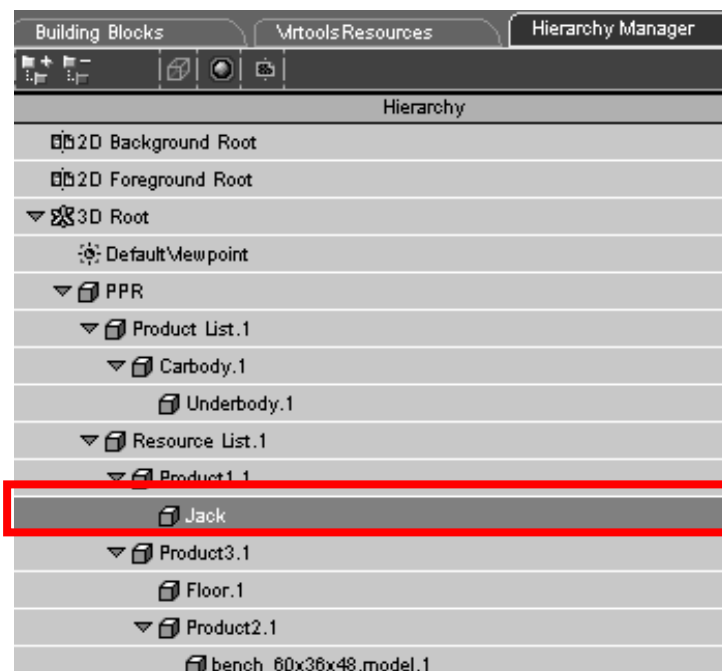


4. Select the options as followings:
 - a. UnitFactor : 0.001
 - b. NormalsProcessingMode:Two-sided lighting shader

- c. MaterialOverrideMode:Propagate
- 5. Press “OK” to import the geometric models
- 6. The geometric models are imported in Virtools

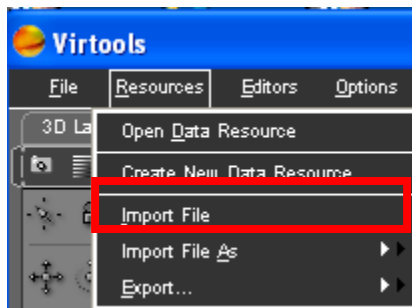
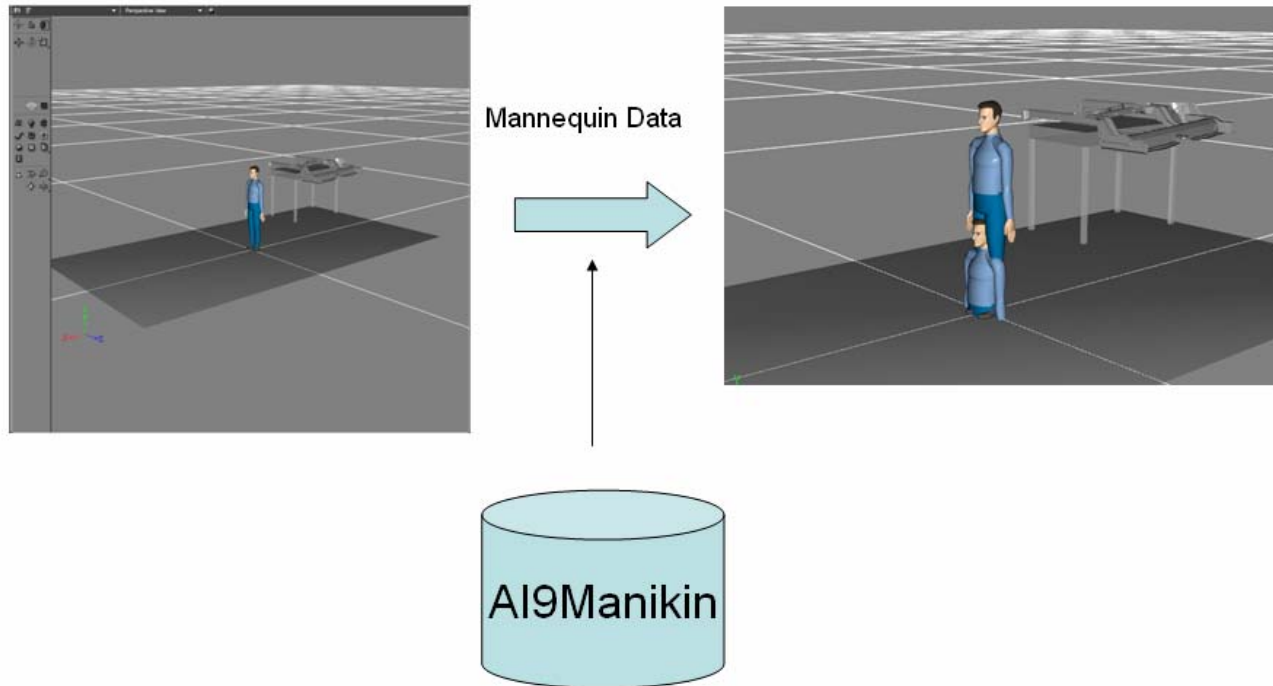


- 7. Check the location of the Manikin with Virtools' Hierarchy Manager

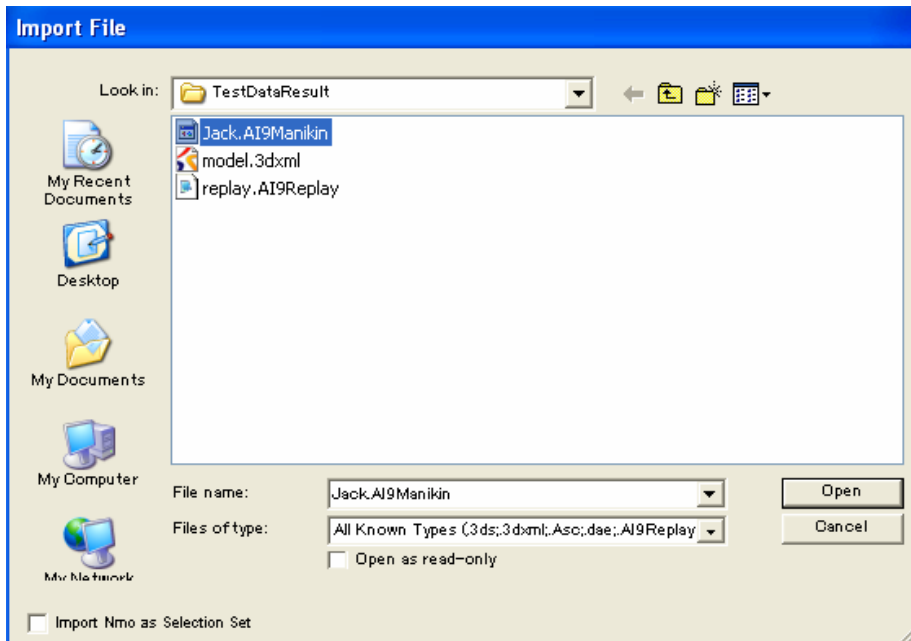


Import Manikins

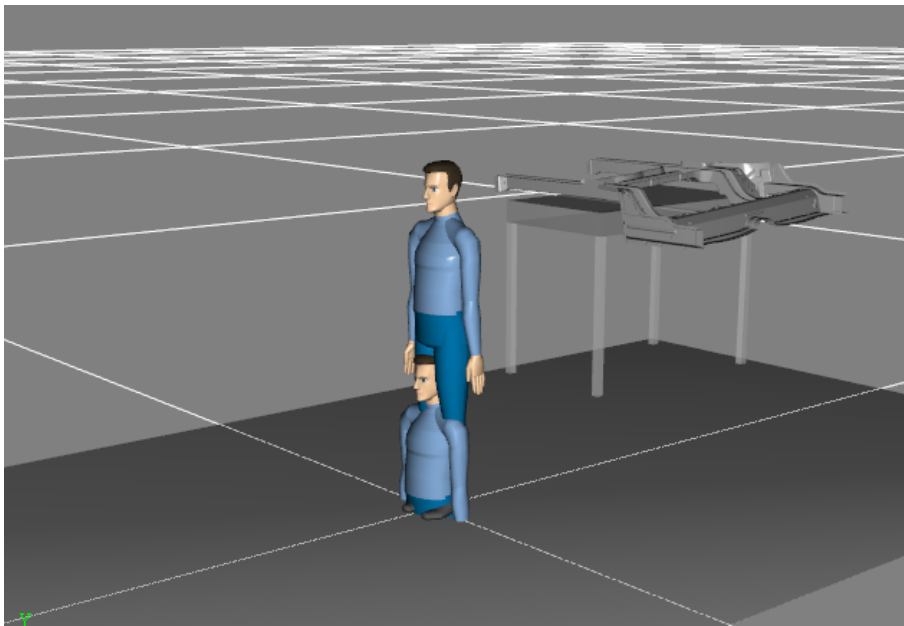
This function is to import the Manikins which is exported from CATIA.



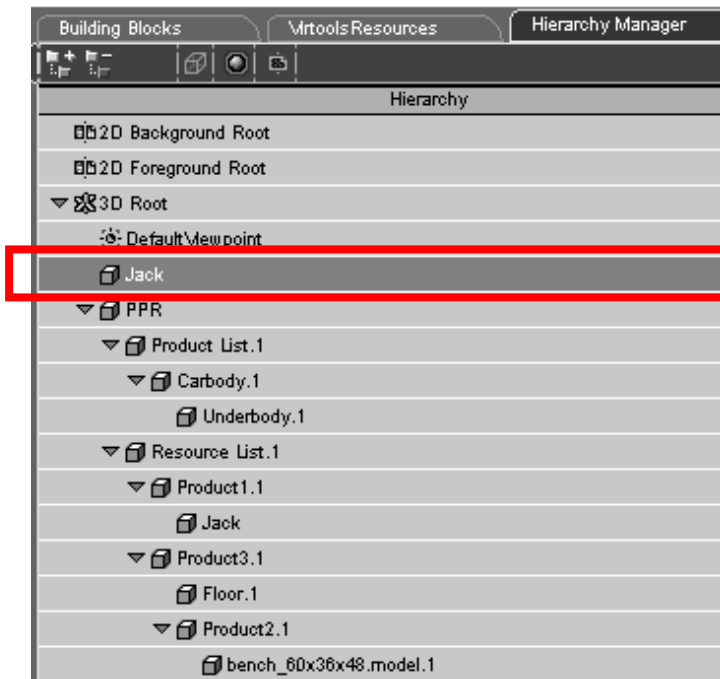
1. launch "Import File" dialog with "Resources->Import file"



2. Select a AI9Manikin file that includes one Manikin exported from CATIA
3. Press “Open” to import the Manikin.
4. The Manikin is imported

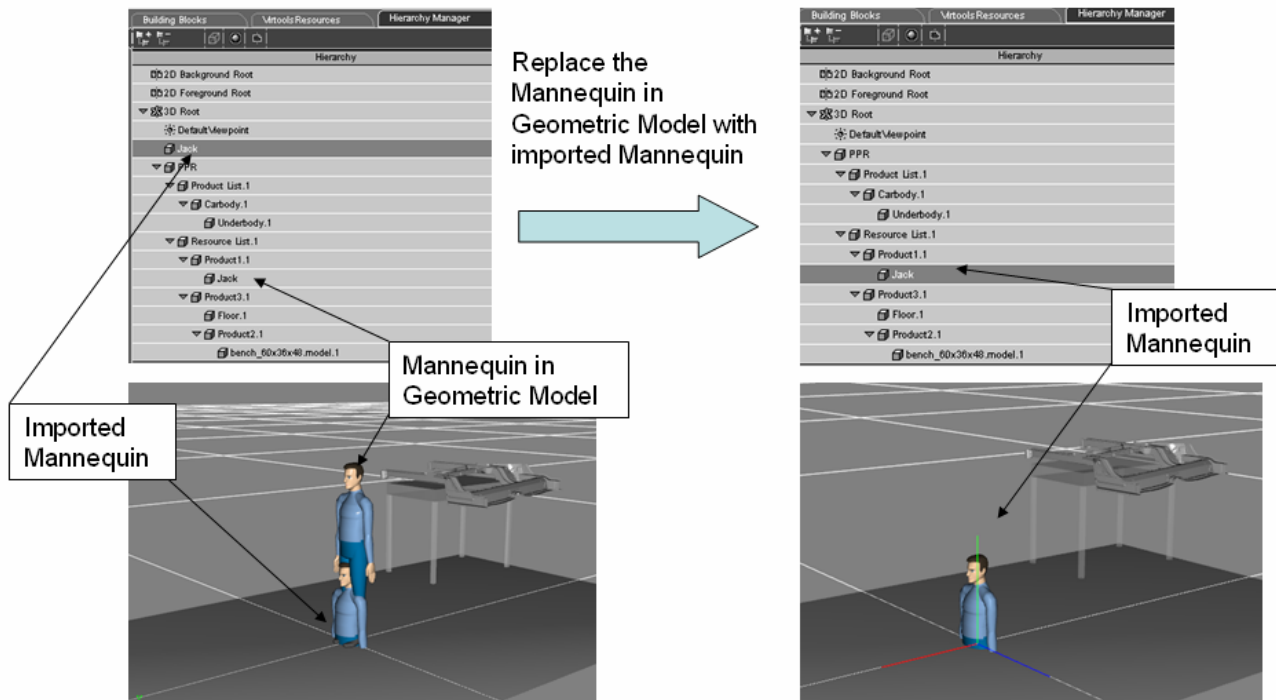


5 Check the location of the Manikin with Virtools' Hierarchy Manager.

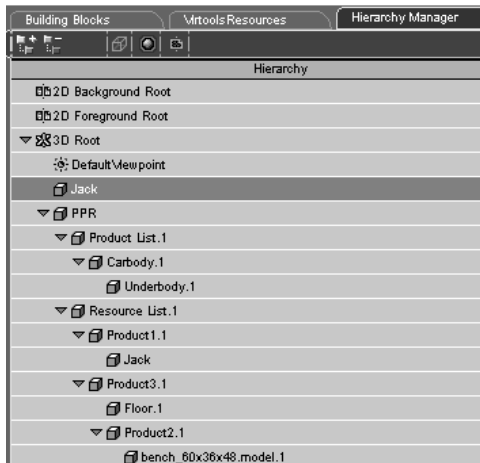


Replace Manikin in Geometric Models (Virtools functionality)

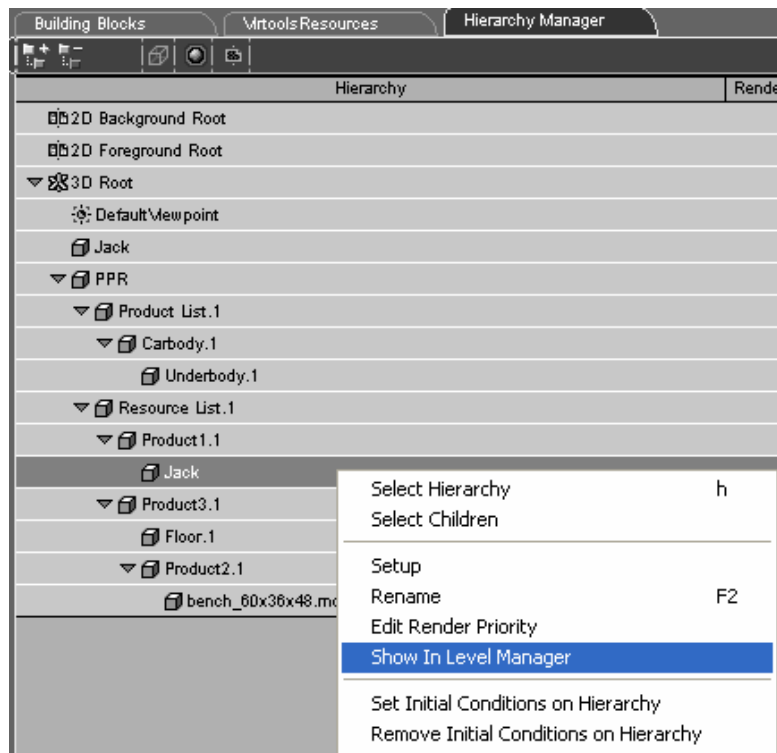
This function is to replace the Manikins in Geometric models with imported Manikins.



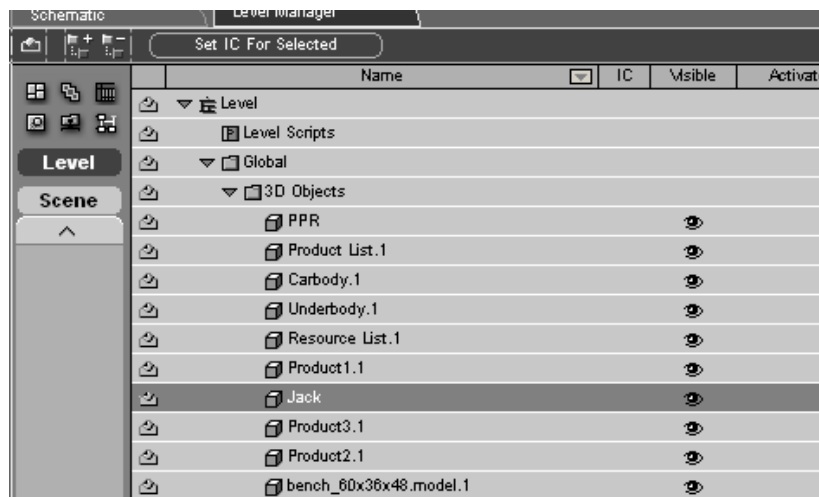
1. Check the locations of the imported Manikin and the Manikin in Geometric Models with Hierarchy Manager



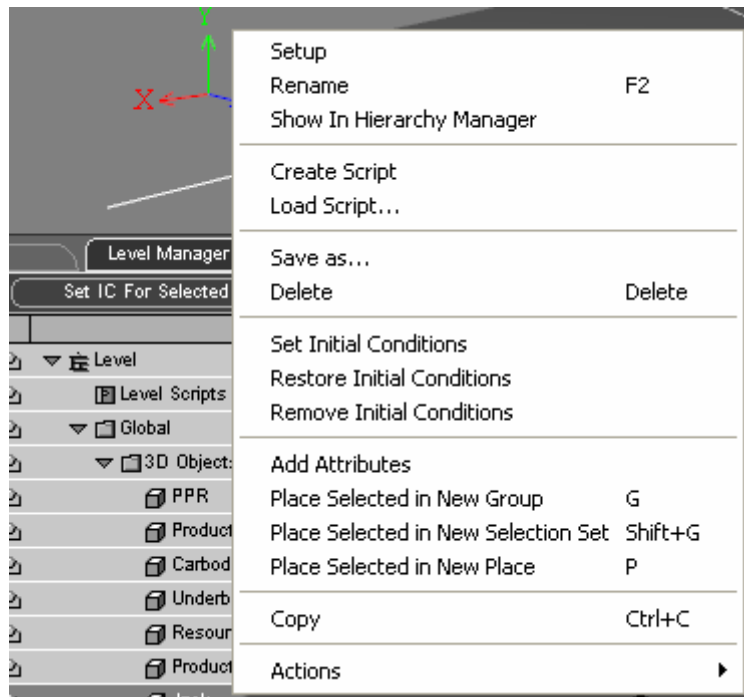
2. Delete the manikin which is in geometric models
 - a. Select the Manikin that you want to delete in Hierarchy Manager and open the context menu,



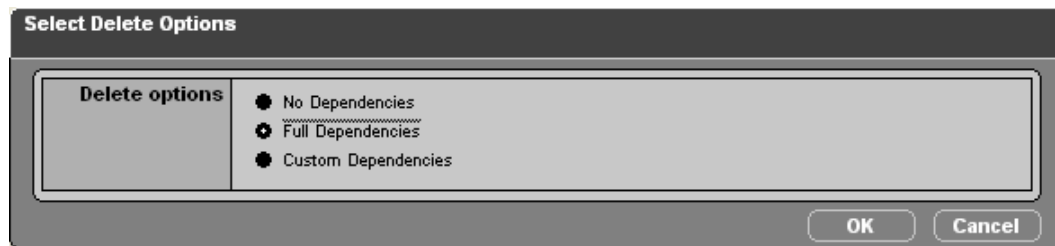
- b. In the context menu, select “Show In Level Manger”
 - c. In “Level Manager”, the manikin is selected



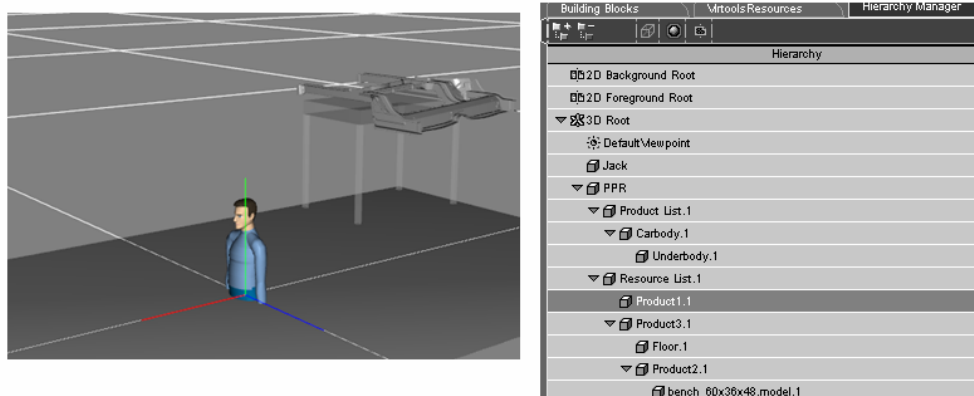
- d. In “Level Manger”, select the Manikin and open the context menu



- e. In the context menu of the selected object, select “Delete” to open a “Select Delete Options” panel.



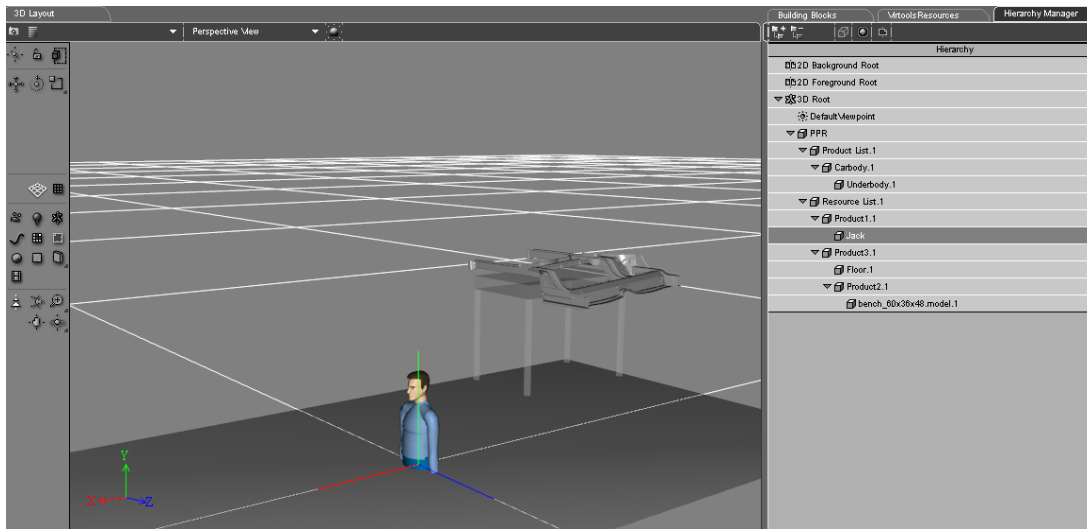
- f. In the “Select Delete Options” panel, select “Full Dependencies”
g. Press “Ok” to delete the Manikin
h. The Manikin in Geometry models is deleted



3. Move the imported manikin to the location of the deleted manikin in the geometric models
 - a. In hierarchy manger, select the imported manikin and move it to the location of the deleted Manikin in geometric models.

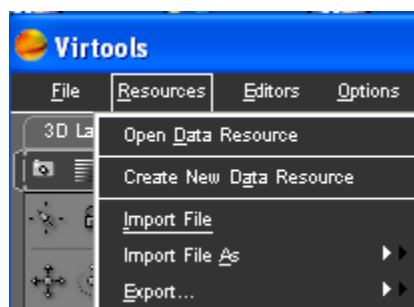
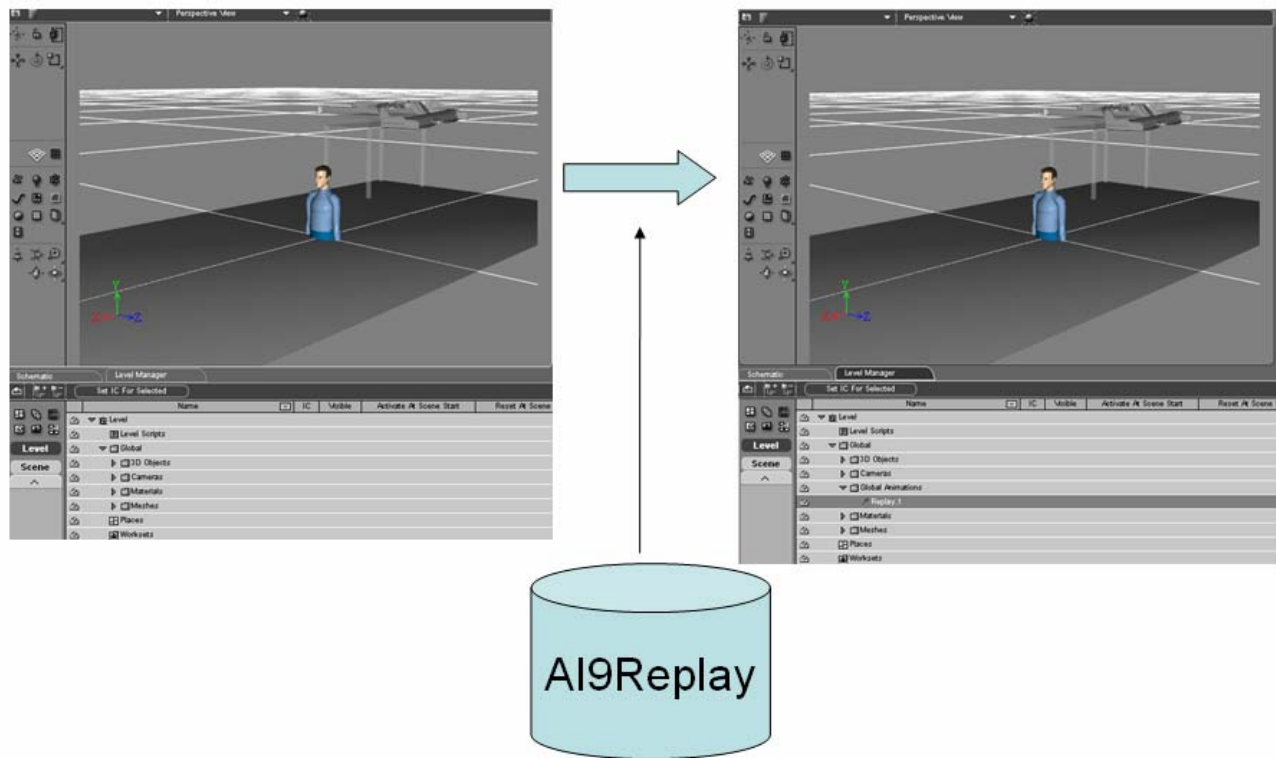


- b. The Manikin in geometric model s is replaced by the imported Manikin

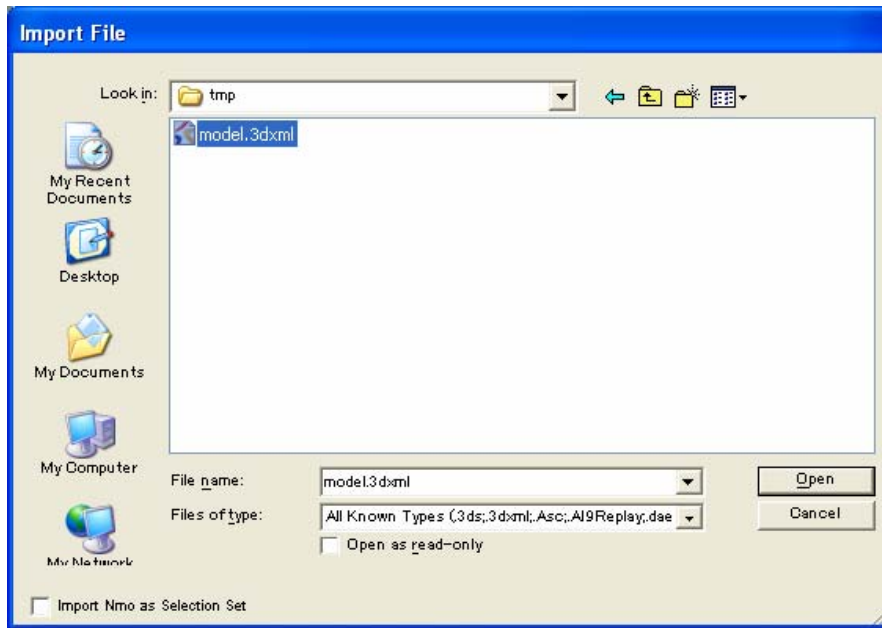


Import Replay data from the Positions file

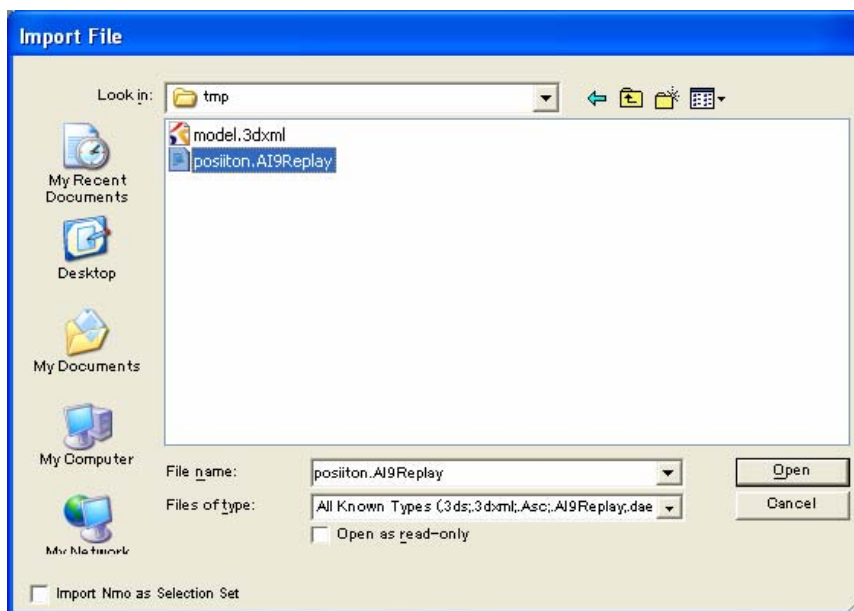
This function is to import Replay data from the positions file and create an animation object in Virtools.



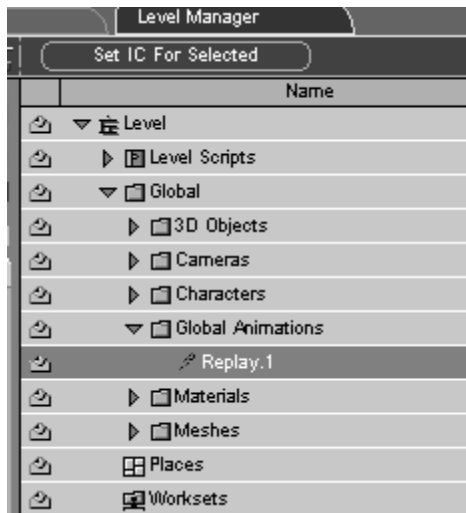
1. In Virtools, launch "Import File" dialog with "Resources->Import file"



2. In the dialog, input the name of the positions file in “File name” field.



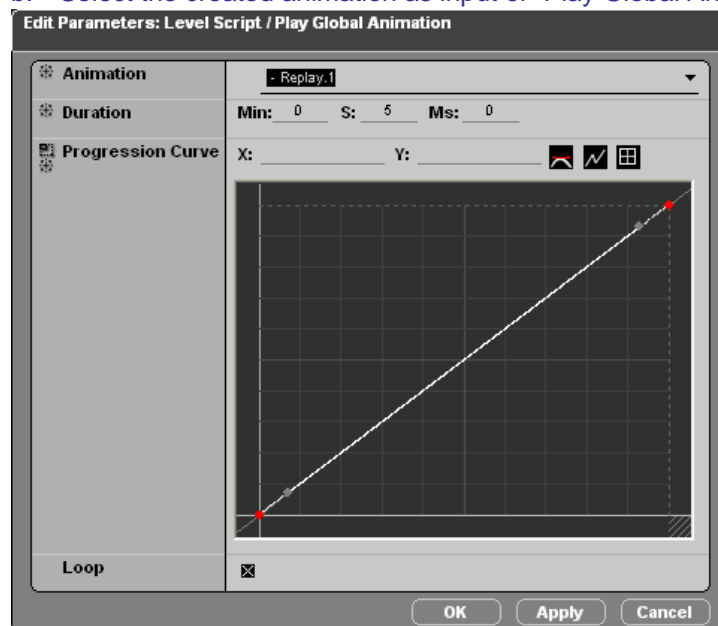
3. Press “Open” to import the positions file
4. After importing the positions file data, a Replay is created in Virtools.



5. Confirm the animation
 - a. Create a script using "Play Global Animation" on Level Scripts



- b. Select the created animation as input of "Play Global Animation"

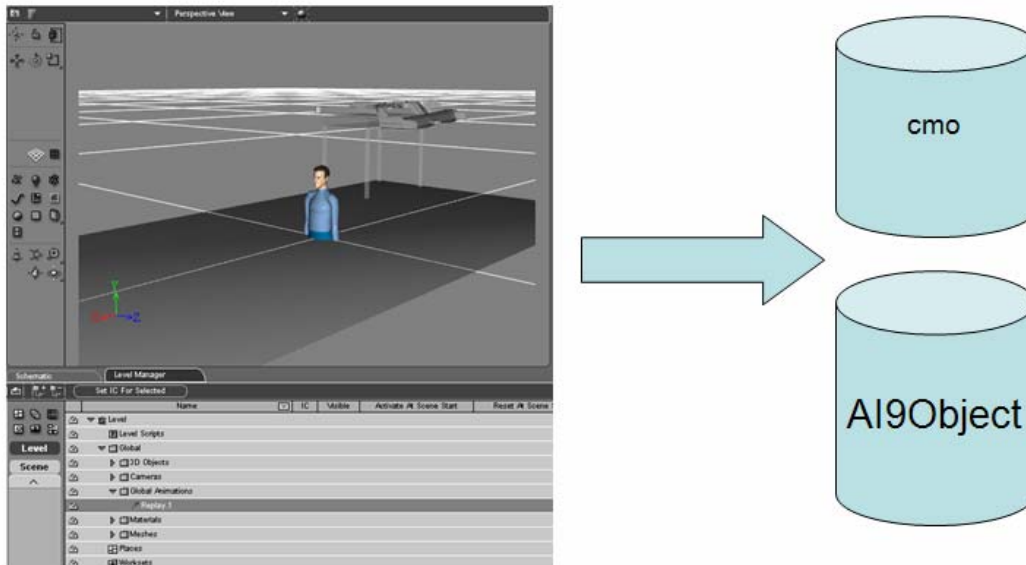


- c. Run the script

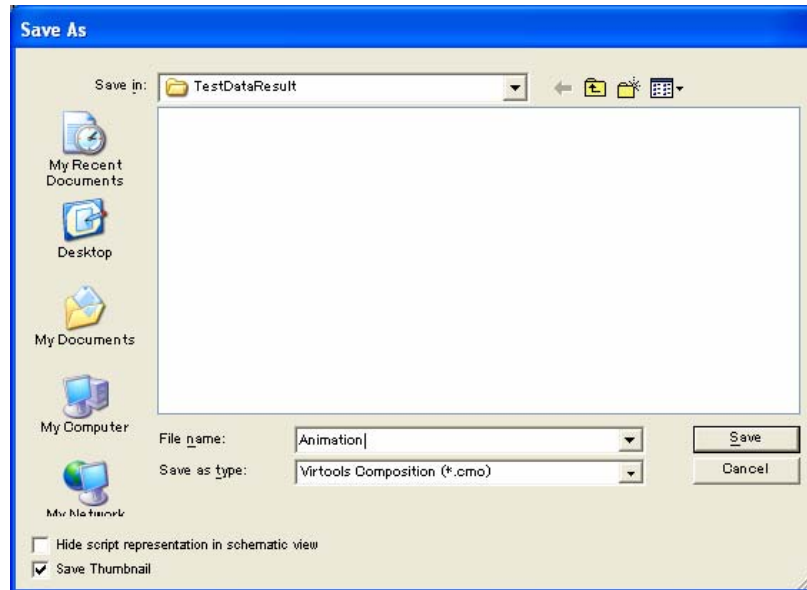


Save animation with Manikins

This function is to save animation with imported Manikins.



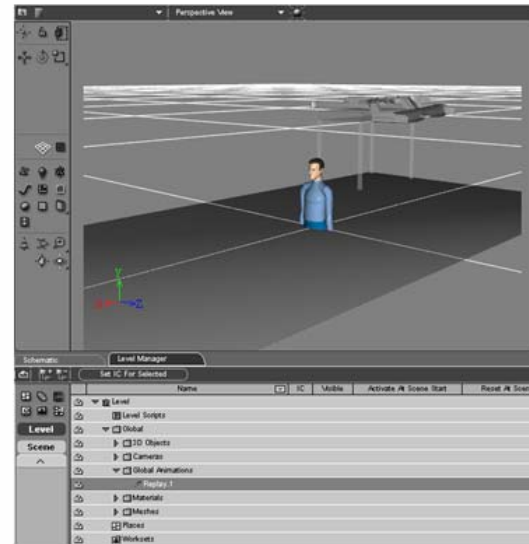
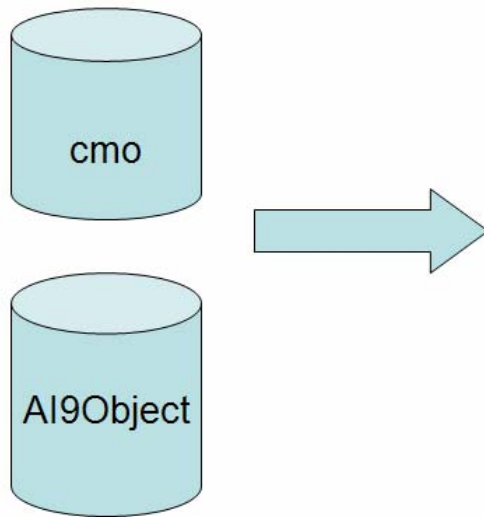
1. In Virtools, launch "Save As" dialog with "File->Save..."



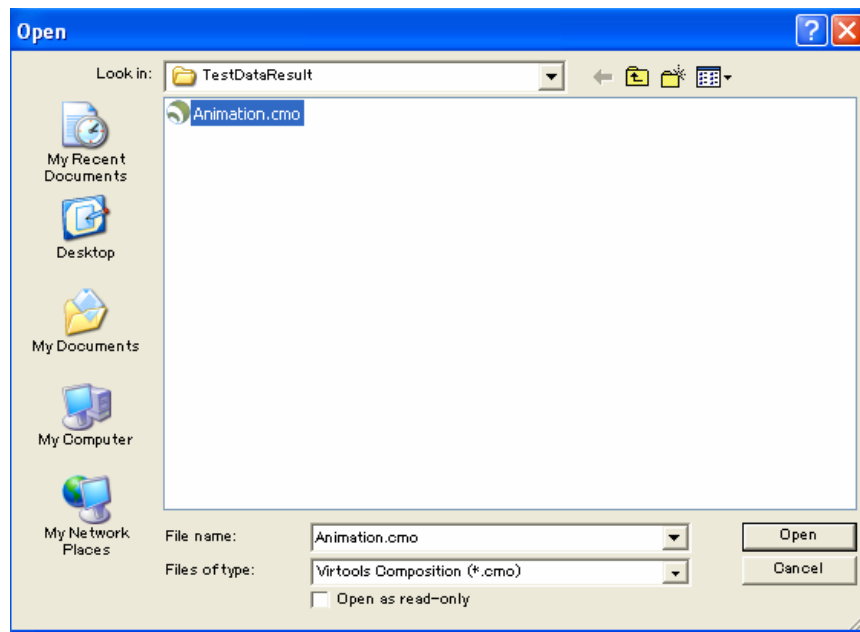
2. In "Save As" dialog, input the path and file name in the field "File name"
3. Press "Save" to save the model and animation
 - a. A cmo file and a file with suffix ".AI9Object" are created. The file with suffix ".AIOject" includes the information of the imported Manikin

Load animation with Manikins

This function is to load animation with Manikins



1. In Virtools, launch "Open" dialog with "File->Load Composition..."



2. In "Open" dialog, select a cmo file that includes animation
3. Press "Open" to open the file
4. Animation and Manikins are loaded
 - a.

