

Open-source web frontend mot en esri backend?

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 GEODATA

#foss4gno #geomatikk

ArcGIS Online

- GeoJSON

ArcGIS Server

- WMS
- WFS
- ArcGIS JSON!?

GeoJSON

```
{
  "type" : "FeatureCollection",
  "crs" :
  {
    "type" : "name",
    "properties" :
    {
      "name" : "EPSG:3857"
    }
  },
  "features" : [
    {
      "type" : "Feature",
      "geometry" :
      {
        "type" : "Point",
        "coordinates" : [
          1190994.28194441, 8383648.65125157
        ]
      },
      "properties" : {
        "TITLE" : "Punkt"
      }
    }
  ]
}
```

ArcGIS JSON

```
{
  "objectIdFieldName" : "OBJECTID",
  "globalIdFieldName" : "",
  "geometryType" : "esriGeometryPoint",
  "spatialReference" : {
    "wkid" : 102100,
    "latestWkid" : 3857
  },
  "fields" : [],
  "features" : [
    {
      "attributes" : {
        "TITLE" : "Punkt"
      },
      "geometry" :
      {
        "x" : 1190994.2819444125,
        "y" : 8383648.6512515731
      }
    },
    {
      "attributes" : {
        "TITLE" : "Punkt"
      }
    }
  ]
}
```

terraformer.io

<https://github.com/esri/terraformer>

- MIT lisens
- Javascript geo-verktøykasse
- ArcGIS JSON - GeoJSON - WKT (Well Known Text)

Terraformer.io: Konvertere mellom formater

```
//parse  ArcGIS geometri til GeoJSON
var point = Terraformer.ArcGIS.parse({
  "x":-122.6764,
  "y":45.5165,
  "spatialReference": {
    "wkid": 4326
  }
});
```



**KEEP
CALM
AND
CALL
MACGYVER**

Hva med tjenester?

- Geoprosessering
- Geokoding
- Reverse geokoding
- Feature Services

geoservices-js

<https://github.com/Esri/geoservices-js>

geoservices-js

```
var Geoservices = require('geoservices');
var client = new Geoservices();
client.geocode({ text: "Schweigaardsgate 28, 0191 OSLO" }, function (err, result) {
  if (err) {
    console.error("ERROR: " + err);
  } else {
    console.log("Resultat funnet her: " + result.locations[0].feature.properties.name);
    console.log("result.locations[0].feature.geometry.x);
  }
});
```

geoservices-js

```
var query_params = {
  f: 'json',
  returnGeometry: true,
  where: '1=1',
  outSR: '4326'
};

var fs = client.featureservice( params , function(err, data){
  fs.query( query_params, function( err, result ){
    if (err) {
      console.error("ERROR: " + err);
    } else {
      console.log("Features: ", result );
    }
  });
});
```

Klienttrijs

- XYZ
- Mapbox GL JS

Open Layers 3

- `ol.format.EsriJSON`
- `ol.source.TileArcGISRest`

Esri-leaflet

<https://github.com/Esri/esri-leaflet>

**er en Leaflet plugin
som også støtter esri-leaflet
plugins**

Esri-leaflet

- Fantastisk eksempelside med demoer
- Store brukergruppe og ivrige utviklere
- Norske tjenester kan kreve Proj4Leaflet-plugin

Esri-leaflet

```
L.esri.featureLayer({  
  url: 'https://services.arcgis.com/rOo16HdIMeOBI4Mb/arcgis/rest/se  
}).addTo(map);
```

Kilde: <https://github.com/patrickarlt/dev-summit-2015-esri-leaflet-with-leaflet-plugins>

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Oppsummering

- Mye kan løses med direkte REST-kall
- terraformer.io for konvertering av formater
- [geoservices-js](#)
- Open Layers 3
- Esri-leaflet

Illustrasjonsfoto @ <http://splitshire.com>