

# PTV Vision® Software Training Courses, October 10-13, 2010 in Jeddah, Saudi Arabia

## Learn – Improve – Innovate

Our PTV Vision Training Courses offer a wide range of training objectives. Beginners meet with efficient introduction into PTV Vision software products. Advanced users (from basic level on) are offered advanced Training Courses with different emphasis.

## Training schedule and brief description

<b>October 10-11, 2010</b>	<b>VISSIM Introductory Course</b>
	This course is designed for transportation planners and traffic engineers working on micro-simulation projects. Attendees should be familiar with windows operating systems and have theoretical knowledge in transportation planning and traffic engineering.
<b>October 12-13, 2010</b>	<b>VISUM Introductory Course</b>
	The VISUM introductory class is aimed for transportation professionals with either theoretical background in transportation modelling or practical experience with modelling software. It lays the foundation for the application of VISUM required for the use of the VISUM hotline.

## Fees

The training fee for VISSIM or VISUM Introductory course is AED 6,000 per person per course. Fees include attendance, lunch, refreshment breaks, documentations and training software. Participants have to make their own visa, travel and accommodation arrangements in Jeddah. Once we receive your registration form, we will issue an invoice that needs to be **paid in full** prior to us confirming your attendance.

## Registration

Please fill out one form per participant. Registration for these training sessions will be running **until Thursday, September 16, 2010**.

Please send your full contact information and the number of participants that you would like to register to PTV Dubai at fax: +971 4 5015881 or email: [training@ptvme.ae](mailto:training@ptvme.ae)

Participants are required to bring their own laptops (basic specifications: Microsoft Windows 2000 or XP, 600MB hard disk, 1GB RAM and minimum speed 2GHz), though no VISUM/VISSIM license is required.

## **Venue and Accommodation**

The venue information will be communicated to registered participants only at the later date.

## **Trainer**

- ▶ VISSIM Introductory Course – Slavenko Cugalj, PTV Dubai
- ▶ VISUM Introductory Course – Eurgen Hilbertz – PTV Karlsruhe, Germany

# October 10-11, 2010: VISSIM Introductory Course

## VISSIM network model: Building and editing

- ▶ Base maps for network setup
- ▶ Links and connectors
- ▶ Vehicles
- ▶ Priority rules
- ▶ Fixed time traffic control
- ▶ Routes (Vehicles Routing Decisions)
- ▶ Public Transport stops
- ▶ Public Transport lines and timetable plans

## Simulation parameters

- ▶ Desired Speed (distribution curves)
- ▶ Desired and maximum acceleration and decelerations
- ▶ Traffic compositions
- ▶ Driver's behaviour
- ▶ Dwell times (distribution curves)
- ▶ Simulation period and parameters

## Evaluations and results

- ▶ Travel times
- ▶ Delay
- ▶ Congestions
- ▶ VISSIM analyzer report (Level of Service LOS study)

## 3D presentation

- ▶ Easy 3D animation with existing objects
- ▶ First Video production

# October 12-13, 2010: VISUM Introductory Course

## Basic principals of VISUM

- ▶ Project structuring in VISUM
- ▶ File types in VISUM

## VISUM network model - Setting up and editing

- ▶ Edit modes:
  - ▶ Insert mode
  - ▶ Edit mode
  - ▶ Spatial selection mode
- ▶ Transport systems, modes and demand segments
- ▶ Nodes, links, turns
- ▶ Zones, Connectors
- ▶ User-defined attributes
- ▶ Import existing Networks from Shape-file – example for network setup with external data

## Assignment - Route choice for drivers and passengers

- ▶ Create 4-Zones Matrix
- ▶ Private Transport assignment procedures (Incremental)
- ▶ Public Transport assignment procedures (transport system based)

## Graphic Parameters

- ▶ Graphical display of assigned and counted values and other attributes of
  - ▶ Links, Nodes, Turns, Zones
- ▶ Graphical backgrounds
  - ▶ Adaption of pixel graphics and vector data for map graphics

## Graphical network evaluations

- ▶ shortest path search
- ▶ Isochrones
- ▶ Desire lines
- ▶ Flowbundles (select object analyses) based on:
  - ▶ links, nodes, zones, main nodes, main zones

## Listings

- ▶ Evaluations using listings (link list)
- ▶ Exports of listings to other programs (such as MS Excel, OpenOffice.org Calc or others)
- ▶ Import of listings from other programs

## Travel Demand Modelling

- ▶ Demand matrices for different demand segments
- ▶ Demand matrices for different scenarios
- ▶ Elements and Inputs
- ▶ Input of structural data in VISUM
- ▶ Set up of a demand model in VISUM
  - ▶ Demand strata definition
- ▶ Basic Three Steps
- ▶ Trip generation
- ▶ Trip distribution
- ▶ Mode choice (Modal Split)
- ▶ Assignment
  - ▶ Selection of appropriate procedures to assign demand on the supply

## Assignment Results Analysis

- ▶ Deviation from counted values
- ▶ Quality of demand modelling