ISIS
A City Guide Based on the Nexus Platform

Physical World

ISIS City Guide

Nexus

Spatial World Model

Information Spaces
ISIS:
A City Guide for Stuttgart
• Builds on Nexus Platform
• Target Devices:
  – Laptop/Tablet PC
  – PDA (iPAQ)
• Implemented in Pure Java
• Developed by Study Project (6 Students)
Architecture

Application Tier
- ISIS (on Laptop 2)
- ISIS (on PDA)
- GPS

Value-Added Services
- Map Server (on Laptop 1)
- Nav. Server (on PC 1)

Federation Tier
- Federation

Service Tier
- WWW
- Spatial Model Server (on Laptop 1)
- GIS (on PC 1)

Components in grey are not used in demonstration.
Maps

- Generated by Nexus Map Service
  - Streets
  - Buildings
  - Points of Interest
    (Restaurants, Sights, ...)
  - Virtual Information
    Towers

- Formats
  - Laptop: Vector Graphics (SVG)
  - PDA: Bitmap
Information Access

- Predefined Queries Specific to City Guide
  - Food & Drink
  - Culture & Events
  - Sights
  - Accommodation
  - Traffic Information
  - etc.

- Arbitrary Expert Queries

- Pointing with Electr. Compass
Virtual Information Towers (VIT)

- Link Information (Web Pages) to Locations
- VIT has Range of Visibility
Navigation

Based on Nexus Navigation Service

- Currently: Wrapper of GIS
- Future Work:
  - Native Nexus Service
  - Support of Multimodal Transportation