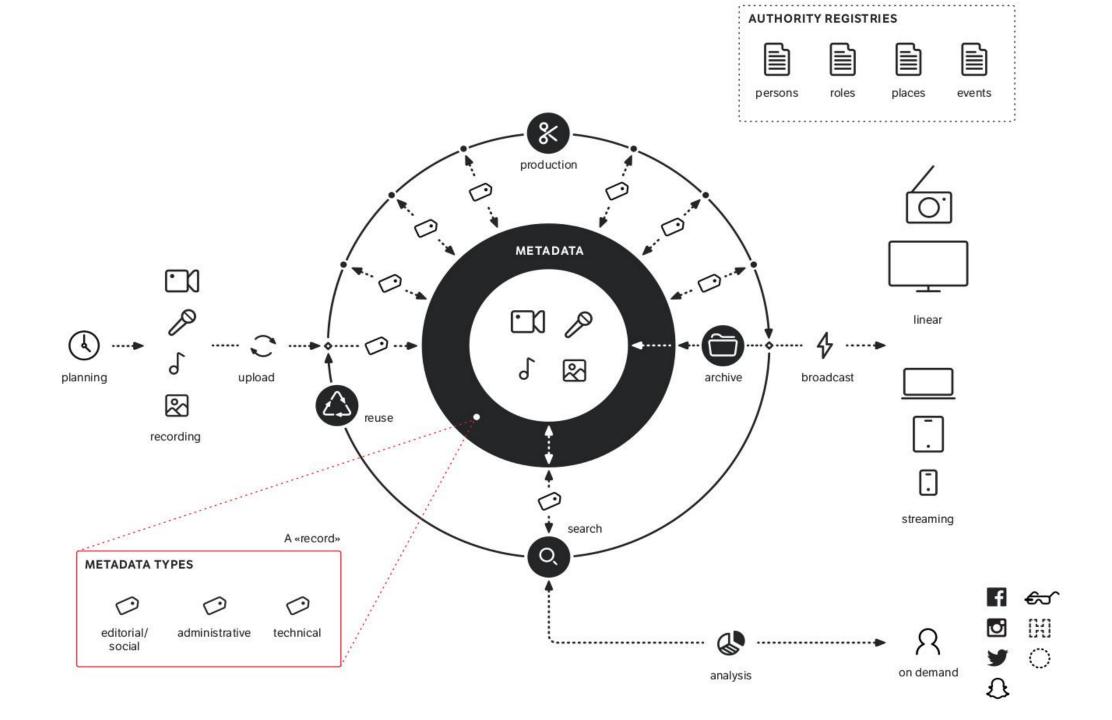


MK

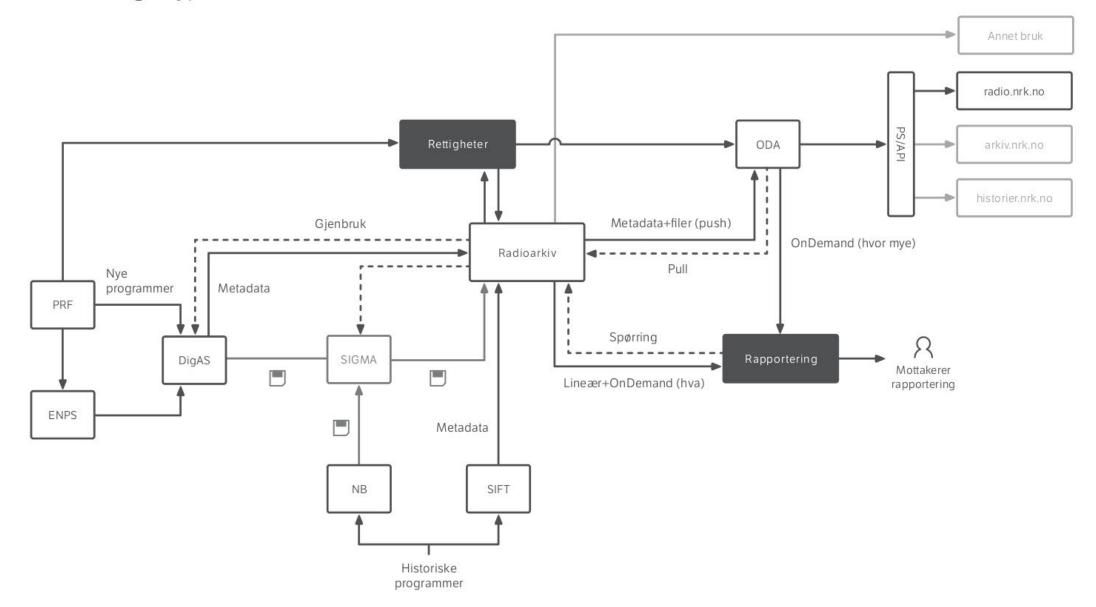
Robert Engels
NRK
ORIGO

ORIGO enterprise architecture group Project leader Metadatabank / Archive

> robert.engels@nrk.no +47-99544481



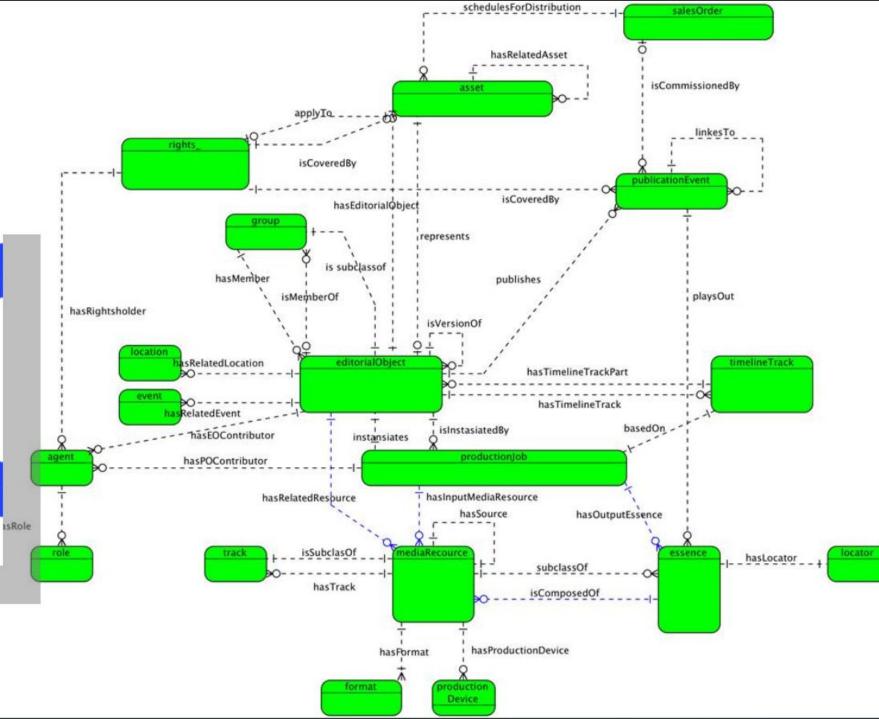
Publiseringsløypa radio

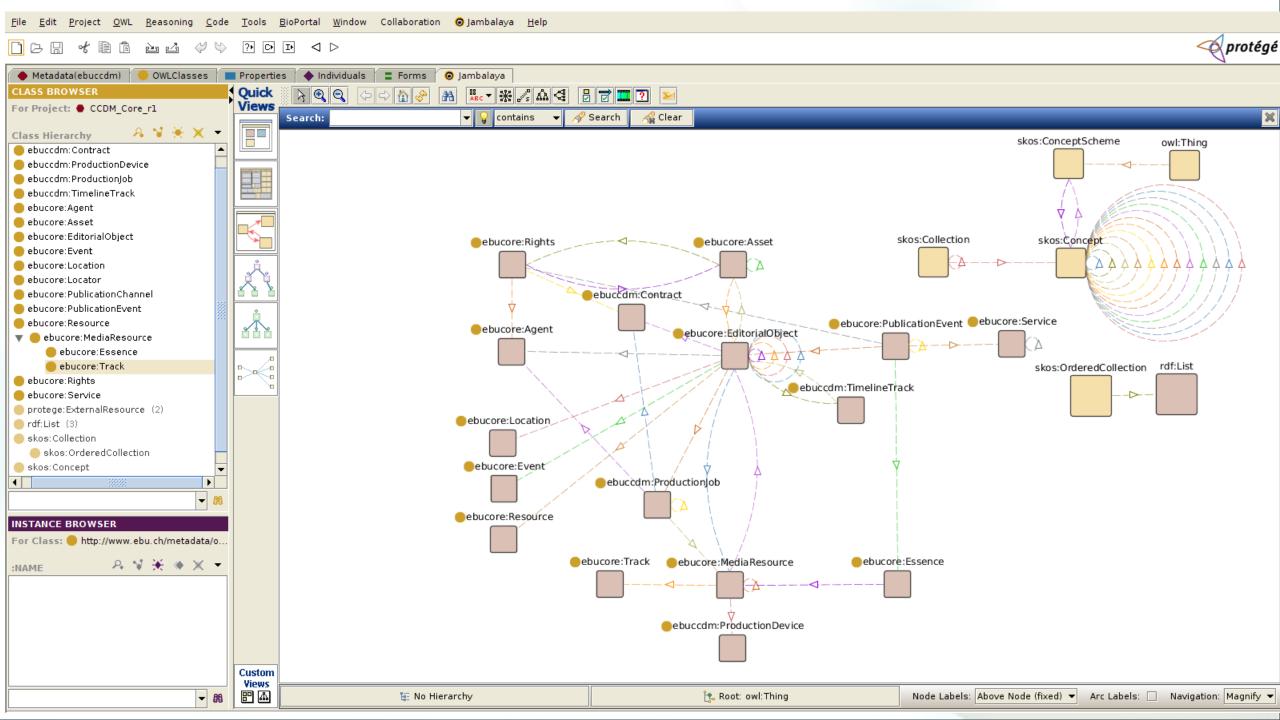




EBUCore EBU CCDM



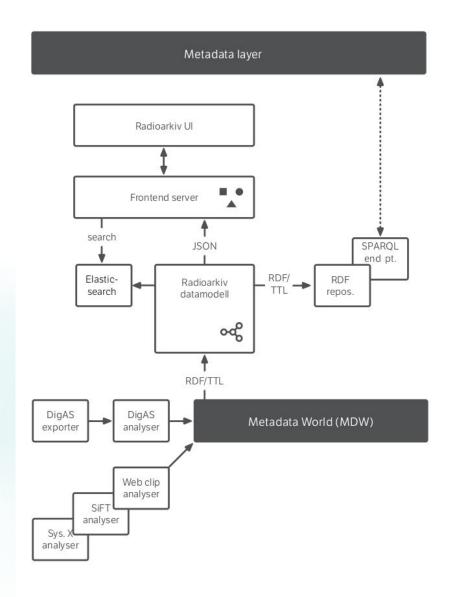




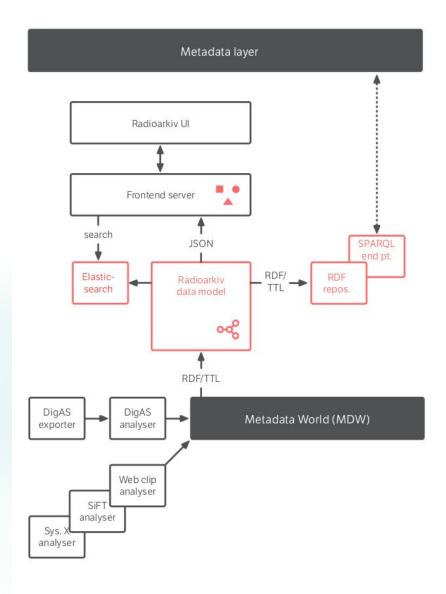
Topic_EO Like the calendar in ENPS includes EO_group_implementation hasMember-- hasMember Radio_Story_EO hasMember hasRelatedAsset Web_Story_EO asset Overall description/concept Radio not further includes expanded in the NRK Super example EO_Group_Brand linkesTo is commissioned by publicationEvent EO_Group_Series hasRelatedAsset hasMember asset EO_Group_Seaso actor hasMember Programme_EO Version_Programme_EO isVersionOf location includes -\ EO-Group_extraMaterial isInstansiatedBy mediaResource hasSubJobs Ekstra materiale - tilgjengelig Bakgrunnsmateriale Manus, tekstefil, grafikk o.l. basedOn productionJob hasRelatedAsset hasOutputEssence asset hasTimelineTrackPart format essence hasLocator hasInputMediaResource hasSource locator location mediaResource Et innslag kan timelineTrack også ha en hasFormat timeline I hasLocator hasRelatedAsset mediaResource asset i hasLocator locator

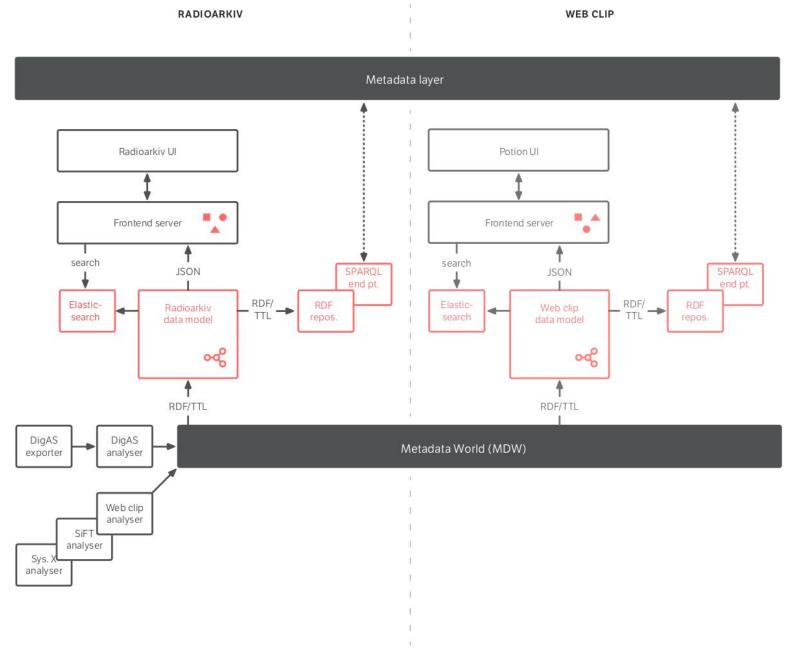
NK

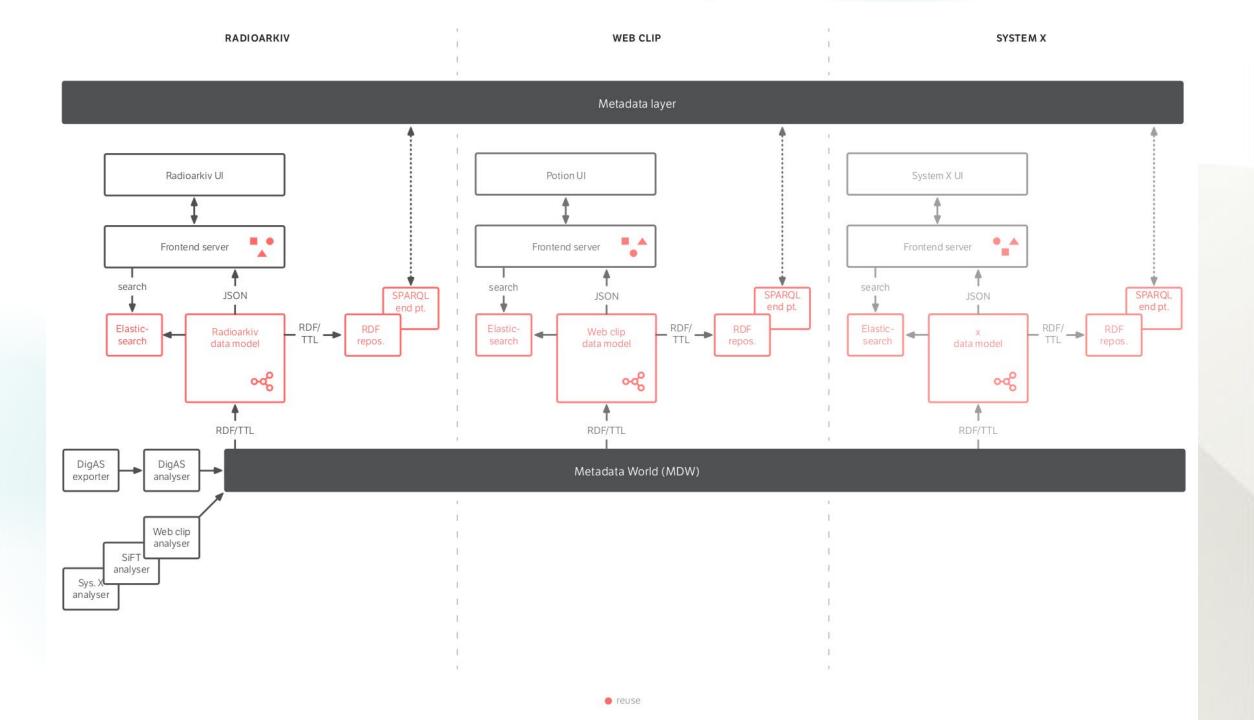
RADIOARKIV

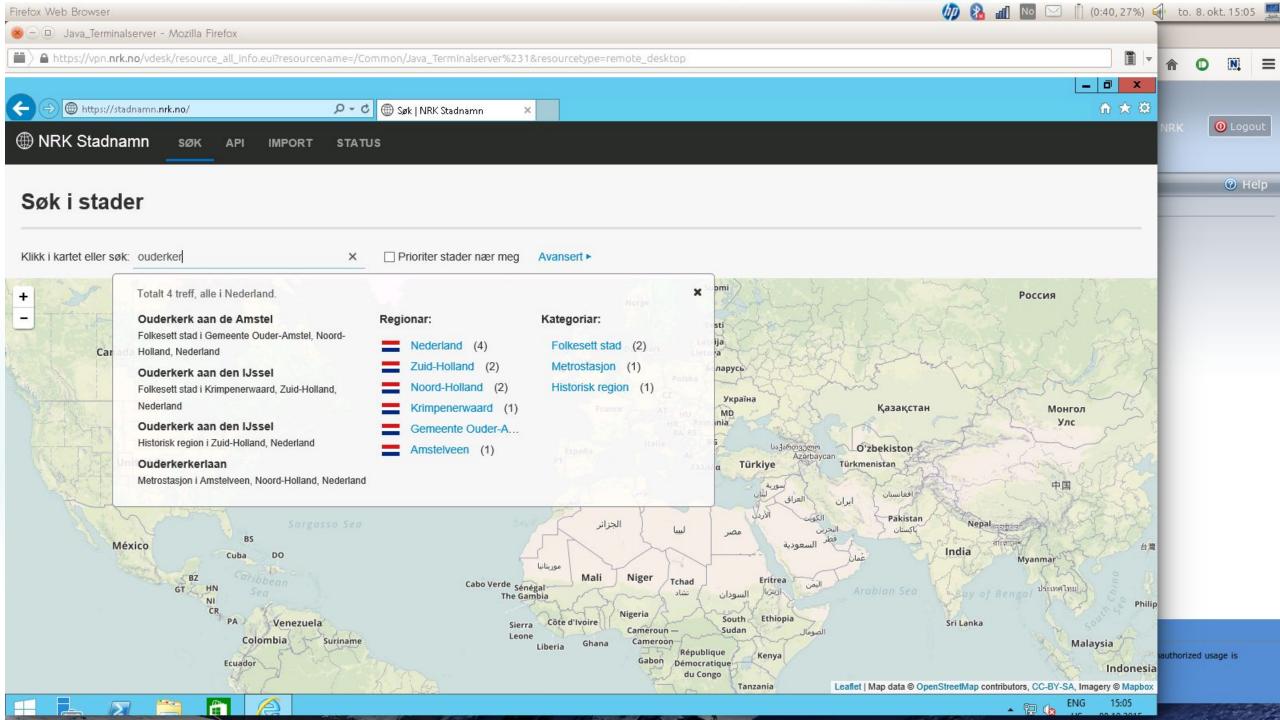


RADIOARKIV







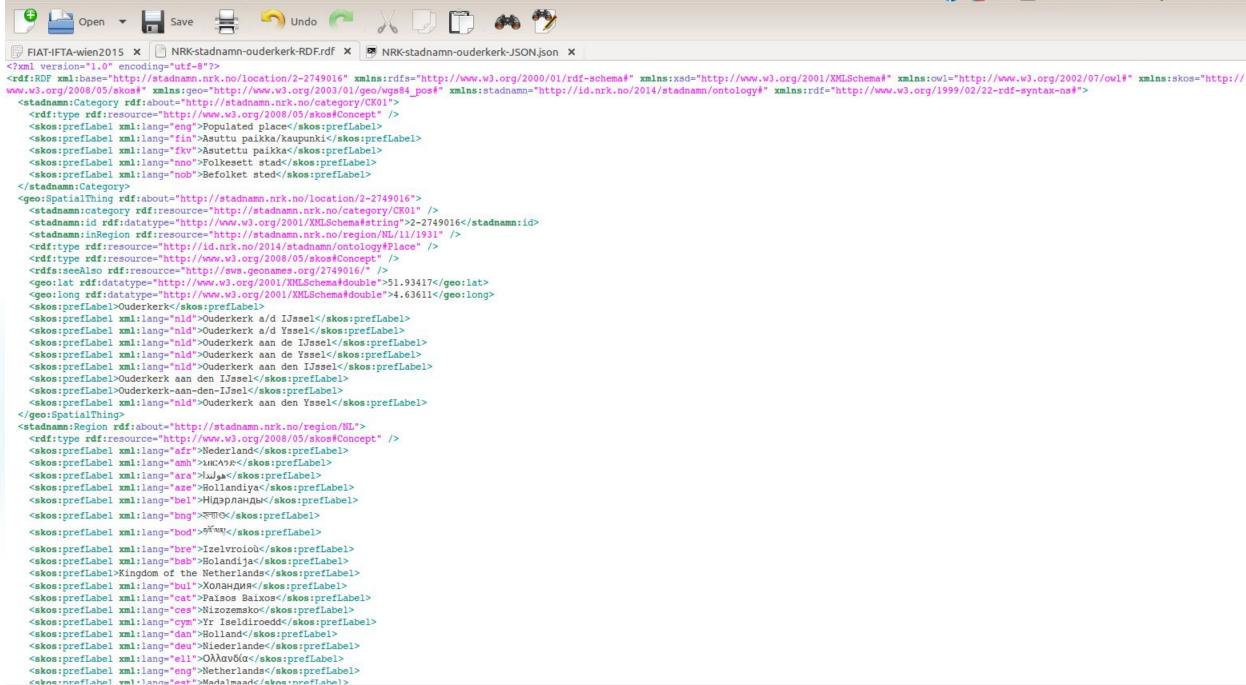






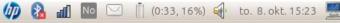
M № № (0:22, 19%) → to. 8. okt. 15:19

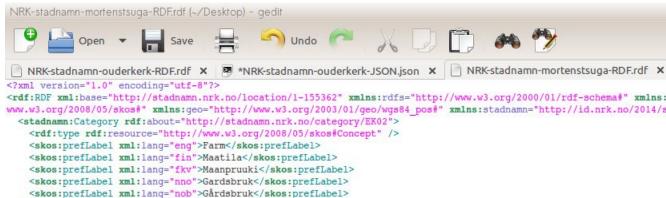












<rdfs:seeAlso rdf:resource="http://sws.geonames.org/9425651/" />

<skos:prefLabel xml:lang="nor">Mortensstuqua</skos:prefLabel> <skos:prefLabel xml:lang="nor">Mortenstugua</skos:prefLabel>

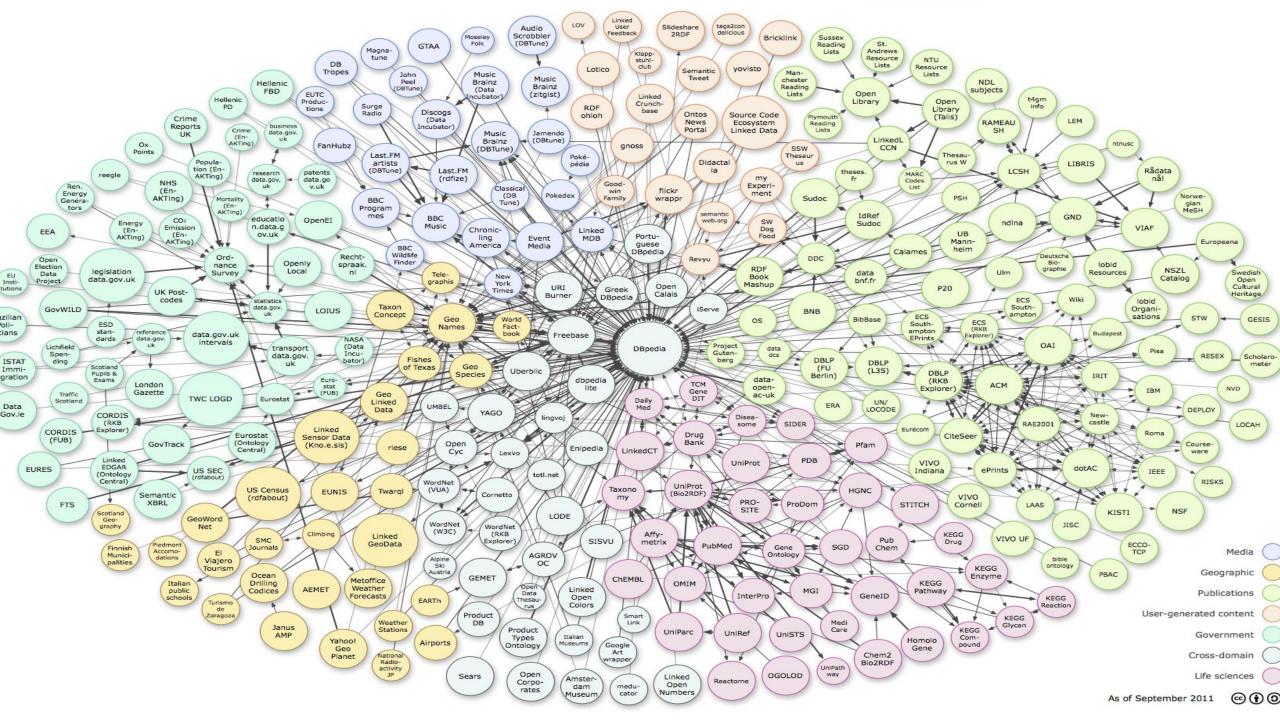
<stadnamn:Region rdf:about="http://stadnamn.nrk.no/region/NO">

<skos:prefLabel>Mortensstugua</skos:prefLabel>

<skos:prefLabel>Kingdom of Norway</skos:prefLabel> <skos:prefLabel xml:lang="afr">Noorweë</skos:prefLabel> <skos:prefLabel xml:lanq="amh">qCq</skos:prefLabel> <skos:prefLabel xml:lang="ara">النرويح <skos:prefLabel xml:lang="aze">Norvec</skos:prefLabel> <skos:prefLabel xml:lang="bel">Hapserig</skos:prefLabel> <skos:prefLabel xml:lang="bng">ন্বিওয়ে</skos:prefLabel> <skos:prefLabel xml:lang="bod">******|</skos:prefLabel> <skos:prefLabel xml:lang="bre">Norvegia</skos:prefLabel> <skos:prefLabel xml:lang="bsb">Norveška</skos:prefLabel> <skos:prefLabel xml:lang="bul">Hopseгия</skos:prefLabel> <skos:prefLabel xml:lang="cat">Noruega</skos:prefLabel> <skos:prefLabel xml:lang="ces">Norsko</skos:prefLabel> <skos:prefLabel xml:lang="cos">Norvegia</skos:prefLabel> <skos:prefLabel xml:lang="cym">Norwy</skos:prefLabel> <skos:prefLabel xml:lang="dan">Norge</skos:prefLabel> <skos:prefLabel xml:lang="deu">Norwegen</skos:prefLabel> <skos:prefLabel xml:lang="div">;;</skos:prefLabel> <skos:prefLabel xml:lang="ell">Nopβηγία</skos:prefLabel> <skos:prefLabel xml:lang="eng">Norway</skos:prefLabel> <skos:prefLabel xml:lang="est">Norra</skos:prefLabel> <skos:prefLabel xml:lang="eus">Norvegia</skos:prefLabel> <skos:nrefLahel yml:lang="fao">Noreg</skos:nrefLahel>

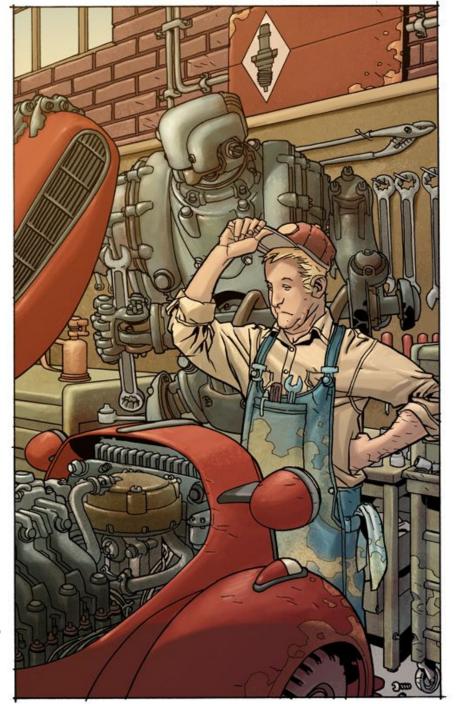
</stadnamn:Category>

</geo:SpatialThing>





Semantic Web Under the hood



with a little help from Ivan Herman's intro course to the semantic web

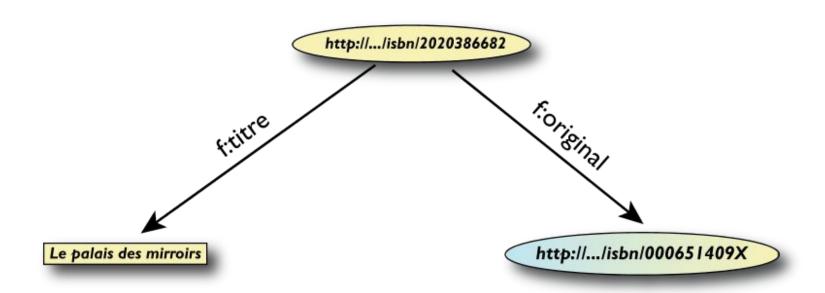
RDF triples (cont.)

- An RDF Triple (s,p,o) is such that:
 - "s", "p" are URI-s, ie, resources on the Web; "o" is a URI or a literal
 - "s", "p", and "o" stand for "subject", "property", and "object"
 - here is the complete triple:

```
(<http://...isbn...6682>, <http://.../original>, <http://...isbn...409X>)
```

• <u>RDF</u> is a general model for such triples (with machine readable formats like RDF/XML, Turtle, N3, RXR, ...)

A simple RDF example (in Turtle)



```
<http://.../isbn/2020386682>
   f:titre "Le palais des mirroirs"@fr ;
   f:original <http://.../isbn/000651409X> .
```

"Internal" nodes

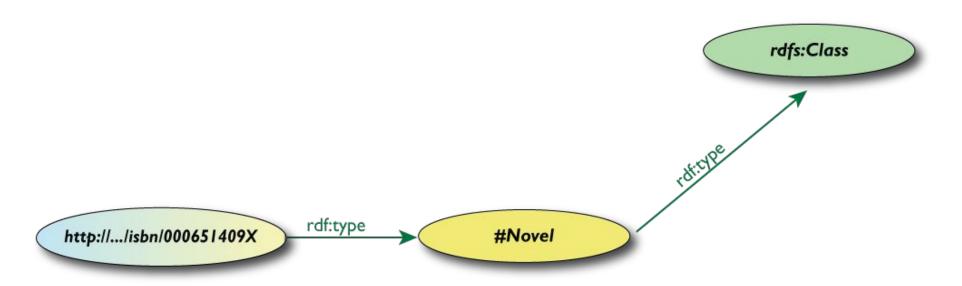
- Consider the following statement:
 - "the publisher is a «thing» that has a name and an address"
- nodes were identified with a URI. But...
- ...what is the URI of «thing»?
- Use the concept of blank nodes
 - » but be carefull when merging



Need for RDF schemas

- We need "extra knowledge", so let's:
 - define the terms we can use
 - what restrictions apply
 - what extra relationships are there?
- This is where RDF Schemas come in
 - officially: "RDF Vocabulary Description Language"; the term
 "Schema" is retained for historical reasons...

Classes, resources in RDF(S)



- RDFS defines the meaning of these terms
 - (these are all special URI-s, we just use the namespace abbreviation)

The rough structure of data integration

- 1.Map the various data onto an **abstract data** representation
 - -make the data independent of its internal representation...
- 2. Merge the resulting representations
 - 3. Start querying on the whole!
 - -queries not possible on the individual data sets

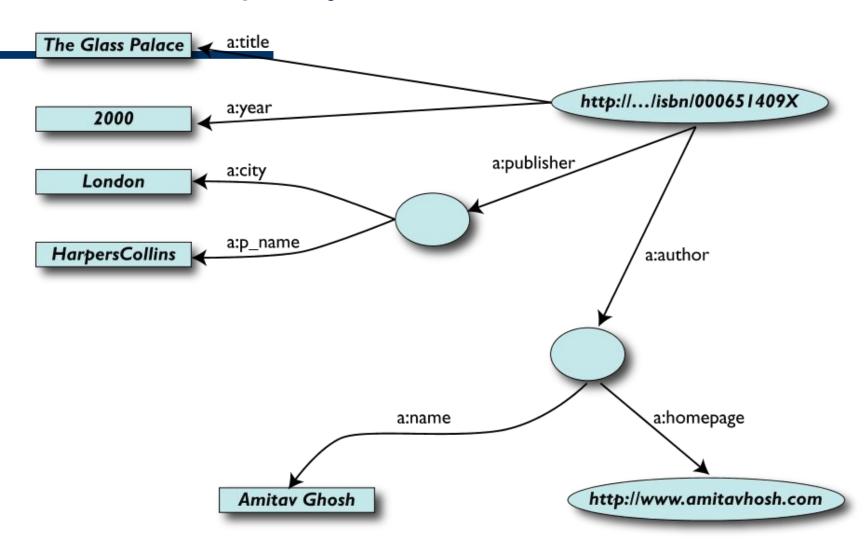
A <u>simplified</u> bookstore data (dataset "A")

KEYFIELD: ID	Author	Title	Publisher	Year
ISBN0-00-651409-X	id_xyz	The Glass Palace	id_qpr	2000

ID	Name	Home Page
id_xyz	Ghosh, Amitav	http://www.amitavghosh.com

ID	Publ. Name	City
id_qpr	Harpers Collins	London

1st: export your data as a set of *relations*



Another bookstore data (dataset "F")

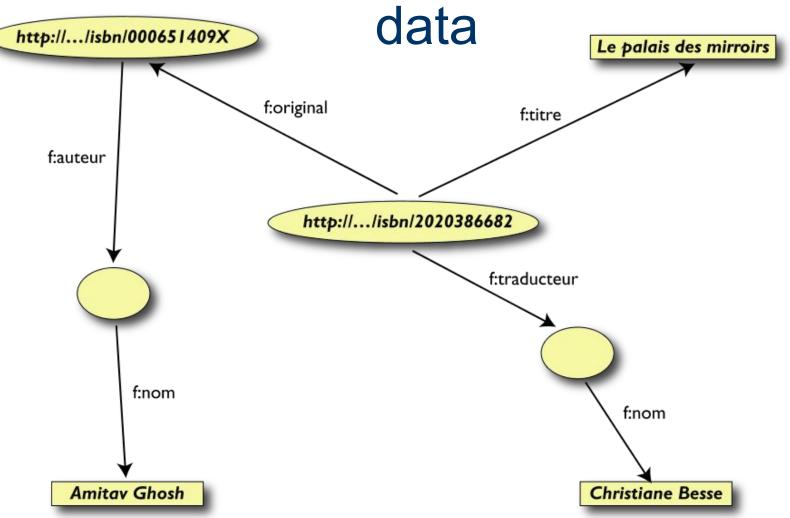
	Α	В	С	D	Е
1	ID	Titre	Auteur	Traducteur	Original
2	ISBN0 2020386682	Le Palais des miroirs	A7	A8	ISBN-0-00-651409-X
3			1		
4					
5	-				

Nom

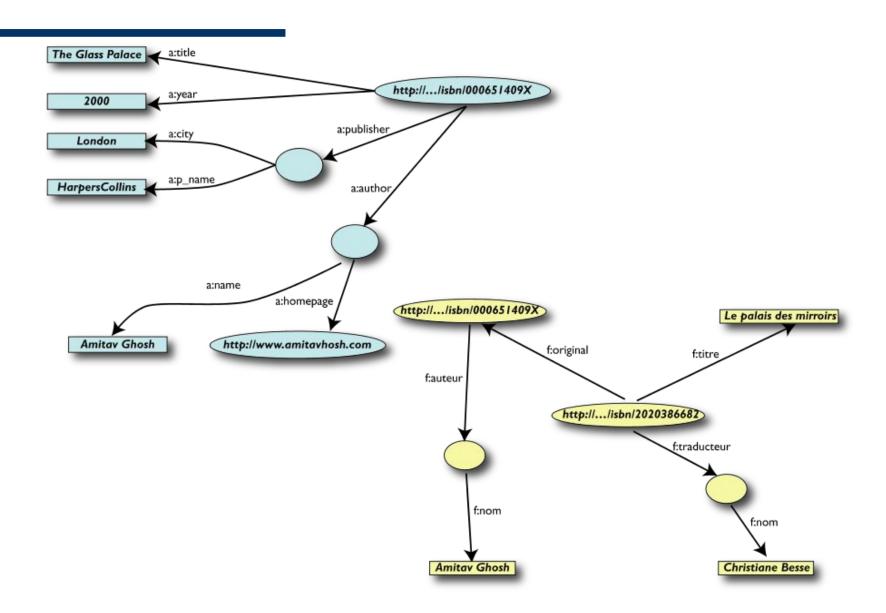
Ghosh, Amitav

8 Besse, Christianne

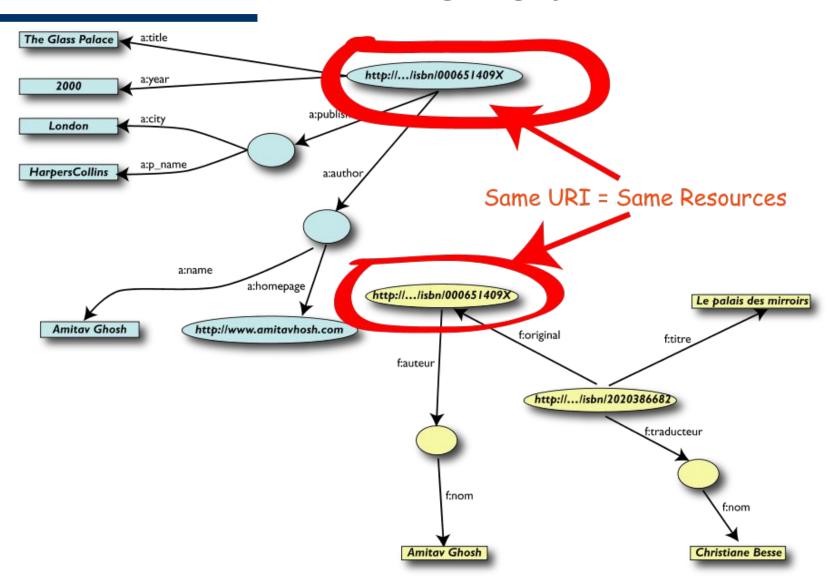
2nd: export your second set of



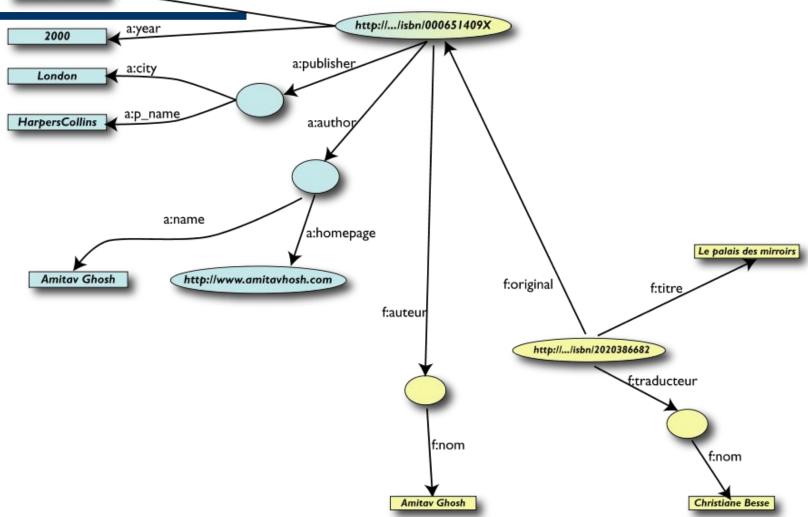
3rd: start merging your data



3rd: start merging your data

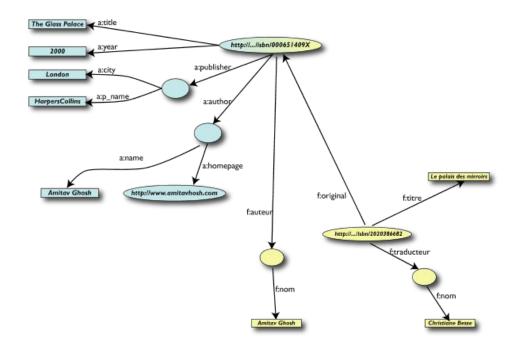


3rd: merge identical resources



Start making queries...

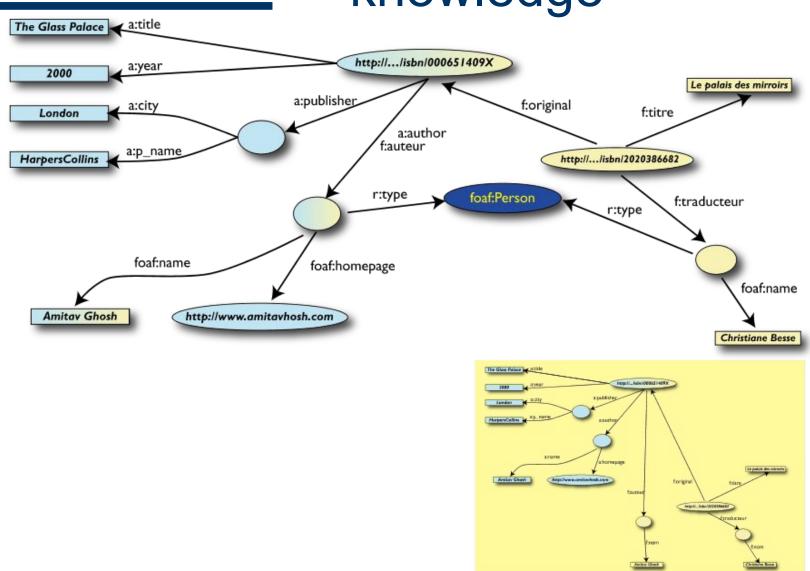
- User of data "F" can now ask queries like:
 - "give me the title of the original"
- This information is not in the dataset "F"....
- ...but can be retrieved by merging with dataset "A"!



However, more can be achieved...

- We "feel" that a:author and f:auteur should be the same
- But an automatic merge does not know that!
- Let us add some extra information to the merged data:
 - a:author same as f:auteur
 - both identify a "Person"
 - a term that a community may have already defined:
 - a "Person" is uniquely identified by his/her name and, say, homepage
 - it can be used as a "category" for certain type of resources

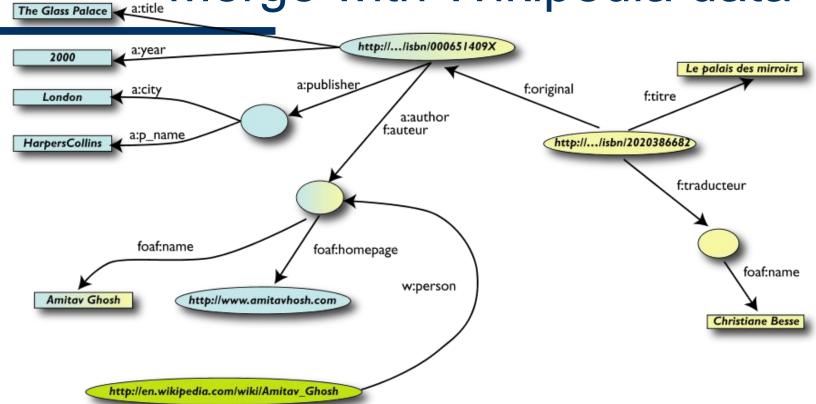
3rd revisited: use the extra knowledge



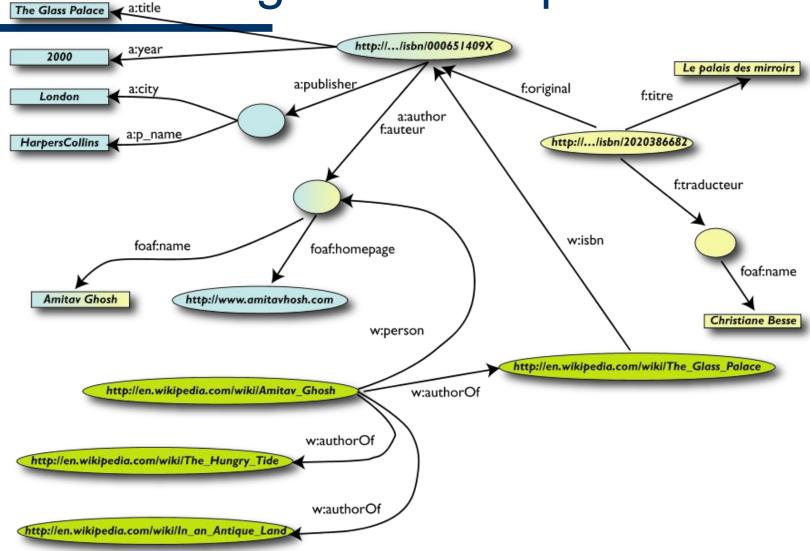
Start making richer queries!

- User of dataset "F" can now query:
- -"give me the home page of the original's author"
- •The information is not in datasets "F" or "A"...
 - •...but was made available by:
 - -merging datasets "A" and datasets "F" tritre Le pelas des morrors
 - -adding three simple extra statement as a specific continue of the continue of

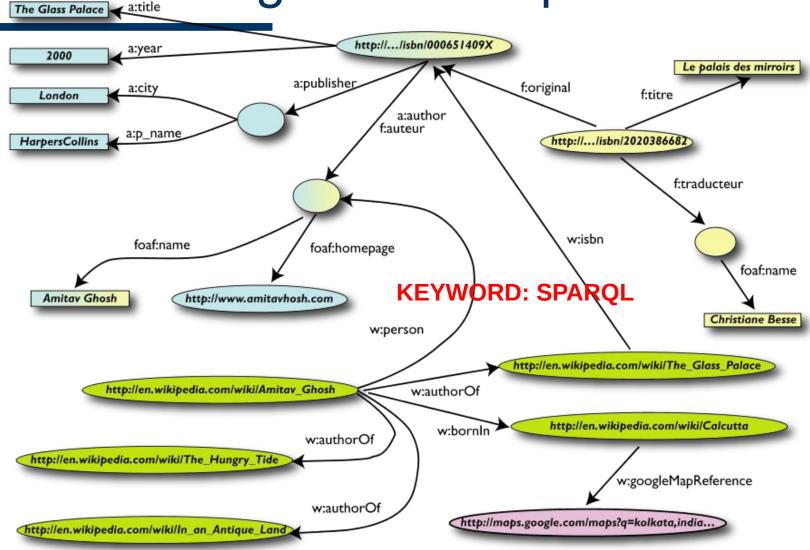
Merge with Wikipedia data



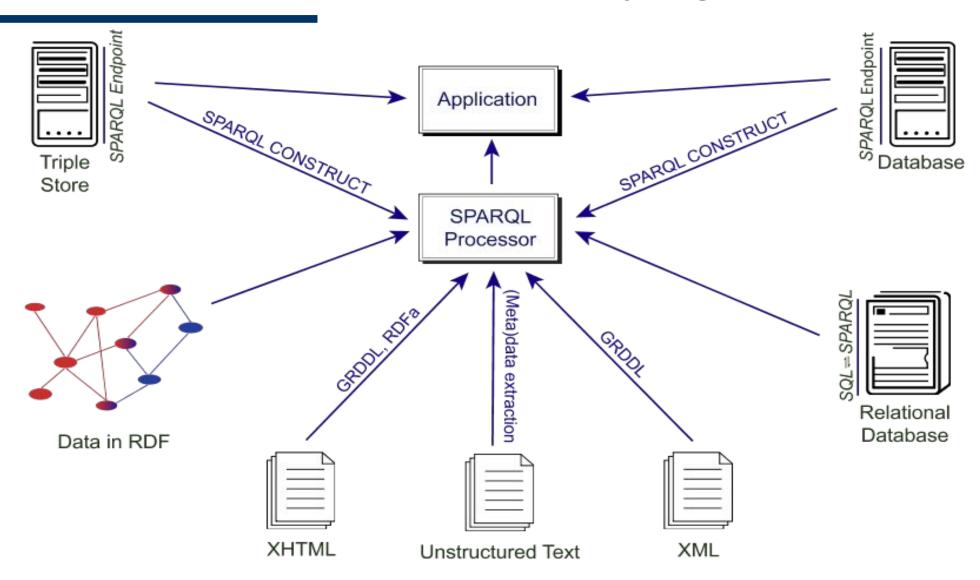
Merge with Wikipedia data



Merge with Wikipedia data



SPARQL as a unifying point



SPARQL

- SPARQL Protocol And RDF Query Language
- Documentation:

```
Queries http://www.w3.org/TR/rdf-sparql-query/
Language for submitting "graph pattern" queries

Protocol http://www.w3.org/TR/rdf-sparql-protocol/
Protocol to submit queries to a server ("endpoint")

Results http://www.w3.org/TR/rdf-sparql-XMLres/
XML format in which results are returned
```

• Try it out:

```
DBLP http://dblp.13s.de/d2r/snorql/
DBpedia http://dbpedia.org/sparql
DBtunes http://dbtune.org/musicbrainz/snorql/
```





http://10.50.219.36:8890/sparql

⊗ □ □ Virtuoso SPARO	L Query Editor - Google	Chrome		
☐ Virtuoso SPARQL Qu	e x			<u>a</u>
← → C 🖸 localho	st:8890/sparql			⊕ ☆ .
Virtuoso SPAR	QL Query Edit	or		
Default Data Set Nam	e (Graph IRI)		Ab	out Namespace Prefixes Inference rules
Query Text				
		a ?Concept} LIMIT 100		
(Security restrictions of this Results Format:	s server do not allow you t	o retrieve remote RDF data, see details.)		
Execution timeout:	0	milliseconds (values less than 1000 are igr	nored)	
Options:	Strict checking of	of void variables		
(The result can only be sen	nt back to browser, not say	ved on the server, see <u>details</u>)		
Run Query Reset				
	\	Copyright © 2016 OpenLink (rirtuoso version 07.20.3212 on Linux (x86_64-unknow)		

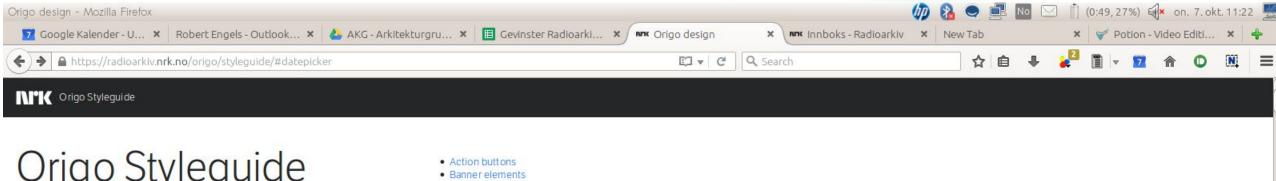


MK

Robert Engels
NRK
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> robert.engels@nrk.no +47-99544481



Origo Styleguide

Getting started

When you have read about the core principles underpinning the styleguide and the CSS implementation, you may want to check out the tutorial-style Getting started.

Core principles

The CSS is based on the principles behind OOCSS by Nicole Sullivan. It does not, however, use the OOCSS framework or any of its components. The following is an overview of the important principles that underly the implementation.

SEPARATE COMPONENTS AND LAYOUT

All layout concerns are handled by the layout system - individual components should not reimplement it. Components should focus strictly on adjusting positioning/spacing from the defaults made by the layout system, as well as the component "skinning" (backgrounds, borders, font adjustments and so on). This ensures that there is one authorative source for layout specification, enabling us to easily adjust if necessary, and keep centralized control over responsive layouts.

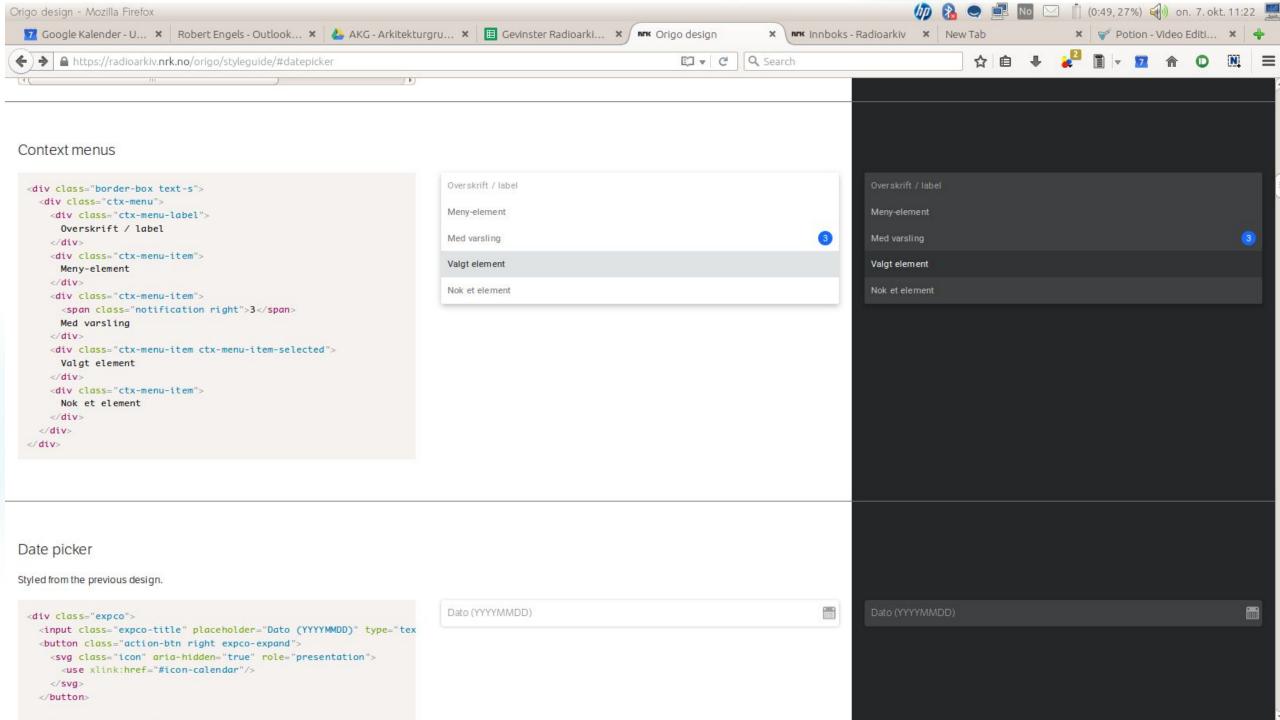
COMPONENTS SHOULD ALWAYS LOOK THE SAME

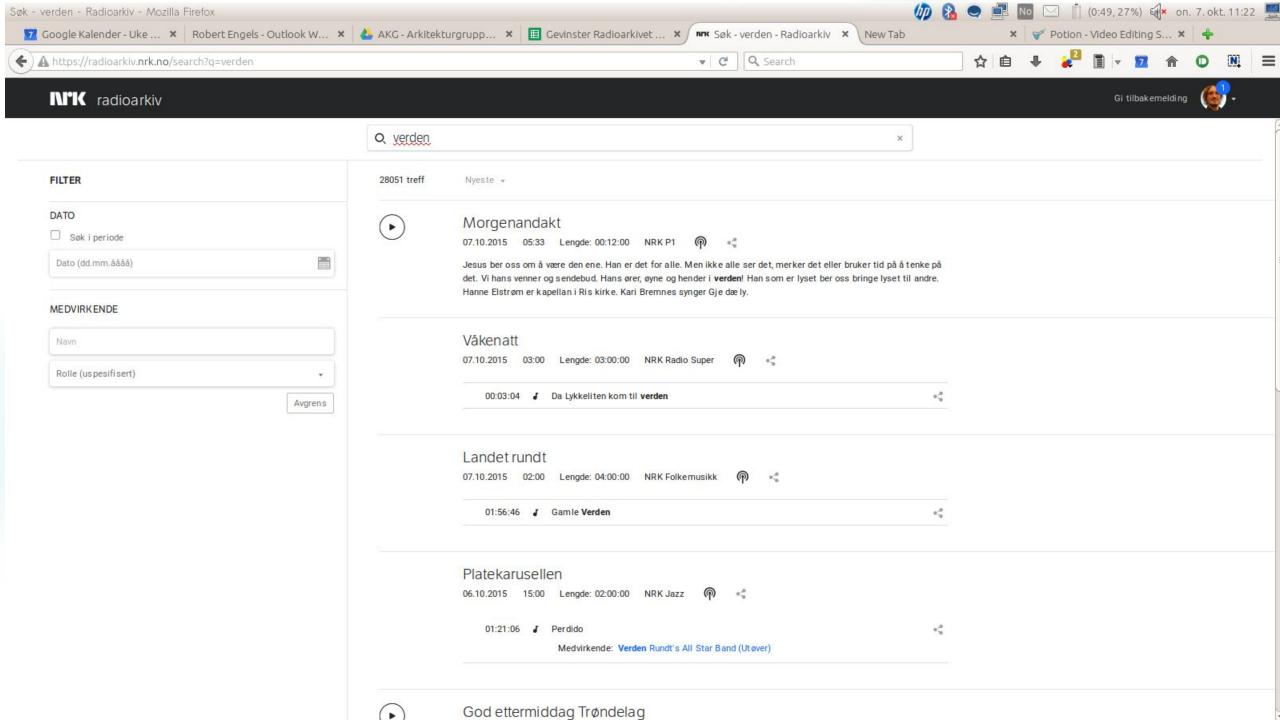
Any component should always look the same, regardless of its context. If you move a component from the left column to the right, it should still look the same. The layout details may give it different outer dimensions, but the internal skinning should not change. This ensures easily composable UIs and easy reuse of visual components.

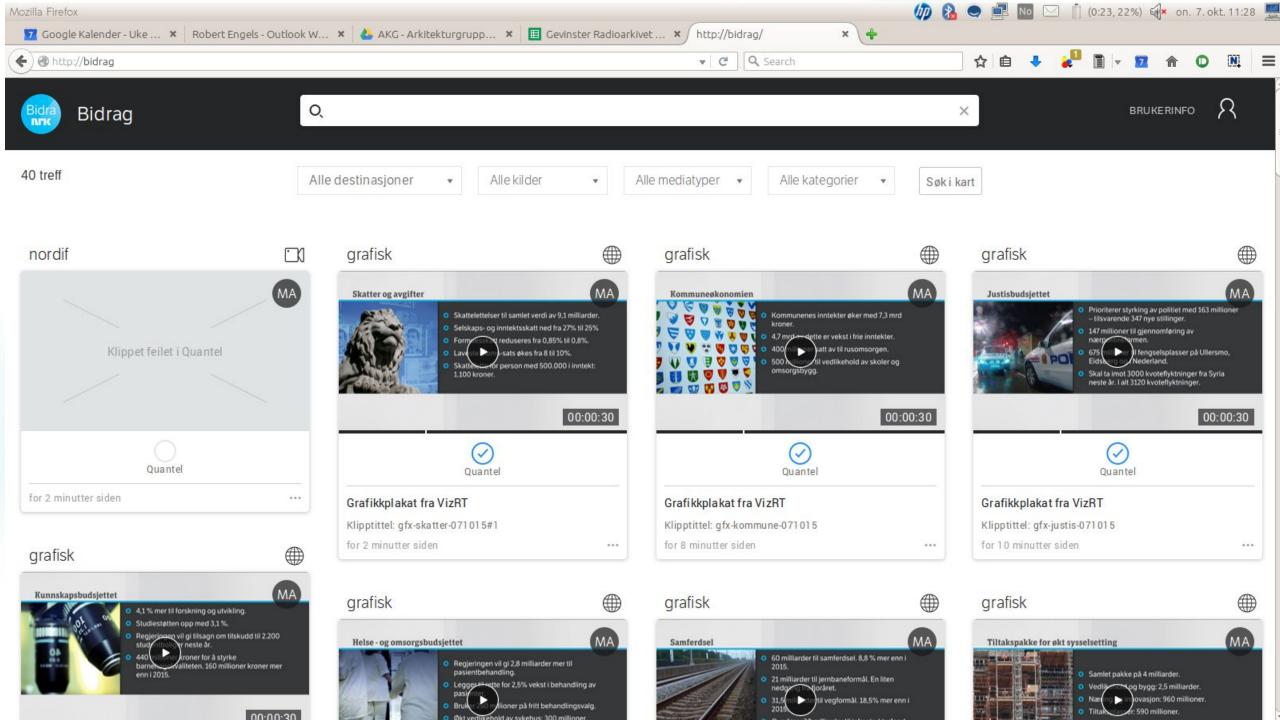
STYLE CLASSES, NOT ELEMENTS

Styling directly on elements prevents multiple presentations of the same elements without resorting to overriding styles. Overriding styles lead to CSS bloat and is highly discouraged. Overriding styles will also interfere with the previous principle, and may cause surprising results when moving components around. Styling directly on classes avoids this problem. There are only a few cases where styles are applied directly to

- · Big inputs
- · Body copy
- Buttons Colors
- Context menus
- · Date picker
- Expanding text areas
- Expco Expand/collapse boxes
- Forms
- · Grid layout
- Headings
- Icon layout Icons
- Index copy
- Layout and spacing
- Channel logos
- Material design input fields
- Media elements
- Notifications
- One-liners
- Overlays / Border boxes
- · Pills
- Progress bars
- Responsive grids
- · Responsive design
- · Round objects
- Switches
- Tables
- Tooltips
- Tweening icons
- Vertical sliders
- Glossary
- Typographic glossary









Detaljvisning for MUHH36000715AA

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Gult

Nytt på nytt

7:17

Sendt: 20.02.2015 kl 20:55 Opprettet: 20.05.2015 kl 13:54 Lengde: 00:30:08:21

MUHH36000715AA

Nytt på nytt (7:17 @ Nytt på nytt)



MEDVIRKENDE

Jon Almaas Programle der Knut Nærum Programleder Ingrid Gjessing Linhave Programle der Anne Lindboe (pr 7 knuts lag) Gjest Shahzad Rana (pr 7 Ingrids lag) Gjest

RETTIGHETER ©

Rettighetsnivå

Rettighetsnotat Nytt pånytt er etter en original ide fra Hat Trick production Ltd. All bruk fra programmet må klareres med redaksjonen/underholdningsavdelingen.

NRK Rettighetseier Kontaktperson Guri Skavlan

ANDRE METADATA

20/02/2015 20:55 Sendt Opprettet 20/05/2015 13:54 Endret 09/06/2015 15:28 NRK domene Arkiv Klipptype PROGRAM

PROGRAM

Programserie Episode Programkategori E00 Lett underholdning

PRODUKSJON

Hov edproducer Hilde Olsen

Hov edscript

Hege Winje

IK

Publikumsvisning

Metadata

Publiseringsvalg

Publikumsvisning

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Filtre

Beste treff

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Sendt: 31.01.1979 01:01 -

FBUA035978-AR-199305028





Skipsklokka

Alice og Fartein har sammen med tre dykkere prøvd å finne vraket av "Svanen". Skonnerten gikk på Hummersteinene for flere årtier siden. Men vraket er ikke der! Hvor kan det bære blitt av? En dag mø (...)

Endret: 09.01.2016 05:01 -TOGSTANS-060116W-OA





Skinnebrudd knekte togtrafikken

Folk venter på perongen på Ski stasjon - tog står stille ovenifra - arbeidere jobber med skinnegangen, kapper skinne så gnistene står, lemper unna skinnestykker - Busser kjører inn ved spor 19 på Oslo (...)

skinnebrudd tog reparasjon pendlere togtrafikk pendling buss for tog buss forsinkelser oslo's solbråtan oppegård skinnegang skinner solslyng

PB Marienlyst Skinnebrudd knekte togtrafikken

PB Oslo og Akershus Skinnebrudd knekte togtrafikken

Sendt: 21.12.2015 07:12 -

SKOGRAND-211215Y-HO





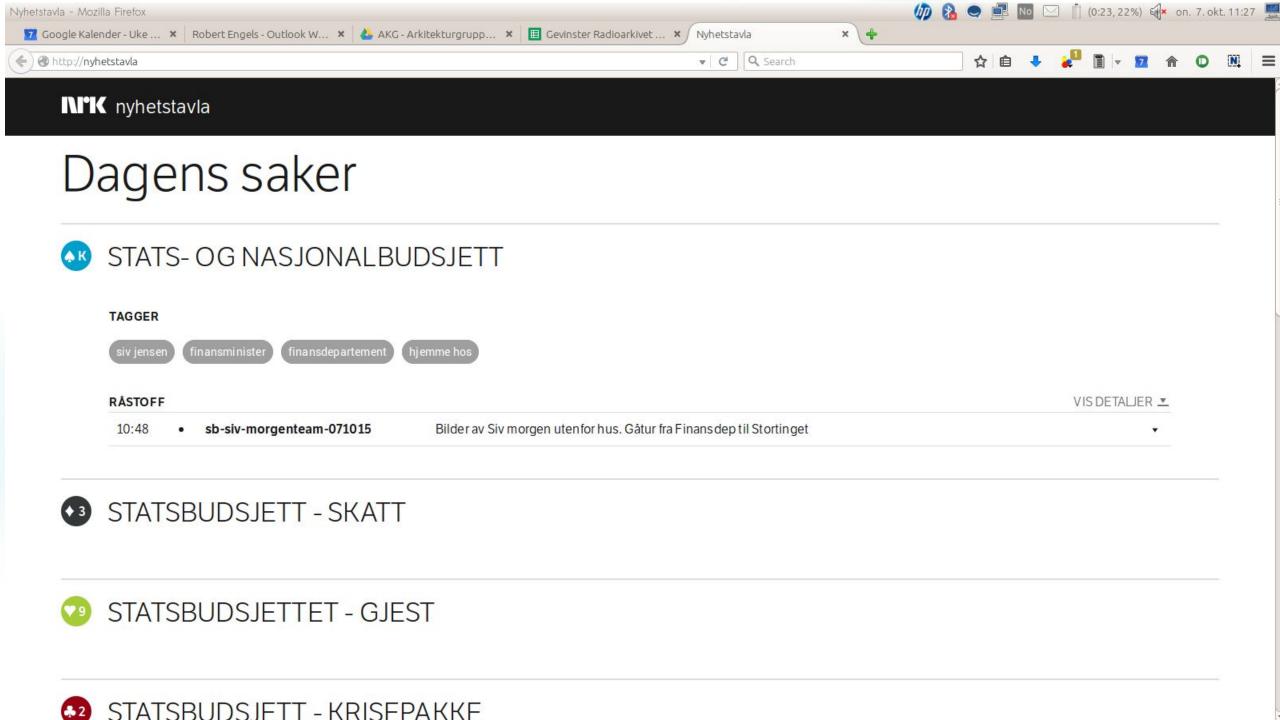
Gulljenten kom hjem

Stine kommer gående med blomster i hendene, klemmer folk, nær champagne i sekk, snakker om vm, mer klemming, bilder fra TV 2 fra kampen, går ut av flyplass med man (far).

vm handball mester stine bergen mål score velkomst hjem flesland

Hordaland Gulljenten kom hjem





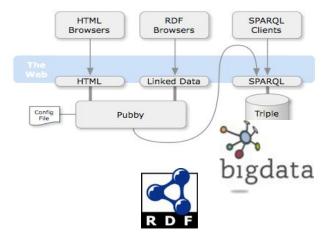


Radioarkivet API-er

Abstracted API (RA) elasticsearch.

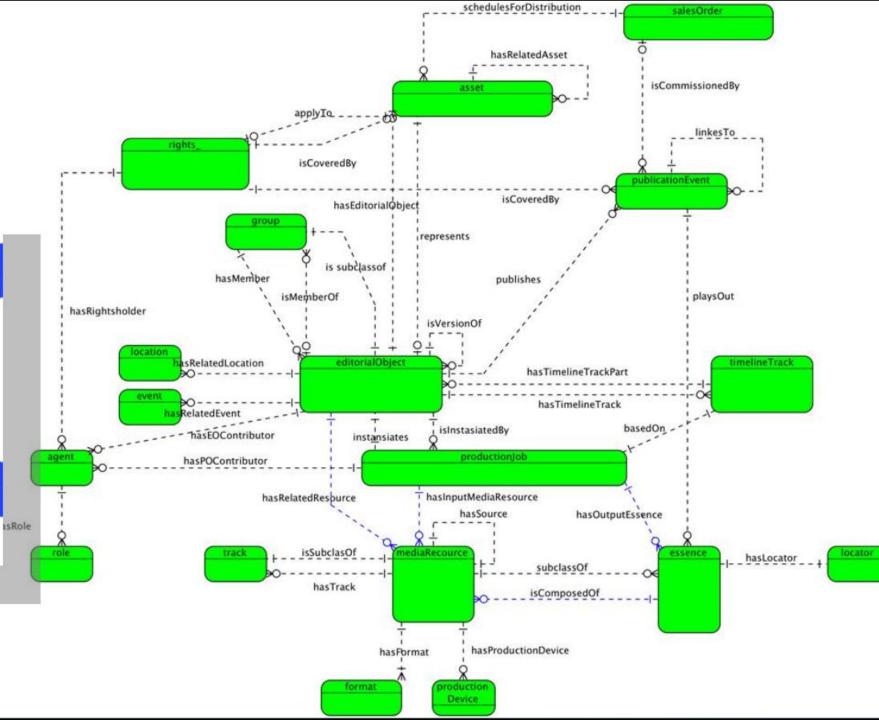


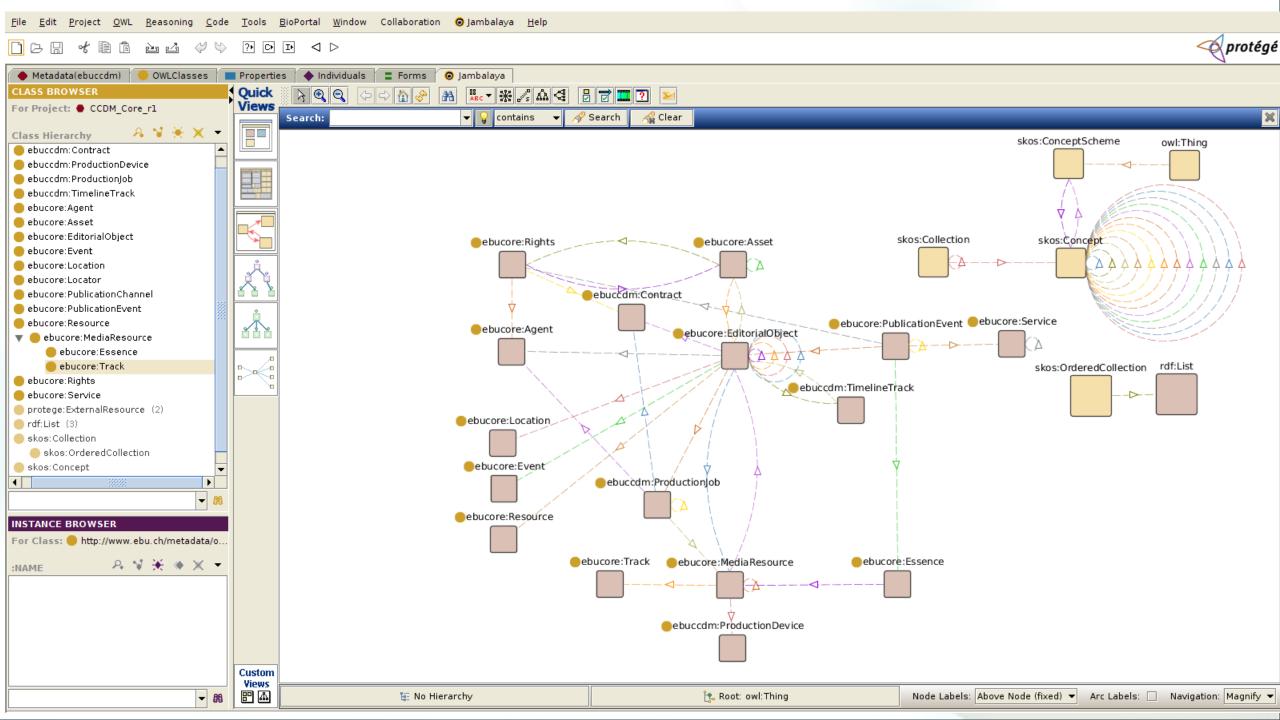
SPARQL endepunkt



EBUCore EBU CCDM

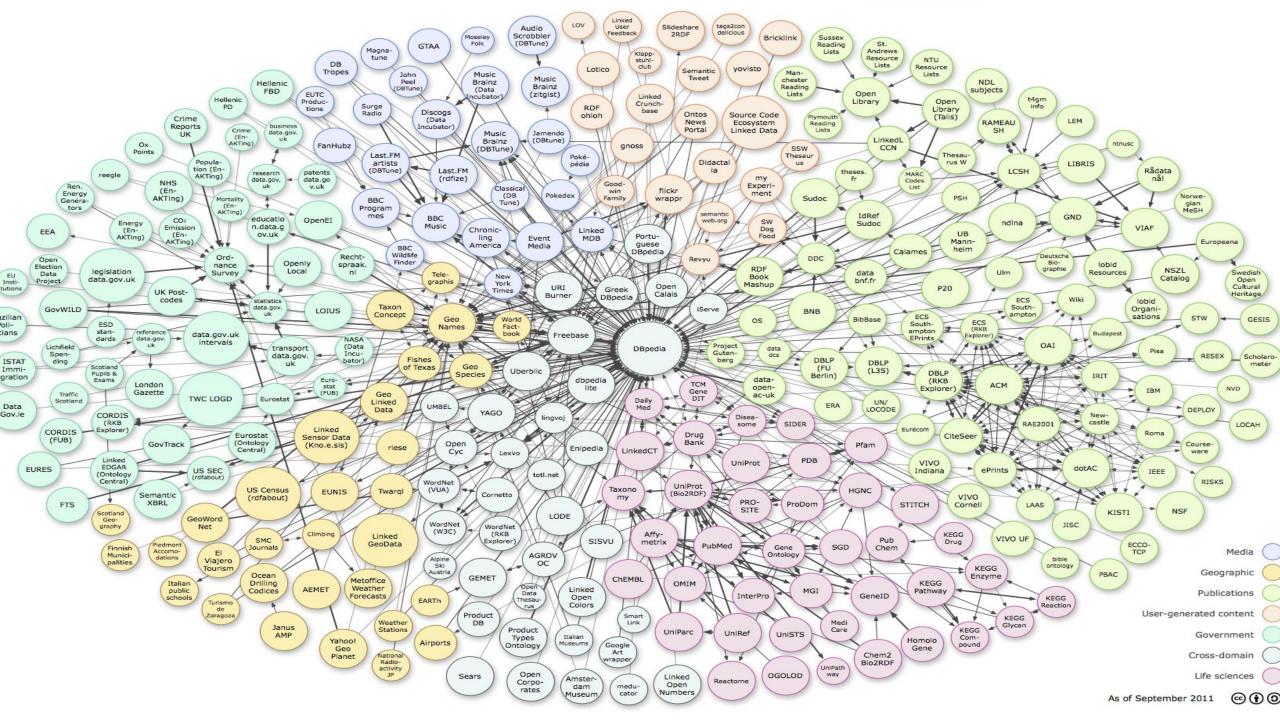




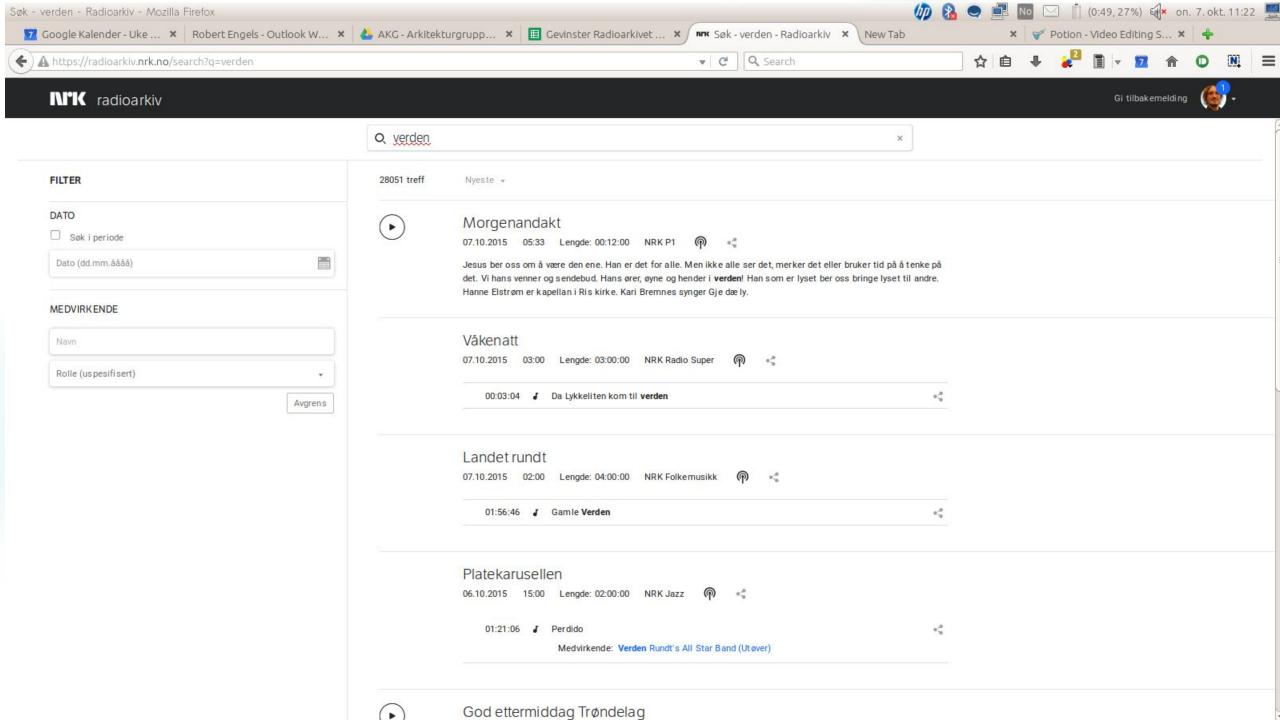


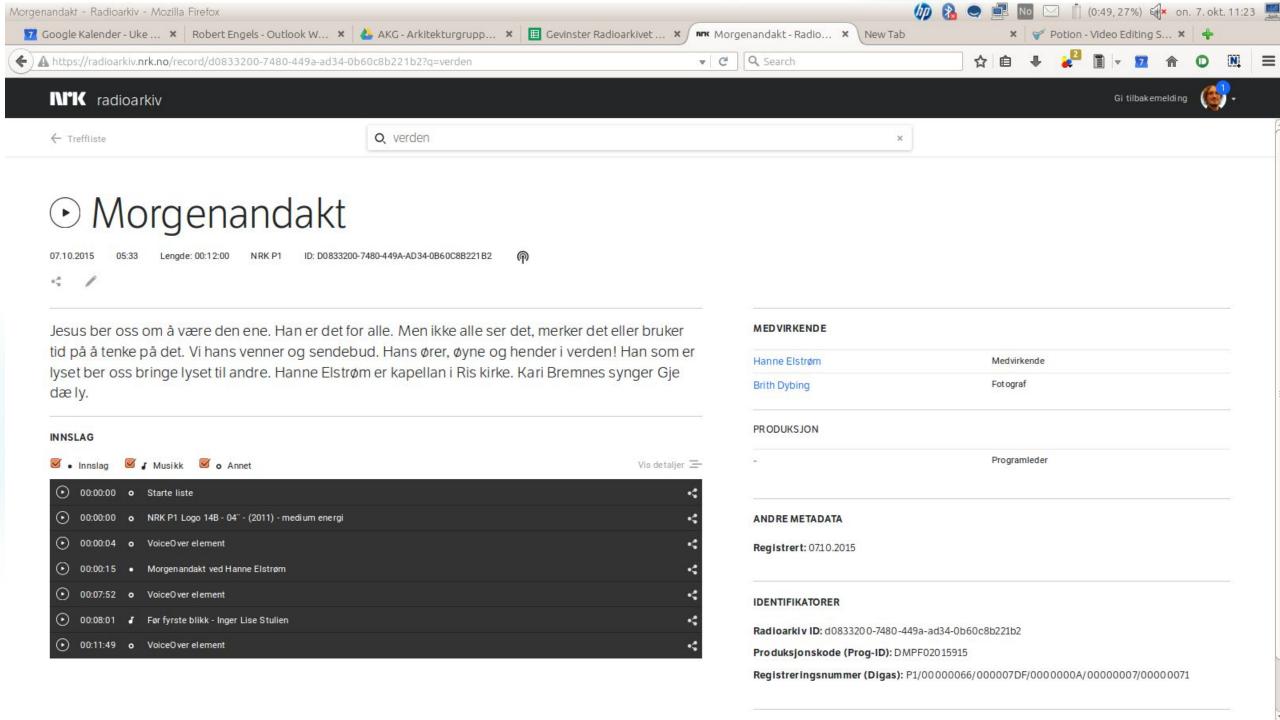
Topic_EO Like the calendar in ENPS includes EO_group_implementation hasMember-- hasMember Radio_Story_EO hasMember hasRelatedAsset Web_Story_EO asset Overall description/concept Radio not further includes expanded in the NRK Super example EO_Group_Brand linkesTo is commissioned by publicationEvent EO_Group_Series hasRelatedAsset hasMember asset EO_Group_Seaso actor hasMember Programme_EO Version_Programme_EO isVersionOf location includes -\ EO-Group_extraMaterial isInstansiatedBy mediaResource hasSubJobs Ekstra materiale - tilgjengelig Bakgrunnsmateriale Manus, tekstefil, grafikk o.l. basedOn productionJob hasRelatedAsset hasOutputEssence asset hasTimelineTrackPart format essence hasLocator hasInputMediaResource hasSource locator location mediaResource Et innslag kan timelineTrack også ha en hasFormat timeline I hasLocator hasRelatedAsset mediaResource asset i hasLocator locator

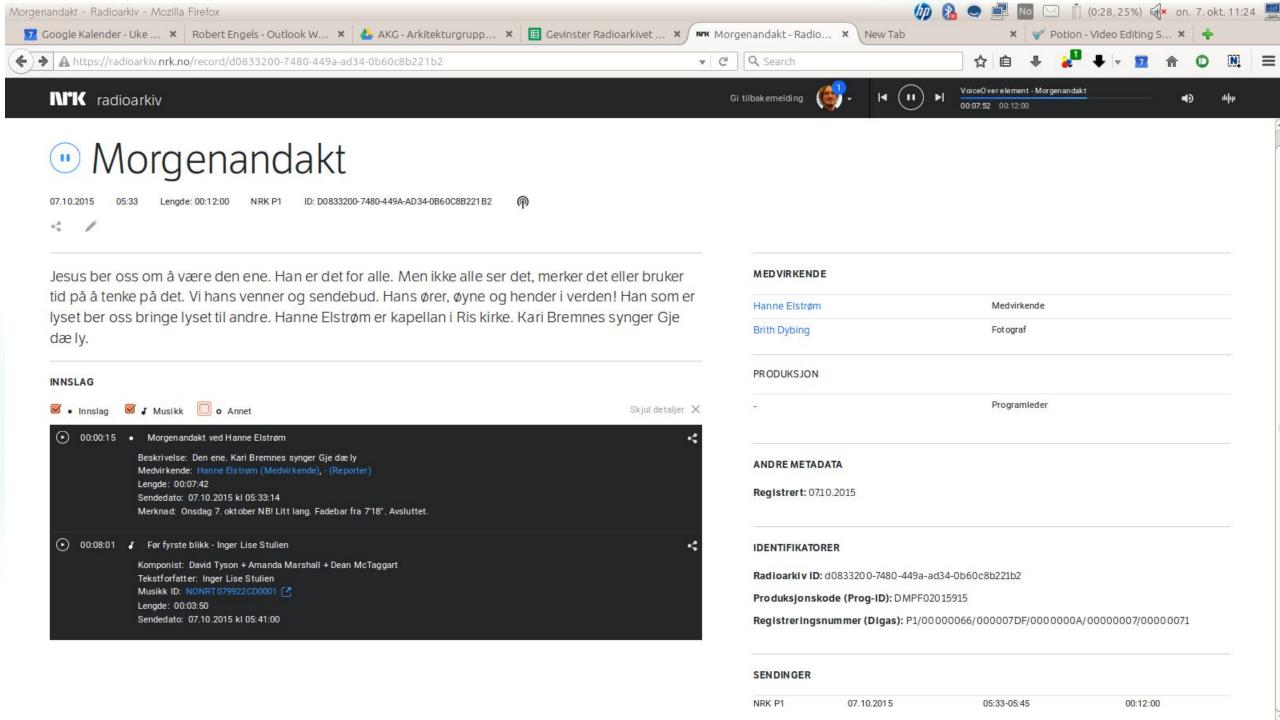
NK

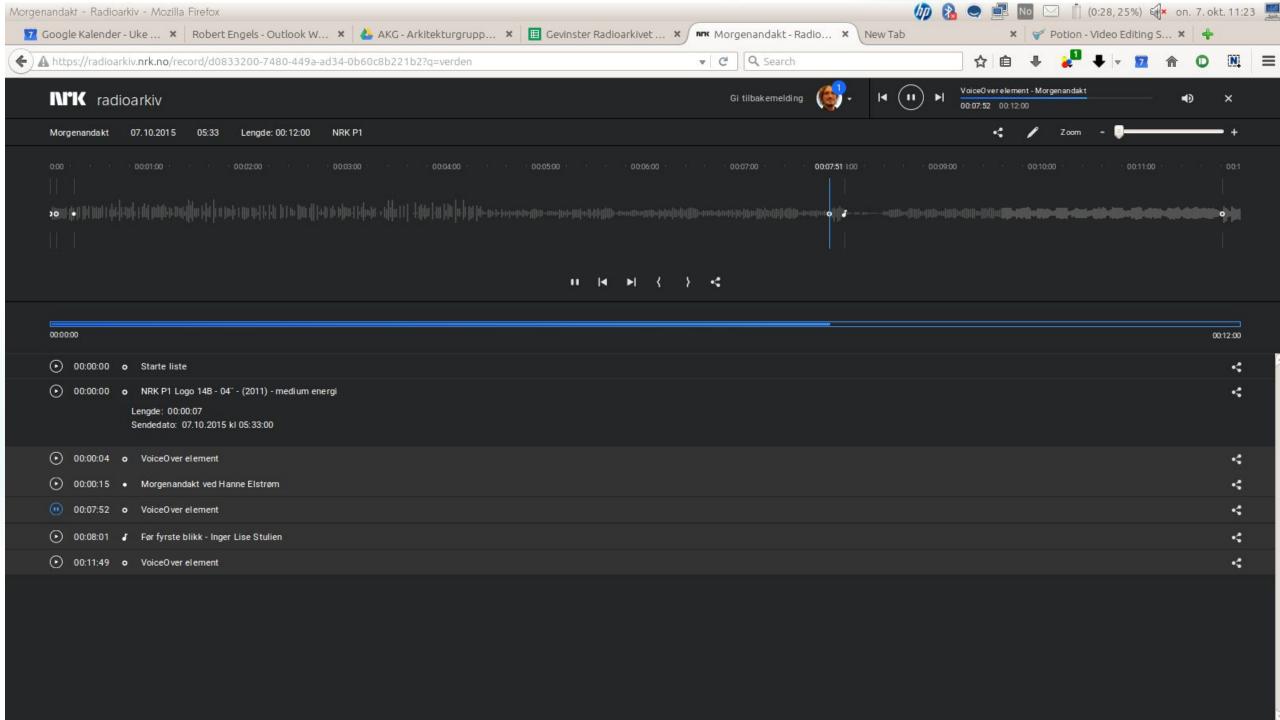


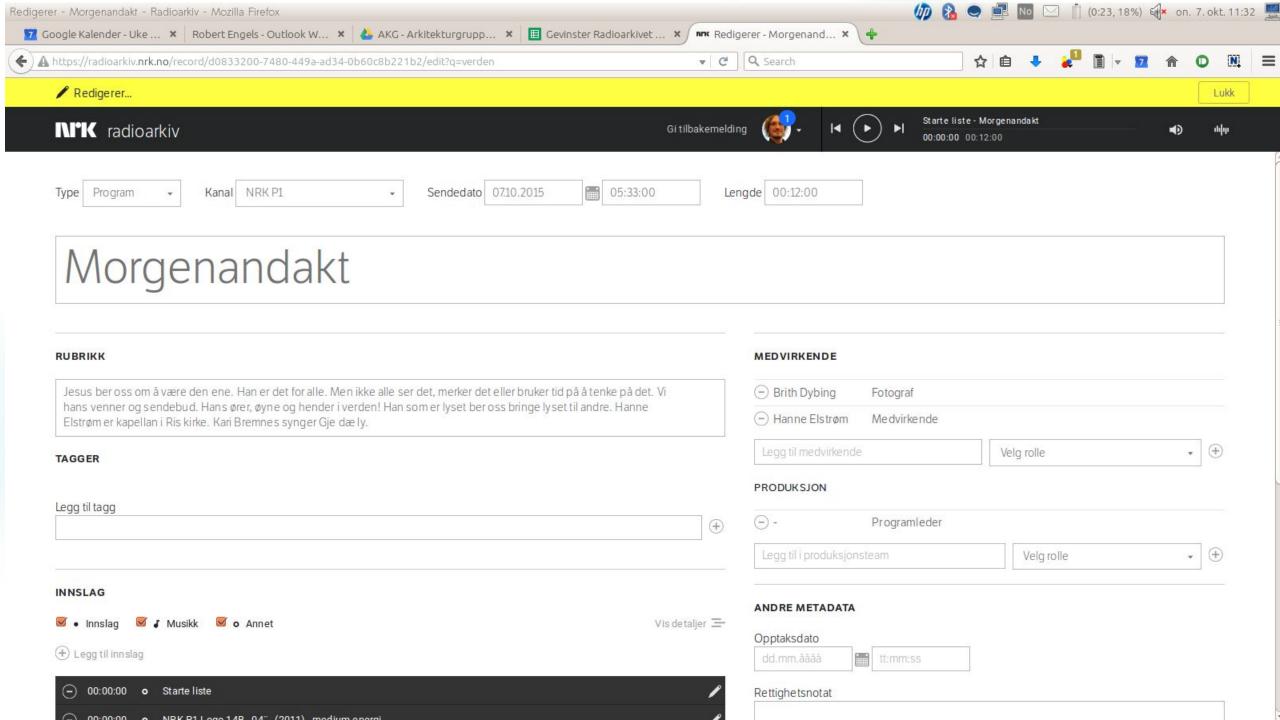


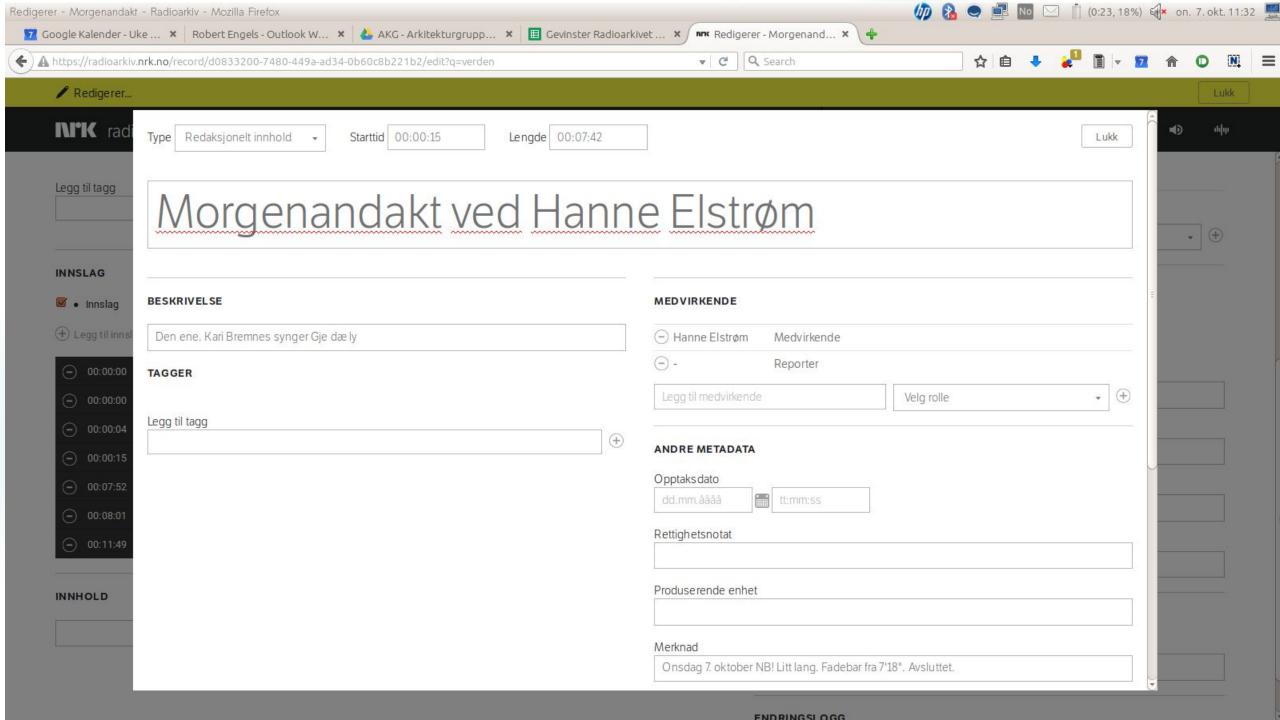


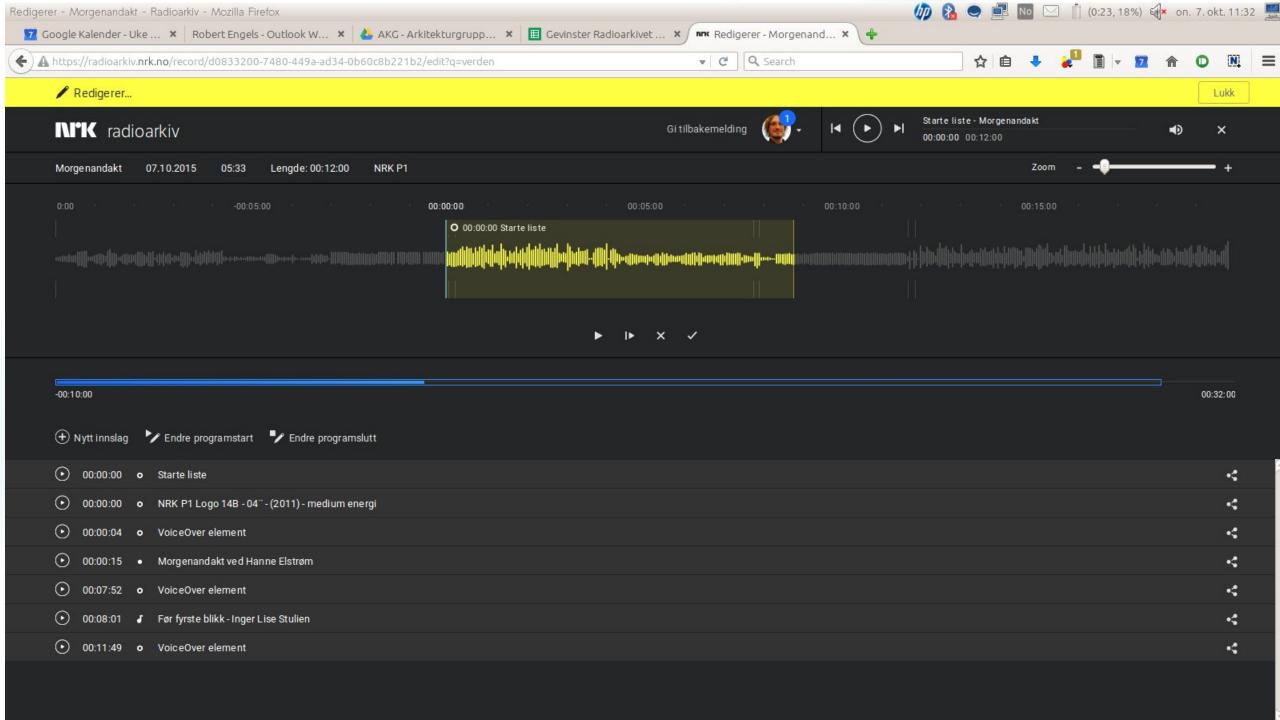


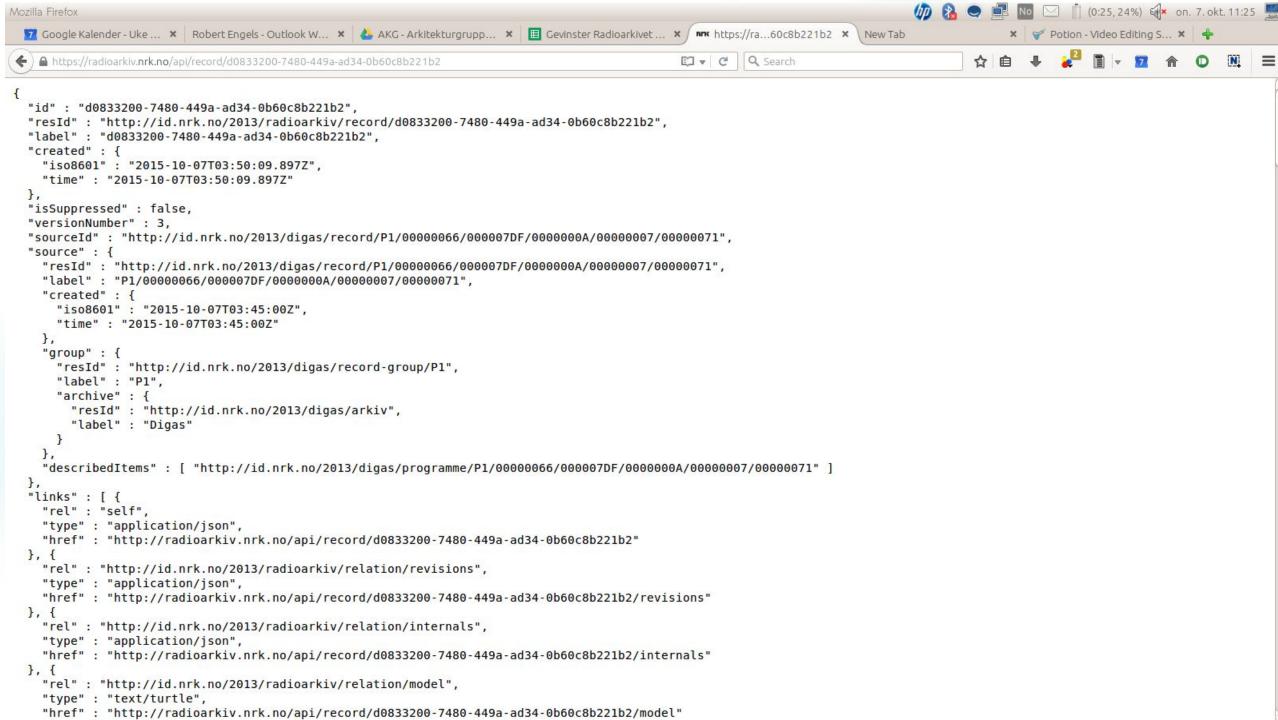




















(n) (0:25, 24%) (√x on. 7. okt. 11:26



























<http://id.nrk.no/2013/digas/show/P1/00000066/000007DF/0000000A/00000007/00000071/00000069/timeLineTrack> ;



```
*model X
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
```

```
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix dctype: <a href="http://purl.org/dc/dcmitype/">http://purl.org/dc/dcmitype/">.
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix dcterms: <http://purl.org/dc/terms/> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix arkiv: <http://id.nrk.no/2014/arkiv/ontology#> .
@prefix ebuccdm: <http://www.ebu.ch/metadata/ontologies/ebuccdm#> .
@prefix nrkroller: <http://qluon.nrk.no/nrkRoller.xml#> .
@prefix nrkdataordbok: <http://qluon.nrk.no/dataordbok.xml#> .
<a href="http://id.nrk.no/2013/digas/show/P1/00000066/000007DF/0000000A/0000007/00000071/0000006A/timeLineTrack">http://id.nrk.no/2013/digas/show/P1/00000066/000007DF/0000000A/0000007/00000071/0000006A/timeLineTrack</a>
                                ebuccdm: Rundown ;
```

```
ebuccdm:duration 230370;
ebuccdm:editUnit "0.001"^^xsd:float .
```

ebuccdm:hasTimelineTrack

```
<a href="http://id.nrk.no/2013/digas/show/P1/0000066/000007DF/0000000A/0000007/00000071/00000068/contributor/TEMP-ID/2">http://id.nrk.no/2013/digas/show/P1/00000066/000007DF/0000000A/0000007/00000071/00000068/contributor/TEMP-ID/2</a>
                                          dcterms: Agent , ebuccdm: Contact ;
           nrkdataordbok:name "Hanne Elstrøm" ;
           ebuccdm:contactName "Hanne Elstrøm" ;
           ebuccdm:hasRole
                                          nrkroller:N01 .
```

```
<a href="http://id.nrk.no/2014/siqma/container/DMPF02015915/essence/PADDMPF02015915">http://id.nrk.no/2014/siqma/container/DMPF02015915/essence/PADDMPF02015915</a> 1.dat/format/waveformdata>
                               ebuccdm:ContainerFormat;
          dcterms:format <http://www.iana.org/assignments/media-types/application/octet-stream>;
          dcterms:title "waveformdata"^^xsd:string .
```

```
<a href="http://id.nrk.no/2013/digas/show/P1/00000066/000007DF/0000000A/0000007/00000071/00000069">http://id.nrk.no/2013/digas/show/P1/00000066/000007DF/0000000A/0000007/00000071/00000069</a>
                                                   <http://id.nrk.no/2013/diqas/class/Audio> , <http://id.nrk.no/2013/diqas/class/VoiceOver> , ebuccdm:Part , ebuccdm:EditorialObject , nrkdataordbok:item ;
                                                   <a href="http://id.nrk.no/2013/digas/programme/P1/00000066/000007DF/0000000A/0000007/00000071">http://id.nrk.no/2013/digas/programme/P1/00000066/000007DF/0000000A/0000007/00000071>;</a>
           dcterms:isPartOf
                                                   <http://id.nrk.no/NRK>;
           dcterms:publisher
           dcterms:title
                                                   "VoiceOver element" ;
           ebuccdm:duration
                                                   8976 ;
                                                   "0.001"^^xsd:float ;
           ebuccdm:editUnit
```

ebuccdm:editorialObjectName "VoiceOver element";

dcterms:title "ID64AAC"^^xsd:string .

```
ebuccdm:start
                                     471562 .
<http://id.nrk.no/2014/siqma/programme/DMPF02015915/essence/DMPF02015915 1 ID64AAC.mp4/format/ID64AAC>
                       ebuccdm: AudioFormat ;
```

```
<a href="http://id.nrk.no/2014/sigma/programme/DMPF02015915/essence/DMPF02015915">http://id.nrk.no/2014/sigma/programme/DMPF02015915/essence/DMPF02015915</a> 1 ID24HEAAC.mp4/format/MP4/AAC>
                                      ebuccdm:ContainerFormat;
            dcterms:format <a href="http://www.iana.org/assignments/media-types/audio/mp4">http://www.iana.org/assignments/media-types/audio/mp4</a>;
            dcterms:title "MP4/AAC"^^xsd:string .
```

```
<a href="http://id.nrk.no/2014/siqma/programme/DMPF02015915/essence/DMPF02015915">http://id.nrk.no/2014/siqma/programme/DMPF02015915/essence/DMPF02015915</a> 1 IDPCM1616MWAV.wav/format/IDPCM1616MWAV.
                                 ebuccdm:AudioFormat;
           dcterms:title "IDPCM1616MWAV"^^xsd:string .
```