



The European Commission's science and knowledge service

Joint Research Centre

INSPIRE Geoportal

Organising data sets and services

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Protection of Network Services

- The Get Network Service Metadata Requests (e.g. the OGC GetCapabilities, DescribeFeatureType, etc.) are supposed to be accessible without authentication as they only contain metadata.
- CAPTCHA block machine-to-machine interaction and break the infrastructure.

Protection of View Services

- All operations of View Services are expected to be freely accessible but “may be in a form preventing their reuse for commercial purposes”
- (Limitations to Public Access may apply only in the case).

Protection of Download Services

- Get Spatial Data Set and Get Spatial Object operations can be access protected.
- An automatic redirect to an e-commerce site is more user-friendly than a basic request for credentials but then user interface language is important (English version).

How many datasets in a single service?

All datasets in a single service:

- Introduces a single point of failure in the infrastructure
- More difficult to inspect and find desired content for users

Organising View Services

- View Service with 1,599 layers

Resource Locator

http://www.ifremer.fr/services/wms_charm3?

PERFORMANCE

| | |
|---|-----------|
| Initial response (seconds) | 0.904 |
| Transmission time (seconds) | 0.329 |
| Bytes transferred | 3,163,726 |
| Average MBytes/sec | 9.171 |
| Average Spatial Objects/sec | |
| Average Spatial Object Descriptions/sec | |

browser

- Distribution Model: Winter presence-only habitat suitability of Cetorhinus maximus
- Distribution Model: Winter presence-only habitat suitability of dolphins
- Distribution Model: Winter presence-only habitat suitability of Phocoena phocoena
- Distribution Model: Winter presence-only habitat suitability of Tursiops truncatus
- Distribution Model: Year-round presence-only distribution of carnivores
- Distribution Model: Year-round presence-only distribution of cephalopodivores
- Distribution Model: Year-round presence-only distribution of gelatinoplanktivores
- Distribution Model: Year-round presence-only distribution of piscivores
- Distribution Model: Year-round presence-only distribution of zooplanktivores
- Distribution of Atlantic Mackerel larvae from CPR samples for period 1-1 (years 1957 to 1963) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 1-2 (years 1957 to 1963) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 1-3 (years 1957 to 1963) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 1-4 (years 1957 to 1963) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 2-1 (years 1964 to 1970) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 2-2 (years 1964 to 1970) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 2-3 (years 1964 to 1970) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 2-4 (years 1964 to 1970) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 3-1 (years 1971 to 1977) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 3-2 (years 1971 to 1977) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 3-3 (years 1971 to 1977) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 3-4 (years 1971 to 1977) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 4-1 (years 1978 to 1984) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 4-2 (years 1978 to 1984) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 4-3 (years 1978 to 1984) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 4-4 (years 1978 to 1984) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 5-1 (years 1985 to 1991) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 5-2 (years 1985 to 1991) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 5-3 (years 1985 to 1991) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 5-4 (years 1985 to 1991) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 6-1 (years 1992 to 1998) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 6-2 (years 1992 to 1998) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 6-3 (years 1992 to 1998) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 6-4 (years 1992 to 1998) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 7-1 (years 1999 to 2005) - Point data
- Distribution of Atlantic Mackerel larvae from CPR samples for period 7-2 (years 1999 to 2005) - Point data

Organising Atom Download Services

- Zip files must be fully downloaded before they can be decompressed so the INSPIRE Geoportal cannot inspect the content.
- Consider on-the-fly compression is preferable
In the Apache Http Server it is called "**Output Compression**". Similar functionality is available in NGINX and Microsoft IIS

Organising Atom Download Services

- Split huge files in smaller chunks

Example 26: Use of bbox and time attributes

```
<!--example use of bbox and time attributes -->
```

```
<link rel="section" href="http://xyz.org/data/file.tif" bbox="50.0  
5.0 50.9 5.9" time="2012-06-01T13:00:00Z" type="image/tiff" hreflang="en"  
title="example file"/>
```

- Use the bbox and/or the time attributes

Organising WFS Download Services

- No concept of dataset in WFS. All its content is the dataset which comprises one or more feature type.
- Not optimized for downloading the whole dataset

Approaches

- One service per Spatial Data Theme
- One service per dataset

Data Set Series

Metadata Technical Guidance document does not really say when to use one or the other.

It does not indicate how a series can reference the datasets it comprises.

How many Themes in a single Data Set?

One or more?

Need for a common approach?



Any questions?

INSPIRE Geoportal Helpdesk

<https://ies-svn.jrc.ec.europa.eu/projects/geoportal/>