

Global Search for Microsoft Dynamics CRM On-Premise

User Manual



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Overview

Welcome to the Akvelon Global Search User Manual. With this guide, you can learn how to install, configure, and use Akvelon Global Search for Microsoft Dynamics CRM.

Global Search for Microsoft Dynamics CRM is a custom module, which allows you to search across all CRM entities at the same time, providing results in a single-view convenient layout.

Global Search provides the ability to:

- Search all records in all CRM entities (including custom entities) at once from inside the CRM workspace
- Search all records using the CRM plug-in within Microsoft Outlook
- View search results grouped by entities at a single glance
- Filter results in the column headers of each entity
- Configure entities to search, attributes to search by, and information to display
- Search the contents of an attachment
- Search custom entities (Search by Lookup fields)
- Export search results to Excel



Licensing

Whether you are using Microsoft Dynamics CRM in your production, development or test environment, you always need licenses.

Each organization requires its own license for Global Search. In a typical setup you have one single organization and only need one license. The license contains the organization name and you only can install the license on the organization with the specified name.

If you use multiple organizations, each organization requires a separate Global Search license. However, you only need licenses for the organizations using Global Search. If you have a single CRM server with 4 organizations and you want to use Global Search in two of them, then you need two licenses.

Each organization license (except the trial one) contains a restricted number of client user licenses (CAL). Each user of an organization that uses Global Search must have a valid license. If an organization has 100 users and 50 users have permissions to perform search using Global Search (see Global Search Users' Permissions section), you need at least 50 Global Search licenses, otherwise you will receive a license validation error.

When adding new users to CRM, be sure to check that Global Search also has corresponding licenses for new users.

To request Global Search licenses please contact gs.support@akvelon.com or visit avocado.com.



Installation of Global Search

Global Search Installation

To set up Akvelon Global Search on Microsoft Dynamics CRM On-premise, follow these steps:

- 1. Download Akvelon Global Search by the following link: https://avocado.com/global-search/
- 2. Log on to your Microsoft Dynamics CRM server using an account that has administrative privileges.
- 3. Allow pop-up windows in your web browser for CRM website:
 - Internet Explorer: http://windows.microsoft.com/en-us/internet-explorer/ie-security-privacy-settings
 - Google Chrome: https://support.google.com/chrome/answer/95472?hl=en
 - Mozilla Firefox: https://support.mozilla.org/en-US/kb/pop-blocker-settings-exceptions-troubleshooting
- 4. Run Global Search .exe file as Administrator (right-click on the setup file and select "Run as Administrator").
- 5. Follow the installation wizard.
- 6. After installation, Global Search should be activated. An activation window for the CRM server **default organization** will open after installation. If you need to activate Global Search for a non-default organization you should open the activation page manually (see Activation section for more details).
- 7. Give search rights to users (see Global Search Users' Permissions section).

Attachment Search Installation

Automatic installation

The Attachment Search is a feature which allows users to search the contents of an attachment in Microsoft CRM for the following file formats: .doc, .docx, .xls, .xlsx, .pdf, .ppt, .rtf, .txt, .xml, .pdf, and .zip.

To install this feature, please follow these steps:

- 1. Global Search front-end should be installed and activated (please see Global Search Installation above).
- 2. Run Global Search Backend .exe file **as Administrator** (right-click on the setup file and select "Run as Administrator") on SQL server where working copy of MSCRM Config database is located.
- 3. Follow the installation wizard and select SQL instance.
- 4. Enable attachment search feature Activation of Global Search on CRM On-premise

Activate Global Search separately for each organization. Enable compatibility view for your CRM website in case you use Internet Explorer.



First of all, make sure that pop-ups are not blocked by your internet browser for your CRM site. To activate Global Search for an organization, open the following page in your browser (activation page for server default organization will open when installation is complete): http(s)://CrmOrganizationAddress/ISV/Akvelon/GlobalSearch/Pages/Activator.aspx (e.g.: https://crm.akvelon.com/ISV/Akvelon/GlobalSearch/Pages/Activator.aspx).

On the activation page you will see the **End User License Agreement**, please read and accept it using the checkbox, then click the **Activate** button. Input your Global Search license into the open license window (see Figure 1) and click **OK**.

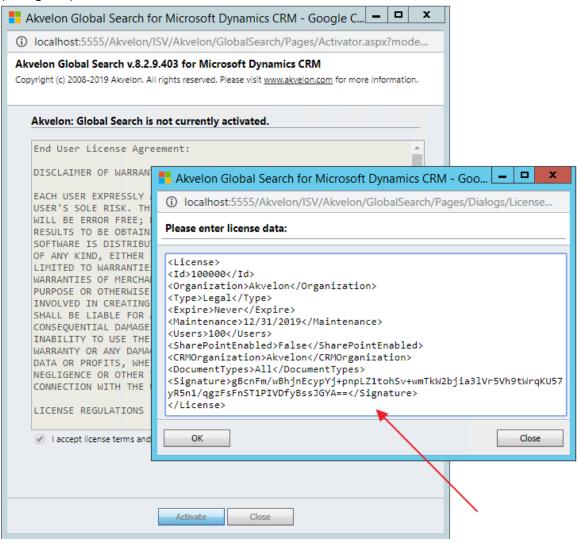


Figure 1 License window

The Akvelon Global Search configuration window will open (see Figure 2). Here you can select the tabs to add the Global Search links.

Please note: you should select at least one tab, otherwise you will not be able to use Global Search.



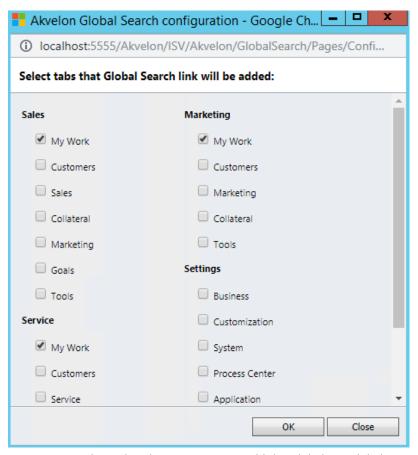


Figure 2 Select tabs where you want to add the Global Search link

After you click **Ok**, a message that Global Search is activated will show. Now you can use the Global Search functionality.

Updating License Data

If you need to update license data (e.g. to input commercial license instead of trial or update number of users) go to **Settings > Global Search Settings**, and click the **About** button at the upper right-hand corner. Then click the **Update license** button, put new license data into the license textbox (see Figure 3) and click the **Update license** button.



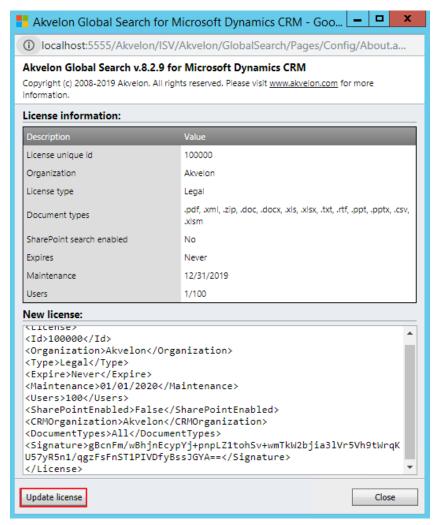


Figure 3 Update license window



Uninstall Global Search

1. Deactivate Global Search for ALL CRM organizations that have it enabled.

To deactivate Global Search, go to **Settings** \rightarrow **Global Search Settings** and click the **About** button at the upper right-hand corner. A window with license information will open (see Figure 4). Click the **Deactivate** button.

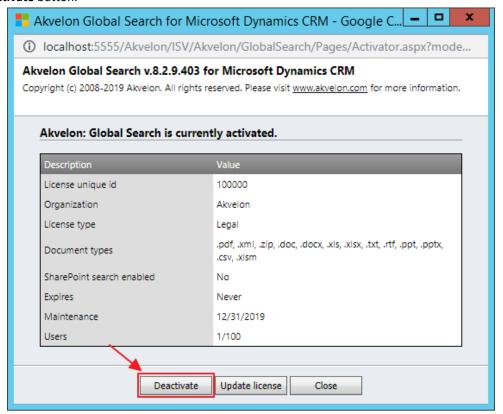


Figure 4 License information window

2. Uninstall Global Search using the "Add/Remove Programs" utility in the Microsoft Windows Control Panel (name in programs list: "Akvelon Global Search"), or using the Global Search installer.



Uninstall Attachment Search

1. Disable the Attachment Search for ALL CRM organizations that have it enabled.

To disable Global Search Attachments, go to Settings \rightarrow Global Search Settings and click the Attachment Search Configuration button at the top menu. The Attachment Search Configuration window will open (see Figure 5). Uncheck the Attachment Search Enabled checkbox.

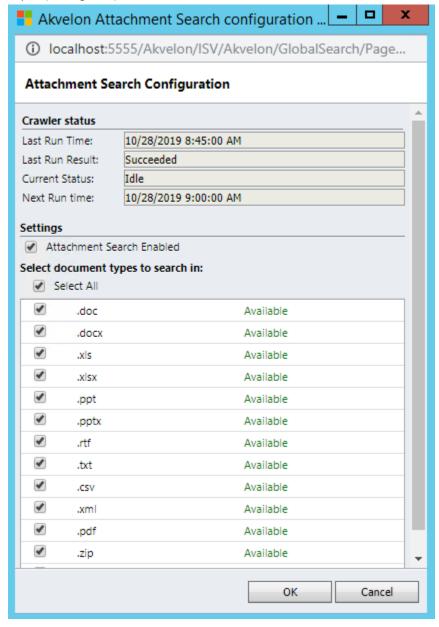


Figure 5 Attachment Search Configuration



2. Uninstall the Attachment Search using the "Add/Remove Programs" utility in the Microsoft Windows Control Panel (name in programs list: "Akvelon Global Search v.x.x Attachments Search"), or using the Attachment Search installer (Global Search Backend .exe file).

Activate Global Search separately for each organization.

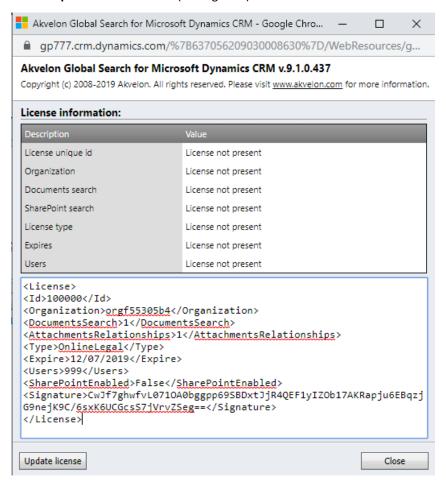


Figure 6 Activate Global Search

Updating License Data

If you need to update license data (e.g. to input commercial license instead of trial, update number of users, prolong your commercial license or enable search in attachment contents feature) go to **Settings** \rightarrow **Global Search Settings** and click the **About** button at the upper right-hand corner. Then click the **Update license** button, put the new license data into the license textbox (see Figure 7) and click the **Update license** button.



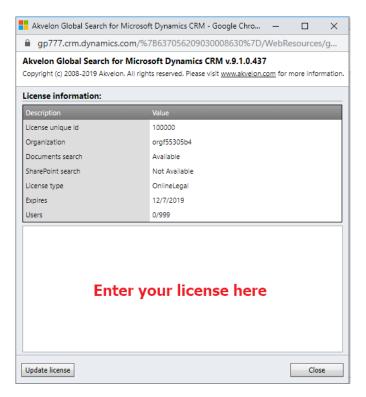


Figure 7 Update Global Search license



Searching with Akvelon Global Search

Akvelon Global Search can search various data items (such as customers, accounts, activities and etc.) in a single query. Global Search 5.0 and higher includes cross-browser support. It means that you can use your favorite browser (IE, Chrome, Firefox or Safari) to search in Dynamics CRM.

To use the search, go to one of the tabs where the Global Search link was added in the Microsoft Dynamics CRM application (these tabs are Sales, Service, Marketing), and select Global Search link (see Figure 8). Type a word(s) into the search field and click the Search button or press Enter (see Figure 9 and Error! Reference source not found.).

Note: If you use customized sitemap and Global Search link is not appeared there, please contact Global Search support for assistance: gs.support@akvelon.com.

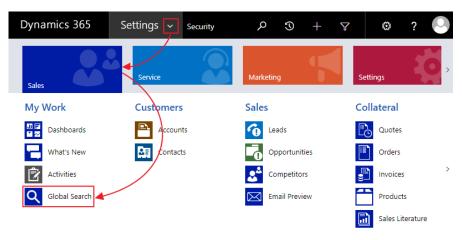


Figure 8 Global Search link in the sitemap

After the search is complete you will see all entity groups found. If you expand any of them you will see the list of found records. To open a specified record, double click on it. Also, Global Search provides ability to highlight search keywords in search results (see Enable/Disable Highlighting Keywords section for more details).

Global Search supports two types of search views (choose view at the top-right corner):

- All Items all items from all users (that user has access to) will be searched
- My items only your items will be searched

Note: Entities and attributes that are searched and displayed can be configured in the Global Search Settings (for detailed information see Configuration section).



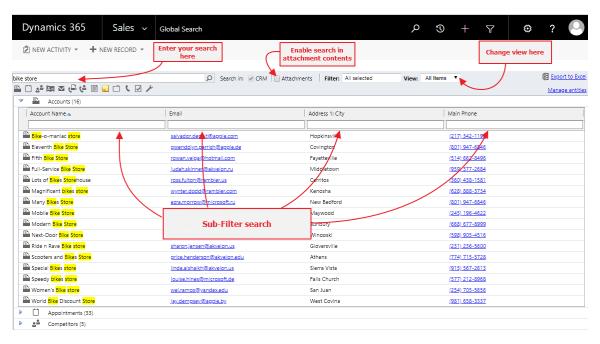


Figure 9 Global Search main screen in CRM

Search Logic

Global Search performs searches of strings in all entities and attributes configured in the Global Search Settings.

Global Search performs case-insensitivity searches by the word-beginning search principle.

For example, if you search for "Book" you can find entities that contain "book", "Books", "BOOKSHELF" and also "eBook"

Wildcard Search

You can use an asterisk ("*") as a character to represent one or more other characters. For example: If you search for "sa*t", found values will start with "s" and end with "t", for example "Salt", "Saint", "sacrament" etc.

If you search for "*sam*", records with "sam" anywhere in the string will be found, for example "sample", "Samson", "Grossam"

Multiple Words Search

If several words are input, Global Search will find all records containing all of the words in their attributes (not obligatory in the same attribute).

For example, if you search for "Jack London", it will find a contact with name Jack London, and it will find all Jacks that have London in the "city" attribute (or in any other searchable attribute).

If you search for "Seattle Art Museum" it will find Accounts with the organization name "Seattle Art Museum" or contacts with city "Seattle" and "Art Museum" in description.



You can also use the asterisk symbol with Multiple Word Searches (see Wildcard Search section).

Search the Contents of an Attachment

To make a search through attachment contents, type a word(s) into the search field, check **Search in Attachment** and click the **Search** button or press **Enter** (please ensure the Attachment Search is enabled, see the Configuring Attachment Search in CRM section for more details). Search logic for attachments are the same as for Global Search **except Wildcard search** (please see the Searching with Akvelon Global Search section). Wildcard doesn't work for beginning and middle of search word. It works only for end of the word, for example, if you search for "**Tom**", it will find the following: Tom, Tomato, Tomorrow, etc.

Custom Entity Search

Akvelon Global Search supports Custom Entity Searches (Search by Lookup fields). Every entity form has a lookup field regarding another entity. For example, the **Account** entity can be related to the **Contact** entity by the **Primary Contact** lookup field (please see Figure 10).

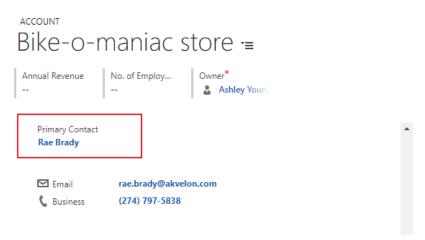


Figure 10 Relationship between Account and Contact

To add required attributes, go to **Settings** → **Global Search Settings**, select the entity, click **Edit Entity** or double click on selected entity. In **Attributes to Display** and **Attributes to search by** areas you can see customized attributes marked as **(lookup)** (please see Figure 11).



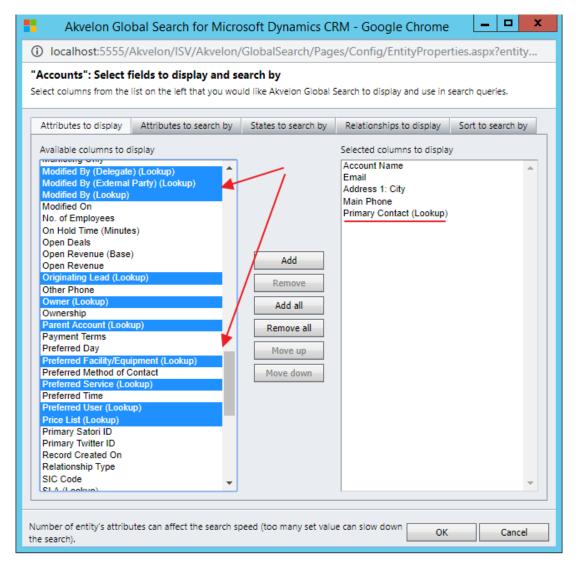


Figure 11 Search Lookup Settings

Add required attributes and click **OK**. The lookup fields are clickable. Related records will open by clicking the appropriate link (please see Figure 12).

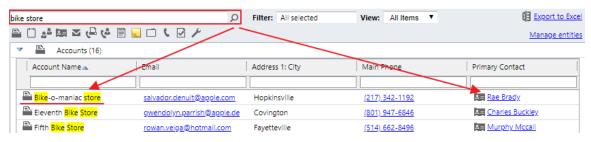


Figure 12 Search by Lookup Field



Inside Column Filters and Sorting in columns

When more than five records are found in group, the additional column filters are shown. At the top of each column, there is a text box used to filter that specific column (see Figure 13).

By typing in the text box, you can narrow the number of rows in the table down to those that match your filter text.

You can sort search results for each column by click on column name. You can select sort order (such as smallest to largest or largest to smallest) for each column you want to sort on.

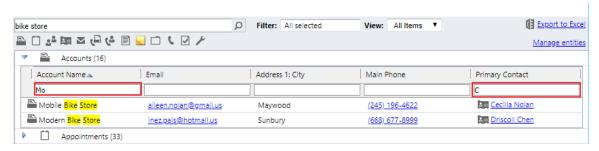


Figure 13 Inside column filters

Export found data to an Excel static worksheet

This feature requires 'Export to Excel' privilege that can be set on security roles (go to **Security** settings → click on **Security Role** and open role → go to the **Business Management** tab and look under "**Privacy Related Privileges**"). By default, an exported worksheet includes found records and fields that are displayed in the search results, using the same field order and sorting.

- 1. In the main Global Search window, click Export to Excel (see Figure 14).
- 2. In the Export Data to Excel dialog box, select entity which you want to export to Excel. Please note that CRM doesn't provide ability to export multiple entities at a time.
- 3. Click Export button → Open or Save Excel file.



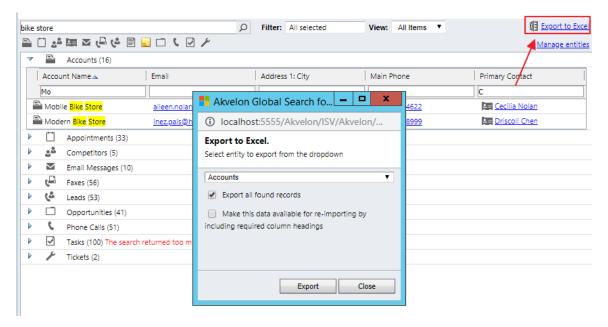


Figure 14 Export found results to Excel

Export all found records option – provides ability to export all found records to Excel. For example, Maximum Number of Found Records = 100 but Global Search has found 172 accounts, this option provides ability to export all 172 records to Excel.

Make this data available for re-importing by including required column headings option — if you are exporting the data so that you can make changes and import it back into Microsoft Dynamics CRM, select this check box (file will be saved in XML format).

Notes:

- When you open Excel file you will see a message that says the file that you are trying to open is
 in a different format than specified by the file extension. Click Yes.
- In Microsoft Dynamics CRM, money values are exported to Microsoft Office Excel as numbers.
 After you have completed the export, to format the data as currency, see the Excel Help topic titled "Display numbers as currency."
- Maximum number of records which you can Export to Excel at a time, depends on Microsoft Dynamics CRM configuration.



Configuration

This chapter describes how to configure Global Search roles, entities, attributes to search by, and attributes to display, within results.

Global Search Users' Permissions

To allow users to use Global Search, you must assign them special permissions. To give Global Search permissions to user groups, go to **Settings** \rightarrow **Administration** \rightarrow **Users**. Select user(s) you want to provide with Global Search permissions and go to **Manage Roles** on upper CRM menu. Add "**Akvelon Global Search Users**" role to selected user(s) (see Figure 15). Click **OK** button.

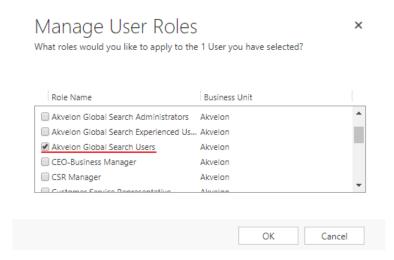


Figure 15 Global Search users' permissions

To allow users to change Global Search Settings (add and remove entities and attributes to search and display), you must assign them "Akvelon Global Search Experienced Users" (see Figure 16)



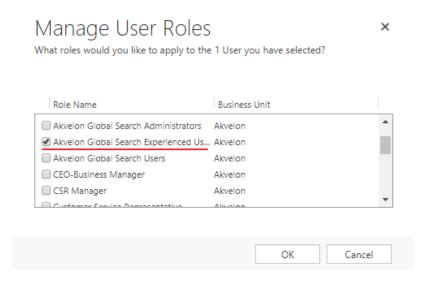


Figure 16 Manage User Roles

<u>Please note:</u> this role provides selected users with rights to Manage THEIR OWN Search Settings. It enables advanced functionality for your CRM users and number of requests to your support team can be increased. <u>Please enable this functionality only for experienced users and at your own risk.</u>

Users who have "Akvelon Global Search Administrators" can change Global Search Settings for all users (see "Save as Default" Settings for Global Search Users section).

Please note:

- Akvelon Global Search Administrators doesn't influence number of Global Search licenses;
- Akvelon Global Search Experienced Users influences number of Global Search licenses;
- Akvelon Global Search Users influences number of Global Search licenses;
- Akvelon Global Search role assigned to Teams influences number of Global Search licenses.

For example: you purchased 10 Global Search licenses, and you have 2 users with Akvelon Global Search Administrators role, 3 users with Akvelon Global Search Experienced Users role and 4 users with Akvelon Global Search Users role – only 7 licenses are used in this case. 3 licenses are available for additional Global Search users.

If you have User-1 with Akvelon Global Search Users/Experienced Users role and User-2 without this role, but **User-2** is assigned to **CRM Team which has Global Search Users/Experienced Users role** – in this case, 2 licenses will be used. Please be aware.

Adding/Removing Entities to Search

By default, Akvelon Global Search has set of configured Entities/Attributes to search through Dynamics CRM records and display search results. You can reconfigure search entities, attributes, and display fields according to your business needs.

Follow these steps to add/remove the entities Global Search uses:



1. Go to the **Settings** area, and click **Global Search Settings** (see Figure 17). You will see the list of entities that are currently enabled for search.

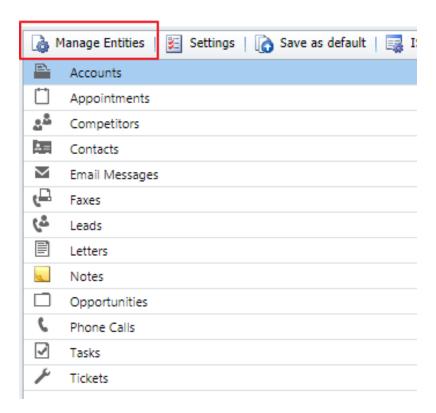


Figure 17 Global Search Settings

2. To add a new entity, click **Manage Entities** on the toolbar. Select the entities you want to enable in Global Search from the list (see Figure 18).



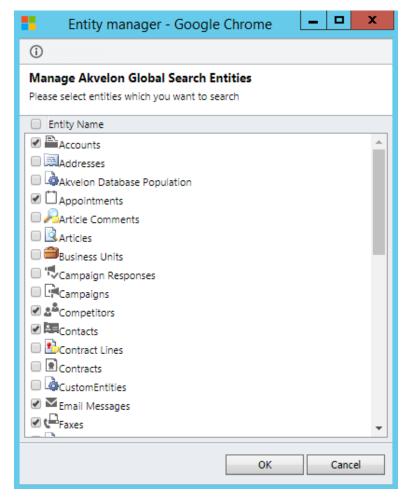


Figure 18 Manage Global Search Entities

Please note: Number of searched entities can affect search performance (too many entities selected can slow down the search).

After you click **OK** the entity will add to main Global Search Settings window with default settings. In this window you can change the default attributes to search and display. To disable an entity for search, click **Manage Entities** and unselect this entity in the list. Click **OK** button.

Users who have **Akvelon Global Search Experienced Users** role can configure Global Search Settings directly from Global Search main page (see the Configuring Entity Properties for Advanced Users section).

Configuring Entity Properties

For each entity enabled for Global Search you can customize the properties that are searched and displayed in result columns. In the entities list, double-click the.

On the **Attributes to display** tab (see Figure 19), use the **Add/Remove** buttons to select the attributes you want to show in the results table. To change the order of the displayed columns, use the **Move Up/Move Down** buttons.



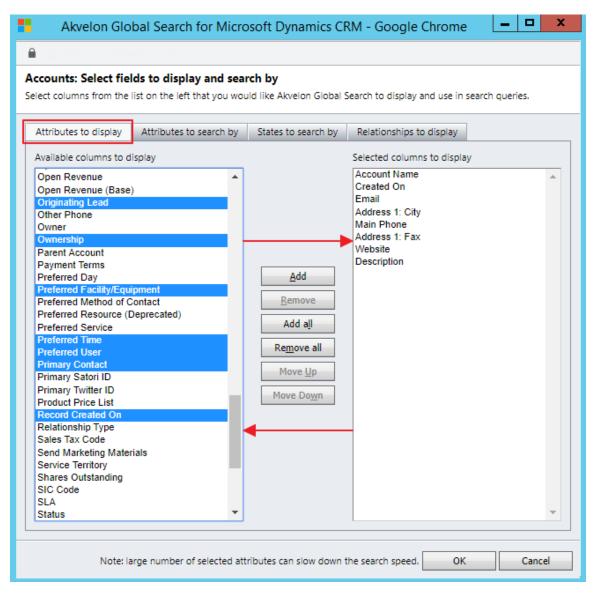


Figure 19 Attributes to display window

On the **Attributes to Search by** tab (see Figure 20), select the entity attributes that will be used in search queries.



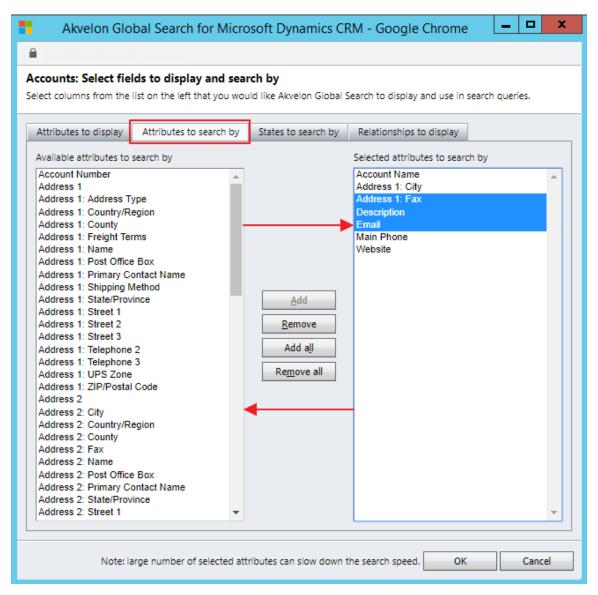


Figure 20 Attributes to search

Please note: Too many entity attributes selected can affect search performance.

In the **States to search by** tab, you can choose the states to filter records (e.g. search only active records). If all states are selected, search results will not be filtered by state. To apply new settings, you should click the **OK** button.

On the **Relationships to display** tab you can set relationships for entities which can be displayed in search result (see Figure 21).



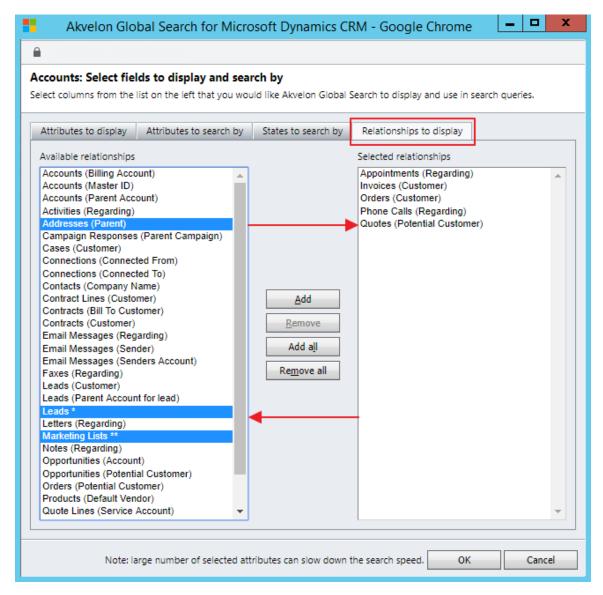


Figure 21 Relationships to Display

Configuring Entity Properties for Advanced Users

Users who have **Akvelon Global Search Experienced Users** role can change their own search settings directly from Global Search window. Click on **Entity's icon** which you want edit. **Entity Properties** window will open (please see Configuring Entity Properties for more details). Click **Manage entities** to add or remove entities for search (see Figure 22).



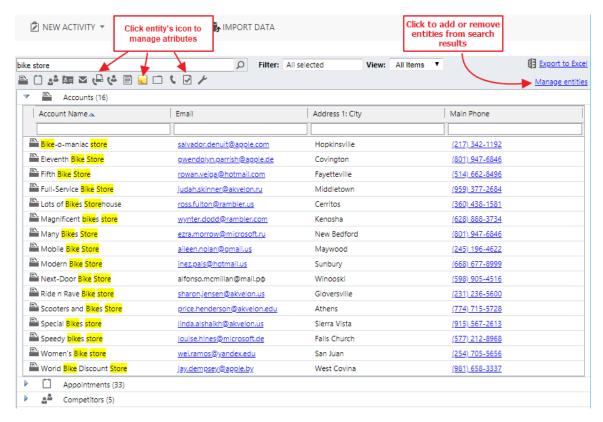


Figure 22 Quick search settings panel

Configuring Maximum Number of Found Records

You can set a maximum number of found records for an entity group (there are 100 records by default) — go to the **Global Search Settings** page and click on **Settings**. You can change this value to any number from 100 to 500 records (see Figure 23). To apply new settings, click **Ok** button. **Please note that large values can affect searching performance.**



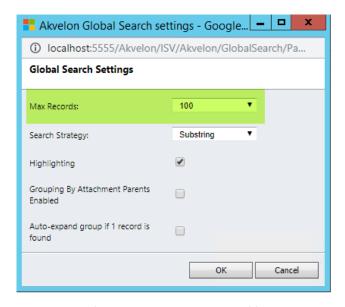


Figure 23 Configuring maximum number of found records

Enable/Disable Highlighting Keywords

Highlighting keywords provides ability to quickly find used keyword in search results (see Figure 24). To Enable/Disable highlighting keywords, go to the **Global Search Settings** page, click on **Settings**, tick the **"Highlighting"** option and click the **OK** button (see Figure 25).

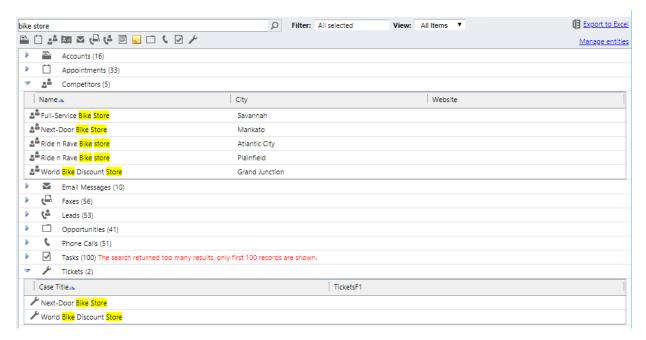


Figure 24 Highlighted keywords



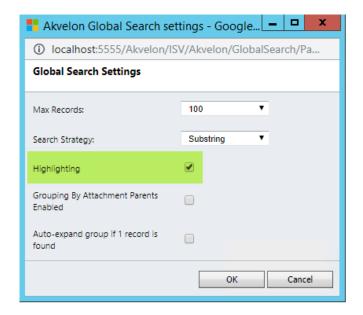


Figure 25 Enable highlighting option

Auto-expand Entities in Search Results

This new feature provides ability to automatically open group of entities in the search if only one record was found in this group (see Figure 26).

This feature is disabled by default. To enable this feature, go to the **Global Search Settings** page and click on **Settings**. Select the **"Auto-expand group if 1 record is found"** and click **Ok** button (see Figure 27).

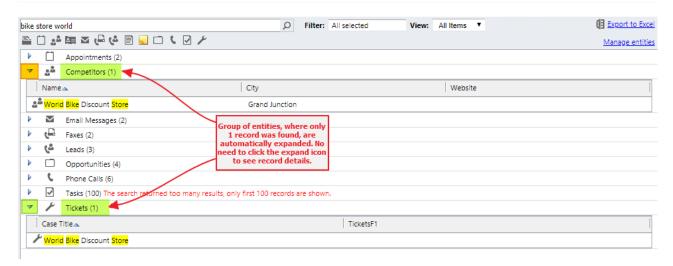


Figure 26 Auto-expand Entities in Search Results



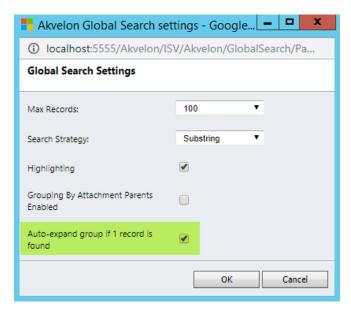


Figure 27 Auto-expand option in the Settings screen

Display Relationships for Notes and Attachments in Search Results

This feature provides ability to display entity's details, which is related to found attachment or note. For example, Global Search found CRM attachment related to the Contact. If user expands Notes, then Contact, combination of Attachment's and Contact's attributes will display in the search results (see Figure 28).

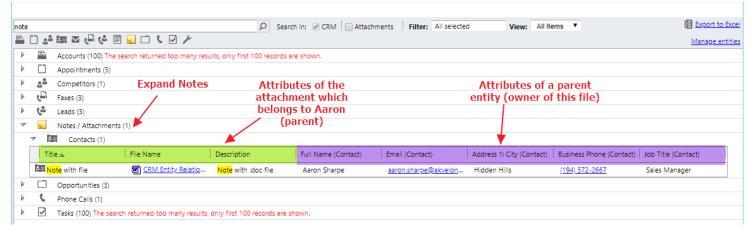


Figure 28 Display Relationships for Attachments in Search Results

Attributes to display for Attachments and Notes automatically inherit from a parent entity (**Attributes to display** columns, see Configuring Entity Properties section).

You can enable or disable this option in CRM On-premise through **Global Search Settings** → **Settings** → **Grouping By Attachment Parents Enabled** checkbox (see Figure 29).



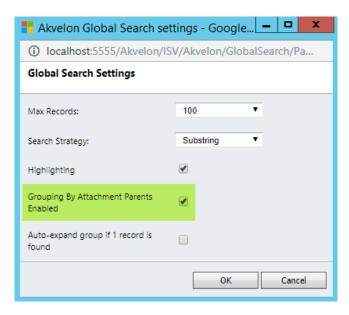


Figure 29 Grouping By Attachment Parents Enabled in the Settings screen

"Save as Default" Settings for Global Search Users

Changed Global Search settings can be applied for all users by one user with "Akvelon Global Search Administrators" role.

To apply changed search settings, go to CRM Settings \rightarrow Global Search Settings \rightarrow click Save as Default (see Figure 30).

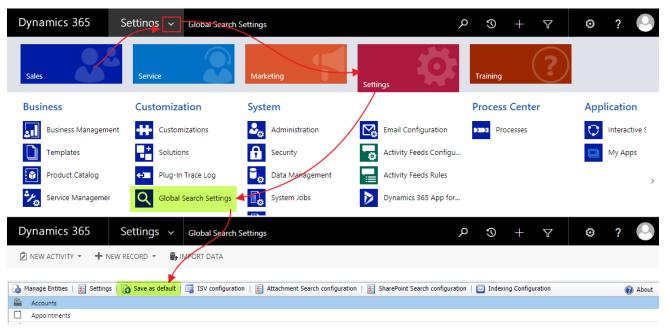


Figure 30 Save as Default button



Select "Users with the following roles: ..." and click OK to apply settings for all users: Akvelon Global Search Online Users, Akvelon Global Search Online Experienced Users and Akvelon Global Search Online Administrators (see Global Search Users' Permissions section for more details).

Select Only users with "Akvelon Global Search User" role and click OK to apply settings only for users who have Akvelon Global Search User role (except Experienced Users) (see Figure 31).

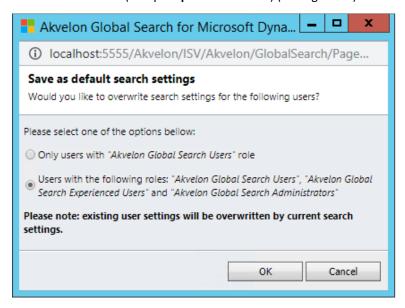


Figure 31 Select user roles to apply settings

Configuring Attachment Search in CRM

We strongly recommend start attachments indexing process when CRM users do not work with CRM (non-working time). To enable the Search Attachment feature, please follow these steps: Go to CRM Settings → Global Search Settings. Make sure Notes is added to Global Search Setting then click the Attachment Search Configuration button (please see Figure 32).



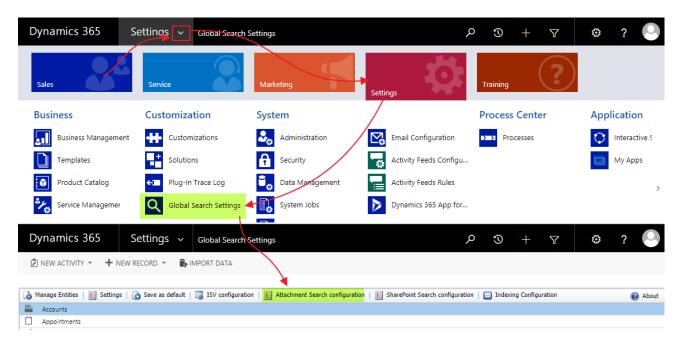


Figure 32 Attachment Search Configuration link

Attachment Search Configuration will open in CRM On-premise (please see Figure 33).



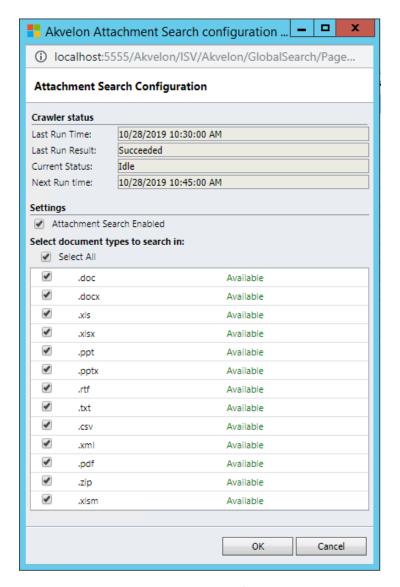


Figure 33 Attachment Search Configuration window

Check the **Attachment search enabled** check box. Check the formats required and click **OK**. After 15 minutes Global Search Attachment will begin indexing the CRM Database (only attachment/document records). You can see the current indexing status at the top of the Attachment Search Configuration window.

Please note:

- 1. We strongly recommend start attachments indexing process when CRM users do not work with CRM (non-working time).
- 2. Entity "Notes" should be added to Global Search Settings.
- **3.** Owner of the Akvelon.CrawlerJob must have enough permissions to execute crawler.exe. By default, the Akvelon.CrawlerJob is deployed under the NETWORK SERVICE account.
- 4. SQL Server Agent must be running.



- **5.** Full indexing can take from several minutes to several hours depending on the amount of documents in the system.
- **6.** You will be able to search newly added attachments after the Attachment Search indexing occurs within the CRM Database (Crawler will perform indexing every 15 minutes).

Configuring Email and Notes indexing

We strongly recommend start email indexing process when CRM users do not work with CRM (non-working time). Email & Notes Indexing provides ability to improve searching performance in CRM emails' description and notes' description. Searching performance becomes much better.

Please note:

- 1. Email & Notes indexing process can take up to several hours depending on amount and size of the emails in the CRM Database.
- **2.** Email & Notes indexing process consumes SQL server recourses, so CRM users can experience some lags and inconveniences.
- 3. We strongly recommend start email & notes indexing process when CRM users do not work with CRM (non-working time).
- **4.** Email & Notes Index requires additional disk space to create indexes. Please make sure you have free disk space on your SQL Server (it should not be less than size of the ActivityPointerBase CRM DB table)
- 5. Make sure **SQL Full-text Filter Daemon Launcher (MSSQLSERVER)** service is running and startup type is Automatic (see Figure 34).



Figure 34 SQL Full-text search service in SQL Server 2014

To enable the Email & Notes Indexing feature, please follow these steps:

Go to **CRM Settings** → **Global Search Settings** → click the **Indexing Configuration** button (see Figure 35).



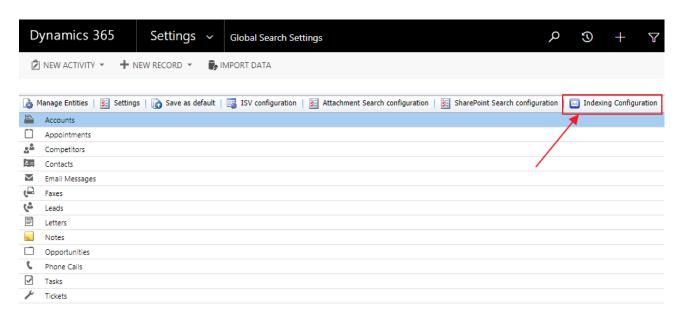


Figure 35 Indexing Configuration

E-mail & Notes Indexing configuration window will be opened (see Figure 36). Click **Enable E-mail Index...** and/or **Enable Notes Index...** button to start indexing process (please read notes above before starting indexing).

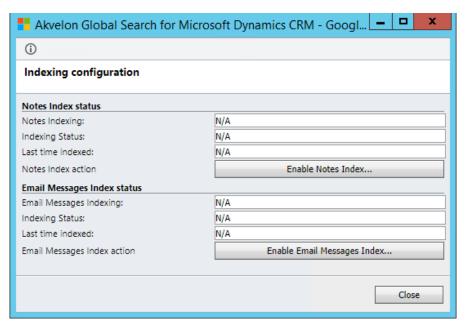


Figure 36 Indexing configuration

Click OK button to start indexing process or click Cancel to prevent this action (see Figure 37).



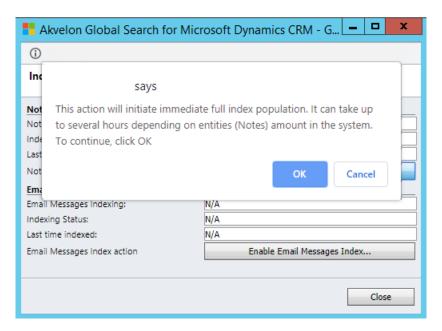


Figure 37 Confirmation dialog

You can see the current indexing status in the Indexing configuration window (see Figure 38). There you can see that Indexing is enabled or disabled, **Indexing Status** (N/A, In Progress or Completed), Date and Time when last indexing was completed. **Please reopen window to refresh status** (Status will not update automatically).

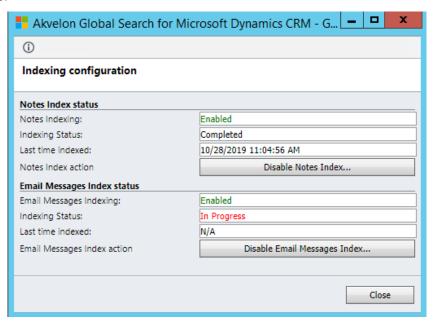


Figure 38 Indexing Status

If **Indexing process** was successfully completed, **Indexing status** will change to "**Completed**". In addition, you can see **Date and Time** when indexing process was completed.



Now you can add "Description" in the "Attributes to search by" tab for the "E-mail Messages" and "Notes" entity (please see Adding/Removing Entities to Search section).

Disabling and Removing Index

To <u>disable and remove</u> index, go to **CRM Settings** → **Global Search Settings** and click the **Indexing Configuration** button at the top menu. In the opened window, click the **"Disable E-mail Index..."** and / or **"Disable Notes Index..."** button (see Figure 39).

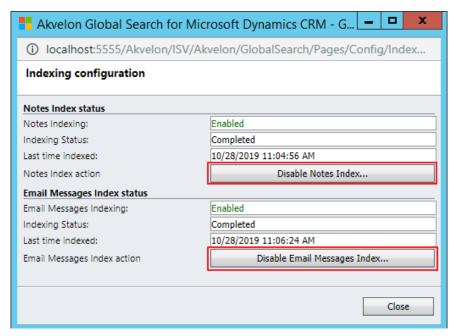


Figure 39 Disable indexing

Click **OK** to confirm removing of index.

Please note:

- 1. All indexed data will be removed from your system completely.
- **2.** <u>Enabling process next time (after disabling) can take up to several hours depending on amount and size of emails in your CRM deployment.</u>
- **3.** We strongly recommend remove "Description" in the "Attributes to search by" tab for the "E-mail Messages" and "Notes" entities (please see Configuring Entity Properties).



Feedback

If you have any questions, experience problems, or have feedback – please feel free to contact us: gs.support@akvelon.com.

The Akvelon team encourages and appreciates leaving feedback about Akvelon Global Search at the App Source site.