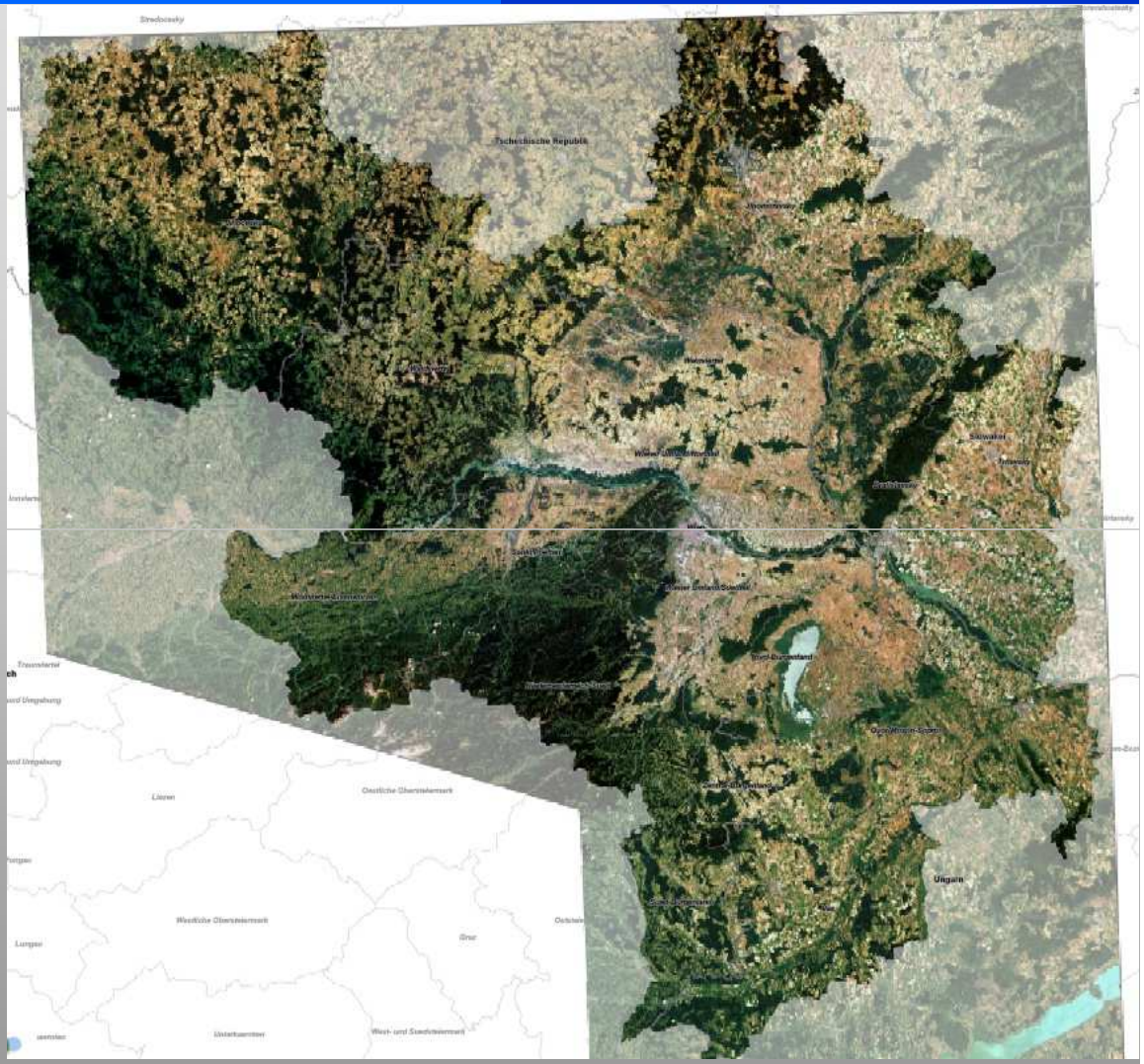
CentropeMAP and CentropeSTATISTICS

Cross-Border Geodata Infrastructure with User-Defined Thematic Maps



on behalf of the
Planungsgemeinschaft Ost (PGO)
(Eastern Austrian Planning Association)

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Clemens Beyer*
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I. The Centrope Region

II. CentropeMAP

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V. Live Demonstration

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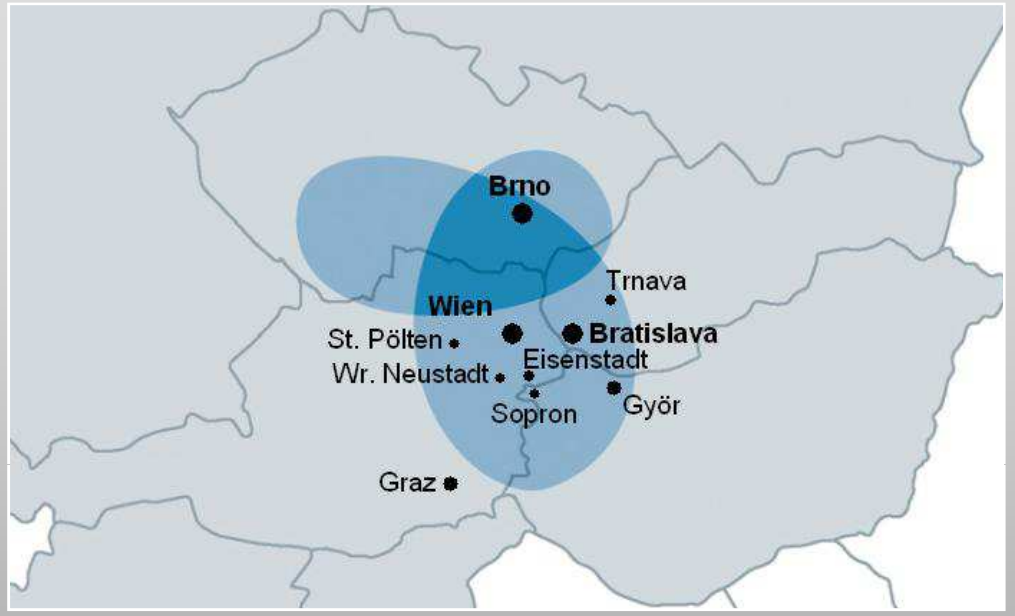
CENTROPE Partner Regions

- Czech Republic
  - Region: South Moravia
  - City: Brno
  - *Interested: Olomouc*
- Slovak Republic
  - Region: Bratislava, Trnava
  - Cities: Bratislava, Trnava



- Hungary
  - Region (county): Győr-Moson-Sopron
  - Cities: Győr, Sopron
- Austria
  - Region (federal states): Burgenland, Lower Austria, Vienna
  - Cities: Eisenstadt, St. Pölten, Vienna
  - *Interested: Wiener Neustadt*

CENTROPE Region

Population

- 6 million
- of which 3 million in cities

Economy

- 3.8 million employed
- 55 – 65 % employed in service sector
- unemployment rate between 4 and 14 %
- GDP growth between
  0.8 % and 3.6 %
  since 2003

Infrastructure

- 3 international airports (Brno, Bratislava, Vienna)
- 2 Danube river ports (Vienna, Bratislava)
- Pan-European corridors

(Source: Wikipedia)

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Centrope MAP Challenges

- Legal planning responsibilities on different levels
- Data responsibilities on different levels
- Administrative boundaries = data boundaries
- No “common data infrastructure“ available, only “isolated applications“

Input to Centrope Map

Geodata

Land use
(Corine Land Cover 2000, Level 3, all layers separately)

about 32 categories

Administrative borders
NUTS 2, NUTS 3, LAU 2

Infrastructure (linear):
road network
railway network
conductions, pipes

Infrastructure (punctiform):
transportation (stops, P+R)
education
health/social
administration
leisure/recreation
culture
supply and disposal
other

Planning:
builiding land
protection areas
Natura 2000
world heritage
ground water protection
flood protection
mining

Anmerkungen:
WEBmap Service: dh. Verknüpfung mit anderen Servern (Geoland, SK, CZ, HU) Karten durch user online generierbar und als Bild (PDF hochauflösend) downloadbar.

Visualisation
of the data based on administrative borders (maps, diagrams)

Remarks:
Phase 1:
downloadable print-ready maps (PDF)
Phase 2:
online interactive maps

Statistical data

Database
NUTS 2, NUTS 3, LAU 2 (up to availability and meaning)

Area:
cadastral area, area of durable settlement, forest, water bodies, ...

Population:
Development, migration balance, balance of births
prognoses, age groups, nationalities
educational qualification
household size, secondary residences
employed, unemployed
strucutre of income, purchasing power
settlement structure

Occupation and Economy:
places of work, business structure
branch structure, value added
jobs, commuter structure
agriculture, forestry, tourism

Infrastructure:
(Data linked with punctiform infrastructure data)
administration, education, social, leisure, recreation, tourism, culture, ...

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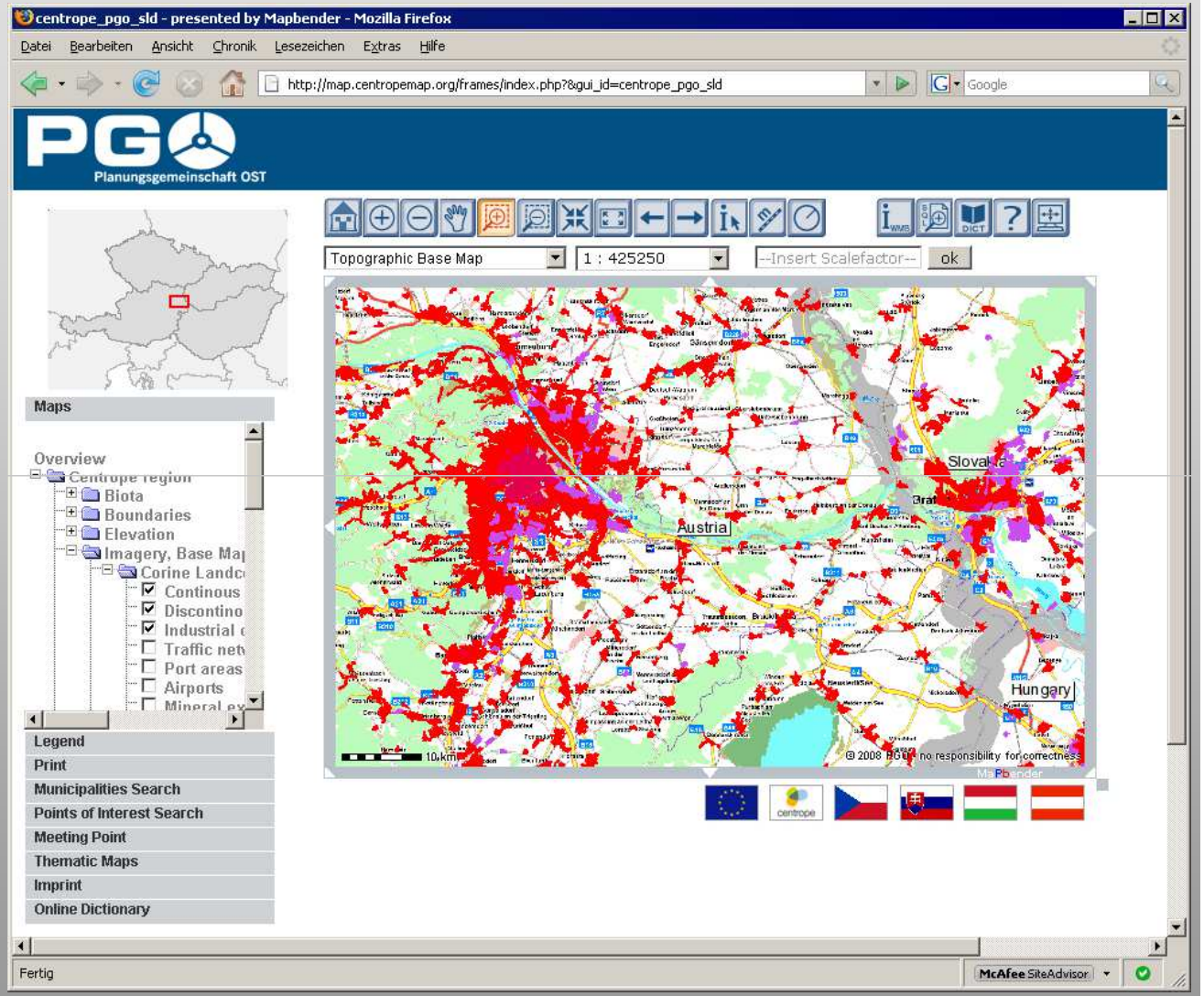
CentropeMAP Web Application

- datasets come directly from project partners → no redundancy, always up-to-date
- functions: Zoom, Pan, Query, Search, Tell-A-Friend, Measurement
- hundreds of layers for the whole region and sub-regions
- background maps from simplified views to high-resolution satellite images and aerial views (ortho-photos)
- map generation on the fly



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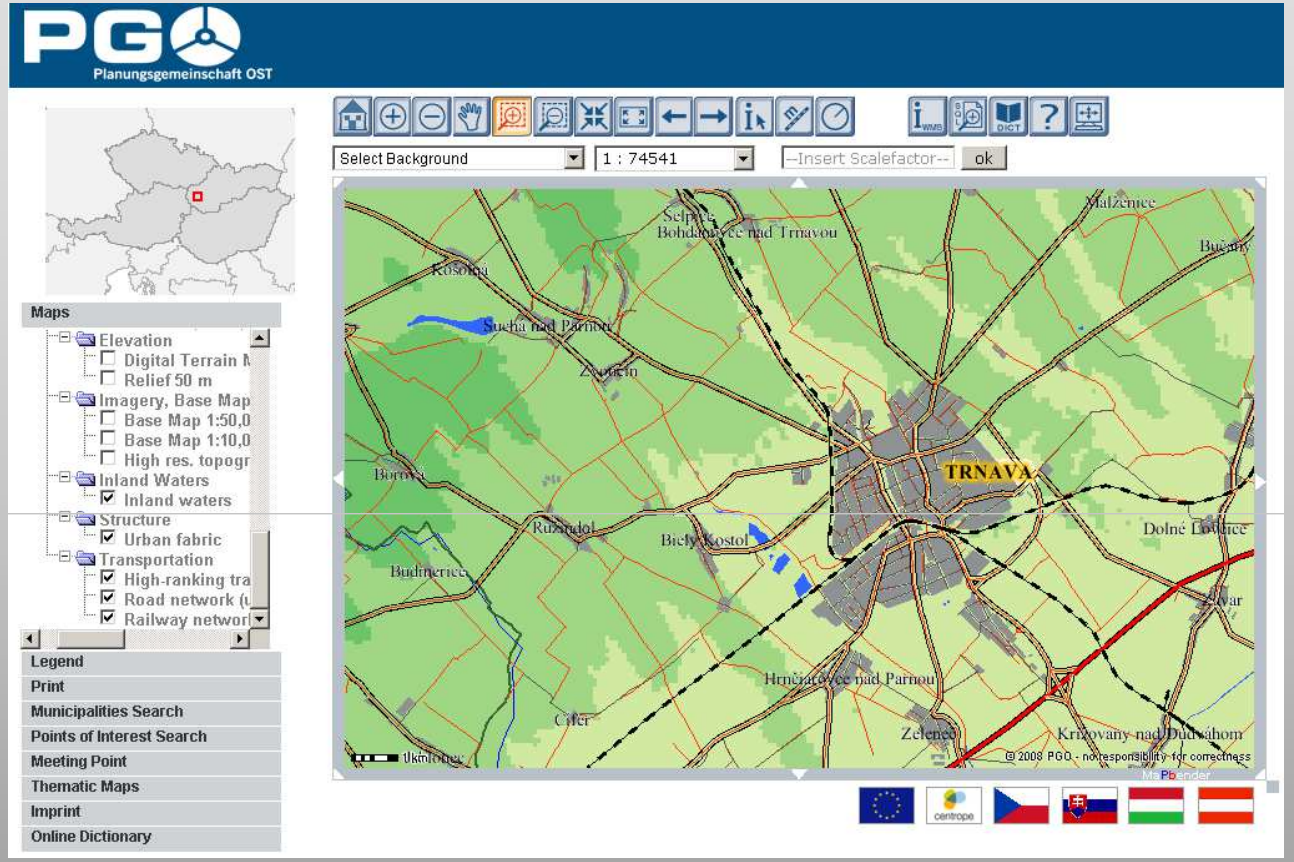
Data Examples



elevation, road network, railway network, urban fabric, inland waters

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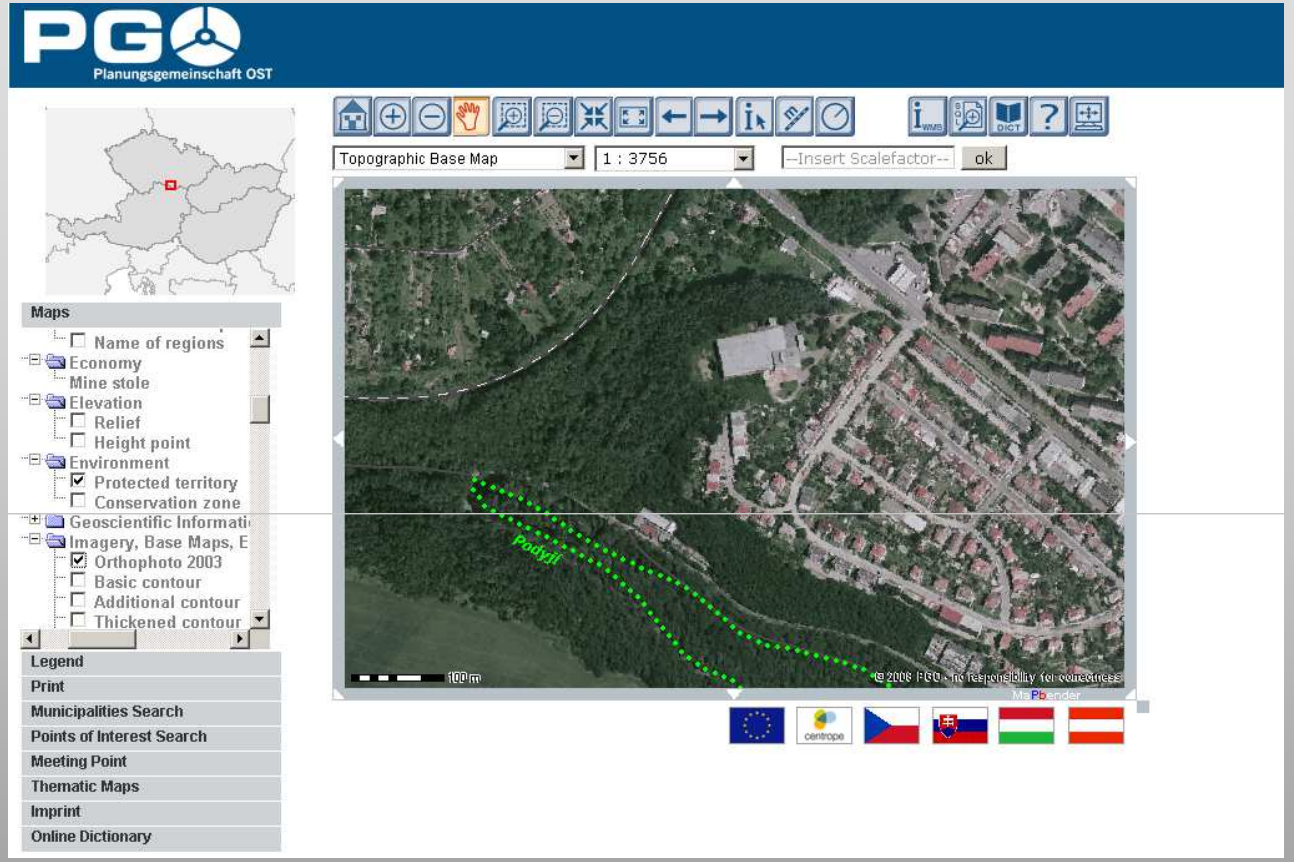
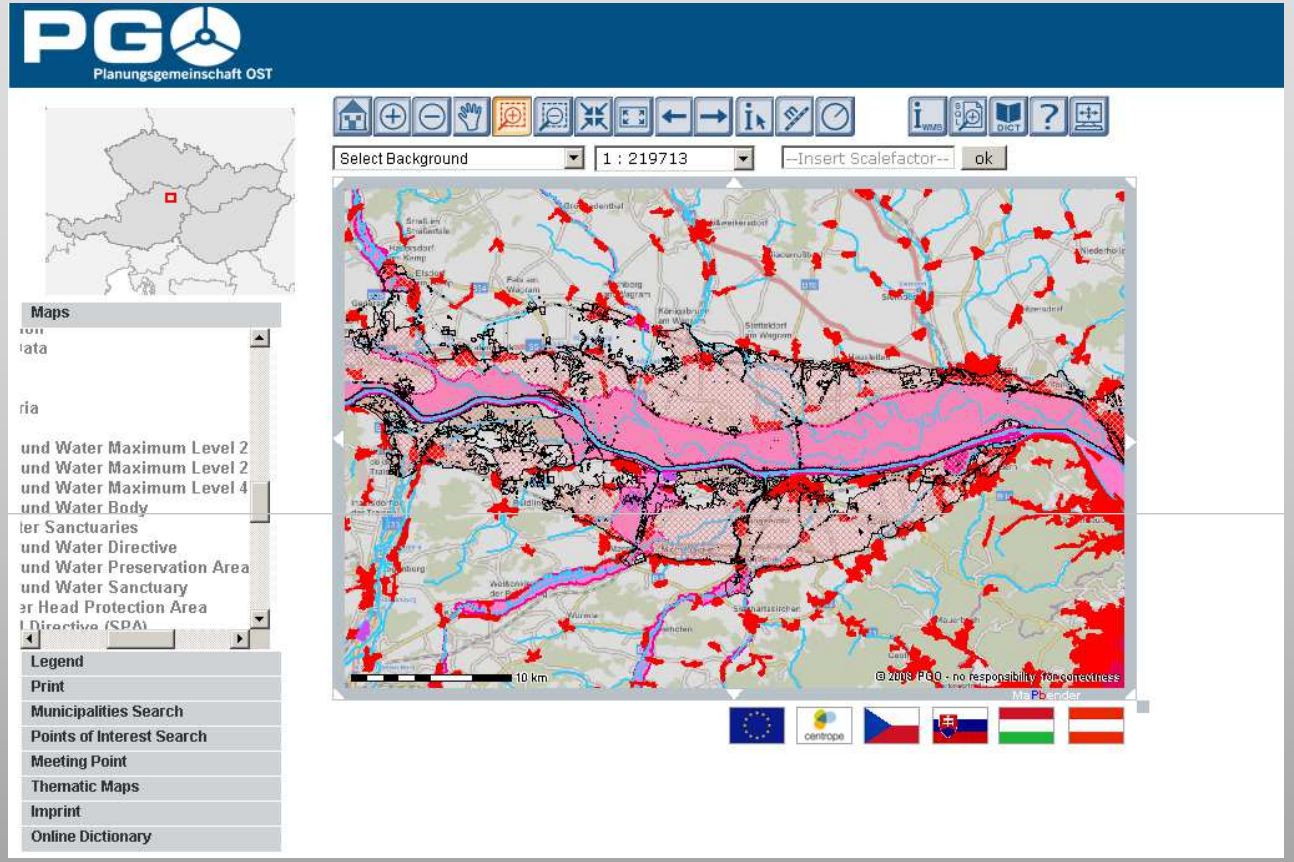


high resolution orthophoto, environmental protected territory (Znojmo, CZ)

Data Examples



urban fabric, rivers, inundation risk areas, high ground water level (<2m)
(Danube, Lower Austria)

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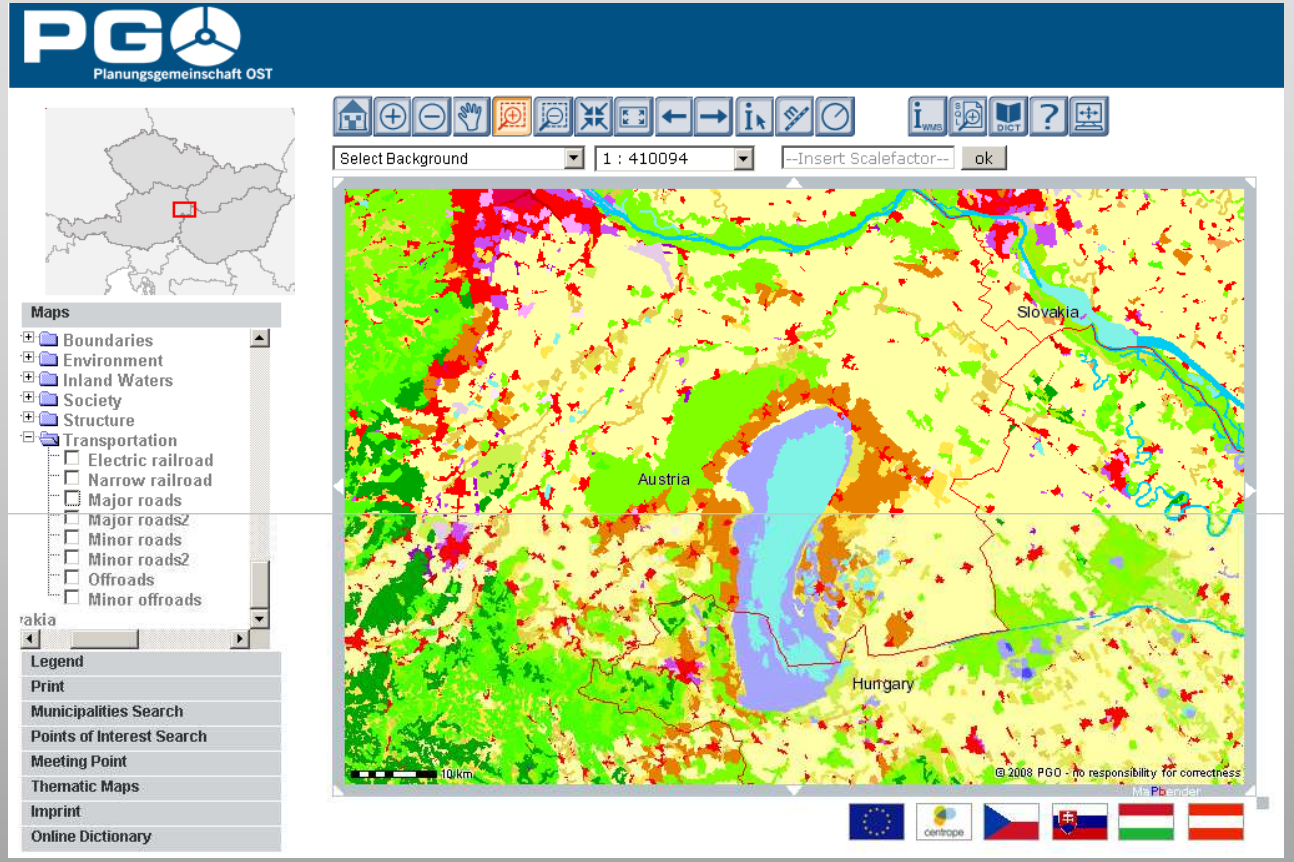
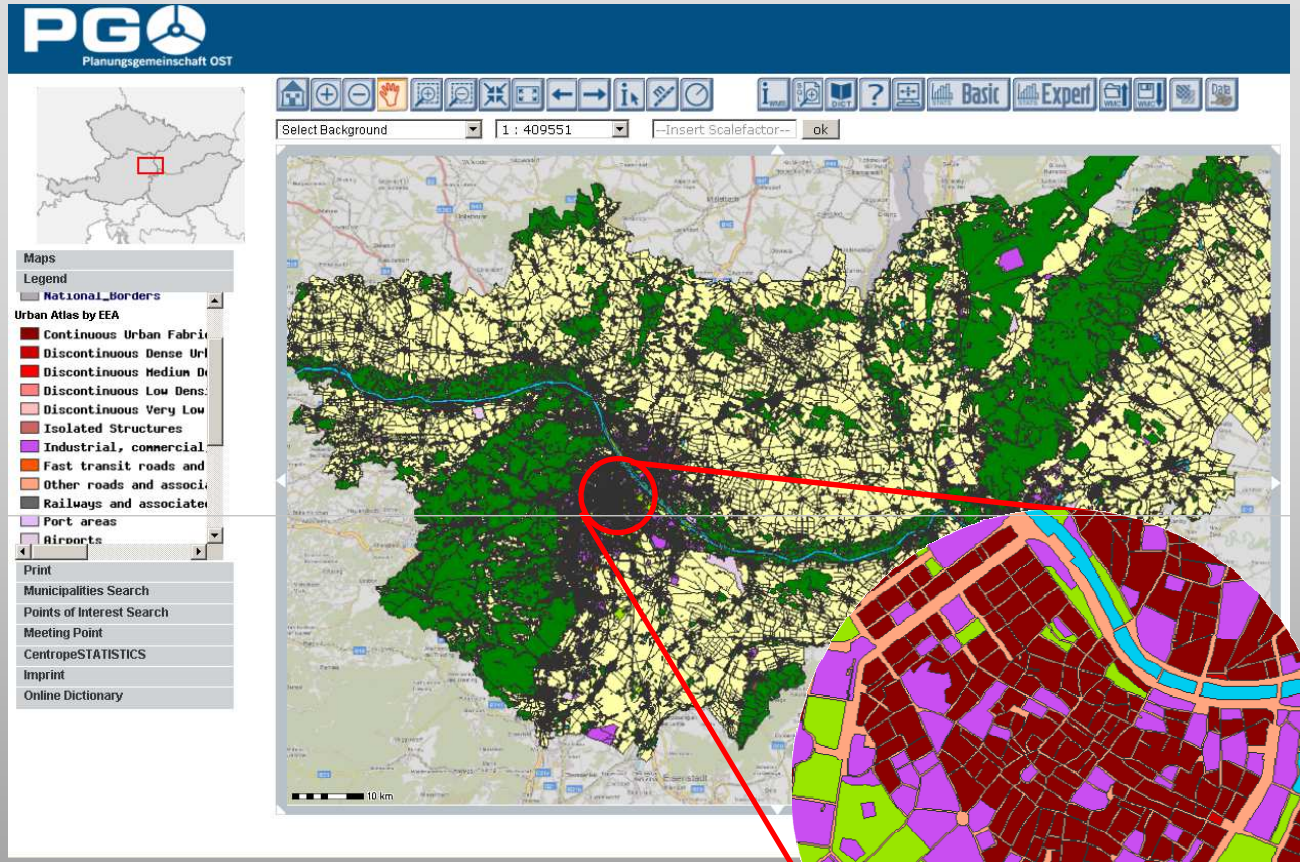


Corine Land Cover Level 2 (Lake Neusiedl Region)

Data Examples



European Urban Atlas
(Twin City Region
Vienna-Bratislava)

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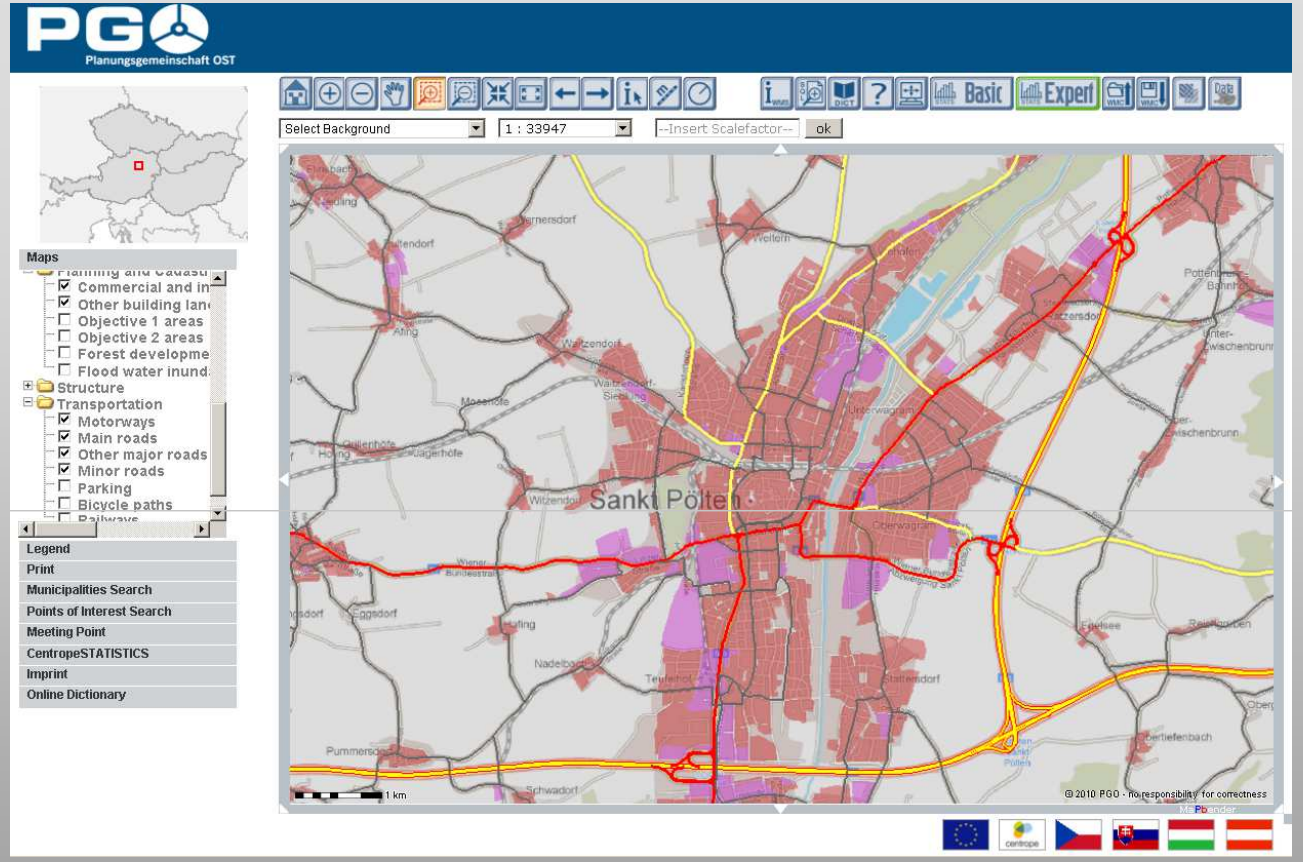

Building Land (Residential/Commercial), Road Network

(St. Pölten, Lower Austria)

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Project Partners

CentropeSTATISTICS is a cross-border database project of these co-operating statistics offices/departments in the Centrope Region
(on behalf of PGO - Planungsgemeinschaft Ost/Eastern Austrian Planning Association,
and technically led by CEIT ALANOVA gemeinnützige GmbH)

- **Czech Republic:**
  CZSO - Czech Statistical Office – Český statistický úřad (ČSÚ)
- **Slovak Republic:**
  Statistical Office of the SR – Štatistický úrad Slovenskej republiky
- **Hungary:**
  HCSO - Hungarian Central Statistical Office – KSH - Központi Statisztikai Hivatal
- **Austria:**
  Statistics Departments of the three Austrian federal states Burgenland, Lower Austria and Vienna

Workshops:

September 2008 in Schwechat,
March 2009 in Schwechat,
September 2009 in Brno,
2010 t. b.a.

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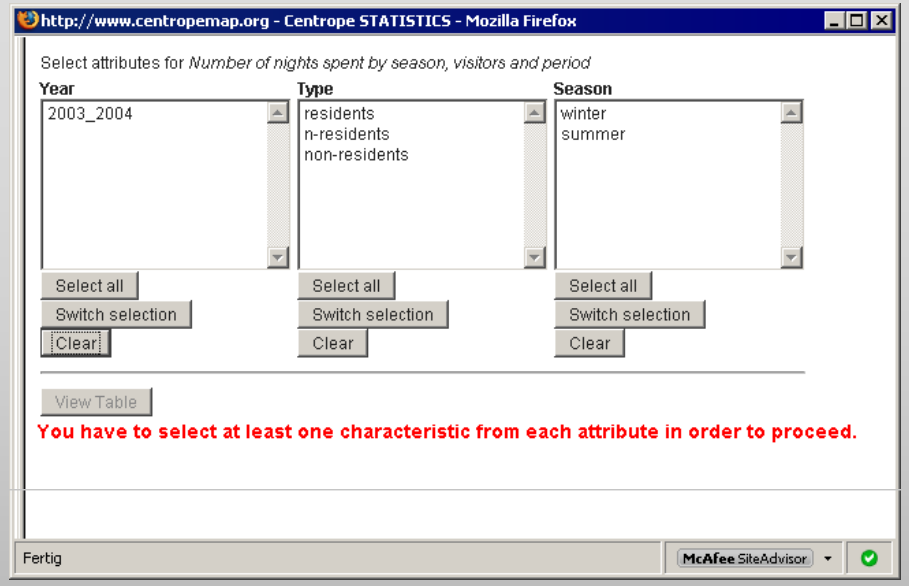
CentropeSTATISTICS User Interface

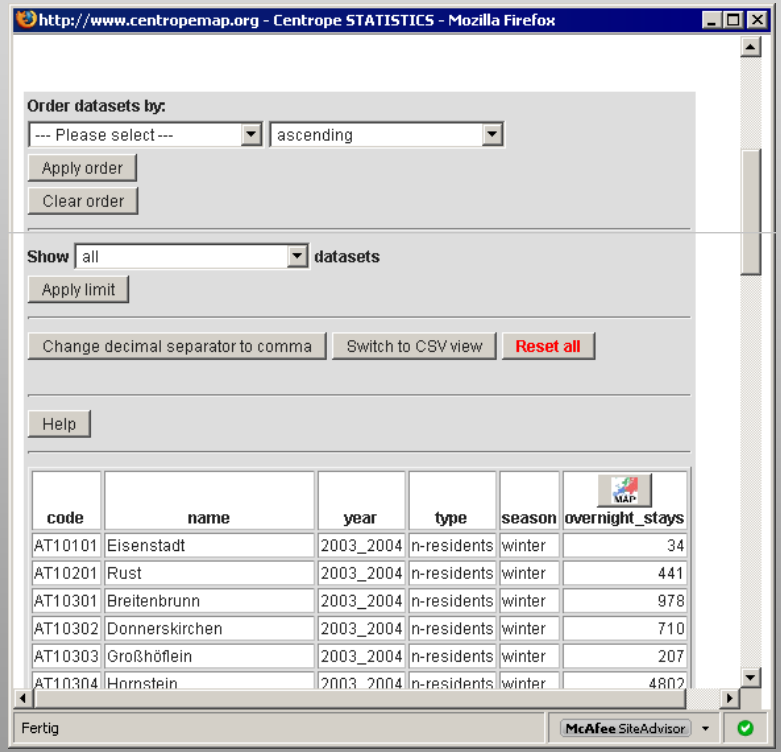


- All available indicators are displayed
- Multiple choice allowed
- Results are shown as table
- Dynamic Database Live Query

→ *On the fly Map Generation*

- Functions:

  Show – Export – Query – Sort



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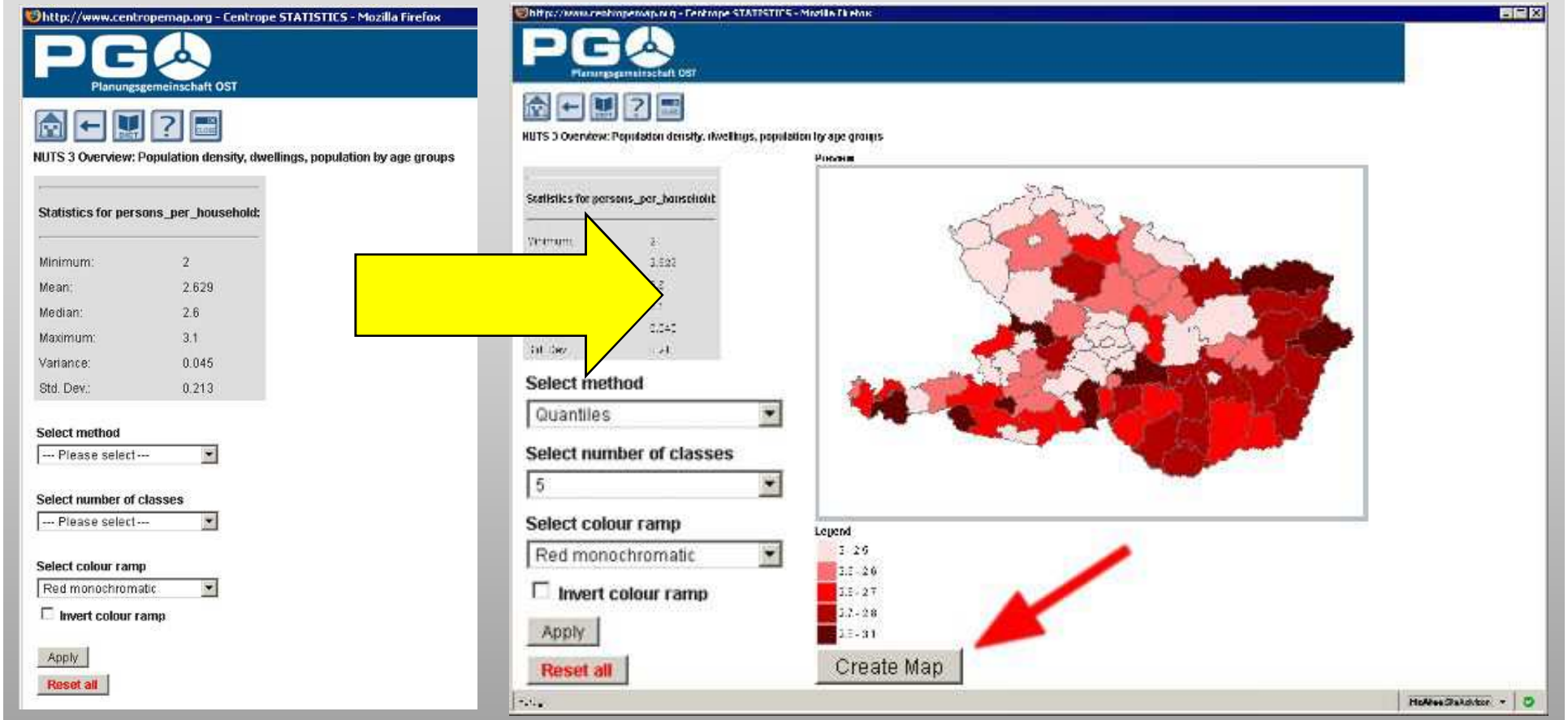

→ *On the fly Map Generation*

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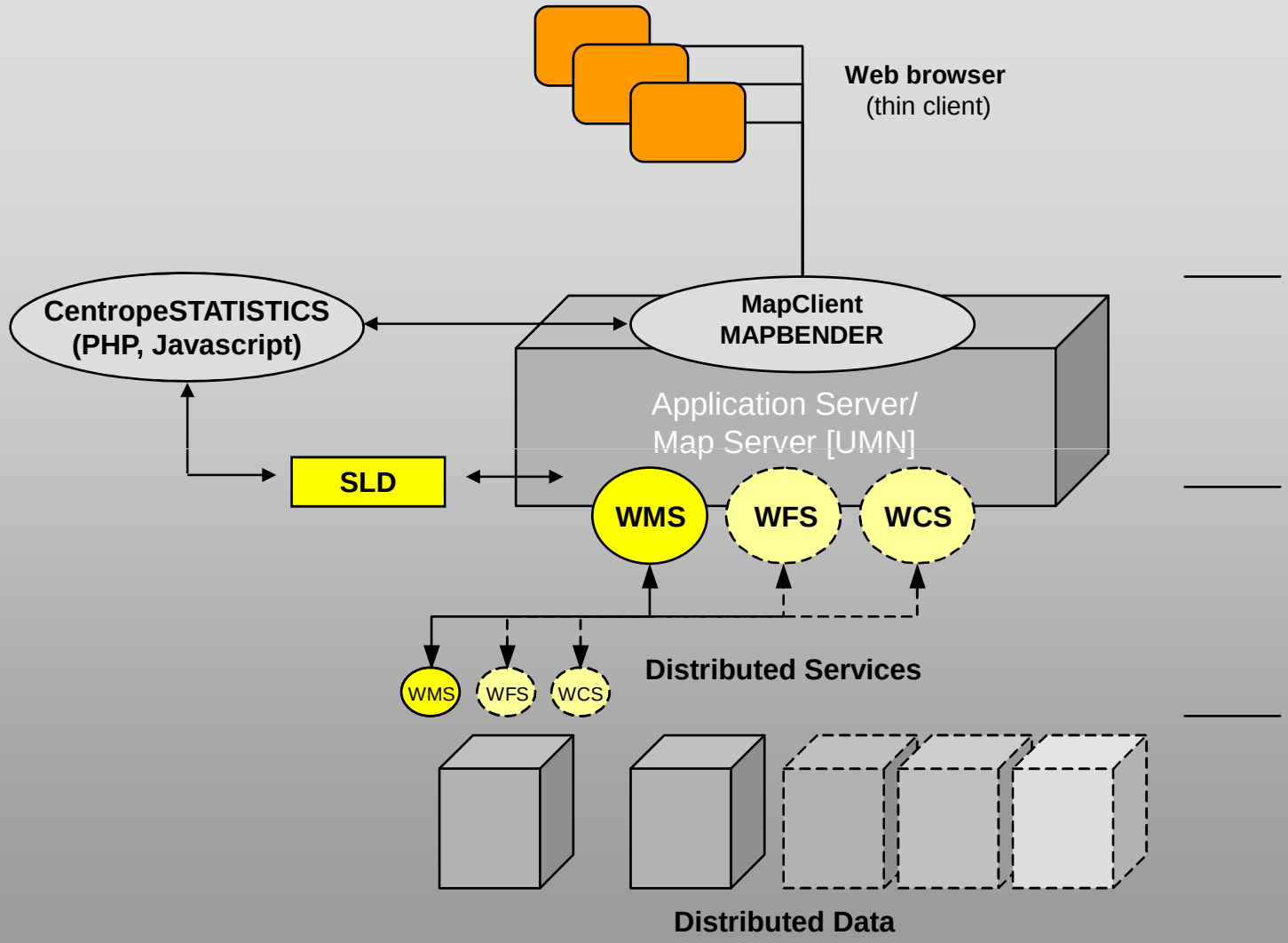
System Architecture



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Thank you for your attention!

www.centropemap.org

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