Geoportal.DE
–insight into the spatial data infrastructure of Germany (GDI-DE)

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Agenda

- **GDI-DE at a glance**
  - Organisational background
  - Technical architecture

- **Geoportal.DE**
  - Purpose
  - Requirements
  - Implementation overview (more details in SESSION 3, WhereGroup)
  - Operation

- Summary
Geodateninfrastruktur Deutschland

Spatial data infrastructure of Germany (GDI-DE)

1 Nation (Federation)
with parliament (legislature),
administration (executive authority), judicial power

16 States („Länder“)
each with parliament (legislature), administration (executive authority), judicial power

14,000 Municipalities
with many rights of self-government

They all have spatial data.

Make it available!
GDI-DE - Organisation

Political Level (E-Government)

National SDI (GDI-DE) is coordinated by a common Steering Committee

The Steering Committee comprises delegates of all levels of public authority

- 2 Federal Ministries (national)
- 1 each State = 16 (regional)
- 3 Associations of Municipalities (local)

Operational support: Coordination Office GDI-DE

Steering Committee GDI-DE

decisions, work orders

Coordination Office GDI-DE

proposals, reporting

NETWORK

Federation, States, Municipalities, Working Groups, Experts, Universities, Private sector, ...

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GDI-DE - Technical architecture

Geoportal-DE GDI-DE Testsuite

Registry-DE GDK-DE (Discovery Service)

Discovery Services View Services Download Services Other Services

central components local components

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Central component: GDK-DE, Discovery Service

- central search engine for GDI-DE
- caches 30 decentral catalogues
- ~80000 metadata sets
- CS-W AP ISO 1.0
- GeoNetwork opensource


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Central component: Geoportal.DE

Purpose

- Find all spatial data sets and services across administrative levels and domains from Germany
- Showcase GDI-DE
- Make GDI-DE more transparent
- primarily for working world (public administration, business, academia); open to general public also
Central component: Geoportal.DE

Requirements

- User-friendly, Web-like, straightforward
- High performance, no sandglass experience
- Search within GDK-DE data pool, i.e. GDI-DE
Implementation overview

- Content Management System (CMS): CoreMedia/Government Site Builder

- Geo-Clients – Open Source
  - Integrated into CMS
  - Viewer - Mapbender3
  - Geodata search: Apache Solr, standalone search client
  - More details SESSION 3 on Wednesday afternoon

- Content from Spatial Web Services from GDI-DE
Central component: Geoportal.DE

Erdbeben in Deutschland:
Wenn sie betreffen In Deutschland ist die Erdbebengefahr weit geringer als in Regionen, in denen zwei Kontinentalplatten aufeinandertreffen. Dennoch gibt es auch in der Bundesrepublik Erdbeben geringer bis mittlerer Stärke.

Nach welchem Ort suchen Sie?
z.B. Stadt, PLZ, Adresse

Nach was suchen Sie?
Geodaten & Inhalte über
Suchbegriffe

Beliebte Suchanfragen
- Umwelt
- Bevölkerung
- Klima
- Wasser
Operation overview

Internet

300 Mbit/s

Loadbalancer

Internet-Firewall

1 Gbit/s

Primary VMWare-Cluster Geoportal (6 Systeme)

1 Gbit/s

verfügbare Hardware-Server (4 Systeme)

4 Gbit/s

SAN

VPN DMZ BKG / DMZ GDZ zur Synchronisation

DMZ BKG

BKG Frankfurt

BKG LAN

Interne Firewall

DMZ GDZ

GDZ Leipzig

GDZ LAN

Interne Firewall

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Operation: usage patterns, per day

- Maximum number of requests per day: 640.215 (page requests 90.144)
- Mean number of requests per day: 174.598 (page requests 63.638)
- Absolute number of requests for Geo-Clients (search, viewer)
Main user group: the working world

Cumulative number of requests for Geo-Clients (search, viewer)
Peak after go live, usage stabilising and increasing

Absolute number of requests for CMS-component
So, were requirements met?

- User-friendly, Web-like, straightforward
  - Generally positive feedback (~90 mails altogether)
  - Helpful comments on additionally needed filters (‘all free WMS’)
- High performance, no sandglass experience
  - For core services yes (base maps, place search, geodata search)
  - Problem remains for decentral services, caching a solution
- Search within GDK-DE data pool, i.e. GDI-DE
  - Reveals lack of data quality in metadata, problem to filter on free text fields from CS-W AP ISO 1.0 (‘all free WMS’)
  - Room for improvement; focal point for further development
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Questions?

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