

## Automated generalization of national topographic data within a Web environment

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## Automated Generalization

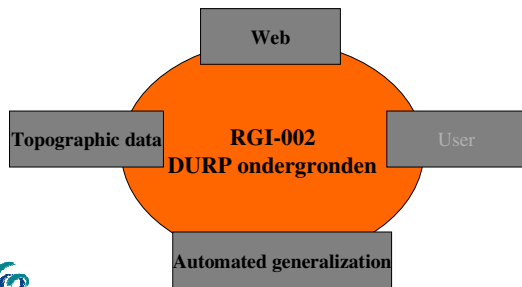
- To produce
  - Maps
  - Data
- Adopt geodata according to
  - Scale
  - Use
- Automation
  - Changing requirements (market, customization, dissemination)



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## Research Components

- Focus of PhD study:



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## Main Requirements

- Produce generalized maps
  - ➔ Cartographic generalization
- Automated generalization
  
- RGI 002 project context, but approach should be applicable to other domains



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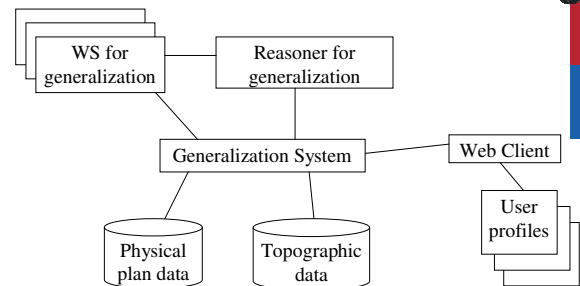
## Research Objectives

- Develop an approach to:
  - Apply the physical plan as a topological framework to the generalization process
  - Embed generalization processes on the web
- Deliverables
  - Architecture
  - Prototype
  - Theoretical concept
    - Operator classification
    - Topological constraints on topographic data



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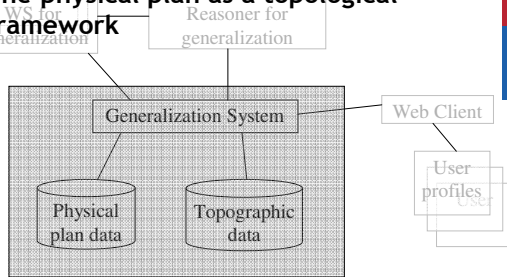
## Conceptual Architecture



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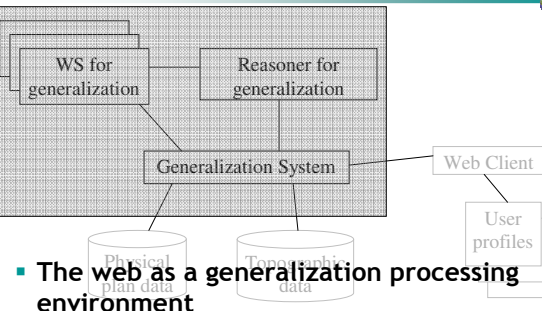
## Conceptual Architecture

### ▪ The physical plan as a topological framework



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## Conceptual Architecture



### ▪ The web as a generalization processing environment



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## Preliminary Results

- Research collaboration
  - IGN, France
  - FGI, Finland
- Processing platform
  - Open Source
  - [www.52north.org/wps](http://www.52north.org/wps)
- Classification for operators
- Participate in standards for geoprocesses
- Publications
  - AGILE, GIN, ICA, W2GIS



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## Thanks!

### Questions?

### Websites:

[www.durpondergronden.nl](http://www.durpondergronden.nl)  
[www.52north.org/wps](http://www.52north.org/wps)

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