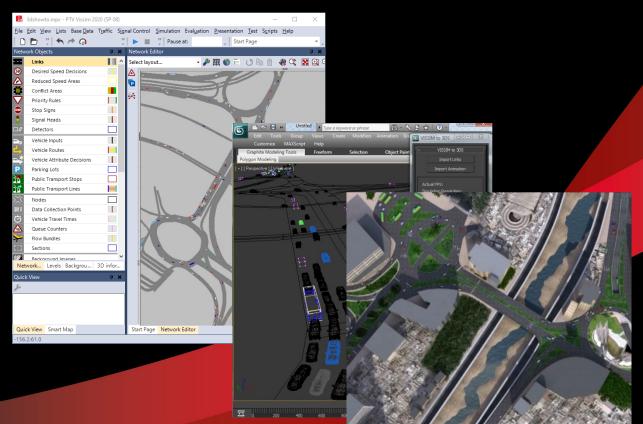


PTV Vissim Importing Vissim Network and Animation to Autodesk® 3ds Max®



Copyright

© 2020 PTV AG, Karlsruhe

PTV Vissim[®] is a trademark of PTV AG.

This documentation is [Kommentare]

All brand or product names in this documentation are trademarks or registered trademarks of the corresponding companies or organizations. All rights reserved.

Disclaimer

The information contained in this document is subject to change without prior notice and should not be construed as a commitment on the part of the vendor.

This document may not be used for any other purpose than the personal use of the trainee.

No part of this document may be reproduced, stored in a retrieval system, or transmitted, in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, edited or translated, except as permitted under the terms of the copyright, without the prior written permission of PTV.

Imprint

PTV Planung Transport Verkehr AG Haid-und-Neu-Str. 15 76131 Karlsruhe Germany Tel.: +49 (0)721-9651-0 Fax: +49 (0)721-9651-699 info@vision.ptvgroup.com vision-traffic.ptvgroup.com

Content

Importing Steps Overview	. 4
Preparation for the script	.4
Exporting network from Vissim	.4
Importing Vissim network to Autodesk® 3ds Max®	. 5
Exporting the Vissim Animation	. 6
Importing Vissim animation to Autodesk® 3ds Max®	. 7

Importing Steps Overview

To import the Vissim network and animation to Autodesk[®] 3ds Max[®], perform the following steps:

- 1. Preparing Autodesk[®] 3ds Max[®]
- 2. Exporting the network from Vissim
- 3. Importing the Vissim network to Autodesk® 3ds Max®
- 4. Exporting the Vissim animation
- 5. Importing the Vissim animation to Autodesk® 3ds Max®Working with VisVAP

Preparation for the script

The Vissim3DS script needs special 3D models. Some example models are provided in the following directory:

<VISSIM INSTALLATION DIRECTORY>\API\3DSMAXEXPORT\MAXMODELS

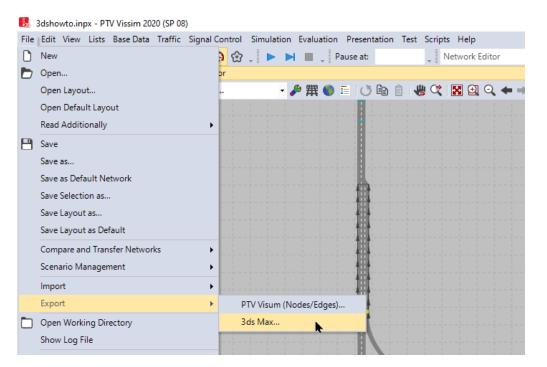
These models should be copied to the Autodesk® 3ds Max® project's directory SCENES.

For more information about preparing 3D models for the script, refer to the script's user guide.

Exporting network from Vissim

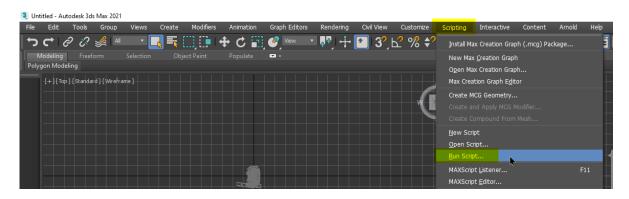
- 1. Open Vissim and load 3DSHowTo.inp from the following directory: </
- 2. From the FILE/EXPORT menu choose 3DS MAX.
- 3. In the Save File As dialog enter a file name (for example Network) and save the file.

Vissim creates a text file which contains all links and pedestrian areas from the network. This file is imported to Autodesk[®] 3ds Max[®] using the Vissim3DS script.

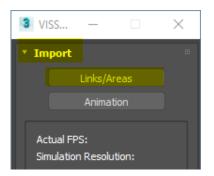


Importing Vissim network to Autodesk® 3ds Max®

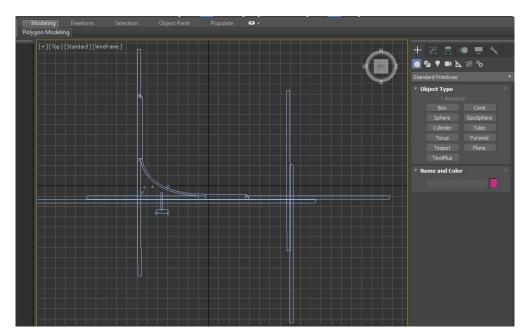
- 1. Start Autodesk[®] 3ds Max[®].
- 2. From the MAXSCRIPT menu choose RUN SCRIPT.
- 3. From the directory <Vissim installation directory>\API\3dsMaxExport\Scripts select VISSIMTO3DS.MS



- 4. On the **Vissim to 3DS** panel click IMPORT LINKS.
- 5. Choose the exported file from Vissim.



The imported network looks like this:



Exporting the Vissim Animation

To export a part of the Vissim simulation to Autodesk[®] 3ds Max[®], set the animation parameters in Vissim to define the time intervals and optionally sections to export, start recording the animations and start the simulation:

<u>-</u> 30	dshowto.inpx - PTV Vissim 2020) (SP 08)			
File I	Edit View Lists Base Data	Traffic Sigi	nal Control Simulation Eva	luation Pre	<mark>sentation</mark> Test Scripts Hel
D	DB. S 🔶 🔚		ି 🙃 🏠 🖡 🕨 🔳	👔 Pa 🖬	Camera Positions
Netwo	ork Objects	д X	Network Editor	1111	Storyboards
-	Links	^	Select layout	- 🎤 🚺	3D Information Signs
<u>60</u>	Desired Speed Decisions			+	Record AVIs
	Reduced Speed Areas		••••••••••••••••••••••••••••••••••••		3D Anti-Aliasing
	Conflict Areas		🙀		Continuous
$\overline{}$	Priority Rules		····		Single Step
•	Stop Signs				
8	Signal Heads				Stop
	Detectors				Single Step Reverse
	Vehicle Inputs			•	Continuous Reverse
4	Vehicle Routes			~	Animation with ANI file
⇒*	Vehicle Attribute Decisions				Animation Recordings
Ρ	Parking Lots				Record Animations

Set the animation parameters:

- 1. From the PRESENTATION menu open the list **Animation Recordings**.
- 2. Set the recordings start and end time.
- 3. For the attribute **Section**, define what part(s) of the network should be recorded. This is optional, so if no section is defined, the whole network is recorded.

For more information please refer to the Vissim user manual.

Select layout 🔹 🎤 📥 🗙 🕼 🛔 🕯 🛣	💸 <single list=""> 🔹 🖹 😫 🚨</single>
Count: 1 No Name RecAnim Filename Typ	pe Start End Sections
1 1 🗹 3dshowto 🖻 For	r Export (*.ani.txt) 0,0 MAX

4. Turn on Record Animations.

5. Start the simulation in Vissim.

🚦 3dshowto.inpx - PTV Vissim 20	20 (SP 08)				
File Edit View Lists Base Data	Traffic Sign	nal Control Simulation	Evaluation Pre	sentation Test Scripts	Help
0 🖻 🖻 🗉 🖴 🏕 🔚		ି 🕞 🏠 💄 🕨	🔲 🔶 Pa 🖬	Camera Positions	on
Network Objects	4 X	Network Editor		Storyboards	
Links	1 1	Select layout	- 🎤 🚺	3D Information Signs	2
50 Desired Speed Decisions				Record AVIs	
Reduced Speed Areas			I I I I I I I I I I I I I I I I I I I	3D Anti-Aliasing	
Conflict Areas		*		Continuous	
Priority Rules		~		Single Step	
💿 Stop Signs				2	
Signal Heads				Stop	1
Detectors			- B - 	Single Step Reverse	
				Continuous Reverse	
Vehicle Routes				Animation with ANI file	-
Vehicle Attribute Decisions				Animation Recordings	
P Parking Lots				Record Animations	
Public Transport Stops					

The simulation can be stopped after the animation recording is finished.

Vissim saves all vehicle and pedestrian trajectories to an ANI.TXT file. This is a text file and can be edited using a text editor. Refer to the AniTxtFileFormat document for more information about this file format.

Importing Vissim animation to Autodesk® 3ds Max®

- 1. Start Autodesk[®] 3ds Max[®].
- 2. Choose **Run Script** from the SCRIPTING menu.
- 3. From the directory <Vissim installation directory>\API\3dsMaxExport\Scripts select VissimTo3DS.ms
- 4. Click Import Animation on the VISSIM TO 3DS panel.
- 5. Choose the exported ANI.TXT file from Vissim.

There are many options that can be set. Please refer to the Vissim 3DS MAX user guide for more detailed information.

If the script is not able to find a 3D model, a dialog will pop up so that the missing 3D model can be located. In the example below, the script can't find the 3D model for PED - MAN BIZ 04.

If this dialog is cancelled when searching for a vehicle model then a box is used in its place. If it is cancelled when searching for a pedestrian model then the script tries to load a model called DEFAULTSKELETON.MAX. If the DEFAULTSKELETON.MAX cannot be found then a cylinder is used in its place.

The import can be cancelled by pressing **ESC** any time.

PTV AG

Haid-und-Neu-Straße 15 76131 Karlsruhe Germany Phone +49 (0) 721 9651-300 Fax +49 (0) 721 9651-699 E-Mail: info@vision.ptvgroup.com www.ptvgroup.com vision-traffic.ptvgroup.com

ptvgroup.com