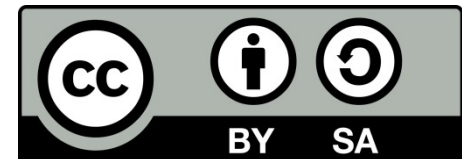




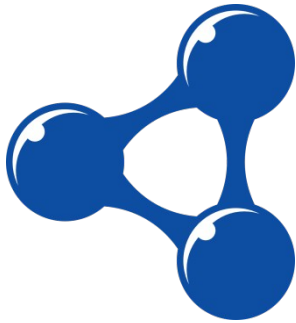
Linked Data Theatre

Slide deck



The challenge

We love our Linked Data!



Linked Data

But it doesn't look good

```
dbpedia:Amersfoort rdf:type dbo:PopulatedPlace;  
  rdf:type dbo:City;  
  rdf:type dbo:Place;  
  rdf:type dbo:Settlement;  
  dbp:establishedDate "1259";  
  dbp:north n1:Bunschoten;  
  dbp:northwest n1:Baarn;  
  rdfs:label "Amersfoort"@nl;  
  geo:geometry "POINT(5.3833332061768 52.150001525879)";  
  dbo:areaCode "033";  
.
```

Turtle representation

The Linked Data Theatre

- Responsive UI based on Bootstrap;
- Rich user interface, using jQuery, D3.js and Leaflet.js
- Zero-coding: configuration is 100% Linked Data;
- Multi-channel: PC, smartphone and tablet support;
- Multi-format: html, xml, json, pdf, svg, etc, etc
- Geospatial and graphical support;
- Uses standard web infrastructure, available for Docker;
- 100% Open source, available on Github, GNU license.

Requests

<http://dbpedia.org/resource/Amersfoort>

“Dbpedia, do you have some information about Amersfoort?”

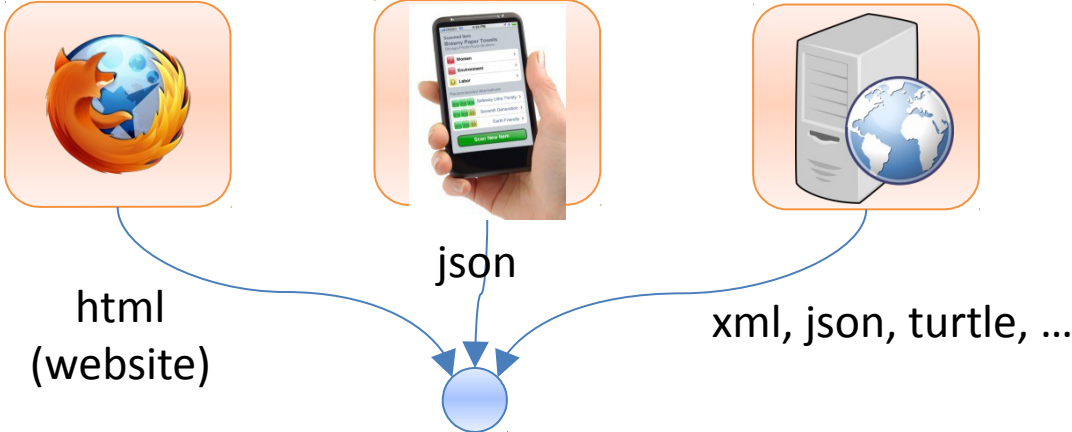
<http://mysite/resource?subject=http://dbpedia.org/resource/Amersfoort>

“Mysite, do you have some information about Amersfoort?”

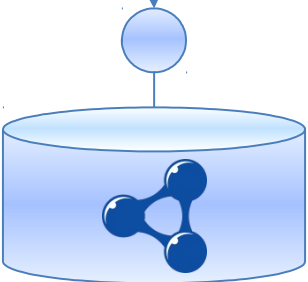
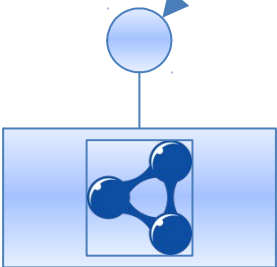
http://mysite/query/birthplaceOf?subject=http://dbpedia.org/resource/Piet_Mondrian

“Mysite, could you give me some information about the birthplace of Piet Mondrian?”

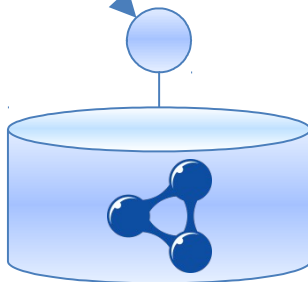
Architecture



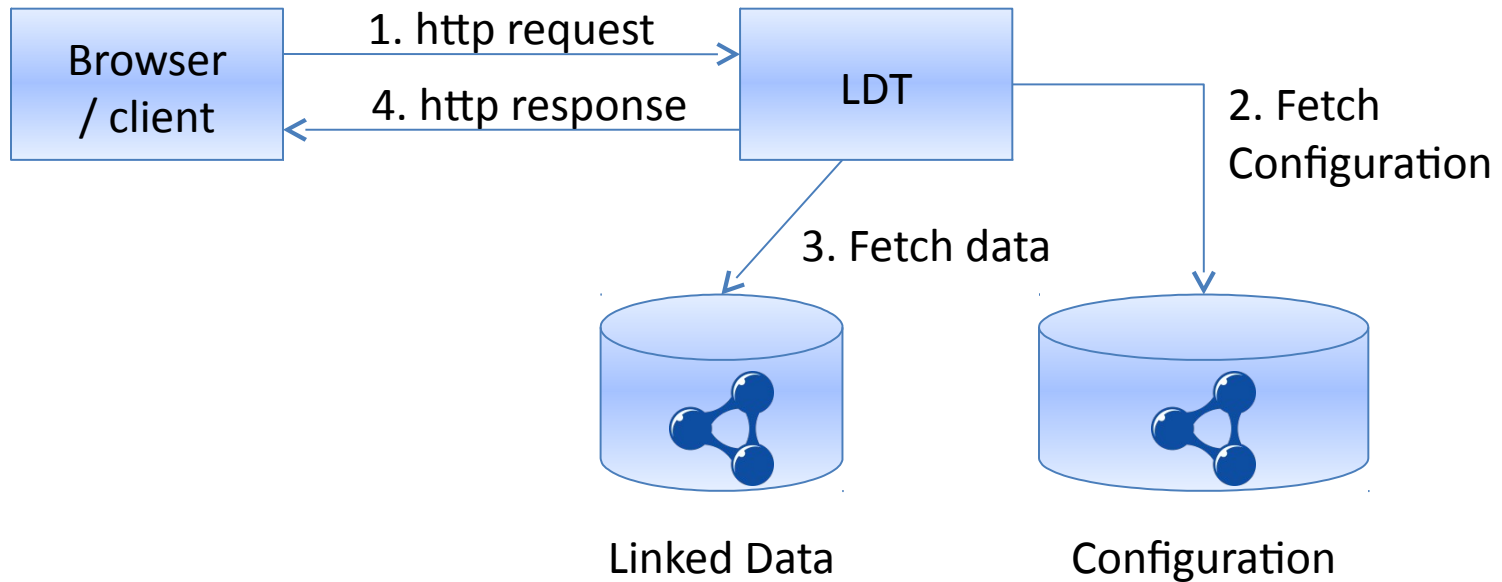
RDF(a) website



SPARQL endpoint



LDT overview



Two (basic) examples

```
@prefix stage: <http://demo.bp4mc2.org/stage>.
@prefix elmo: <http://bp4mc2.org/elmo/def#>.
stage:someList a elmo:Representation;
  elmo:url-pattern "/query/places$";
  elmo:query '''
    prefix dbo: <http://dbpedia.org/ontology/>
    select place place_label elevation
    where {
      ?place a dbo:City.
      ?place rdfs:label ?place_label.
      ?place dbo:elevation ?elevation.
    }
  '''
```

```
@prefix stage: <http://demo.bp4mc2.org/stage>.
@prefix elmo: <http://bp4mc2.org/elmo/def#>.
stage:Place a elmo:Representation;
  elmo:applies-to [rdf:type dbo:City];
  elmo:query '''
    construct {
      <@SUBJECT@> ?pred ?obj.
      ?obj rdfs:label ?objlabel
    }
    where {
      <@SUBJECT@> ?pred ?obj.
      OPTIONAL {?obj rdfs:label ?objlabel}
    }
  '''
```

Toon rijen

Zoeken:

elevation	place
1880	Durango (stad)
1881	Walsenburg
1885	Harar
1892	Kunming
1896	Moriarty (New Mexico)
1900	San Miguel de Allende
1901	South Lake Tahoe
1906	Stanley (Idaho)
1920	Morelia (Mexico)
1922	Greenhorn (Oregon)

1 tot 10 van 100 resultaten

Vorige [1](#) [2](#) [3](#) [4](#) [5](#) ... [10](#) Volgende

[Excel](#)

Lhasa

type	nederzetting stad nederzetting stad bebouwde omgeving plaats
wikiPageID	45533592
wikiPageRevisionID	683767952
sameAs	Lhasa
areaCode	891
areaTotalKm	29274
areaUrbanKm	53
elevationM	4200

Site, stage and backstage

A Theatre (site)



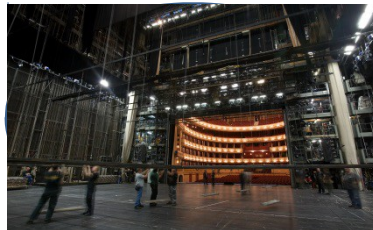
<http://demo.bp4mc2.org>

Mainstage &
second stage



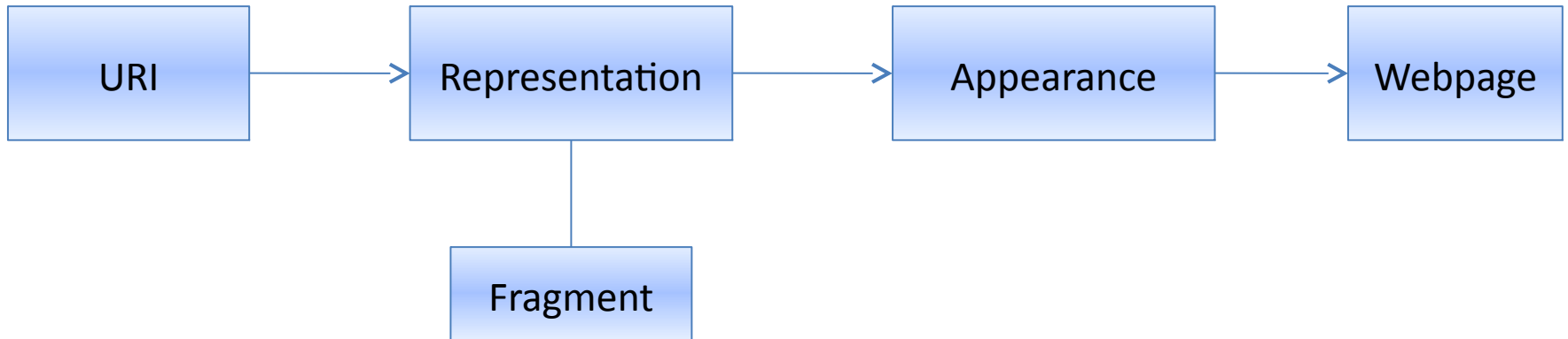
<http://demo.bp4mc2.org>
<http://demo.bp4mc2.org/secondStage>

Backstage



<http://demo.bp4mc2.org/backstage>

Configuration overview



Content appearance

A content appearance is used to represent the result of a CONSTRUCT-query. The resulting triples are displayed using a two-column table per unique subject. The first column contains the property-label, the second column the object-value.

Amersfoort	
label	Amersfoort
subject	http://dbpedia.org/resource/Category:Amersfoort http://dbpedia.org/resource/Category:Populated_places_in_Utrecht_(province) http://dbpedia.org/resource/Category:Olympic_modern_pentathlon_venues http://dbpedia.org/resource/Category:Cities_in_the_Netherlands http://dbpedia.org/resource/Category:1928_Summer_Olympic_venues
lat	52.15
long	5.38333
homepage	http://www.amersfoort.nl
populationDonym	Amersfoorter
settlementType	City and Municipality
abstract	Amersfoort [aː.mɛrs.ˌfʊːrt] is a municipality and the second largest city of the province of Utrecht in central Netherlands. The city is growing quickly but has a well-preserved and protected medieval centre. Amersfoort is one of the largest railway junctions in the country, because of its location on two of the Netherlands' main east-west and north-south rail lines. The city celebrated its 750th birthday in 2009.
isPrimaryTopicOf	http://en.wikipedia.org/wiki/Amersfoort

Table appearance

A table appearance is used to represent the result of a SELECT-query. The resulting rows are displayed in paged table. Every variable is displayed as a column.

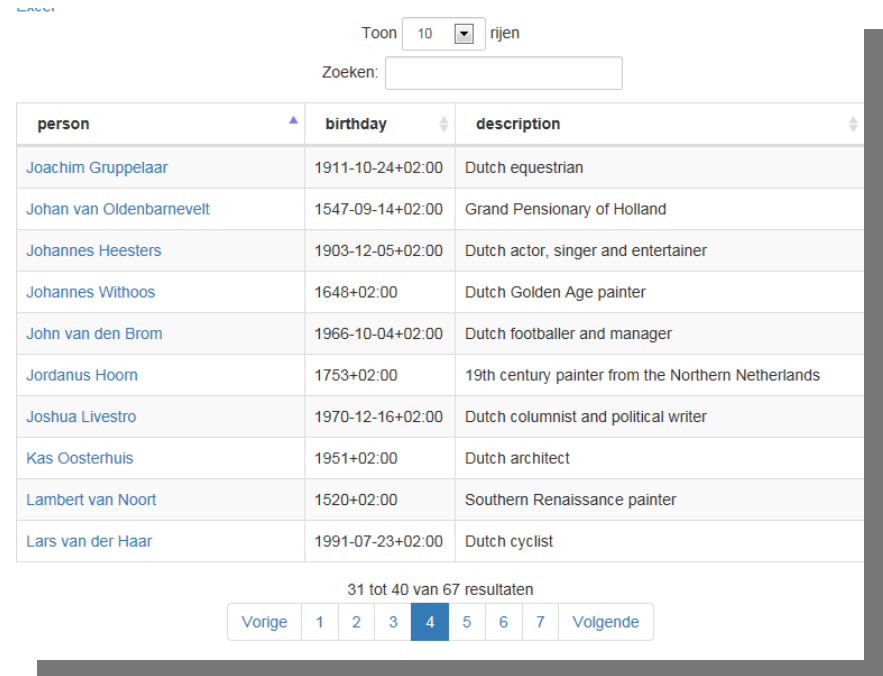


Table appearance showing search results for Dutch people. The table is paged, displaying 10 rows per page. The current page shows results 31 to 40 of 67 results.

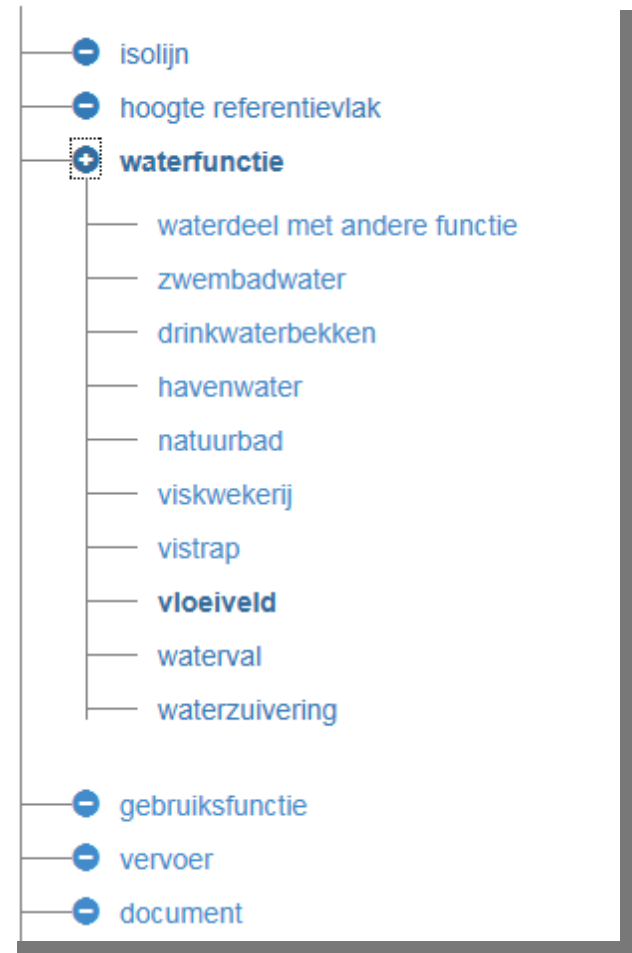
person	birthday	description
Joachim Gruppelaar	1911-10-24+02:00	Dutch equestrian
Johan van Oldenbarnevelt	1547-09-14+02:00	Grand Pensionary of Holland
Johannes Heesters	1903-12-05+02:00	Dutch actor, singer and entertainer
Johannes Withoos	1648+02:00	Dutch Golden Age painter
John van den Brom	1966-10-04+02:00	Dutch footballer and manager
Jordanus Hoom	1753+02:00	19th century painter from the Northern Netherlands
Joshua Livestro	1970-12-16+02:00	Dutch columnist and political writer
Kas Oosterhuis	1951+02:00	Dutch architect
Lambert van Noort	1520+02:00	Southern Renaissance painter
Lars van der Haar	1991-07-23+02:00	Dutch cyclist

31 tot 40 van 67 resultaten

Vorige 1 2 3 4 5 6 7 Volgende

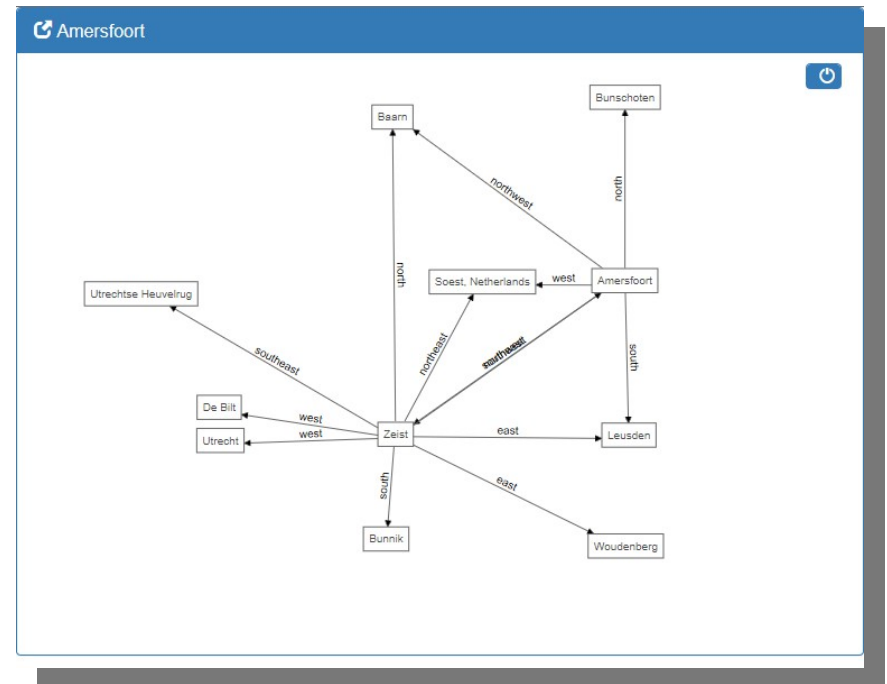
Tree Appearance

- A tree appearance can be used to create a tree of resources, using the link between resources (from a CONSTRUCT query), for example a taxonomy of concepts.



Graph appearance

The graph appearance creates a graphical representation of the linked data, using rectangles for items and arrows for the relations between the items. Users can expand the graph by selecting an item. All relations to and from that item will appear.



Geo appearance

- The geo appearance shows a map of the world, including reference points from the query result.

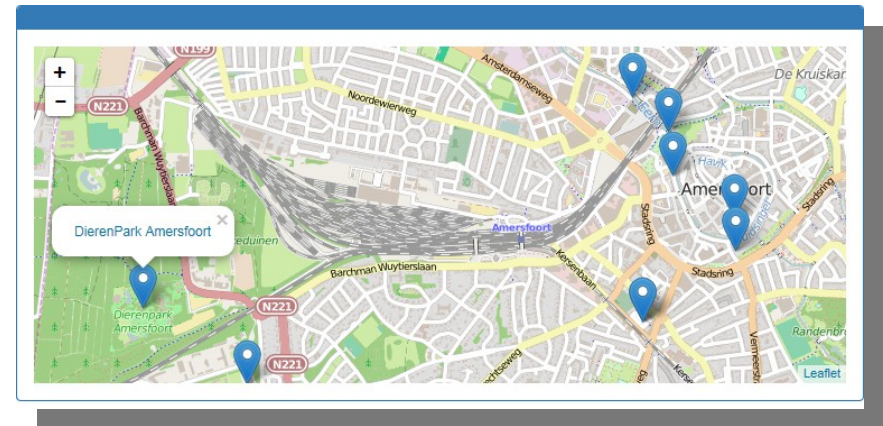
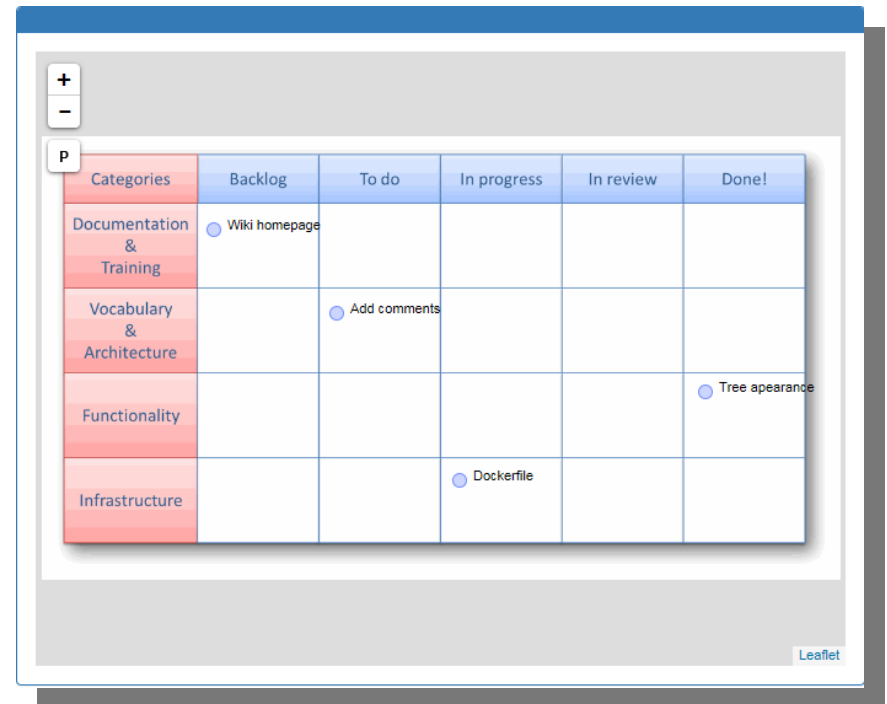


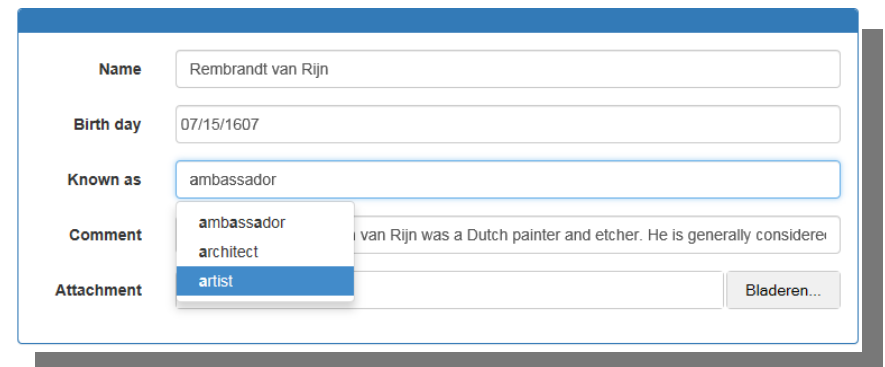
Image appearance

- The image appearance uses a custom image as the background instead of a map of the world.
- It can also be used to edit the locations of polygons
- Export to PDF and PNG is also supported



Form appearance

- A form appearance is used to give a user the opportunity to enter data. Support is available for various data types, such as date pickers, text input, file upload and selecting a value from a list.



A screenshot of a web form with a blue header bar. The form contains several input fields and a dropdown menu. The fields are labeled as follows:

- Name:** Rembrandt van Rijn
- Birth day:** 07/15/1607
- Known as:** ambassador
- Comment:** van Rijn was a Dutch painter and etcher. He is generally considere
- Attachment:** Bladeren...

A dropdown menu is open over the 'Comment' field, showing three options: 'ambassador', 'architect', and 'artist'. The 'artist' option is currently selected and highlighted in blue.

Text Appearance

For displaying “regular” documents, a text appearance is available.

Wet van 4 juni 1992, houdende algemene regels van bestuursrecht (Algemene wet bestuursrecht)

Hoofdstuk 1. Inleidende bepalingen

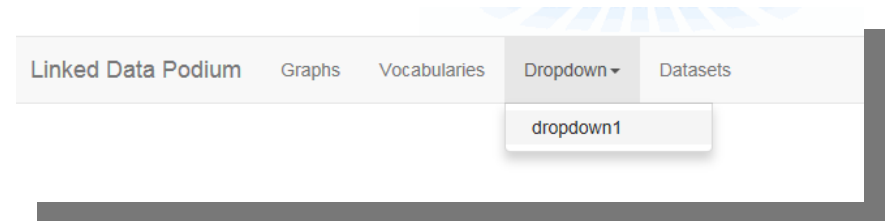
Titel 1.1. Definities en reikwijdte

Artikel 1:1

- 1 Onder bestuursorgaan wordt verstaan:
 - a. een orgaan van een rechtspersoon die krachtens publiekrecht is ingesteld, of
 - b. een ander persoon of college, met enig openbaar gezag bekleed.
- 2 De volgende organen, personen en colleges worden niet als bestuursorgaan aangemerkt:
 - a. de wetgevende macht;
 - b. de kamers en de verenigde vergadering der Staten-Generaal;
 - c. onafhankelijke, bij de wet ingestelde organen die met rechtspraak zijn belast, alsmede de Raad voor de rechtspraak en het College van afgevaardigden;
 - d. de Raad van State en zijn afdelingen;
 - e. de Algemene Rekenkamer;
 - f. de Nationale ombudsman en de substituut-ombudsmannen als bedoeld in [artikel 9, eerste lid, van de Wet Nationale ombudsman](#), en ombudsmannen en ombudscommissies als bedoeld in [artikel 9:17, onderdeel b](#);
 - g. de voorzitters, leden, griffiers en secretarissen van de in de onderdelen b tot en met f bedoelde organen, de procureur-generaal, de plaatsvervangend procureur-generaal en de advocaten-generaal bij de Hoge Raad, de besturen van de in onderdeel c bedoelde organen alsmede de voorzitters van die besturen, alsmede de commissies uit het midden van de in de onderdelen b tot en met f bedoelde organen;
 - h. de commissie van toezicht betreffende de inlichtingen- en veiligheidsdiensten, bedoeld in [artikel 64 van de Wet op de inlichtingen- en veiligheidsdiensten 2002](#).
- 3 Een ingevolge het tweede lid uitgezonderd orgaan, persoon of college wordt wel als bestuursorgaan

Navbar appearance

A navbar appearance creates a navbar with drop down menus and menu-items.



Search appearance

A search appearance is normally used with a navbar appearance, and creates an appearance that contains a search entry-field, plus the functionality to retrieve search results from the entered search query.

