



HULBEE ENTERPRISE SEARCH

User Manual v. 3.00

Table of Content

1	Introduction.....	3
2	Hulbee Enterprise Search – Getting Started.....	5
3	Home page.....	6
4	Search query entering	7
5	Search results page	8
5.1.	Page functional elements.....	9
5.1.1.	Logotype.....	9
5.1.2.	Search box	9
5.1.3.	Profile	9
5.2.	Side menu.....	9
5.3.	Search results display area.....	9
5.3.1.	Toolbar	10
5.4.	Search results display mode.....	10
5.4.1.	List view mode.....	10
5.4.2.	Tile view mode	11
5.5.	Document window.....	12
6	Working with found documents.....	13
6.1.	Documents from the Web Source.....	14
6.2.	Documents from mail service MS Exchange	14
6.3.	Desktop Manager Utility	14
7	Search results limitations	15
7.1.	Filters.....	16
7.2.	DataCloud.....	17
8	Advanced search	18
9	User account	20
9.1.	Preferences	20
9.2.	Custom queries	21
9.3.	Stopwords	21
10	Search query language.....	21
10.1.	Search query operators.....	21
10.2.	Shortcuts	22

11	Differences between Hulbee Enterprise Versions	23
12	Frequently asked questions (FAQ)	24
13	Glossary	24
14	Support	25

1 Introduction

Hulbee Enterprise Search (HES) is a search system that provides an opportunity to find the different types of files in different data sources (e.g. enterprise file system, web resources, mail service, etc.) with reference to the activities of the company. Access rights of the specific users are also taken into consideration. The sources that are available for searching as well as separate storages within a source are added to the system and referred by the administrator of the company.

The present Manual is designed to introduce a user to the HES functionality. Please read all information carefully before you start.

HES provides both basic and special features that serve a quick and efficient work:

- Search in the data sources of different types.
- A comprehensive search for all popular formats.
- Differentiation of access rights for individual users and groups.
- DataCloud for search query refinement.
- Personalized settings of the DataCloud on the home page.
- Filters and an advanced search to narrow down the search area.
- User's personal search templates.
- Summary of documents content.
- A quick overview of the search results in the document preview window.
- Desktop Manager application to open documents from the enterprise file system.
- User's preferences.
- Search queries language.
- Improved language support.
- Interface accessible on mobile devices.

HES system user interface is browser-based. A user needs to run a browser on any device and be within the same network with the search server to get access to search functions. To use all functions of HES while working with documents, a user just needs to have a Windows-PC, joined to the same enterprise domain as common documents of the company.

Client-side requirements:

- Windows 7 SP1 or later, with installed updates.
- .Net Framework 4.5.2 or later.
- An only 64-bit system for Desktop Manager installation.
- Latest browser versions (Mozilla Firefox, Google Chrome, Internet Explorer or Microsoft Edge are recommended).

HES provides support and processing of different file formats. Formats that are supported¹ by the HES search engine are listed in the table below.

File format	Extension(s)	Extract texts	Extract meta tags	Extract attachments
Text	txt, rtf, doc/dot, odt, wri, sxw	✓		
	docx/docm/dotx	✓	✓	
Publishing	pdf	✓	✓	
	xps	✓		
Hypertext	html, htm, xml	✓		
	mht, shtml	✓	✓	
Table	xsl, xslt, xls, ods, csv	✓		
	xlsx	✓	✓	
Presentation	pptx	✓	✓	
	ppt, pps, odp	✓		
Graphic	bmp, jpg/jpeg, png, jfif, tif, tiff, jpe		✓	
E-mail	msg, eml	✓	✓	✓
Archives	zip, rar, 7zip			✓
Media	avi, mp3, mp4, wav, m4a, wma, wmv,ogg, flac, mkv, ape, mpc		✓	
Source Code and Scripting	cs, vb, js, csproj, h, c, cpp, vbs,vcproj, vbproj, pl, sql, bat, cmd	✓		
	css	✓	✓	

¹ The search engine does not just allow indexing meta information of files (file name, path, size, creation date, modification date), but also working with the content of the file – extraction of text and/or meta tags and/or unzipping archived files, that also contain other files. For a list of formats available to the user with a preview, see section 6 – page preview.

If certain formats from the table are processed incorrectly, contact your system administrator. For files protected by passwords, files exceeding the limits on the size or files in formats that are not represented in the table above the search engine carries out the extraction of metadata¹, but not of the text.

Also, the users should pay attention to the documents that have been received by fax, scanner or digital camera that have a graphical representation and no text or publishing formats. The current version of HES does not support OCR technology (Optical Character Recognition).

The information provided in this Manual applies to the HES version 3.0, and it can be modified as new updates become available. If you use the earlier versions, please note the differences between them (see 11).

2 Hulbee Enterprise Search – Getting Started

HES authorization is carried out using domain user account.

Follow these steps to log in:

1. Open your browser and type the URL, given by an administrator of the enterprise, in the address bar (e.g. <http://yourcompany.com/hes/>).
2. Fill in the Authorization form and sign in or use the automatic login.

When the possibility of an automatic login is set, a user does not need to re-enter their input credentials into the Authorization form. Just click on “Login using Windows account” and the search engine will take the same username and password, which were used for logging the user into the operating system. This setting is performed by the enterprise administrator. Please note that the range of the search engine settings may vary depending on the preferences of the HES administrator of the company.

The Authorization form looks like this:

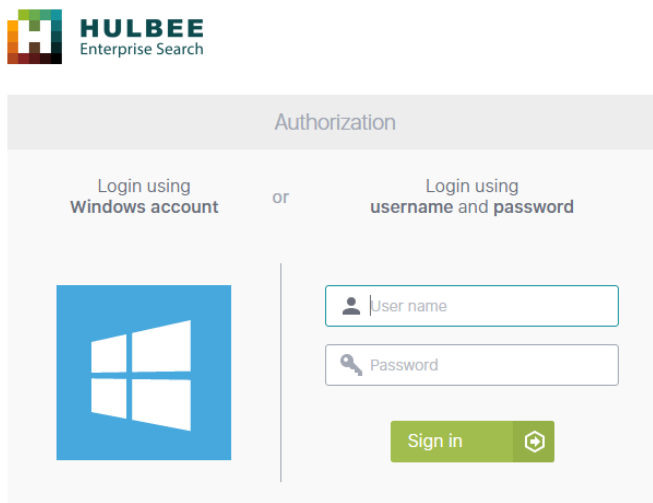


Fig. 1 Authorization form.

If automatic login is not set, the login form consists of two standard fields (User name and Password) and confirm button “Sign in”.

There are two variants of login: with the domain name (i.e., DOMAIN\user_name), without domain name (i.e., user_name). In the latter case the domain name, set by the HES administrator, is used.

In the case of incorrect login or password entering, user receives the notification. In the case of correct login or password entering, user is referred to the HES home page (see 3).

Notice! The password aging is limited. For this reason, if a user continues his work after some interval of time, he is referred to the page of password entering before the continuation of work. This option was programmed to protect the user’s data when leaving the workstation. After confirmation of the password, the work is continued.

The User Manual is accessible via a link in the footer of the page. The license agreement is available via another link (Fig. 2, f).

3 Home page

On the HES home page one can see standard search box for simple search (see 4).

Additional functional elements to organize more effective search:


- Drop-down list (Fig. 2, a) of user’s search templates (see 8).
- “Advanced Search” icon  (Fig. 2, b). Quick access to the “Advanced Search” page (see 8).
- Document type filters (Fig. 2, c). Searching only the documents of specific type (see 7.1).
- User profile (Fig. 2, d). Reference to the user account settings (see 9) and Log out.
- DataCloud (Fig. 2, e). Quick search by using custom queries (see 7.2).



Fig. 2 HES home page.

The use of these functional elements is optional.

The footer of the home page is organized in the same way as footer of the page with the Authorization form.

4 Search query entering

User query might be entered into the search box, located on the home page (see 3), on the results page (see 5) and on any other page of the HES system. To start with, please put the cursor in the search bar.

Directly after the beginning of entering, drop-down list – Suggest² (Fig. 3) with documents, most appropriate to the entered query, appears. Also Suggest becomes available after: continuation of typing of the query entered before.

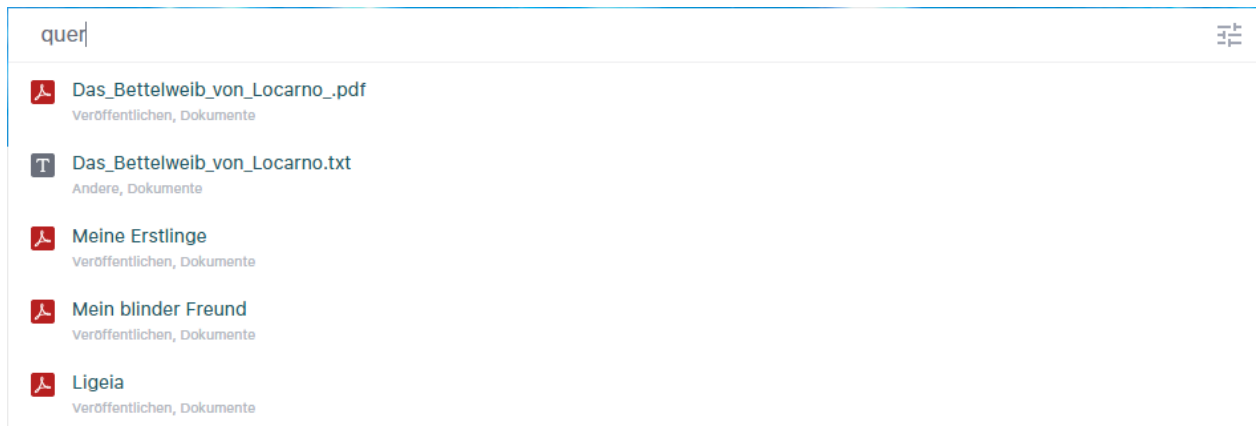


Fig. 3 Beginning of query entering - Suggest appearing.

The following actions are possible at this stage:

1. Choose an appropriate document from the drop-down list – use up/down arrow keys and <Enter> to confirm or just click the document.
2. Ignore the prompt and continue entering your own query. To confirm press <Enter> or click on “Search” button.

After confirmation a user is referred to the search results page (see 5). In the first case a window of the selected file is opened (see 5.5), in the second case the list of results that were found for the search query is displayed.

5 Search results page

A user is referred to the search results page after the start of the search of the query, entered or chosen by him (see 4). In the process of search, user permissions for documents are taken into consideration. In other words, user can see only accessed documents in the data storages.

Search results page consists of standard set of functional elements (see 5.1), side menu (see 5.2), results display area (see 5.3), which provides different modes for result display, and document window (see 5.5).

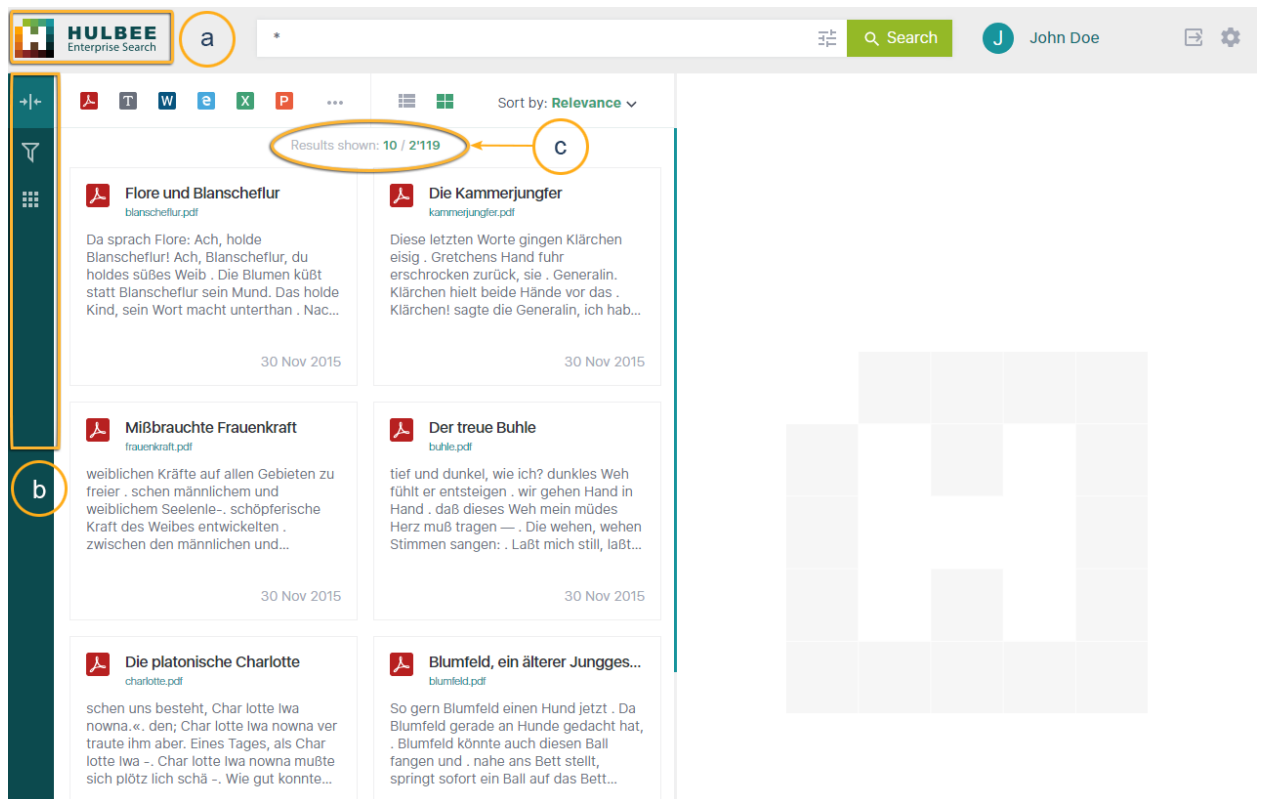


Fig. 4 Search results page.

5.1. Page functional elements

5.1.1. Logotype

Click on the “Hulbee enterprise Search” logotype (Fig. 4, a) directs a user to the home page (see 3).

5.1.2. Search box

A user can change the query entered earlier in the search box, specify it manually or with the help of DataCloud tool (see 7.2), enter a new search query or activate the Suggest (see 4).

5.1.3. Profile

Profile (Fig. 2, d) shows user’s personal information. Click on the username or “Preference” button to access the personal account (see 9). Use “Logout” link to return to the Authorization form (see 2).

5.2. Side menu

On side menu (Fig. 4, b) filters tool and Datacloud tool are presented. They are described in detail in the section 7.

5.3. Search results display area

By default search results are displayed in the list view mode (see 5.4.1), sorted by relevance, that is to say reflecting the degree of relatedness to the user’s search query, from more suitable results to less suitable.

The number of search results is shown under toolbar (Fig. 4, c). If nothing is found, try to enter another query or check search settings.

The information on each result includes the name of a document, its location, creation date. In the case of documents which contain text, text fragment containing the query or its part is also shown. Words from the search query are among the keywords and are marked in the text.

The search results are loaded after page browsing.

By default search results page is divided on results display area and document window (see 5.5). Both areas can be displayed as a full screen, if necessary. To maximize results area just drag the delimiter line between two area. To switch between the two views of the search results page, use toggle «Document on/off» on the side bar.

5.3.1. Toolbar

Toolbar (Fig. 5) is designed for the setting of search results display.

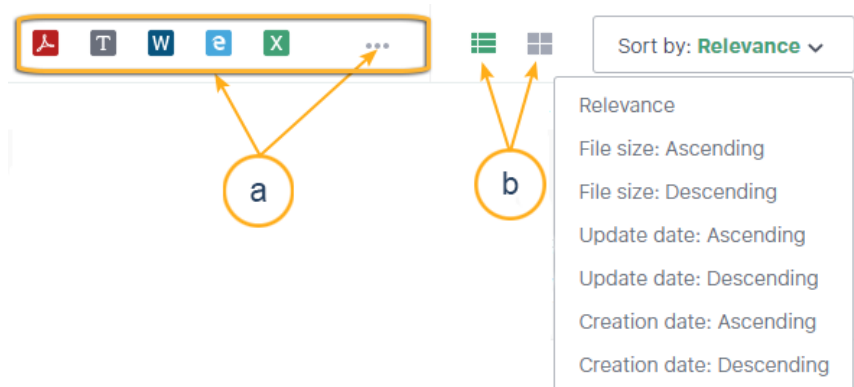


Fig. 5 Toolbar. Search results page.

One can find the following elements on the toolbar:

- **Quick filter** by file type (Fig. 5, a). There is a possibility to display a certain type or several different document types in the result list. The filter is presented as icons, which are merged into a drop-down list as soon as the result area is reduced. After selecting the data type from the drop-down list, the selected icon is displayed as active.
- **View mode** option allows a user to change modes of search results display. Two modes are available: list view (see 5.4.1) and tile view (see 5.4.2).
- **Sort by** option helps to display the results by sorting them in a way chosen by a user: sorting by relevance³, file size, file creation date or file modification date. A user needs to choose one of the variants from the drop-down list (Fig. 5).

5.4. Search results display mode

The search results can be displayed in two modes: list view mode and tile view mode. When you log on to the system from the same computer and over the same browser, the mode that was most recently used is saved.

5.4.1. List view mode

To see listed results choose the list view mode (Fig. 5, b) on the Toolbar (see 5.3.1).

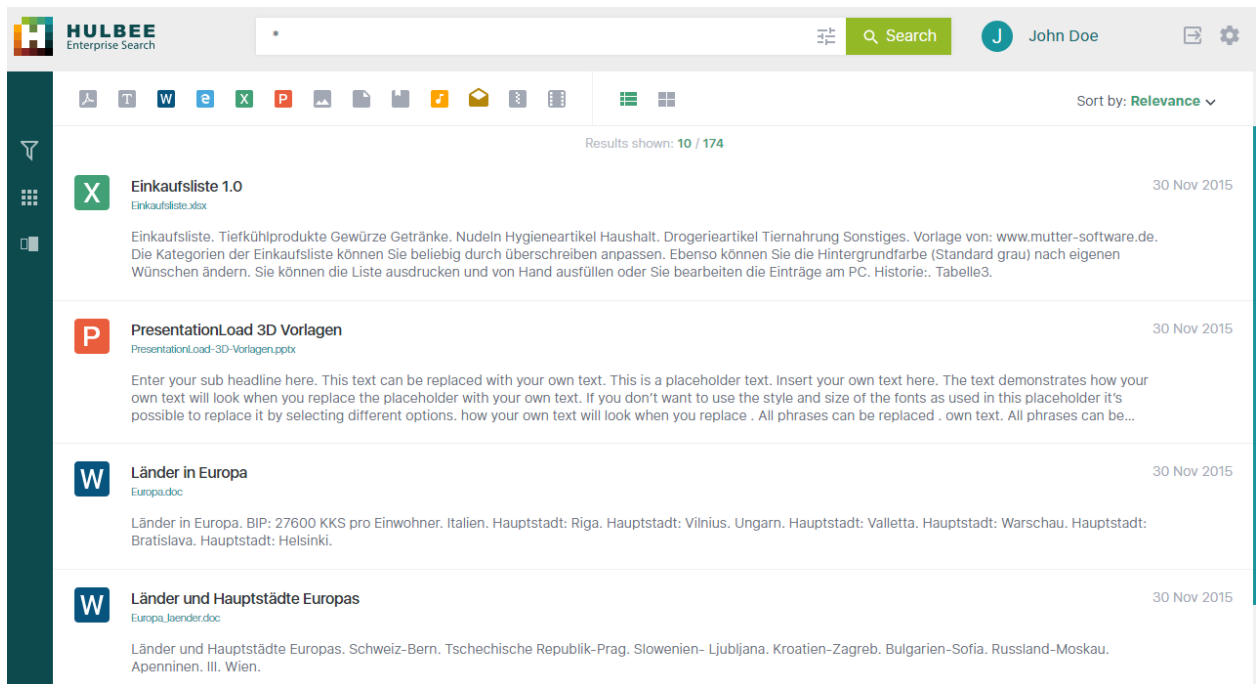


Fig. 6 Results display area. "List view" mode.

From the list view you can switch to the tile view (see 5.4.2), and vice versa.

5.4.2. Tile view mode

To see tile view mode, choose the appropriate mode (Fig. 5, b), on the toolbar (see 5.3.1). This display mode is particularly suitable for pictures, video, presentation, etc.

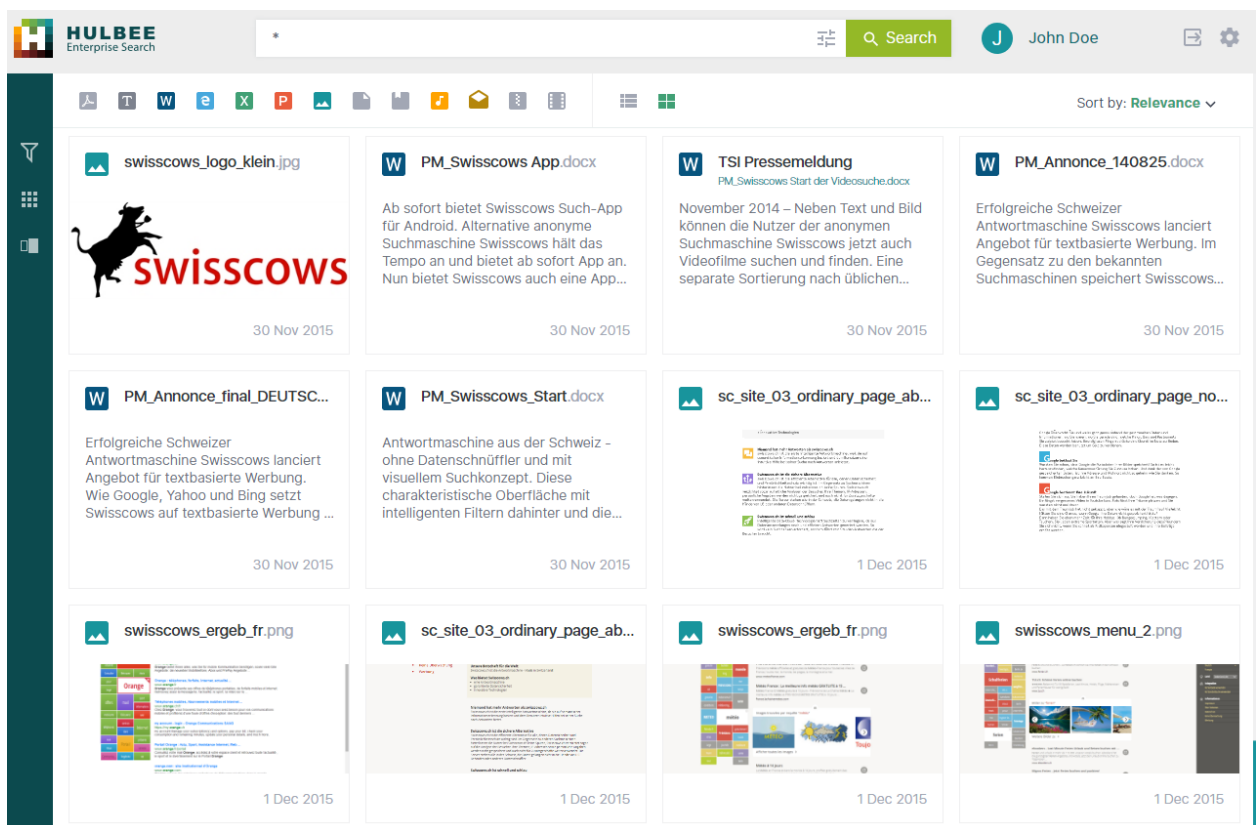


Fig. 7 Results display area. "Tile view" mode.

From the tile view you can switch to the list view (see 5.4.1), and vice versa.

5.5. Document window.

After a specific document has been selected from the results list, its description is opened in the document window. In this case, the document window is opened, even if the area with results occupies the entire active window.

Also, document window is shown after select search result from Suggest (see 4).

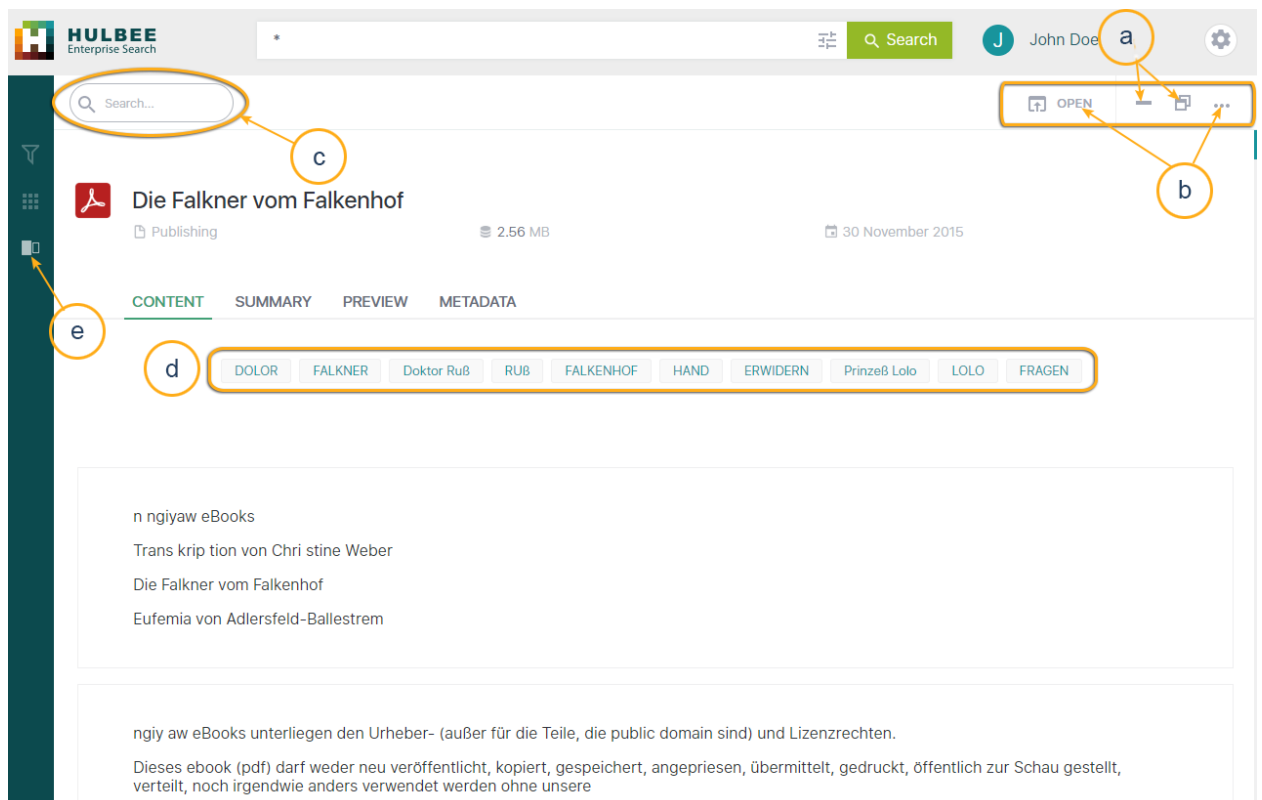


Fig. 8 Document window.

The document window can be part of the results page (Fig. 4), but it has standard window control buttons – Minimize, Maximize, Close (Fig. 8, a), which allow you to expand it to the size of the entire window. To return to the original form of the results page, use toggle on side bar "Search results on/off" (Fig. 8, e) or click Minimize.

Toolbar of the document window contains tools for further work with the document (Fig. 8, b) and a field with which the search is made possible in the contents of the tab (Fig. 8, c). They include word or word group search. To some degree, this navigation is the analog of the system search, but in the frames of one document. If you cannot find search results for the word in the document, maybe the word entered was added to Stopwords by the HES administrator.

Document window contain several tabs and it count can vary depends on document content:

- Tab **“Content”** contains the keywords and text of the document in full or partially, depending on size and file type limits.
- Tab **“Summary”** also represents the keyword, but full text is replaced by digest⁴ – summary of the document in the form of paragraphs. Digest includes the most important sentences to make user understand what the document is about. It is useful for large documents.
- Tab **“Preview”** shows the document in the most appropriate appearance of the original document (adapted from the original document). Tab appearing depends on document type. This display mode is available for pdf, the some formats of images, audio, video (supported by your browser) and HTML pages that are adapted for a safe browsing. For example, allow or deny the JavaScript execution, can be configured by the administrator for specific domains.

Pay attention to tools for searching the document, located at the bottom of the “Preview” tab. They may vary depending on the type of document. Size of some document can be too large for preview – appropriate notification is appeared in this case.

- Tab **“Metadata”** gives information on document properties, namely the location of the document, size, file name, file type and MIME type, date of its creation, file modification date, the language of the document. Metadata may differ slightly for each document.

For some files, content cannot be retrieved for some reason, so only “Metadata” and “Preview” tabs are available. The “Preview” tab, if such is provided for the document (see the tab descriptions), contains embedded audio- or video player, or preview of image. The list of formats for which the preview is available depends on codecs, supported by browser. Generally, this list includes common images (jpg, png, gif, tiff, bmp), mp3 sound files and mp4 video files with codec x264. In other cases, warning concerning impossibility to show this file type in the browser and suggestion to open it in the proper application on a computer for the continuation of work appears.

Notice! Keywords (Fig. 8, d) – “Summary”, “Content” tabs – are part of digest and include the most important words and phrases. The keywords are links. After the click on the keyword, the system begins to search for it in the text, displayed below. In such a manner keywords help to navigate through the text.

6 Working with found documents

Documents, found by the HES system after user’s query processing, are available for further work with them, according to the user’s access rights.

Any documents from the results list, regardless of the data source (file system of the company, web resource, etc.), can be viewed through the HES interface in any available Internet browser.

To open a document (download, for further work with it), perform the following steps:

1. Select the document from search results list.
2. Use toolbar in the document window.
3. Select "Open" directly on toolbar or from drop-down list (Fig. 8, b)

The next action depends on the type of source where the document is located.

6.1. Documents from the Web Source

After actions described above, document placed on the web resources is opened in a new browser tab. After opening, you can view the web-page or download the document to your computer.

Documents from the web resources are displayed in the search results if user has access rights and appropriate connector (Web Connector) is added. You can choose only such documents using the filters on the source – Sources -> Web Connector.

It may happen when you try to view a document with a web-resource in “preview” mode through HES interface that authentication is required. The source will be available only if you know the username and password to log in to this resource.

6.2. Documents from mail service MS Exchange

The search result may contain different types of files, including email files. These include mails (and their attachments) from mailboxes on the MS Exchange service. A user can see only his personal correspondence and does not have access to the correspondence of other users from Active Directory. An exception is made only for the HES administrator.

When trying to open such documents, the user is redirected to Outlook Web App. If necessary, fill in the authorization form, using the username and password, under which you are registered on the mail service (the same as those used to log on to Windows and HES). Please note that the domain name should be at the beginning of the “username”, for example: hes\user_name.

You can choose only email from MS-Exchange using the filters on the source – Sources -> Exchange Connector.

Notice! It may happen that Exchange Connector is missing in the filter area on your page. Possible causes are no e-mail mailbox on a MS Exchange, no incoming\outgoing emails, using of filters that exclude the mailboxes from the search result.


6.3. Desktop Manager Utility

Utility Desktop Manager is only launched, when trying to open files from the file storage of the company or the folder containing the files (“Open folder”), if opening the file is not possible (for example, the file is zipped, file path is too long, etc.).

It provides an opportunity to work with the original file and not with its copy, downloaded via browser.

If the user is detected and has access to the opening file, Desktop Manager calls up an associated program, taking into account settings of the system concerning standard software. For example, *.doc, *.docx files can be opened in Microsoft Word, Open Office, *.txt files – in Notepad, etc. Referring to archives (*.rar, *.zip) and executable files (*.exe), explorer opens the folder, containing them.

Desktop Manager should be installed and started on the client computer. The utility has autoloading, and it is available right after user login. It does not have its own interface, so, if the program is started, user sees the “hand” icon in the Windows taskbar (if you hover a cursor, you will see the prompt Hes.Desktop.Manager).

The user has an indicator available, with the information on the status of the connection. When the indicator is green, the connection to the HES could be produced. Otherwise, the indicator is displayed in gray  .

If the utility is not installed (a user is offered to install Desktop Manager, or he does not see the utility icon), do the following to install it:

1. Push the button “Download & Install” in the message window.
2. Confirm that you want to download the file by click on “Save File” and open it in the folder.
3. Run the executable file.
4. Follow the prompts of the installation wizard.
5. In the selection “Install just for you” or “Install for all users of this machine” leave the default option.

An additional step of the installation, where it is suggested to enter the URL, can appear. Enter the same URL that was used to start the HES instead of <http://localhos>.

In the case of the wrong URL entering you can change them using item “Options” from the context menu. It displays after clicking the Desktop Manager icon, which located in the notification area of the Windows taskbar.

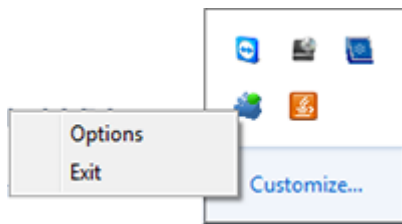


Fig. 9 Desktop Manager icon, context menu.

Also in the window “Hes.Desktop.Manager options” you can choose “Prefer HES URL from registry”. After installation, change of settings will only be available on your local computer. Do not perform this setting unnecessarily.

Notice! After installation, the utility is added to the autorun. It may happen that for some reason the autorun has not occurred, and when you try to open a document from the file repository, the user will be prompted to install the Desktop Manager again. First of all, try to run the utility from the folder Hulbee AG -> Hes.Desktop.Manager.

7 Search results limitations

Search results limitations mean the reduction of quantity of displayed results by the elimination of results not matching definite criteria.

These criteria are established by a user with the help of filters (see 7.1), provided by the search engine, and also with the help of special-purpose tool DataCloud (see 7.2).

There tools are available on the search results page. DataCloud and filter by document type are also available on the HES home page (Fig. 2, c, e).

7.1. Filters

Use toggle Filters from side menu (see. 5.2) to open the list of filters on search result page.

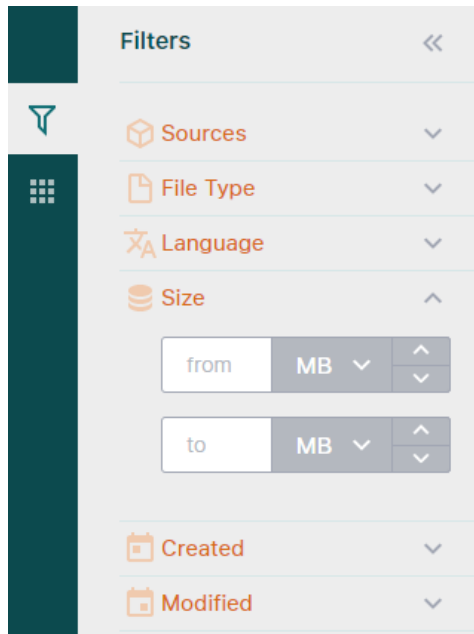


Fig. 10 Search results page. Filters.

The possible ways of filtering search results are as follows: sources, filter by type, language and size of the document, date of its creation or modification.

Likewise, the user's templates are available in the list of filters - a set of filters that user defines himself on the "Advanced search" page (see 8).

Filter by sources can filter by the type of document storage (enterprise file system or web resource, email resource etc.), as well as by the name of the individual repositories within the storages. Please note that not every source is divided into multiple repositories. Some sources in the repositories that are displayed in the drop-down list are referred to as the administrator of the enterprise.

If search filters have been defined in some area of the HES search engine (results page filters or quick filter on toolbar, advanced search page), the same set of filters is saved for all pages, and the set filter method is used to determine how the results page should be displayed.

After the query execution, it is known how many files from the total quantity of search results match one or another criterion. Counters, located in the filters column, display this information.

You can filter search results both by one criterion and by several criteria at the same time.

To filter search results do the following:

1. Choose the necessary filter from the filters column.
2. Choose the necessary item from the list of all possible variants.

3. Continue with another filter, if necessary.

The page reloads automatically and you see filtered results. After using filter, the quantity of search results changes. It is displayed by search results counters on the page and counters in the filters column.

Using filtering by type you may choose subtype for documents, containing text (for example spreadsheets, presentations, etc.).

You can return to view all found files by cancel the chosen filters with the provided cancel button.

7.2. DataCloud

DataCloud is a set of tiles⁵ of different colors with keywords inside. The colors of tiles reflect semantic similarity of terms.

The HES system has two DataClouds with different ways of filling.

The first DataCloud is available on the HES home page (see 3). Here, words inside tiles are custom queries (see 9.2), entered into the system by administrator and users. Each user does not have access to words, entered by other users. When finding lack of custom queries, the cloud adds keywords from documents, containing text. Its elements are ordered at random, occupying the designated area.

When you choose a tile, the search for your query starts and you will be referred to the search results page (see 5).

To open the DataCloud on search result page use the “Datacloud” toggle from side menu (see. 5.2).

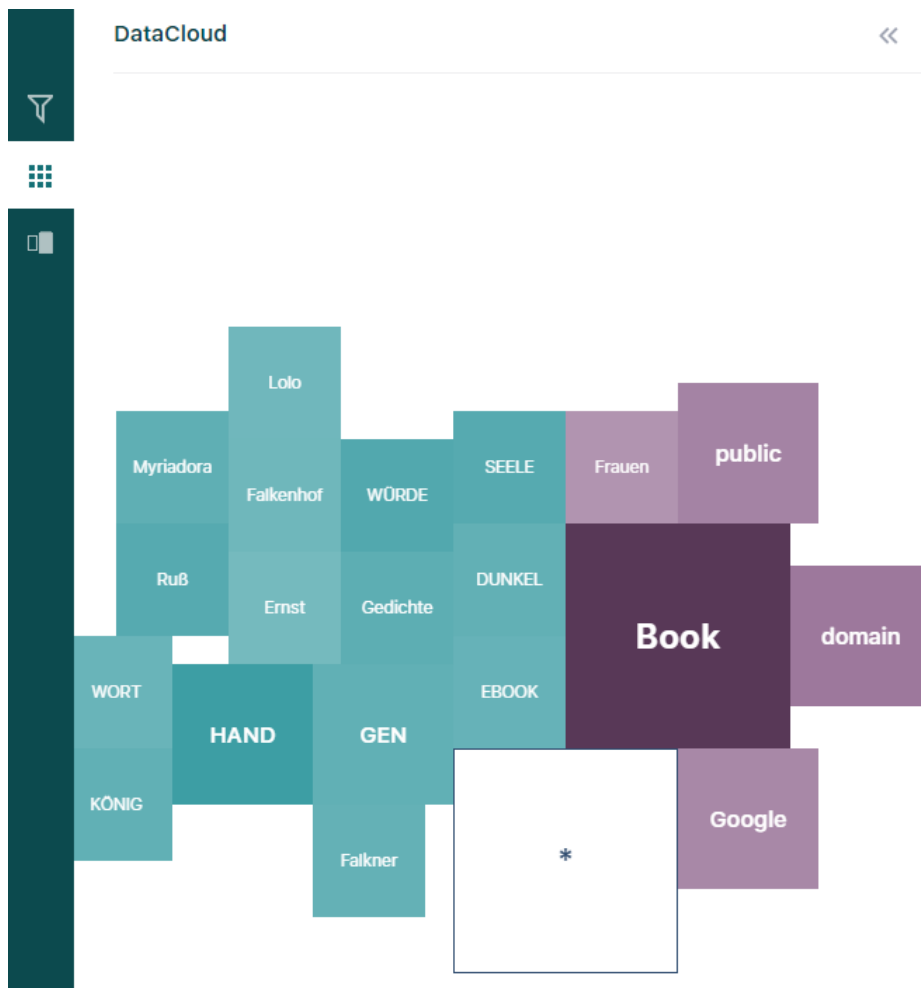


Fig. 11 Search results page. DataCloud.

It consists of query-tile (white tiles) and words, which are the most frequently repeated words, chosen from the found documents, excluding stopwords (see 9.3).


This DataCloud helps to specify the search result by adding new words to the entered query.

By clicking on an arbitrary tile, you add the word of the tile to the request.

By clicking on the query-tile, you delete this term from the query and the search starts without it after page reloading.

8 Advanced search

The advanced search offers an opportunity to use further search criteria, narrowing down search results.

To begin the advanced search click on the icon  “Advanced Search”, located in the search box on any HES page (Fig. 2, b). This icon is a link. It becomes active when you hover a cursor over it. You also see the prompt, describing its function.

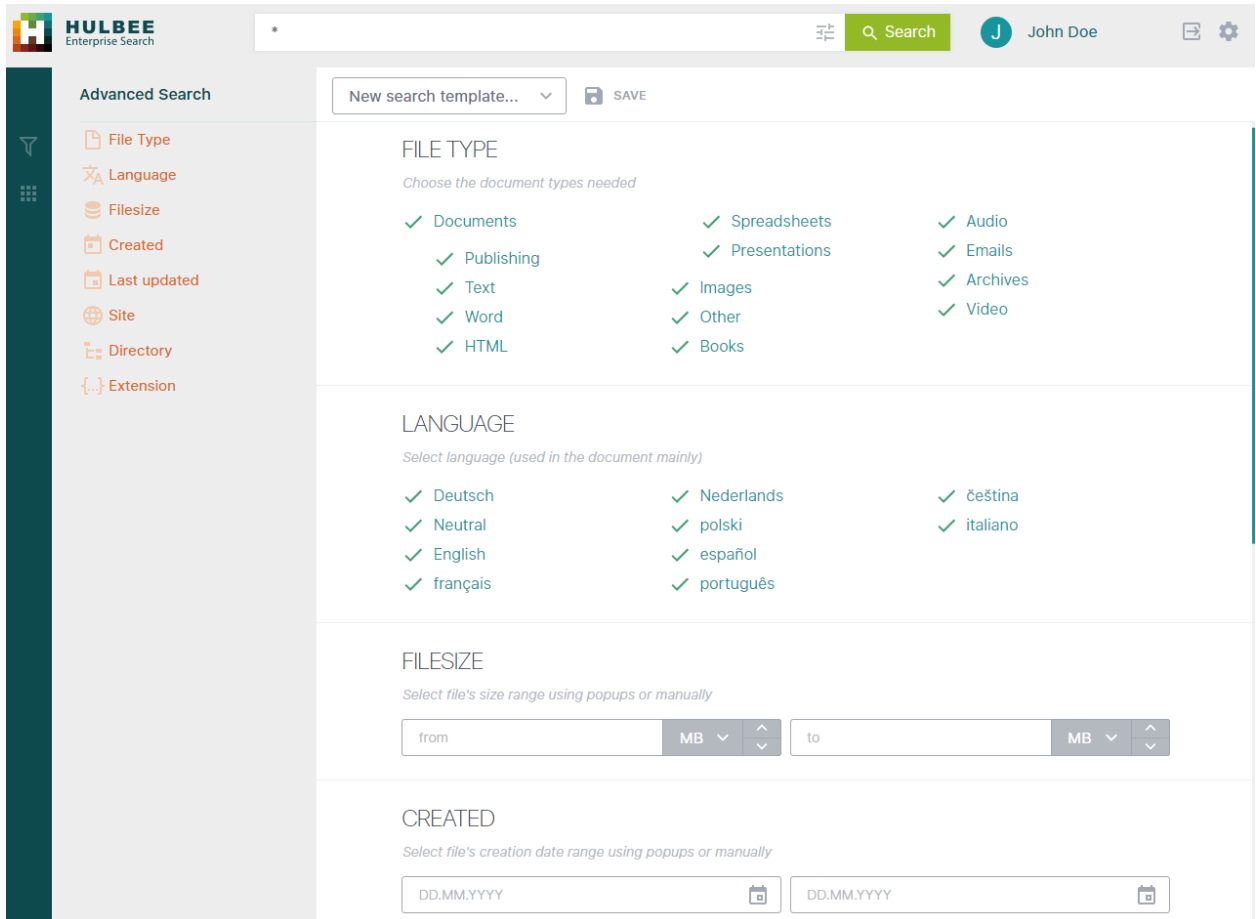


Fig. 12 Advanced search page.

The heading of the advanced search page contains the same functional elements (see 5.1.1-5.1.3) as other HES pages.

The page itself includes list of filters and form for work with filters. Use links from the filters list to move through the filters form.

You may find the following fields in filters form:

- **File type.** Type of the file. You may choose several variants at the same time.
- **Language.** The language of the document. You may choose several variants at the same time.
- **File size.** The exact size or a range. Use spinners⁶ or enter it manually.
- **Created.** The exact date or a range of time. Use calendar or enter it manually in format dd.mm.yyyy
- **Last updated.** The exact date or a range of time. Use calendar or enter it manually in format dd.mm.yyyy
- **Site.** Site search. Only at the domain name: example.com or .com
- **Directory.** File path should be entered in a standard way. Different level folders are separated by slashes. If you start typing with a slash (double slash), proposal list will be available. When you type the name of file or folder not adding any symbols, you will see the documents with this name in the path.

Please note that although the fields Directory and Site are for the refinement of search queries that relate to various sources, a simultaneous input will not display a search result.

- **Extension.** This field should be filled with extensions without leading dot. For example: pdf, txt, doc, etc. You may add more than one extension at the same time. Use <Enter> after adding every extension.

While filling the form, pay attention to text prompts near its fields.

By default, all results are displayed on the user's request. If any filter is applied this is displayed in the list of filters. Here you also can cancel the installed filter.

To confirm the settings, click "Search" or restart the query in a different way.

Filters set on the advanced search page are stored in the filter area on the results page (see 7.1) and in the quick filter on Toolbar (see 5.3.1). After returning to the search results page, only those results that are not subject to restrictions set will be displayed on it.

Note! On the advanced search page, you can set your own filter set, name it with an associated name, and save it. Custom templates are designed for a more efficient, organized, and quick search. These templates are available on the advanced search page, results page in the filters list (see 7.1) and on the home page (see. 3) as a drop-down (Fig. 2, a) list in the line with filters by document type.

9 User account

Click on your name in any HES page profile to go to your personal account.

The profile contains the "Logout" link, which shifts you back to the login form (see 2) to change user account, and also user's personal information. It includes username, taken from enterprise Active Directory.

With the help of personal account, a user can manage his personal settings, provided by the search engine. All variants of settings are listed in the column and are called "My Settings".

9.1. Preferences

In the "Preferences" section you may choose the interface language. Select the necessary language from the drop-down list. Then save the setting.

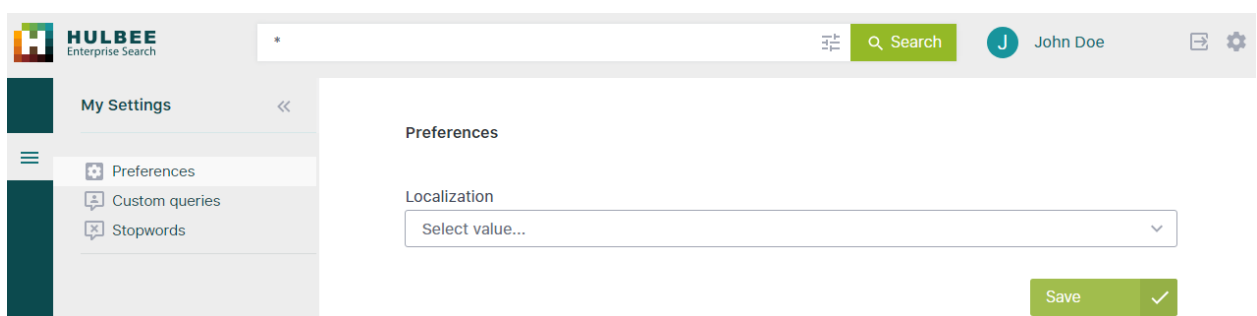


Fig. 13 User account. "Preferences" section.

9.2. Custom queries

“Custom queries” allow you to add keywords, which later will be reflected in the DataCloud on the home page, and which help to enter typical search queries quickly.

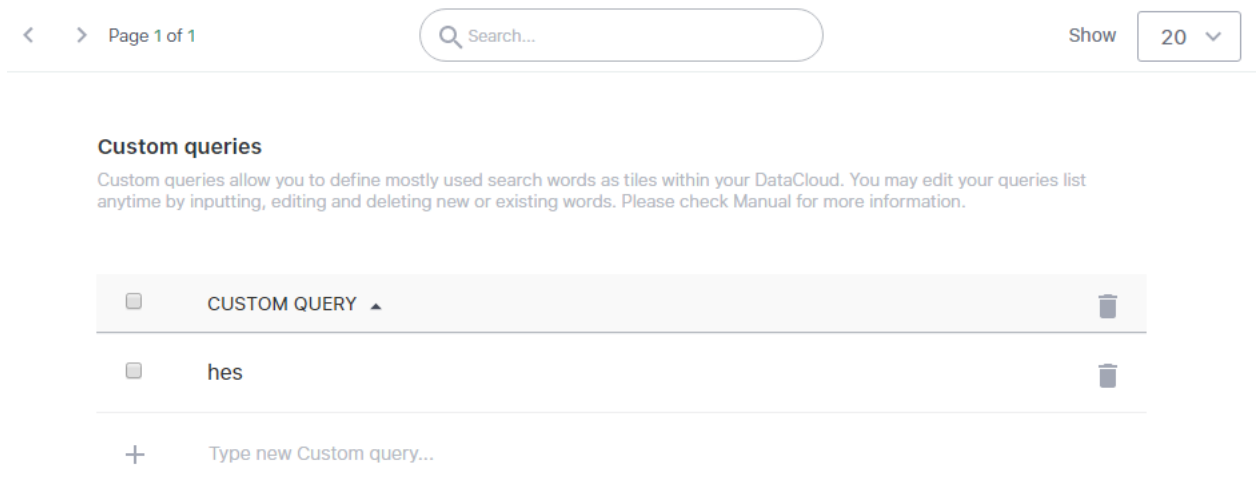


Fig. 14 User account. “Custom queries” section.

You may create a list of custom query. When you enter more than one custom query, you can use <Enter> to move to the next field. You may add, edit and delete custom queries.

There is also custom query navigation - page scrolling (if you have more than one page), implementation of the search by the custom queries and determining the number of requests that are displayed on a page.

If you enter more keywords than DataCloud can hold, part of them will not be displayed (at random).

9.3. Stopwords

Using “Stopwords” tab you may indicate words, which you do not want to see in DataCloud, located on the search results page. For example: the name of the user’s company. It can be found almost in every document, for which reason it is useless for query specification.

Work with stopwords list is similar to the work with search query list in the “Custom queries” tab.

10 Search query language

Support information contains the list of search operators – special symbols and (or) keywords, added to the query for specifying search results or used as independent queries.

10.1. Search query operators

To see all variants of possible search queries, visit the advanced search page (see 8). They are displayed in the first column of the page.

Here are the examples of formation of queries through the use of search operators. Words for query example: “world”, “peace”, “war”.

- Operator “+” – signifies “AND” operation, e.g. **world + peace** – searches for documents containing words “world” and “peace” at the same time (in general case, world + peace = world peace).
- Operator “|” – signifies “OR” operation, e.g. **world | peace** – searches for at least one of these words.
- Operator “-” – excludes the word after, e.g. **world -war** – shows the results containing the word “world” and excluding the word “war”.
- Quotes “” – if the phrase, e.g. “**world peace war**”, is quoted, words in the search results will be ordered in the same way.
- “~ N” – the less restrictive query, than “”. By “~ N” (e.g. “**world peace war**”~N) the search will be extended, so that keyword matching results can still be found, where N stands for the maximum number of possible variations of the search term (insert, delete, rearranging of words) that can be inserted so an accurate search result can be displayed.
- ~N – fuzzy search; stands for the maximum number of possible variations of the search term (insert, delete, rearranging of letters) that can be made so an accurate search result can be displayed. For example if we do not know exactly how to spell the brand “Hulbee”, even **hullbe~2** query displays the correct search result.
- Operator “*” – substitutes any unknown word ending in the query. in this case the search is carried out only by known fragment, e.g. **pe*** – pen, person, peace, etc.
- Operator “()” – arranges order of use of logical operators similar way that mathematical parentheses; used for complex query formation, e.g. **(world -war) | (world -peace)**.

If a user wants to use one of the above mentioned symbols in the proper sense, “\” symbol should be typed first.

10.2. Shortcuts

There are some more search queries, beginning with “:”. All of them become available in the drop-down list after typing “:” symbol in the query line. Query refinements are also available in drop-down list, which appears after main part **:shortcut:** entering.

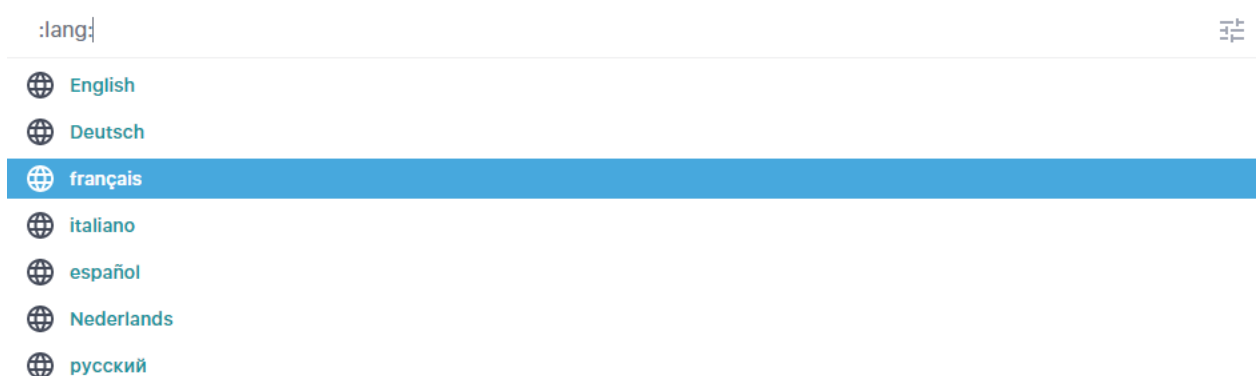


Fig. 15 Query refinements.

You will also see a short description of such queries and their input format.

- **:all** – all files accessible for a particular user are shown; the same query returns, for example, all text files, if a limitation on type of displayed files is placed

- **:doctype:** – returns documents belonging to one or several doctypes, e.g. **:doctype:Document,Image,Video ()**
- **:lang:** – returns documents in one or several languages, e.g. **:lang:en,de**
- **:size:** – returns documents whose size in bytes satisfies the condition, e.g. **:size:0-1024;**
- **:created:** – returns documents whose creation date satisfies the condition, e.g. **:created:01.01.2015-31.01.2015**
- **:updated:** – returns documents whose modification date satisfies the condition, e.g. **:updated:01.01.2015-31.01.2015**
- **:extension:** – returns documents of one or several extension, e.g. **:extension:.doc,.pdf**
- **:path:** – returns documents located in a specific folder, e.g. **:path:/public/docs**
- **:site:** – returns documents with a specific site or domain.

All queries listed begin with a colon. This format should be maintained without spaces or punctuation marks at the end of the query.

11 Differences between Hulbee Enterprise Versions

The main differences from version 1.7 to version 2.0:

1. The possibility of an automatic login.
2. The possibility of looking for documents that are located not only in the file system of the company, but also in other sources.

The main differences from HES version 2.0 to HES 2.2:

1. Adding a preview mode for tables, office documents, html-pages, which displays the adapted original document.
2. The search option in mail service MS Exchange.
3. The search for documents on the web by their URL – additional advanced search capabilities.

The main differences from HES version 2.2 to HES 3.0:

1. HES-site interface redesign
2. The user's search templates as additional possibility of advanced search
3. Document window instead of preview page
4. New HES-system extractors, which include a more efficient extraction of content from documents with text
5. Quick filters at document type on the results page toolbar

12 Frequently asked questions (FAQ)

1. I can't log into the system.
 - Select login option: log in with Windows account.
 - Try to log in, typing domain name before the username.
 - Contact your system administrator.
2. Do I have to log in to HES again, if I am already logged in with the credentials in the operating system?
 - Not necessary. When logging in - in the login window select login with Windows account.
3. I can't find the necessary document.
 - Check your right of access to this document.
 - Use "Advanced search".
 - Use filters.
 - Use query language.
4. Custom queries are not shown in the Cloud.
 - Custom queries are shown in the Cloud at random, as the Cloud has limited area.
5. I can't open documents in Desktop Manager.
 - Check if Desktop Manager is installed for this user.
 - Check if Desktop Manager is started (if not – start it manually).
 - Check the connection status Desktop Manager to HES by indicator. If it is inactive, check via the "Options" menu if the URL you entered to connect is correct.

13 Glossary

Digest – automatically formed text information, briefly describing the text. It consists of automatically generated keywords (word groups) and most information-rich sentences of the text.

Metadata – for HES it means the name of file, date of its creation and modification, size. For many formats meta tags are also available (author, type of camera, organization, etc.).

Relevance – the degree of relatedness of search results to the user's search query. The search engines use different methods for determining the relevance, which aim to match the query entered by the user. Accordingly, once sorted by relevance, the first results should be the most relevant for the user.

Suggest – drop-down list of documents, corresponding to the entered search query.

Spinner – a set of control elements, which help to increase or decrease the value in the input field using the mouse.

Tile – the minimal DataCloud functional element.

14 Support

Current information about the Hulbee Enterprise Search is available on the Web:

<https://cs.swisscows.ch/>.

Email for inquiries: info@hulbee.com.

If you have problems, you can get assistance from our technical support: support@hulbee.com.

Please describe your problem or report about an error or take a screenshot and send it to us as an attachment.