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Share and collaborate across your organization.**

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**Inquiro version 5.1 – Oct 2022**

**Toulouse – Oct2022:** DEXSTR, today announced the availability of Inquiro Version 5.1.

It comes with new features and some major enhancements, especially in artificial intelligence that makes Inquiro an Enterprise Search Engine more intelligent.

## Inquiro V5.1 New features & enhancements

### Multilingual QA

The question-answering server included in Inquiro is now multilingual, in other words, you can ask Inquiro a question in the language you want and the answer will be searched in all documents regardless of their language.

On your profile page, you can define your preferred language.

### QA in advanced search

In the new version, you can use question-answering in the advanced search of Inquiro.

To ask a question in advanced search, start by defining the dataset with the query builder and when the dataset is representative, ask your question in the field.

1. Define your dataset

The screenshot displays the Inquiro interface. On the left, the 'Query Builder' is visible, showing a rule named 'COVID-19' with an instance of 'IN'. Below it, the 'Ask a question' field contains the text 'Where does covid19 appear first?'. The 'Search history' section shows a previous search for 'instance IN covid19'. On the right, the search results are displayed for the question 'Where does covid19 appear first?'. The results include a snippet from 'Wuhan' with a score of 95%, a snippet from 'Mil Med' with a score of 97%, and a snippet from 'Wuhan, China' with a score of 62%. Arrows point from the numbered text labels to the corresponding parts of the interface.

2. Ask a question on the defined dataset

3. Answers to the question in defined dataset

### IA for all types of documents

Until today, the artificial intelligence engine of Inquiro worked on files. Now, Inquiro is able to apply its artificial intelligence capabilities to all documents available. A new administration page allows you

to specify for which functionalities (question answering, annotation, fragments, ChemAxon) we can use these documents and which fields are considered.

For example, in the templates, you can define a new type of document “clinical trials” with fields “Publication title”, “Study type”, “Trial status”, “Clinical trial id” ... and choose that “Publication title” is used for question answering and fragments. By this way, you can ask a question referring to the title or see fragments (corresponding to your search criteria) on the title.

Field	Question answering	Annotation	Fragments
Abstract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clinical trial ID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Completion Date Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
detailed_description	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Document type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generated summary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Healthy Volunteers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
License	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maximum Age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Minimum Age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
official_title	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PMID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Publication title	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
publication_source	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Go to administration page

For each field, select functionalities using it

My search

Search results for "Biospecimen Collection" (9/502 results in 0.30 seconds)

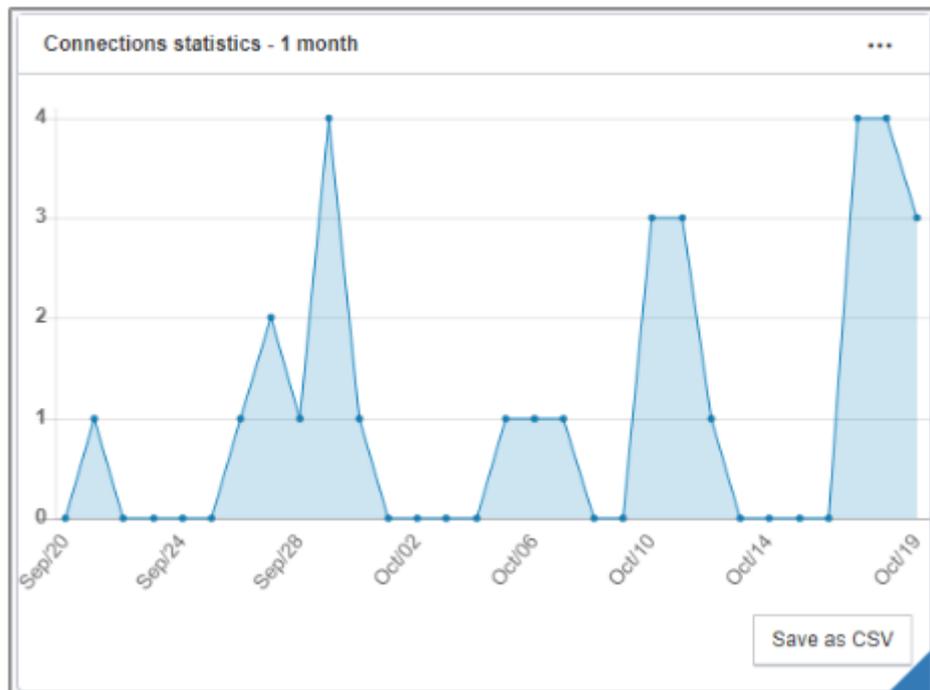
- NCT00571389** *Related documents*  
 Publication title: A Biospecimen Collection Study of Leukapheresis-Derived Circulating ...  
 Root | CwicaThise - COVID-19 | NCT00571389
- NCT04895189** *Related documents*  
 Publication title: Yale COVID-19 Recovery Study  
 Root | CwicaThise - COVID-19 | NCT04895189
- 34878854.txt** *Related documents*  
 Publication title: The National Health and Nutrition Examination Survey (NHANES); 26.  
 Authors: Rync Paulose Ram, Jessica E Graber, David Woodwell, NizarJect Abuwails  
 Publication date: 12/16/2021  
 Human Disease Ontology: COVID-19  
 Root | Pubmed - Covid-19 | 123001-123001 | 34878854.txt

Example of fragments coming from publication title

In addition, those fields can be used in dynamical views.

## Connection statistics

A new dashlet named “Connections statistics” allows you to follow the number of connections in Inquiro per day/month/year.



Data for statistics connections can be exported as a csv.

This new dashlet is available only for admin roles.

## Change detected language for documents

Since the last version of Inquiro, documents are annotated with the language of the document. Depending on the content of the document, this detection can be altered. That’s why you can now set this metadata manually.

## Duplicated and related documents

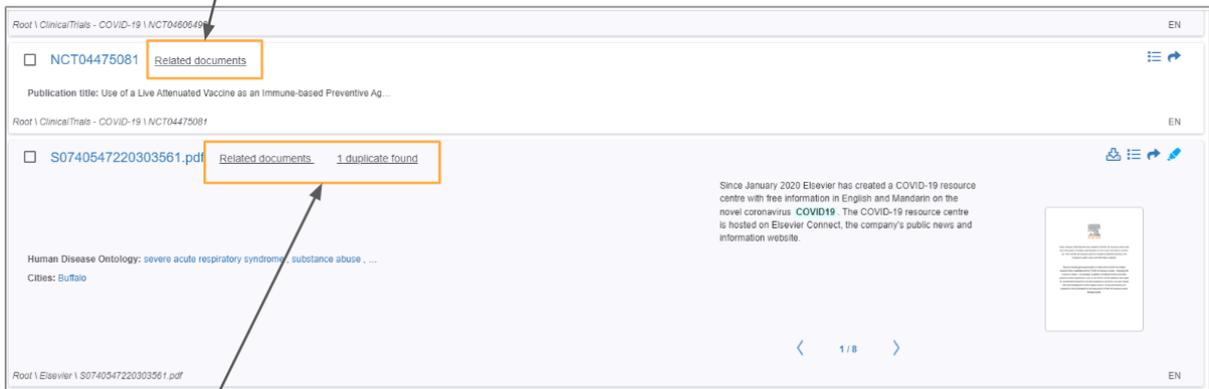
The new version of Inquiro can help you in two ways:

- identify duplicate documents in your dataset
- identify related documents

Duplicated documents are identified using the hashing algorithm md5.

You can see that information on the search result page and directly in the details of the document with two links: “Related documents” and “X duplicate found”. By clicking on one of the links, you can see in a popup the list of documents with their location.

Example of document having related documents



Example of document having related documents and one duplicate

List of related documents with their name, location and metadata

Related documents of S0740547220303561.pdf		
	<p>Name: S0740547220303561.pdf            Container path: Root \ Elsevier - Science Direct Covid-19 \ 38001-30000 \ S0740547220303561.pdf</p>	<p>Publication title: Making lemonade from SARS coronavirus-2 lemons: Transitioning a smoking cessation trial to a virtual platform            Authors: Martin O Mahoney, Rebecca Ashare, Nicolas Schlienz, CeCe Dueni, Larry W Hawk            Publication date: 2020-10-30T22:00:00Z            Chemical Entities of Biological Interest: varicelline            Human Disease Ontology: cancer, severe acute respiratory syndrome, substance abuse, COVID-19            Cities: Buffalo, Philadelphia, Greenfield</p>
	<p>Name: PMC8092028.pdf            Container path: Root \ Pubmed - Covid-19 \ 71001-72000 \ PMC8092028.pdf</p>	<p>Publication title: Transitioning to Remote Clinic Visits in a Smoking Cessation Trial During the COVID-19 Pandemic: Mixed Methods Evaluation            Authors: Martin Christopher Mahoney, Eamthee Park, Nicolas J Schlienz, CeCe Dueni, Larry W Hawk            Publication date: 2021-04-29T22:00:00Z            Chemical Entities of Biological Interest: carbon monoxide, varicelline            Human Disease Ontology: cancer, COVID-19            Cities: Buffalo</p>
	<p>Name: 32657671.tst            Container path: Root \ Pubmed - Covid-19 \ 29001-30000 \ 32657671.tst</p>	<p>Publication title: Tobacco smoking cessation in mental health services during the COVID-19 pandemic.            Authors: Natalie Kim Seiler, Rajeev Swamy, Junhua Xiao, Yang Yun            Publication date: 2020-11-22T22:00:00Z            Human Disease Ontology: COVID-19</p>
	<p>Name: PMC9234926.pdf            Container path: Root \ Pubmed - Covid-19 \ 162001-163000 \ PMC9234926.pdf</p>	<p>Publication title: System-Level Quality Improvement Initiatives for Tobacco Use in a Safety-Net Health System During the COVID-19 Pandemic            Authors: Kara Chung, Henry Rafferty, Leslie W Suen, Maya Vijayaraghavan            Publication date: 2021-12-31T22:00:00Z            Human Disease Ontology: asthma, chronic obstructive pulmonary disease, COVID-19            Cities: San Francisco</p>
	<p>Name: 33140508.tst            Container path: Root \ Pubmed - Covid-19 \ 53001-54000 \ 33140508.tst</p>	<p>Publication title: Tobacco use disorder and the lungs.            Authors: Hayden McRobbie, Benjamin Kwan            Publication date: 2021-08-12T22:00:00Z            Human Disease Ontology: lung cancer, chronic obstructive pulmonary disease, COVID-19</p>

## Services

Some services have been developed to support our customers' needs:

- **summaries:** we can support our customers to generate automatically abstract for their documents and set it as a metadata to be able to search and display
- **multilingual keywords extraction:** for customers who want to generate dictionaries linked to their dataset, we can extract keywords from multilingual documents to build a specific dictionary.

## Various improvements

Highlight for scanned pdf
Retry connection to google drive if connection lost
Allow user to change detected language for documents
In advanced search, restrict the dataset to a list of yours
New dashlet with number of requests in Inquiro
Hide the highlight button when user use advanced search without keyword
Query builder in user language
Reload automatically Inquiro configuration without restarting the server
Use case insensitive sort in the lists of users, groups and roles

## Bug corrections

Selection is incorrect when selecting all in result page
Error when using special characters in first password selection
Default dashboard is duplicated for new users
Edit restrictions is unavailable for files and folders under a connector