

Welcome!

We will start at 10:15.



Aalto University
School of Engineering

Transport modelling

Modelling Tool – PTV Visum

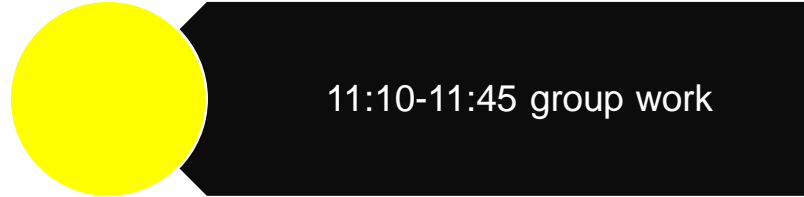
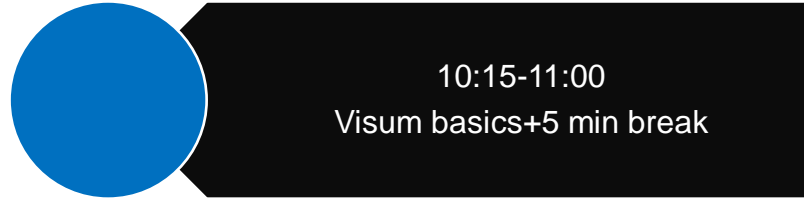
Serio Agristi and Roozbeh Mohammadi

Modelling tool session schedule

Date	Time	Topic	
Monday, January 9	14:00 - 16:00	● Course Introduction - EXCEPTIONALLY ONLINE	
Thursday, January 12	12:00 - 14:00	● I&E project introduction	
Friday, January 13	10:00 - 12:00	● HSL guest lecture - Data surveys	
Monday, January 16	14:00 - 16:00	● Core topic - Data & networks	
Thursday, January 19	12:00 - 14:00	● Project workshop & Guest lecture Nobina	
Friday, January 20	10:00 - 12:00	● Modelling tools	→
Monday, January 23	14:00 - 16:00	● Core topic - Trip generation & Trip distribution	
Thursday, January 26	12:00 - 14:00	● Project workshop	
Friday, January 27	10:00 - 12:00	● Modelling tools & Guest lecture Traficom	→
Monday, January 30	14:00 - 16:00	● Core topic - Modal split / discrete choice models	
Thursday, February 2	12:00 - 14:00	● Project workshop	
Friday, February 3	10:00 - 12:00	● Modelling tools	→
Monday, February 6	14:00 - 16:00	● Core topic - Traffic assignment	
Thursday, February 9	12:00 - 14:00	● Project workshop - Pitching	
Friday, February 10	10:00 - 12:00	● Modelling tools & Guest lecture FLOU	→
Monday, February 13	14:00 - 16:00	● Core topic - ABM & LUTI models	
Thursday, February 16	12:00 - 14:00	● Project workshop - Rehearsal	
Friday, February 17	10:00 - 12:00	● Modelling tools	→
Wednesday, February 22	10:00 - 12:00	● Final presentations	

- Introduction
- Building network
- Data
- Trip Generation and distribution
- Modal split
- Traffic assignment
- Wrapping up-troubleshooting

Today schedule



PTV Visum

PTV GROUP

Products ▾ Expertise ▾ Consulting ▾ About ▾ Resources ▾

Contact

English ▾

PTV Visum

Areas of Application

Release Highlights

Why PTV Visum?

PTV Visum Safety

Demo Version

Urban Strategy with PTV Visum

References

Knowledge Base

Contact

PTV Visum is the world's leading traffic planning software designed for transport planners to empower cities

- ✓ Conduct traffic analyses, forecasts and GIS-based data management
- ✓ Model all road users and their interactions
- ✓ Plan public transport services
- ✓ Develop advanced and future-proofed transport strategies and solutions

PTV AG

Software company



PTV GROUP

the mind of movement

PTV AG is a German company specialising in software and consulting services for traffic and transportation, mobility, and logistics. "Vision Traffic Suite", their transport planning software, and "PTV Map&Guide", their program for route planning, comprise the PTV AG's product portfolio. [Wikipedia](#)

Revenue: 116 million EUR (PTV Group)

Headquarters: [Karlsruhe, Germany](#)

Founded: 1979, [Karlsruhe, Germany](#)

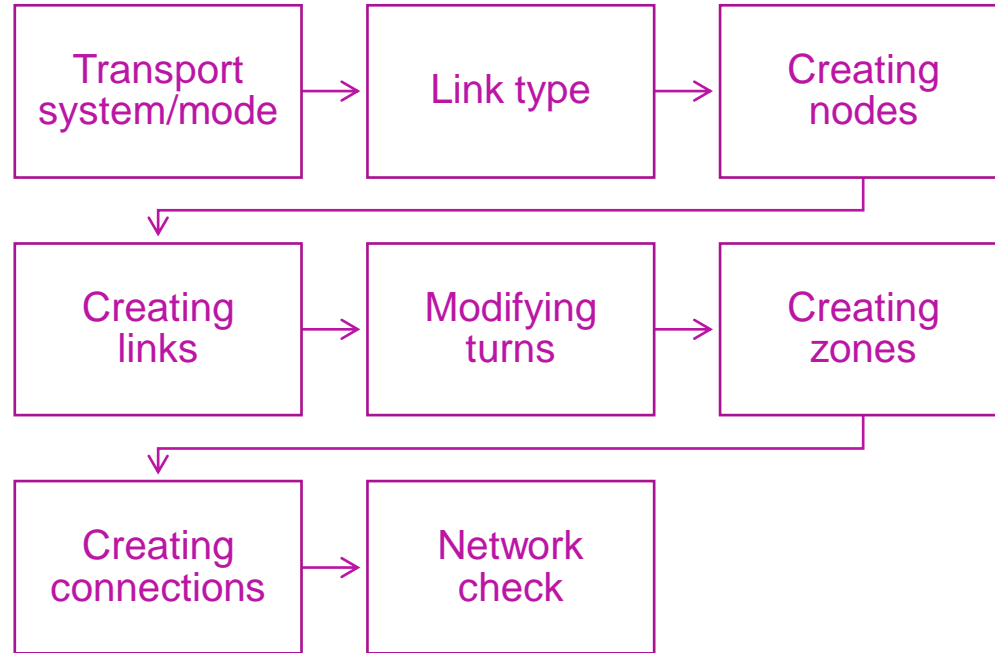
<https://www.ptvgroup.com/en/solutions/products/ptv-visum/>

Student Version

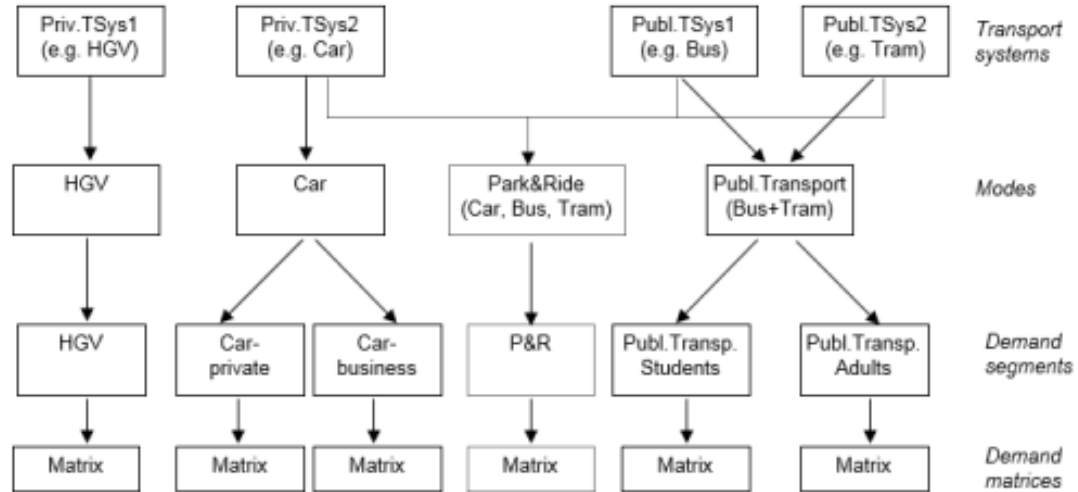
- Size: A2
- max. number of zones: 30
- max. number of links: 1500
- max. number of time profiles: 100
- time limit per session: 45min
After 45 min you will not be able to continue using Visum. A dialog will prompt you to save the VISUM model if you wish to do so.

Any files saved with this license cannot be opened with a different type of license. If you attempt to open a file saved with the Training version with another license you will receive the following message:

Steps to create a basic network



Transportation system/mode/segment



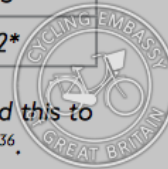
PTV Visum manual

Passenger car unit (PCU)

Table 1: Passenger Car Unit (PCU) values for various vehicle types.

Vehicle Type	PCU Value
Pedal Cycle	0.2
Motor Cycle	0.4
Passenger Car	1.0
Light Goods Vehicle (LGV)	1.0
Medium Goods Vehicle (MGV)	1.5
Buses & Coaches	2.0
Heavy Goods Vehicle (HGV)	2.3
Articulated Buses	3.2*

* Recent research conducted for TfL has suggested this to be an appropriate PCU value for articulated buses³⁶.



<http://content.tfl.gov.uk/traffic-modelling-guidelines.pdf>

Available data

- OD data
- HSL open data (<https://www.hsl.fi/en/hsl/open-data>)
- Information about traffic in Espoo (<https://www.espoo.fi/en/transport-and-streets/information-about-traffic-espoo>)
- <https://www.digitraffic.fi/en/road-traffic/>