



# Bits from INSPIRE

Could be good to know



# Data Provision - Issues with download services

Geoserver known issues - Google Docs

https://docs.google.com/spreadsheets/d/1JTjwVJggxj3CHM40GL1B\_b35IY8zV1\_6i-E0HDaxJXc/edit#gid=

Geoserver known issues

Datei Bearbeiten Ansicht Einfügen Format Daten Tools Add-ons Hilfe Alle Änderungen in Drive gespeichert

ID	Problem	Description	Workaround	INSPIRE Themes impacted	Version	Date Reported	Reported by	In the process of negotiating funding	Comments
1	Unique Endpoint per Dataset	The closest solution provided by GeoServer are the namespace specific endpoints. While the namespace specific endpoints provide the correct capabilities, when providing complex features, there's a problem with the namespace encoding (formally its nicer if all namespaces are declared in the header and then used, in the namespace specific encoding of complex features each namespace is defined where used, the namespaces are all set to null). Also, multiple datasets may be provided by an organization using the same INSPIRE Theme, thus namespace.	Utilize Apache's rewriting functionality. For getCapabilities the namespace specific URI should be used, for getFeature the request URI should be rewritten with the namespace excluded.		2.9	1/31/2017	Kathi Schleidt	Finnish Environment Institute	Ilkka Rinne 16: workspaces" fe Institute and a tied to a single same feature ty than one data s be that feature workspace: the so the current c First match will lurie Maxim 21/ http://osgeo-org -the-same-nam workspaces is fundamentals o My understandi was not done a what are the lin If it will be done have a one-to-o INSPIRE each understood as feature types, a XSD schemas. a dataset and c should exist be
2	Stored Queries	(Some filtering of the data trough) Stored queries are not possible on complex features.	Set up simple features and define filters on these for the id, then		2.9	1/31/2017	Kathi Schleidt		Ilkka Rinne 16: working in FEL:





1 Sheet1

Anzahl: 17

# Repository of software issues

Known INSPIRE issues (download and others) with **Geoserver** on **Github**:

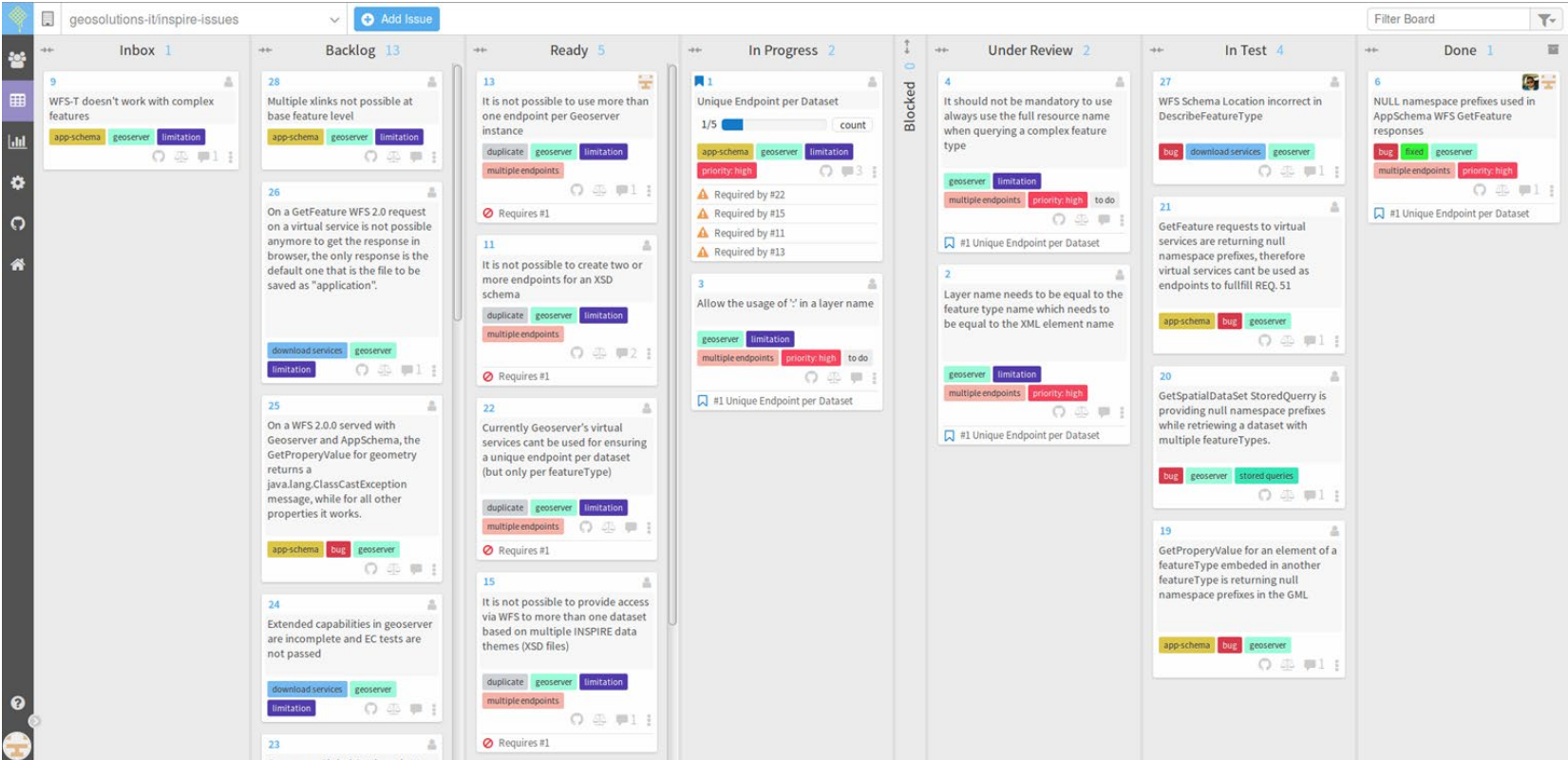
<https://github.com/geosolutions-it/inspire-issues/>

<input type="checkbox"/>	 <b>Requests for multiple complex features crashes Geoserver</b> <span>backlog</span> <span>geoserver</span> <span>investigation</span> <span>1</span>
	<small>#10 opened a day ago by nmco</small>
<input type="checkbox"/>	 <b>WFS-T doesn't work with complex features</b> <span>geoserver</span> <span>limitation</span> <span>1</span>
	<small>#9 opened a day ago by nmco</small>
<input type="checkbox"/>	 <b>WMS doesn't work on some geometry types * gml:MultiSurface</b> <span>backlog</span> <span>geoserver</span> <span>investigation</span> <span>1</span>
	<small>#8 opened a day ago by nmco</small>
<input type="checkbox"/>	 <b>Stored Queries</b> <span>backlog</span> <span>geoserver</span> <span>limitation</span> <span>3</span>
	<small>#7 opened a day ago by nmco</small>

Source: [Excel sheet with known issues and workarounds](#) + GeoSolutions contribution



# Repository of Issues - Dashboard





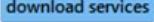




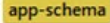







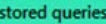



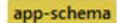








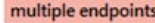
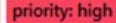


The dashboard displays the following issues across columns:

- Inbox (1):** WFS-T doesn't work with complex features (app-schema, geoserver, limitation).
- Backlog (13):**
  - Multiple xlinks not possible at base feature level (app-schema, geoserver, limitation).
  - On a GetFeature WFS 2.0 request on a virtual service is not possible anymore to get the response in browser, the only response is the default one that is the file to be saved as "application". (download-services, geoserver, limitation).
  - On a WFS 2.0.0 served with Geoserver and AppSchema, the GetPropertyValue for geometry returns a java.Lang.ClassCastException message, while for all other properties it works. (app-schema, bug, geoserver).
  - Extended capabilities in geoserver are incomplete and EC tests are not passed (download-services, geoserver, limitation).
- Ready (5):**
  - It is not possible to use more than one endpoint per Geoserver instance (duplicate, geoserver, limitation, multiple endpoints). Requires #1.
  - It is not possible to create two or more endpoints for an XSD schema (duplicate, geoserver, limitation, multiple endpoints). Requires #1.
  - Currently Geoserver's virtual services can't be used for ensuring a unique endpoint per dataset (but only per featureType) (duplicate, geoserver, limitation, multiple endpoints). Requires #1.
  - It is not possible to provide access via WFS to more than one dataset based on multiple INSPIRE data themes (XSD files) (duplicate, geoserver, limitation, multiple endpoints). Requires #1.
- In Progress (2):**
  - Unique Endpoint per Dataset (1/5 progress, count filter). Labels: app-schema, geoserver, limitation, priority: high. Dependencies: Required by #22, #15, #11, #13.
  - Allow the usage of '?' in a layer name (geoserver, limitation, multiple endpoints, priority: high, to do). #1 Unique Endpoint per Dataset.
- Blocked (0):**
- Under Review (2):**
  - It should not be mandatory to use always use the full resource name when querying a complex feature type (geoserver, limitation, multiple endpoints, priority: high, to do). #1 Unique Endpoint per Dataset.
  - Layer name needs to be equal to the feature type name which needs to be equal to the XML element name (geoserver, limitation, multiple endpoints, priority: high, to do). #1 Unique Endpoint per Dataset.
- In Test (4):**
  - WFS Schema Location incorrect in DescribeFeatureType (bug, download-services, geoserver).
  - GetFeature requests to virtual services are returning null namespace prefixes, therefore virtual services can't be used as endpoints to fulfill REQ\_51 (app-schema, bug, geoserver).
  - GetSpatialDataSet StoredQuery is providing null namespace prefixes while retrieving a dataset with multiple featureTypes (bug, geoserver, stored-queries).
  - GetPropertyValue for an element of a featureType embedded in another featureType is returning null namespace prefixes in the GML (app-schema, bug, geoserver).
- Done (1):** NULL namespace prefixes used in AppSchema WFS GetFeature responses (bug, fixed, geoserver, multiple endpoints, priority: high). #1 Unique Endpoint per Dataset.

<https://waffle.io/geosolutions-it/inspire-issues>

# Progress since the 2017 WS

Progress in Geoserver described by GeoSolutions on GitHub. Closed issues:

23 Open ✓ 5 Closed		Author ▾	Labels ▾	Projects ▾	Milestones ▾	Assignee ▾	Sort ▾
	<b>WFS Schema Location incorrect in DescribeFeatureType</b>   						 1
#27 by nmco was closed Sep 7, 2018							
	<b>GetFeature requests to virtual services are returning null namespace prefixes, therefore virtual services cant be used as endpoints to fulfill REQ. 51</b>   						 1
#21 by nmco was closed Sep 7, 2018							
	<b>GetSpatialDataSet StoredQuery is providing null namespace prefixes while retrieving a dataset with multiple featureTypes.</b>   						 1
#20 by nmco was closed Sep 7, 2018							
	<b>GetPropertyValue for an element of a featureType embedded in another featureType is returning null namespace prefixes in the GML</b>   						 1
#19 by nmco was closed Sep 7, 2018							
	<b>NULL namespace prefixes used in AppSchema WFS GetFeature responses</b>     						 1
#6 by simboss was closed Sep 3, 2018							

# Conclusions

- **SensorThings API is well suited for provision of measurement data under INSPIRE**
- **This does require an extension, adding properties element to other classes**
  - This has been proposed for the 1.1 Version of STA
- **Some issues pertaining to the INSPIRE download services Implementing Rules still open, but should be fairly simple to align (just as has been done for SOS, WFS, WCS...)**
- **So much simpler to deploy and configure**
- **And even simpler to utilize data!**
- **<http://service.datacove.eu:8080/SensorThingsServer-1.0 BRGM/v1.0>**

# OGC SensorThings API

- SensorThings API new OGC standard for sensor data (possible replacement for SOS)
- Simple O&M based data model
- RestFUL service
- JSON data
- Mapping to INSPIRE EF, Publication:  
[www.mdpi.com/2076-3263/8/6/221](http://www.mdpi.com/2076-3263/8/6/221)



# OGC SensorThings API

- SensorThings API is well suited for provision of measurement data under INSPIRE
- This does require an extension, adding properties element to other classes
  - This has been proposed for the 1.1 Version of STA
- Some issues pertaining to the INSPIRE download services Implementing Rules still open, now setting up INSPIRE Good Practice
- So much simpler to deploy and configure
- And even simpler to utilize data!

[http://service.datacove.eu:8080/SensorThingsServer-1.0 BRGM/v1.0](http://service.datacove.eu:8080/SensorThingsServer-1.0_BRGM/v1.0)



# Thanks for your attention!

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