

# CouchWFS (light)



## BasicWFS Requests Typen

GetCapabilities

DescribeFeatureType

GetFeature

## Protokoll

HTTP - REST

Post / Get

XML/GML Response

GetCapabilities: BoundingBox, verfügbare Layer, Koordinatensystem

DescribeFeatureType: GML Schema und Attributmetadaten

GetFeature: Abfrage nach Layer und Boundingbox



Datenbank      DokumentID

http:// ... /45TT6Z3

**Abfrage eines Dokuments**

Datenbank      DesignDokument      ViewName

http:// ... /\_DESIGN/meindoc/**VIEW/meineveiw**

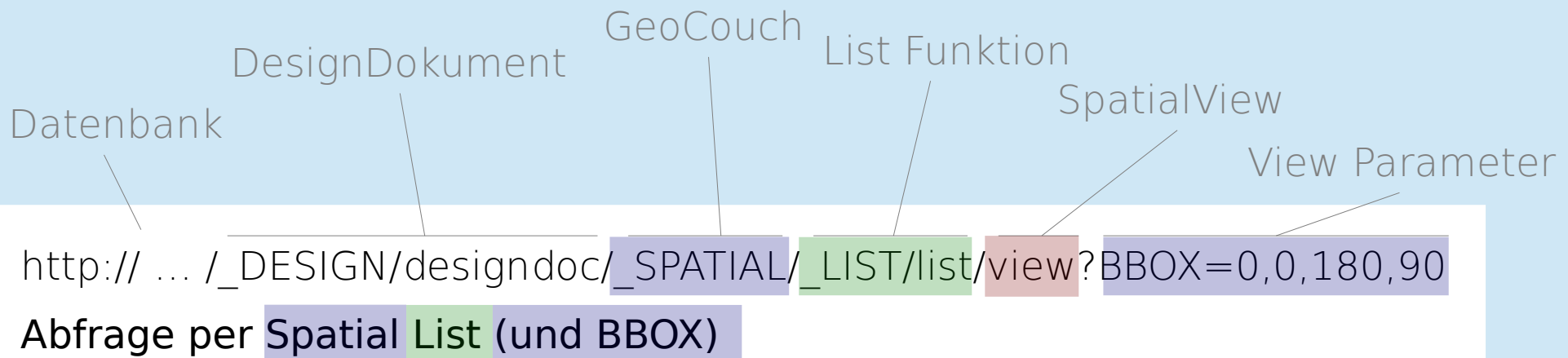
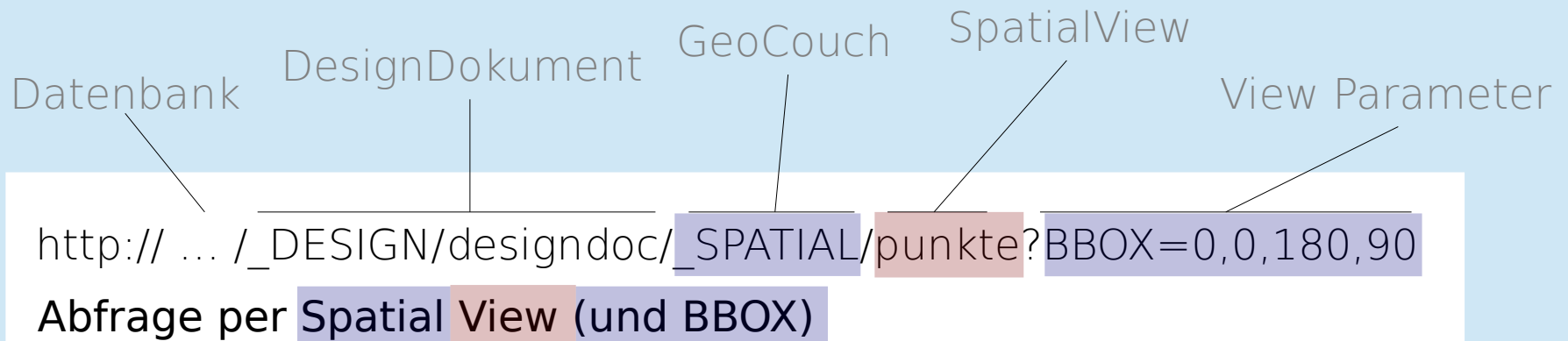
**Abfrage per View Funktion**

Datenbank      DesignDokument      ListFunktion      ViewName

http:// ... /\_DESIGN/meindoc/**\_LIST/meinelist/meineveiw**

**Abfrage per List Funktion**

# CouchWFS (light)





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GeoCouch

List Funktion

SpatialView

## Aufbau der CouchWFS URL

http:// ... /rwilb/\_design/wfs/\_spatial/\_list/wfspoint/point?request=GetCapabilities

Datenbank

DesignDokument

GET Parameter

Kann direkt in der LIST Funktion ausgewertet werden

```

if (req.query.request == "GetCapabilities"){
  start({'headers': {'content-type': 'text/xml; subtype=gml/3.1.1'}});
  ...
} else { ... }

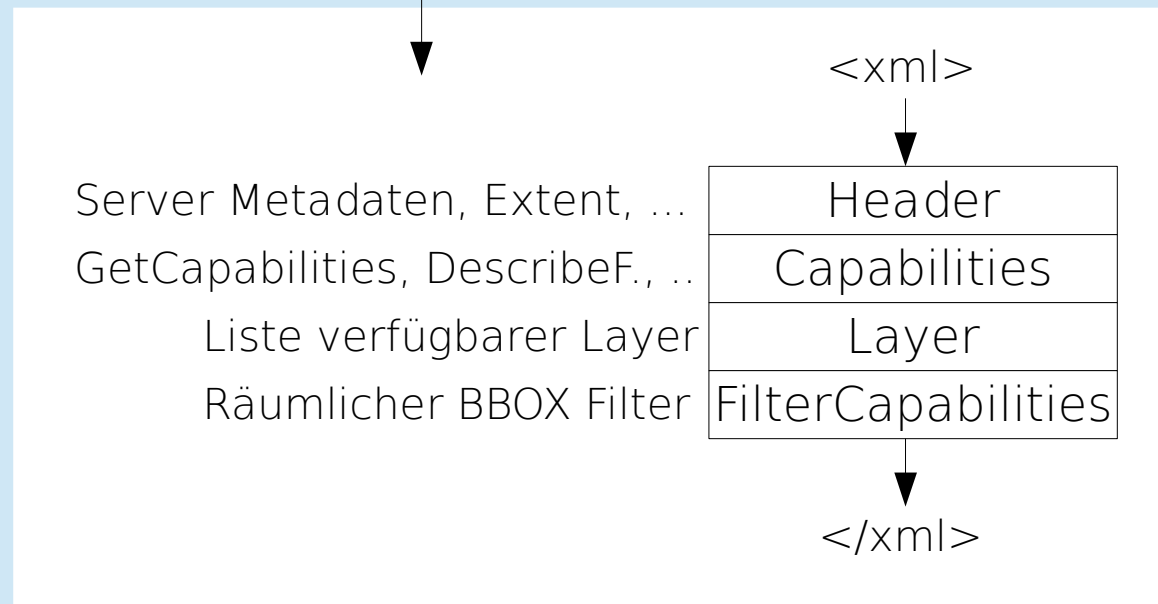
```

Point - List Funktion

# CouchWFS (light)



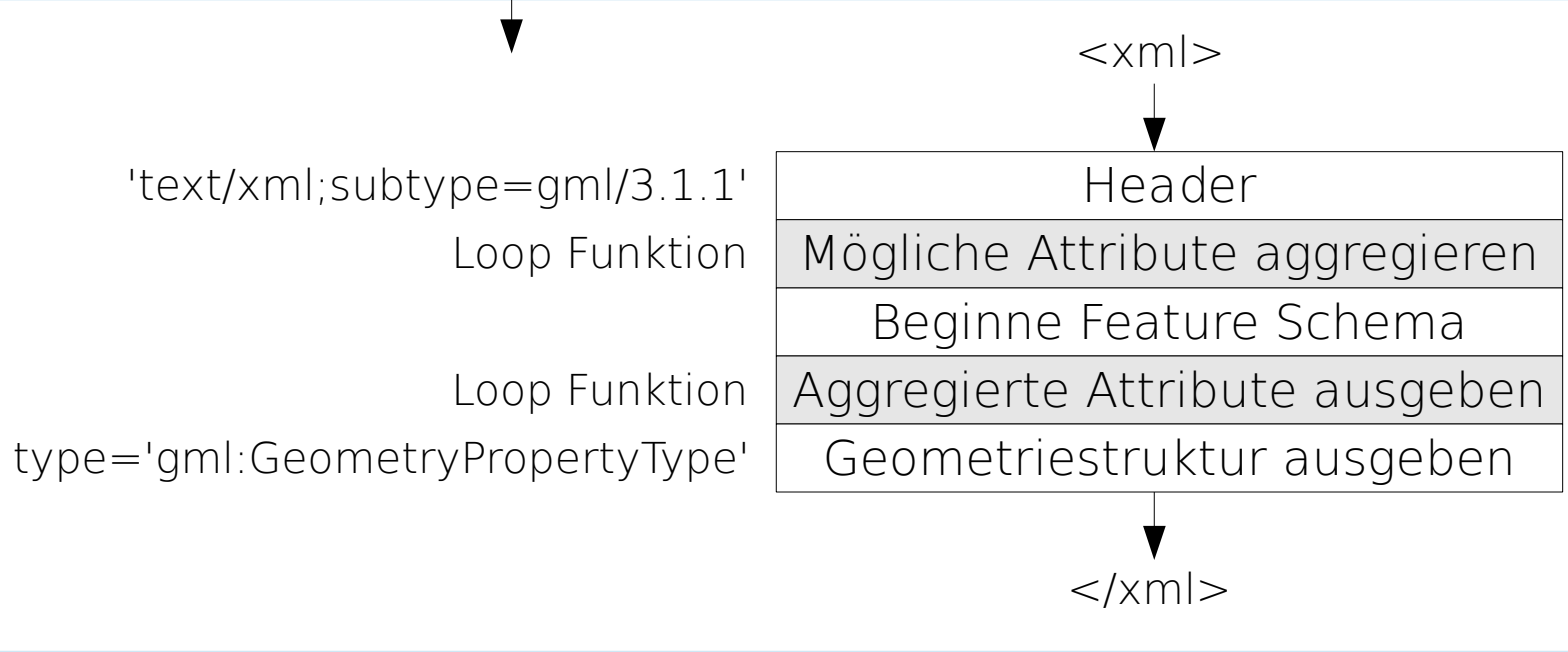
```
if (req.query.request == "GetCapabilities") {  
  start({'headers': {'content-type': 'text/xml; subtype=gml/3.1.1'} });  
  ...  
}
```



# CouchWFS (light)



```
if (req.query.request == "DescribeFeatureType") {  
  start({'headers': {'content-type': 'text/xml; subtype=gml/3.1.1'} });  
  ...  
}
```



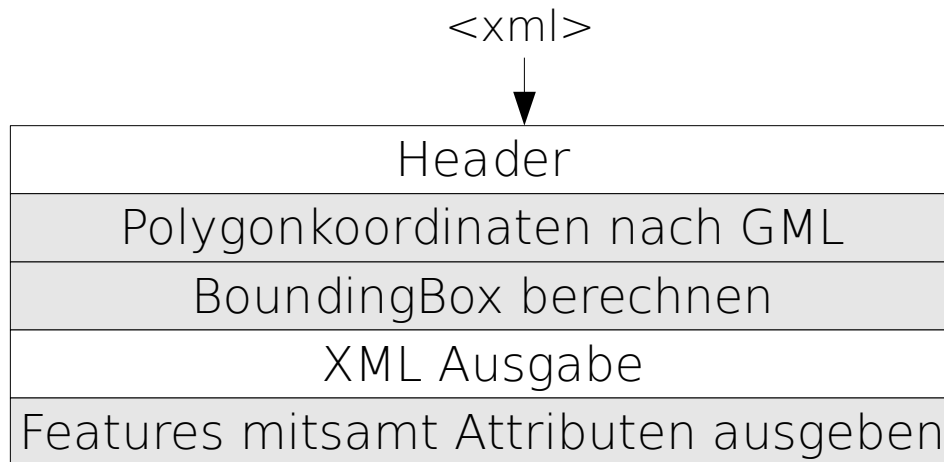
# CouchWFS (light)



```
if (req.query.request == "GetFeature"){  
  start({'headers': {'content-type': 'text/xml; subtype=gml/3.1.1'} });  
  ...  
}
```



'text/xml;subtype=gml/3.1.1'  
Loop Funktion  
Loop Funktion  
Ausgabe der Berechnungen  
Loop Funktion

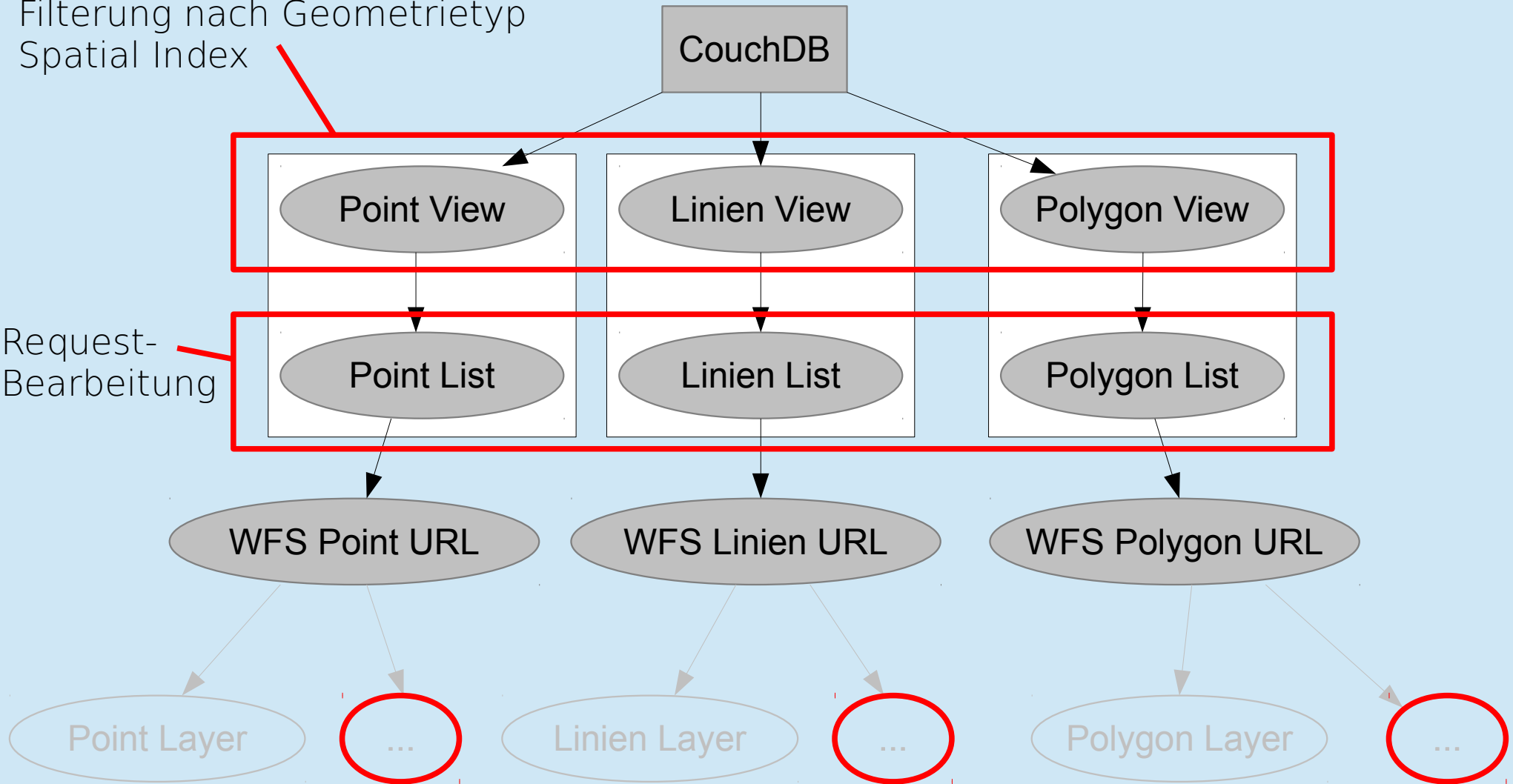




## WFS Interface der CouchDB

Vorauswahl  
Filterung nach Geometrietyp  
Spatial Index

Request-  
Bearbeitung



# CouchWFS (light)



Quantum GIS 1.8.0-Lisboa

Layer

- All Points
- All LineStrings
- All Polygons

Attributtabelle - All Points :: 0 / 211 Objekte

	_id	_rev	name
0	36b419f85...	1-e62bdb...	
1	36b419f85...	1-76d8bd...	Stadtbibliothek
2	36b419f85...	1-52dbf0...	Alters- und Pflegeh...
3	36b419f85...	1-6a4a02...	Feldbach
4	36b419f85...	1-eb1b65...	Esso
5	36b419f85...	1-a5029b...	Feuerwehr und Che...
6	36b419f85...	1-aff4e2...	Esso
7	36b419f85...	1-ec26da...	
8	36b419f85...	1-d51365...	Agrola
9	36b419f85...	1-6d27fd...	Primarschule Weiden...
10	36b419f85...	1-dc7c14...	Schachen
11	36b419f85...	1-4fba25...	Agip
12	36b419f85...	1-820e62...	Agrola
13	36b419f85...	1-7fd7a8...	Avia
14	36b419f85...	1-7a22ea...	Gemeindehaus
15	36b419f85...	1-eac315...	Impulsschule Wurms...
16	36b419f85...	1-21eed4...	Jona
17	36b419f85...	1-51bdcc...	Pfäffikon SZ, Industri...

Suchen nach \_\_\_\_\_ in name

Nur gewählte zeigen  Nur gewählte durchsuchen  Groß-/Kleinschreibung beachten

8.73,47.15 : 8.94,47.32    Koordinate: 989815,5968672    Maßstab 1:87759     Zeichnen    EPSG:900913

### WFS-Layer des Servers hinzufügen

Serververbindungen

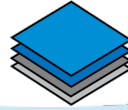
CouchWFS2 Rapperswil b - polygon

Titel	Name	Zusammenfas	Objekte cachen	Filter
All Polygons	All Polygons		<input checked="" type="checkbox"/>	

Koordinatenbezugssystem

EPSG:4326

# CouchWFS (light)



CouchWFS Test - Mozilla Firefox

CouchWFS Test

gisforge.no-ip.org:5984/rwilb/\_design/wfs/index.html

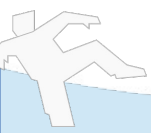
## CouchWFS Test

Data CC-BY-SA by [OpenStreetMap](#)

Konsole

Leeren Dauerhaft Zeitmessung **Alle** Fehler Warnungen Info Debug-Info Cookies

GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...,47.230092875528,8.8816516036989,47.276699433922	200 OK 527ms	<a href="#">OpenLayers.js (Zeile 748)</a>
GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...,47.245856307775,8.8751713867189,47.292448997479	200 OK 457ms	<a href="#">OpenLayers.js (Zeile 748)</a>
GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...,47.262255787361,8.8357321853639,47.308834045041	200 OK 74ms	<a href="#">OpenLayers.js (Zeile 748)</a>
GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...,47.247866463779,8.8558165664674,47.294457384691	200 OK 209ms	<a href="#">OpenLayers.js (Zeile 748)</a>
GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...187,47.2319287845,8.8561169738771,47.27853372784	200 OK 402ms	<a href="#">OpenLayers.js (Zeile 748)</a>
GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...,47.217443774484,8.8506238098146,47.264061459028	200 OK 597ms	<a href="#">OpenLayers.js (Zeile 748)</a>
GET http://gisforge.no-ip.org:5984/rwilb/_design/wfs...,47.193697547586,8.9258544082641,47.286933679264	200 OK 931ms	<a href="#">OpenLayers.js (Zeile 748)</a>



# CouchWFS (light)



## Positive Nebeneffekte

BoundingBox Requests

Etags Caching

## Negative Nebeneffekte

Redundante Abfrage

Geschwindigkeit

# CouchWFS (light)



Individuelle WFS URLs

Benutzermanagement per Datenbank (?)

CouchWFS light nicht  
100% standardkonform

Einfach zu implementieren

Einfach zu entfernen

SourceCode auf:  
<https://github.com/scubbx/couchwfs>