Neuerungen im GeoServer

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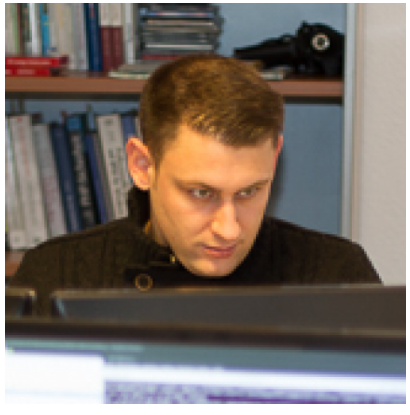
Gliederung

- Über…
- GeoServer Basics
- Ausgewählte Änderungen des letzten Jahres

Nils Bühner



- Diplom-Informatiker
- Entwickler @terrestris
- Java (Spring, Hibernate), JavaScript
- Kernentwickler SHOGun
- Webtechnologien
- GeoServer Certification (GS399)

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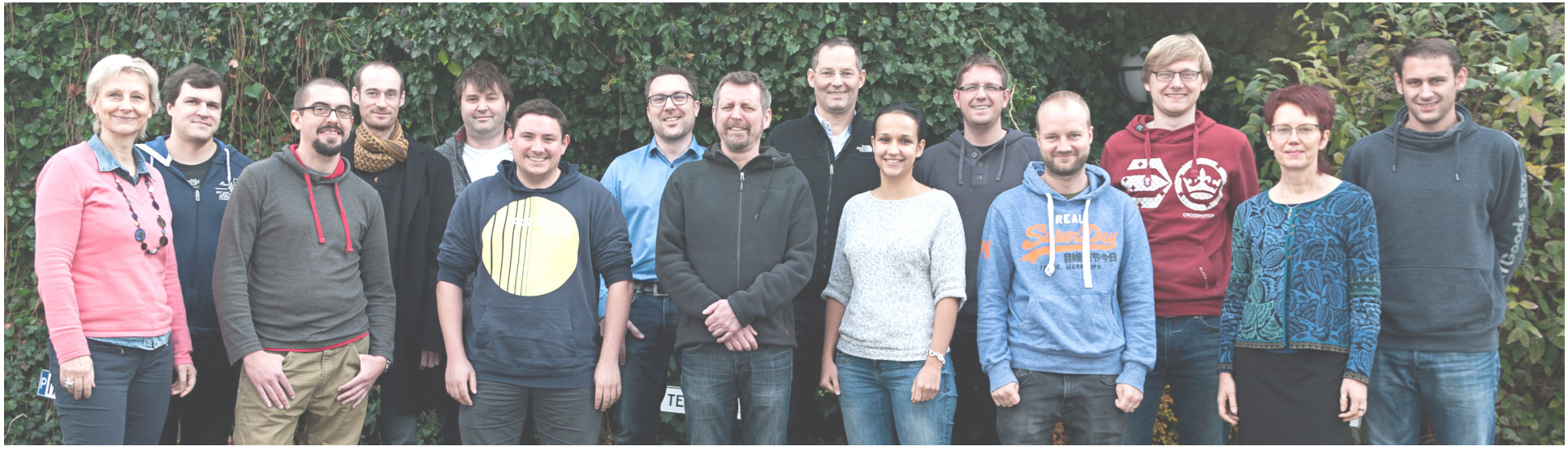
- terrestris.de
- OpenSource GIS aus Bonn
- Entwicklung, Projekte & Support/Schulung
- Beratung, Planung, Implementierung & Wartung

Teil des Teams werden?



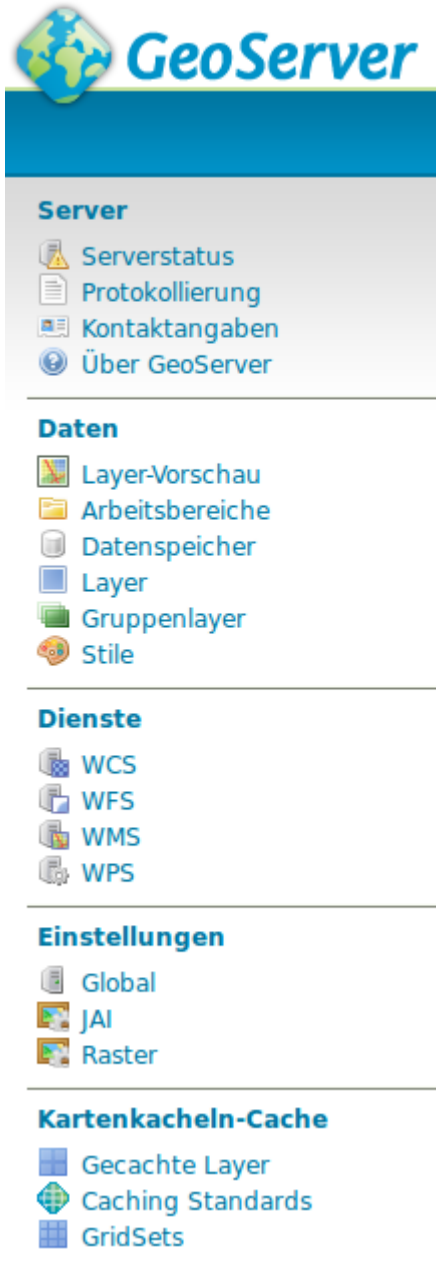
- Softwareentwickler/in
- GIS Consultant
- Praktikanten / betreute Abschlussarbeiten

Details gerne am terrestris Stand

GeoServer

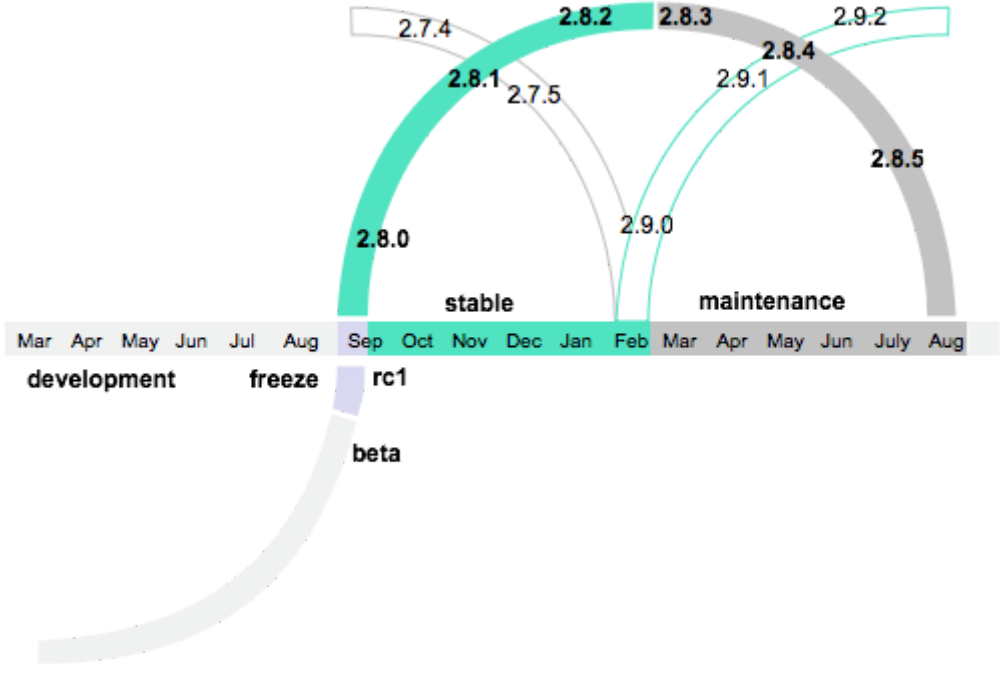
github.com/geoserver

- Java-basierter Server für Geodaten
- Standards des OGC
  (z.B. WMS, WFS(-T), WCS, WPS)
- flexibel und erweiterbar
- gut dokumentiert (user/dev)



- Konfiguration über Browser
- Konfiguration über REST
- OGC-Dienste
- Monitoring
  (Serverstatus, Logs)
- erweiterte Features
  (z.B. GeoWebCache)

Release-Zyklus

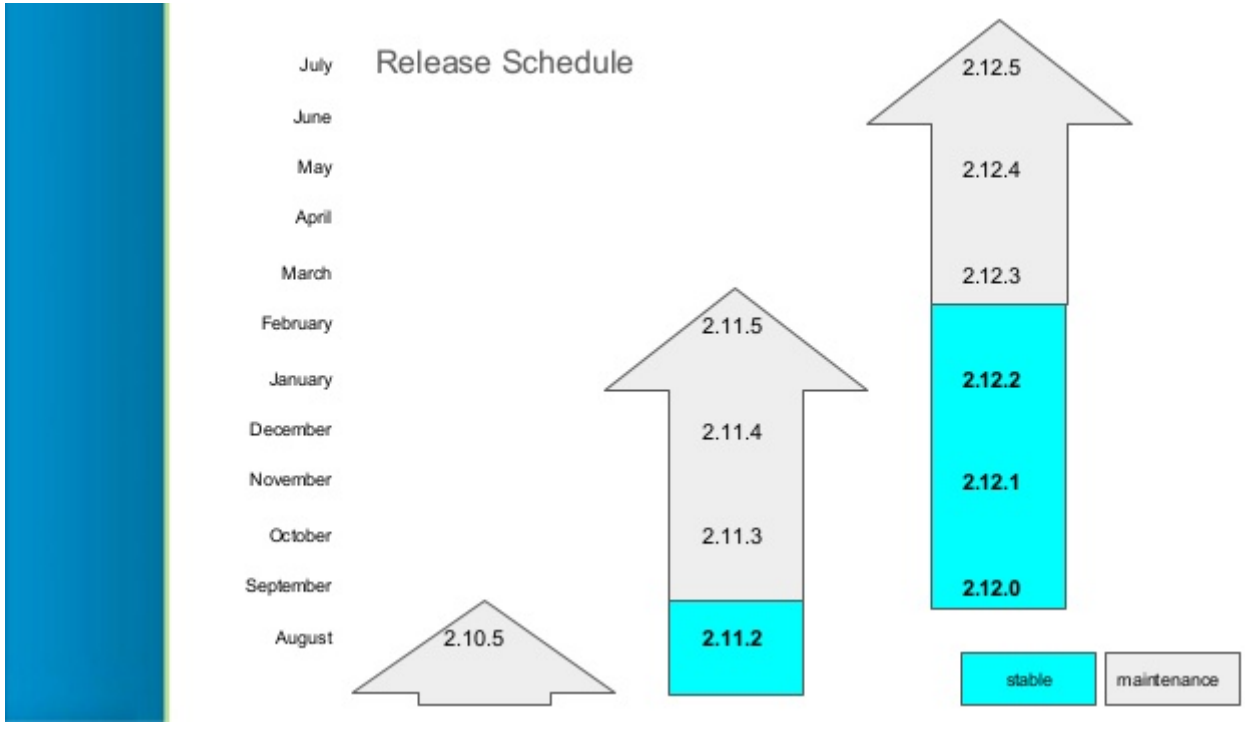


Stable: 2.12.2

Maintenance: 2.11.5

Development: 2.13-beta

Quelle:
http://docs.geoserver.org/latest/en/developer/policies/community-process.html



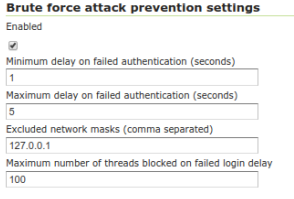
Quelle:
https://www.slideshare.net/geosolutions/state-of-geoserver-21geoservernodeopts2

Änderungen...

- seit v2.11.1 (Mai 2017) ...
- ... bis v2.12.2 (Januar 2018)
- Fokus auf Stable-Releases
- Bugfixes
- Securityfixes
- Features
- Extensions / Plugins / Community Module

v2.11.1 (Mai 2017)

- Security: Brute force attack prevention

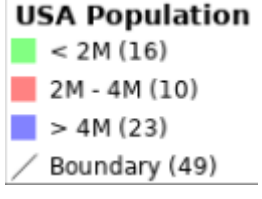


- Community module: Mapbox Styling
- Feature: NetCDF Output Format (GetCoverage)
- Bugfixes, z.B.
  - REST: HTTP-PUT, um Workspace anzulegen
  - GWC
  - GUI

Quelle: http://blog.geoserver.org/2017/05/19/geoserver-2-11-1-released/

v2.11.2 (Juli 2017)

- GetLegendGraphic: Anzahl getroffener Features Legenden-Label
  - `...&legend_options=countMatched:true`



- Reprojektion von Geometrien bei WMS GetFeatureInfo, wenn *info_format=GML*
- Viele kleine Bugfixes

Quelle: http://blog.geoserver.org/2017/07/31/geoserver-2-11-2-released/

v2.12.0 (Oktober 2017)

REST API Migration

- Spring MVC statt Restlet
- Swagger als Doku: http://docs.geoserver.org/latest/en/api/

Quelle: http://blog.geoserver.org/2017/10/17/geoserver-2-12-0-released/

PUT `/workspaces/{workspaceName}/datastores/{storeName}` Modify a data store.

Modify data store ds. Use the "Accept:" header to specify format or append an extension to the endpoint (example "/datastores/{ds}.xml" for XML).

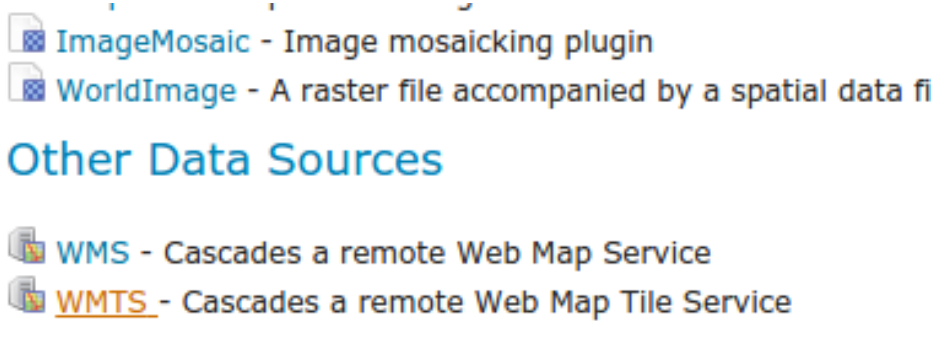
Parameters Try it out

Name	Description
workspaceName • required `string` *(path)*	The name of the worskpace containing the data store.
storeName • required `string` *(path)*	The name of the data store to modify.

dataStoreBody • required
(body)
	The updated data store definition. For a PUT, only values which should be changed need to be included. The connectionParameters map counts as a single value, so if you change it all preexisting connection parameters will be overwritten.
	The contents of the connection parameters will differ depending on the type of data store being added.
	• GeoPackage
	Examples:
	◦ application/xml:
	`<dataStore> <description>A data store</description> <enabled>true</enabled> <__default>true</__default> <connectionParameters> <database>file:///path/to/nyc.gpkg</database> </connectionParameters> </dataStore>`
	◦ application/json:
	`{ "dataStore": { "description": "A data store", "enabled": "true", "_default": "true", "connectionParameters": { "entry": [ {"@key":"database","$":"file:///path/to/nyc.gpkg"}, ] } } }`
	Connection Parameters:

key	description	level	type	required	default
Primary key metadata table	The optional table containing primary key structure and sequence associations. Can be expressed as 'schema.name' or just 'name'	user	String	False	
Callback factory	Name of JDBCReaderCallbackFactory to enable on the data store	user	String	False	
Evictor tests per run	number of connections checked by the idle connection evictor for each of its runs (defaults to 3)	user	Integer	False	3
database	Database	user	File	True	
Batch insert size	Number of records inserted in the same batch (default, 1). For optimal performance, set to 100.	user	Integer	False	1
fetch size	number of records read with each iteraction with the dbms	user	Integer	False	1000

Neue Datenquelle: Cascading WMTS

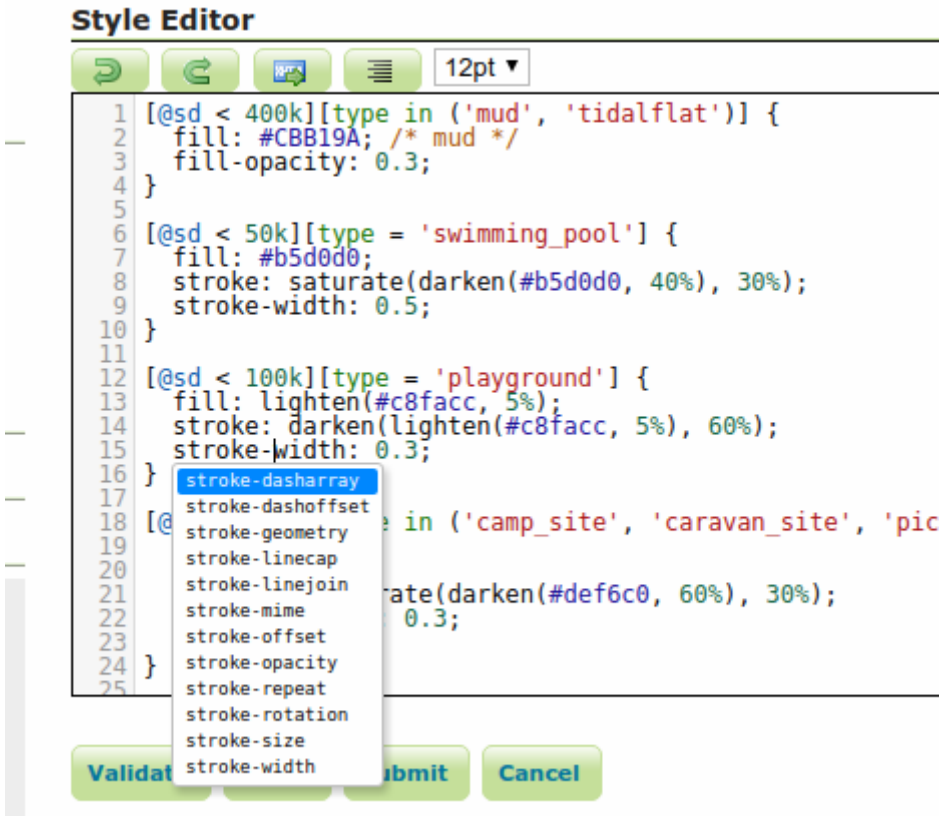


Neue labeling features

- *vendor options* für:
  - Durchgestrichener Text
  - Abstände zwischen Zeichen und Wörtern
  - gebogene/curved labels (LinePlacement)
  - labeling an Polygongrenzen (repetition/offsets)

Neue CSS features

- Code-Vervollständigung in GUI
- Lesbarkeit: *[@sd < 1M]* statt *[@scale < 1000000]*
- LessCSS color functions: *Darken*, *Lighten*, *Saturate*
- Einfacherere Verwendung von Variablen
- Deutlich schnellere Übersetzung von CSS zu äquivalentem SLD


Style Editor
12pt
[@sd < 400k][type in ('mud', 'tidalflat')] {
fill: #CBB19A; /* mud */
fill-opacity: 0.3;
}
[@sd < 50k][type = 'swimming_pool'] {
fill: #b5d0d0;
stroke: saturate(darken(#b5d0d0, 40%), 30%);
stroke-width: 0.5;
}
[@sd < 100k][type = 'playground'] {
fill: lighten(#c8facc, 5%);
stroke: darken(lighten(#c8facc, 5%), 60%);
stroke-width: 0.3;
}
stroke-dasharray
stroke-dashoffset
stroke-geometry
stroke-linecap
stroke-linejoin
stroke-mime
stroke-offset
stroke-opacity
stroke-repeat
stroke-rotation
stroke-size
stroke-width
in ('camp_site', 'caravan_site', 'pic
ate(darken(#def6c0, 60%), 30%);
0.3;
Validat
ubmit
Cancel

Neue Community Module

- Amazon S3 GeoTiff
- Status Monitoring (Ressourcennutzung, Statistiken)
- OpenSearch für das Earth Observation Protokoll

v2.12.1 (November 2017)

- Migration der User/Group/Role REST Models von geofence zu restconfig (core)
- Viele kleine Bugfixes
  - REST API CORS Unterstützung
  - YSLD ColorMap fix
  - GWC Seed Form fix
  - uvm...

Quelle: http://blog.geoserver.org/2017/11/21/geoserver-2-12-1-released/

v2.12.2 (Januar 2018)

- WPS Anfragen unterstützen CDATA
- CSS Ausdrücke mit Einheiten
- Bugfixes:
  - Importer plugin: Shape file mit Leerzeichen in Attributnamen
  - WFS filter encoding Problem gelöst
  - GUI beim Anlegen von LayerGroup
  - viele kleine fixes in Community Modulen

Quelle: http://blog.geoserver.org/2018/01/24/geoserver-2-12-2-released/

v2.13-RC1 (März 2018)

- "Isolierte Arbeitsbereiche" (mit gleichem namespace, z.B. hilfreich im Rahmen von INSPIRE)
- GeoWebCache REST API: zwei neue endpoints
  - /gwc/rest/blobstores
  - /gwc/rest/gridsets
- UI Verbesserung: URL-Autovervollständigung
- WFS 2.0 und WMTS 1.0 Konformität
- Einfache Unterstützung weiterer PostGIS Datentypen (HStore, JSON columns)

Quelle: http://blog.geoserver.org/2018/03/08/geoserver-2-13-rc1-released/

Vielen Dank

Fragen & Anmerkungen?

Impressum

Impressum

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Lizenz

Vortragsfolien, PDF-Version, git repository