KDRS

Kommunearkivinstitusjonenes
Digitale RessursSenter

Facilitation for easy use of data

27 May 2024

Tor Eivind Johansen

Members

1st January 2023

Aust-Agder museum og arkiv IKS

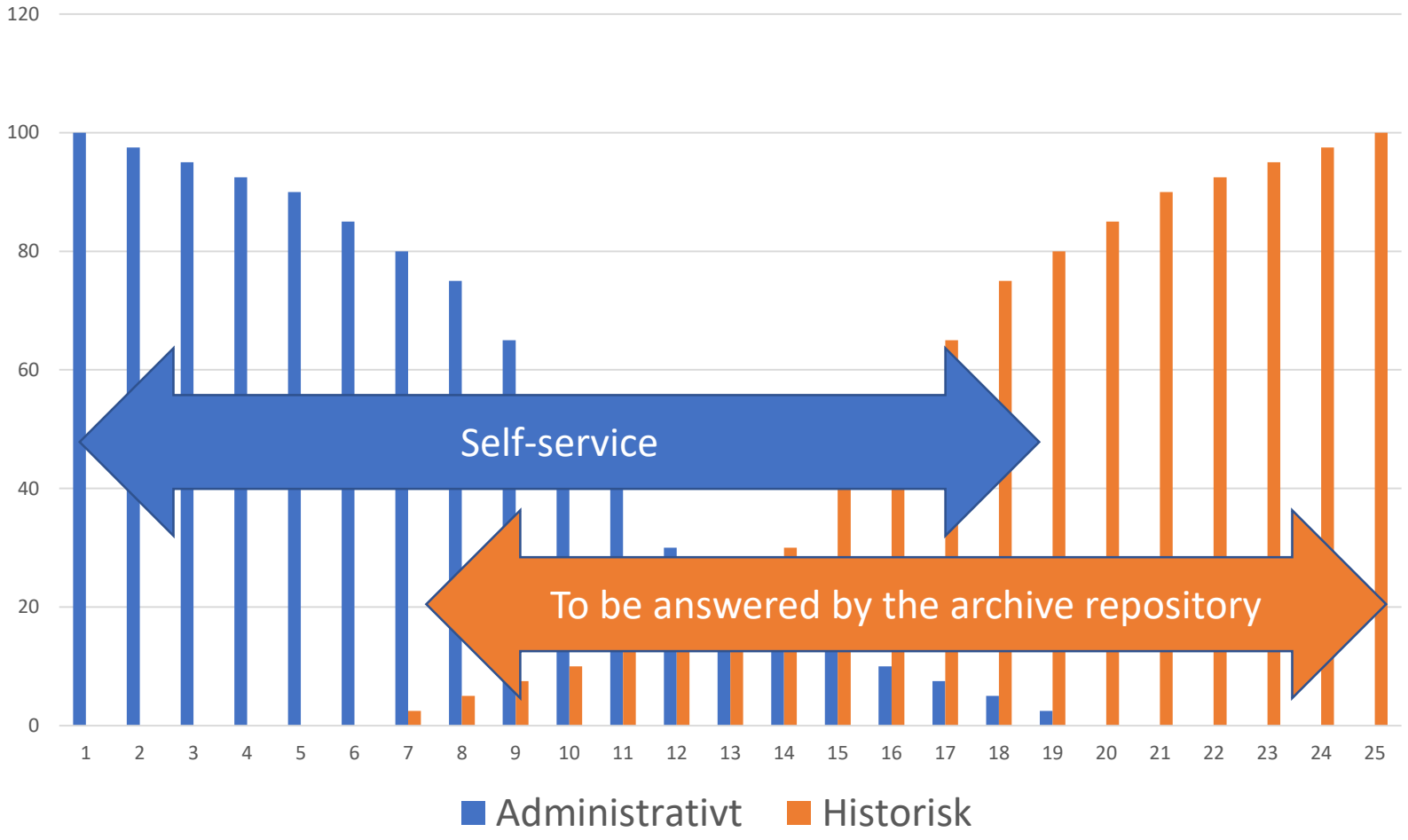
IKA Finnmark IKS

15 archive institutions are members, 60% of the municipalities in Norway

The main challenge

- The main challenge associated with digital material is that it must be preserved in an archive institution much earlier than traditional analogue material, to not be lost.
- To save society from increased costs by both the archive creator and the archive institution establishing their own solutions for access to the same archive material, a joint search and access solution could make the work of both the archive creator and the archive institution more efficient and easier.
- The archive institution can arrange deposited material for easy use and grant access rights to users from the archive creator so that the most common requests can be handled by the archive creator through self-service.
- The archive institution can then receive and preserve digital material earlier, without increased pressure regarding access to the material - as this will be a self-service done by the archive creator.

Expected use of archival material



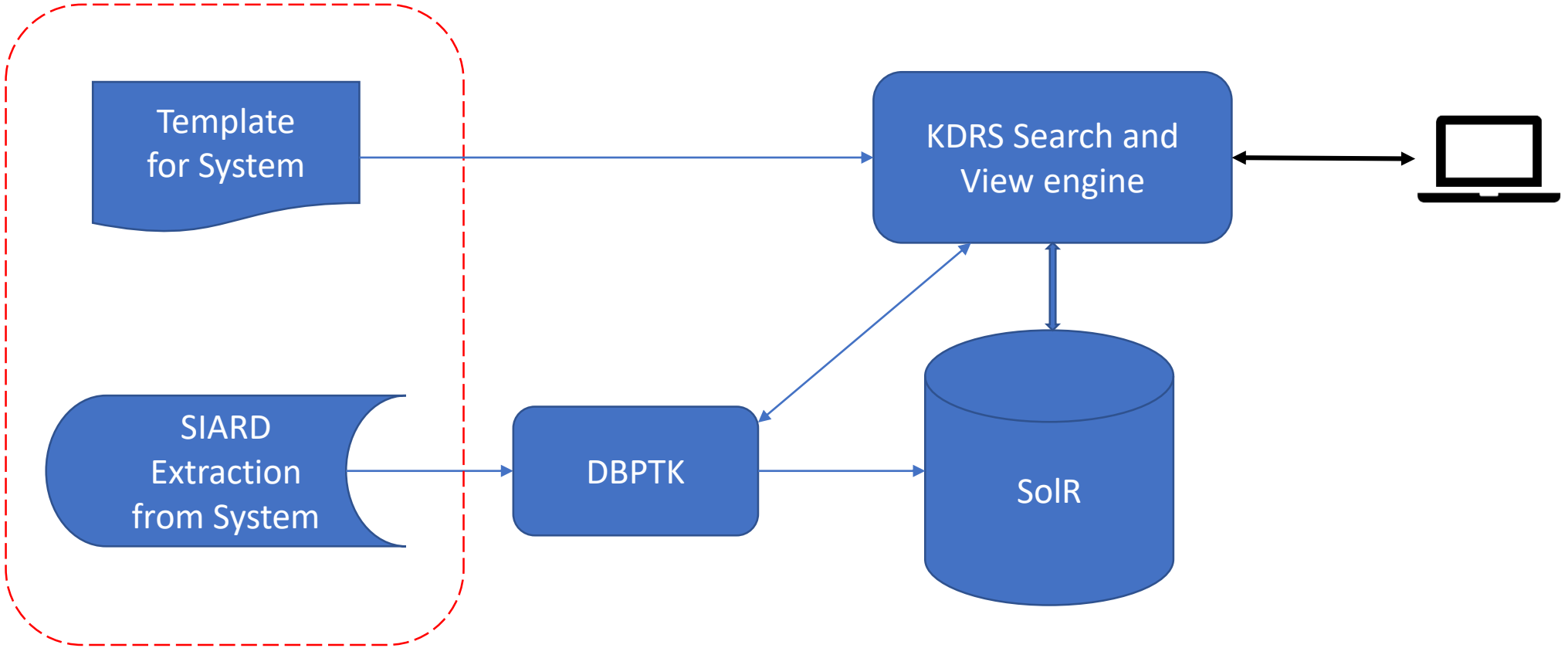
What kind of information is important?

- The project carried out a survey among our members to investigate what information was in demand within different types of archives:
  - School systems (used in schools)
  - Special educational psychological assessments (used in schools)
  - Child protection systems (used in municipalities)
- The survey showed that there were relatively few different queries, but many of each query
- There were approximately five to eight different queries that were repeated for the various systems
- We also examine what information was requested for the query targets of each system

The goals

- The access solution KDRS envisages should cover at least 80% of the access requests that are most common within the various systems in the first 20 years after the system is taken out of administrative use. For special needs, there will be access to raw data sets to answer tricky queries.
- The solution must be flexible and easily adaptable to different needs.
- The same search and view template must be reusable on similar systems for other municipalities/counties.
- The core software (engine) should be the same for all

Architecture



The development

- Using Ruby as the programming language and Ruby on Rails framework to build the engine
- Using XML for the search and view template
- Possible to include HTML and Ruby code for advanced templates
- The software runs in Docker containers
- And it will be open source - we want to share

What is needed?

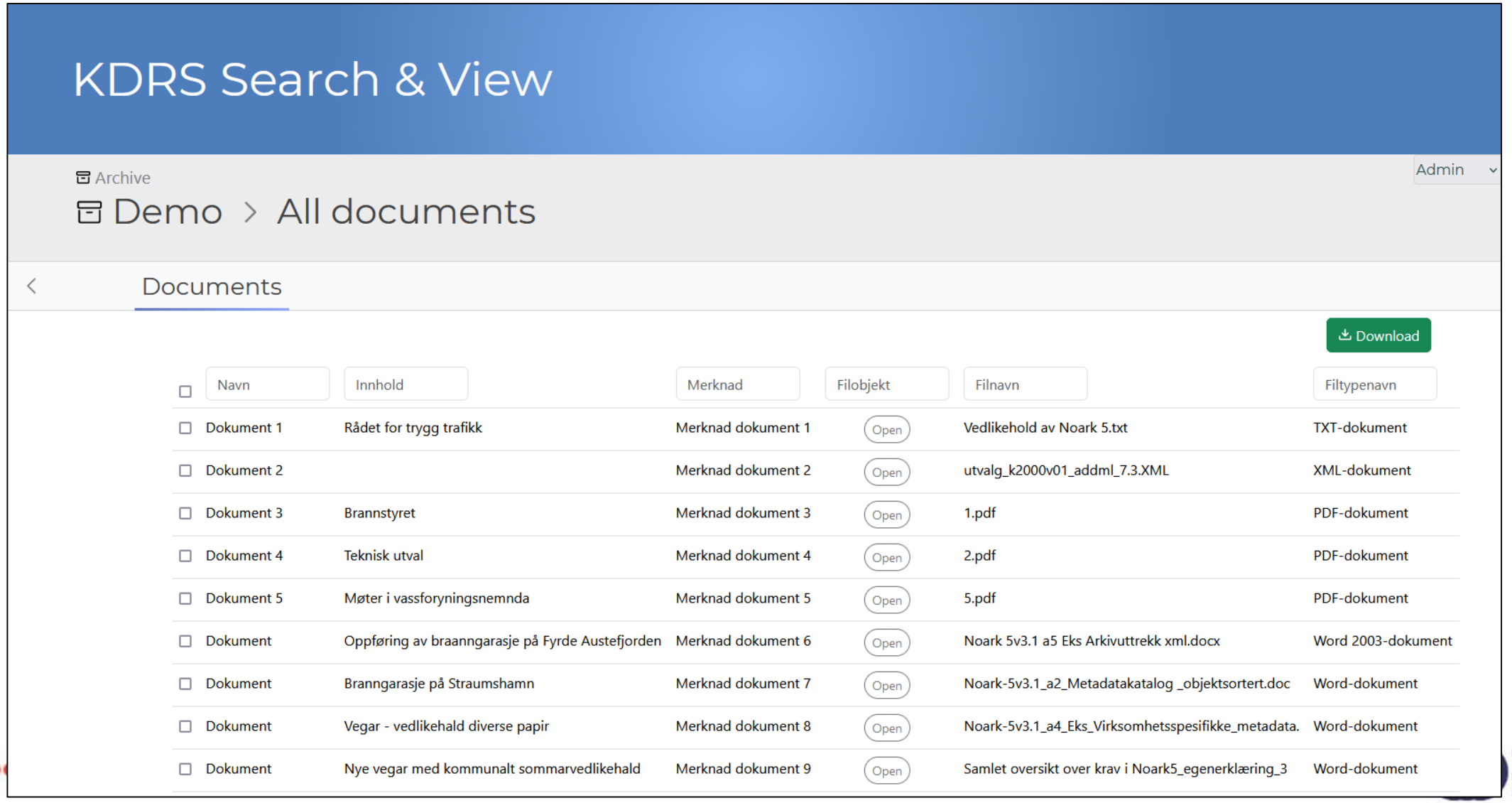
- Install KDRS Search and View (engine)
- Load SIARD extract for the system with DBPTK into SOLR (search database)
- Make or reuse a search and view template for the system (XML file)
- Then we go!

Search and view template (example)

demo.xml > ...

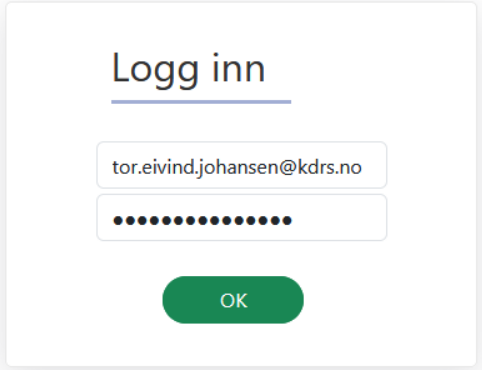
```
<view>
    <name>all documents</name>
    <table>
        <name>objekt</name>
        <title>documents</title>
        <fields>navn,innhold,merknad,filobjekt,filnavn,filtypenavn</fields>
        <primarykey>objektid</primarykey>
        <filename>filnavn</filename>
        <export>download</export>
    </table>
</view>
```

Gives the following result

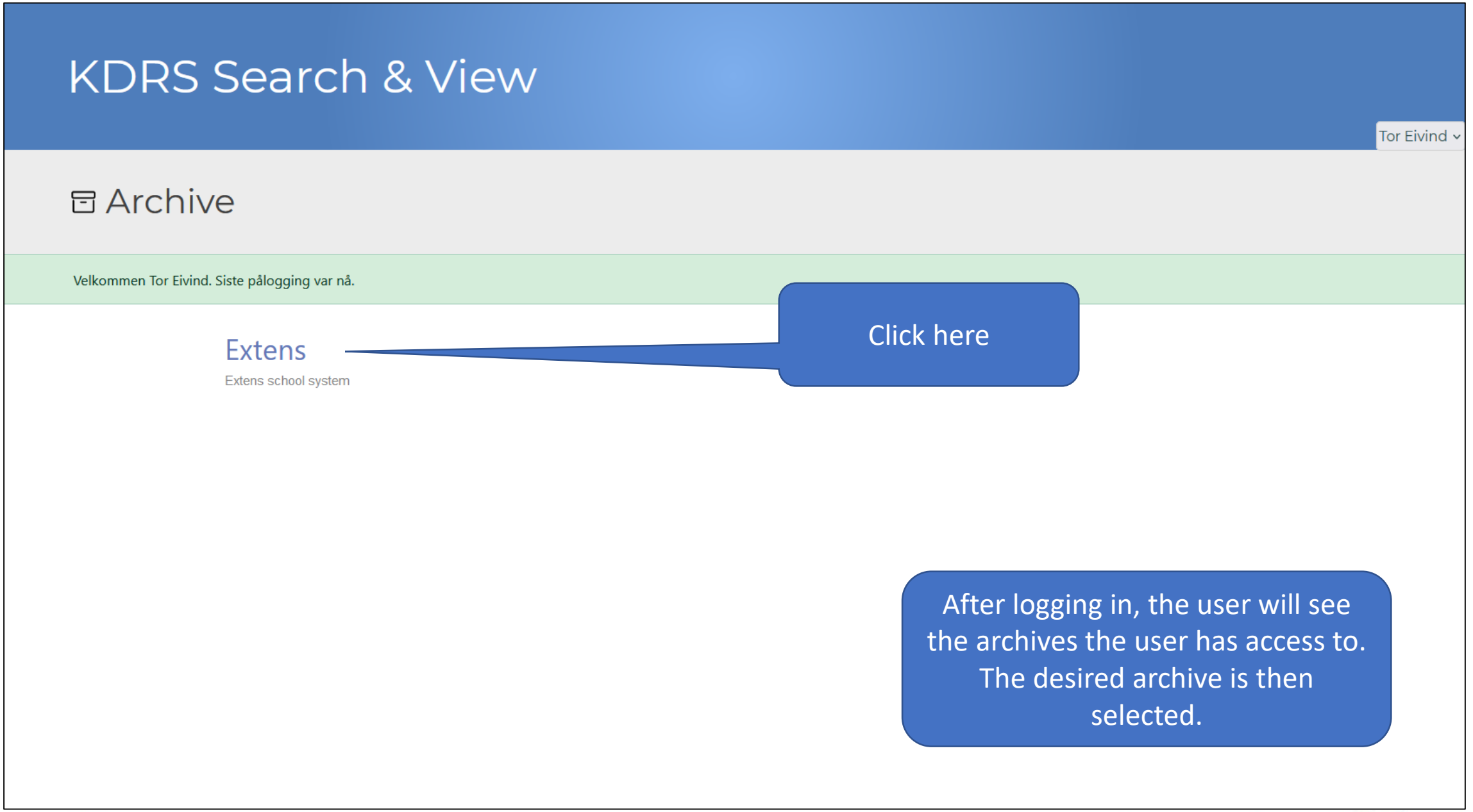


How does it look for a school system?

KDRS Search & View



Authentication can be done through various systems. We now use SimpleSAMLphp which is connected to our Active Directory.


KDRS Search & View
Tor Eivind
Archive
Velkommen Tor Eivind. Siste pålogging var nå.
Extens
Extens school system
Click here
After logging in, the user will see the archives the user has access to. The desired archive is then selected.

KDRS Search & View

Tor Eivind

Archive

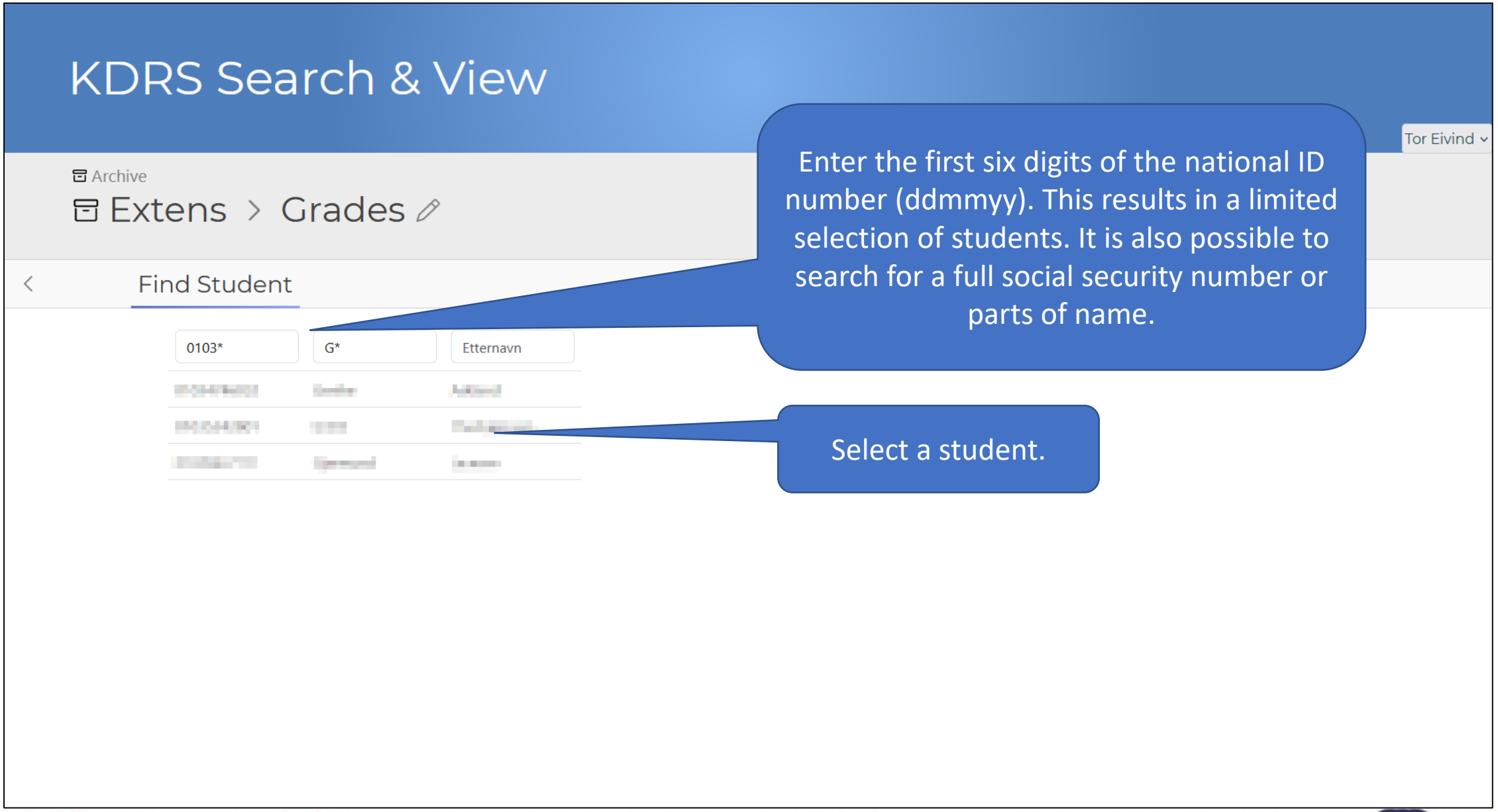
Extens

Grades
Class list
Absence
Notes
Employees
Children in kindergarten
Other queries

Click here

When the desired archive is selected, a list of the most common requests that have been defined appears.

KDRS Search & View



KDRS Search & View

Archive

Extens > Grades

Tor Ei

Grades from Diploma

Navn: Fødselsnummer

har i 2012 fullført grunnskoleopplæringen

Fagkode	Fag	Standpunkt	Eksam		
ELR0010	Elevrådsarbeid		-----		
ENG0012	Engelsk, skriftlig		-----		
ENG0013	Engelsk, muntlig		-----		
FSP0162	Tysk I, 10. årstrinn		-----		
KHV0010	Kunst og håndverk		-----		
KRO0010	Kroppsøving		-----		
MAT0010	Matematikk	6 seks	5 fem	S	
MHE0010	Mat og helse	6 seks	-----		--
MUS0010	Musikk		-----		--
NAT0010	Naturfag		-----		--
NOR0214	Norsk hovedmål, skriftlig		-----		--
NOR0215	Norsk sidemål, skriftlig		-----		--

Print

ere the result can be
ed, or a pdf file can be
created.

For this diploma we use HTML and Ruby to format the printout.

KDRS Search & View

Archive

Extens

Grades
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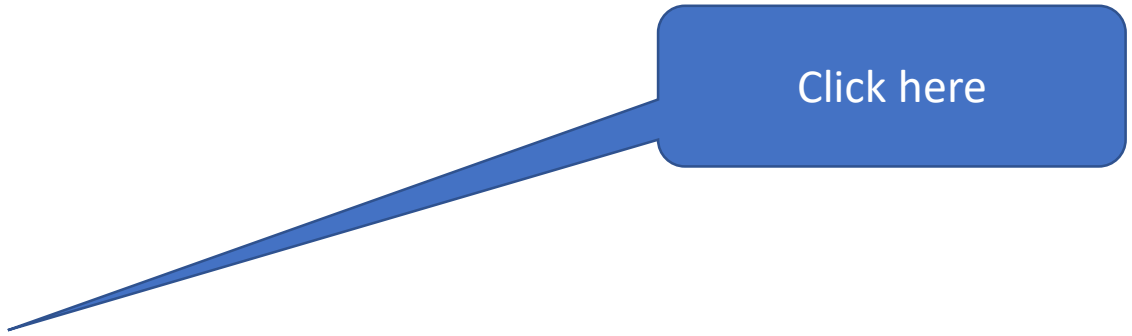
Other queries



KDRS Search & View

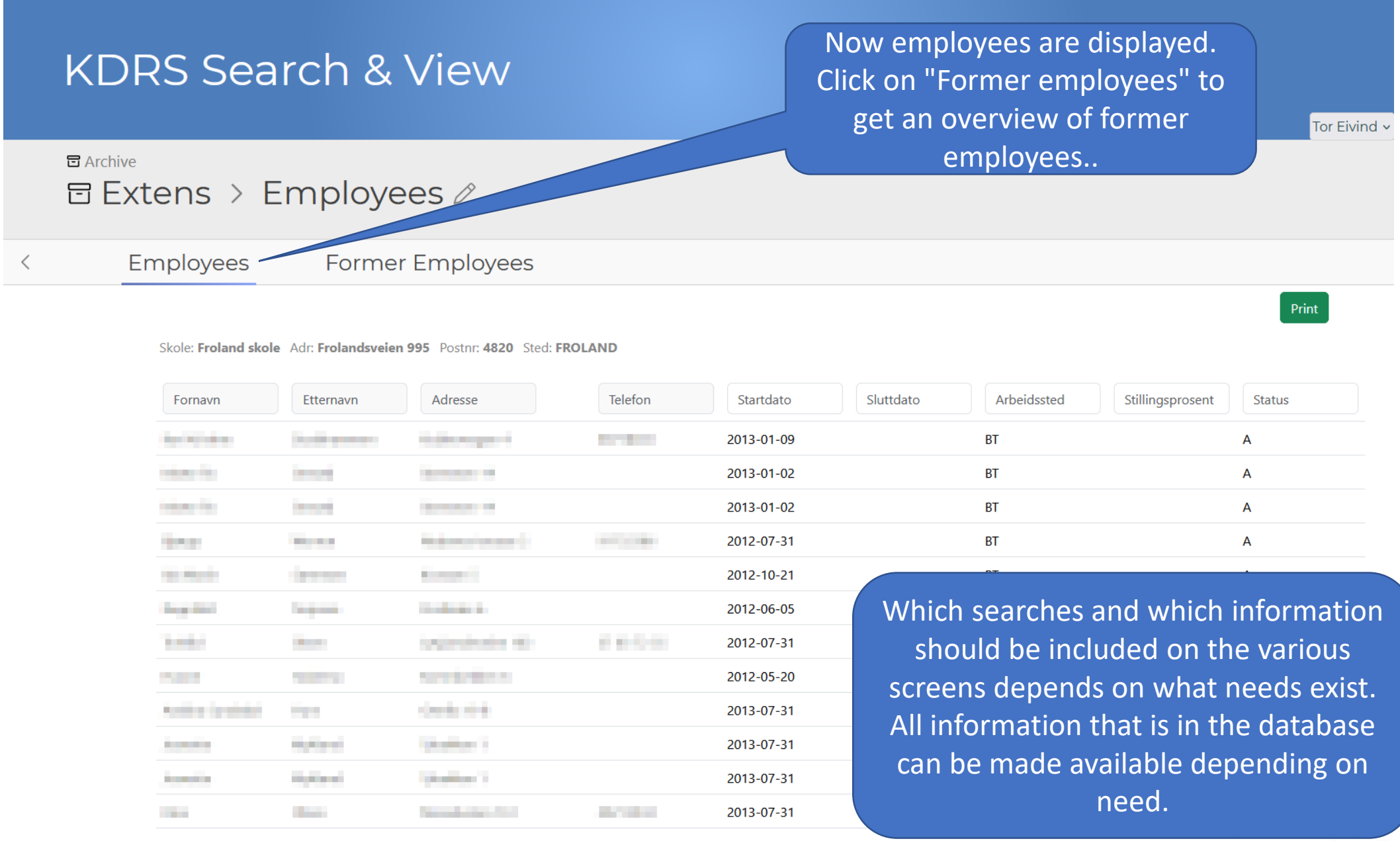
Archive

Extens > Employees

Find school

fro*	Kortnavn	Adresse	Postnr	Sted
Froland barnehage Administrasjon	BK-ADM	Frolandsveien 995	4820	FROLAND
Froland friluftsbarnehage	BK-FRI	Frolandsveien 995	4820	
Froland Barnehage	BK-SPE	Frolandsveien 995	4820	
Froland Musikkbarnehage	BP-MUS	Postbok	4855	
Kulturskolen i Froland	KU-FR	Frolandsveien 995	4820	FROLAND
Froland skole	SK-FRO	Frolandsveien 995	4820	FROLAND
Froland skole	XK-FRO	Frolandsveien 995	4820	FROLAND

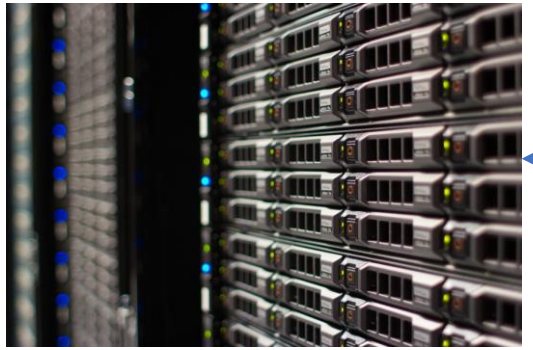
Select the relevant school


KDRS Search & View
Tor Eivind
Archive
Extens > Employees
Employees
Former Employees
Print
Skole: Froland skole Adr: Frolandsveien 995 Postnr: 4820 Sted: FROLAND
Fornavn
Etternavn
Adresse
Telefon
Startdato
Sluttdato
Arbeidssted
Stillingsprosent
Status
2013-01-09 BT A
2013-01-02 BT A
2013-01-02 BT A
2012-07-31 BT A
2012-10-21
2012-06-05
2012-07-31
2012-05-20
2013-07-31
2013-07-31
2013-07-31
2013-07-31
Now employees are displayed. Click on "Former employees" to get an overview of former employees..
Which searches and which information should be included on the various screens depends on what needs exist. All information that is in the database can be made available depending on need.

Security

- In order to handle sensitive information, we have system logging of which searches each user makes
- Encrypted communication between server and client
- User administration in three levels and access control on the archives level

Now in production



KDRS Infrastructure

Archive institution

Arendal municipality

Grimstad municipality

Froland municipality

Questions?

Thank you for listening!

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https://github.com/KDRS-SA/kdrs-search-and-view-docs