



Docusnap Enterprise Search

Description of the functionality as well as the use of the Docusnap Enterprise Search

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1. Introduction

IT departments are given more and more responsibility and must manage a wide variety of different areas. Of course, it is not possible to keep a complete overview and know everything. With Docusnap, you can centrally collect and document the necessary data.

The new Enterprise Search helps you to search within Docusnap. It doesn't matter if you know an IP address or a MAC address. A host name or serial number. You enter the search term, and the relevant results will be listed.

The HowTo describes first the requirements that must be provided.

- Check SQL server Full-Text search and install if necessary
- Enable enterprise search in Docusnap
- Creating a search index
- Run a search

2. Requirements

Docusnap Enterprise Search is index-based. This means that data must first be added to the index before search requests return results. With Enterprise Search, only indexed objects can be found based on the indexed values. If there is no matching index, the object will not be found.

2.1 Checking the SQL Full-Text search

To obtain the maximum performance for the search requests, it is recommended that the feature **Full-Text and Semantic Extraction for Search** is added for the SQL instance. You can check if the feature is installed with the help of an SQL statement within the SQL Management Studio. With return value 1, the full text search is active.

```
SELECT SERVERPROPERTY('IsFullTextInstalled');  
GO
```

The feature is not necessary for the use of the Enterprise Search. But it will affect the performance. If the instance feature is not installed, it can be added later. This is described in the chapter [Optional - Installing the SQL Full-Text Search](#).

2.2 Activating Docusnap Enterprise Search

The first time Docusnap is started, the Docusnap Enterprise search is disabled. It must first be activated in the search options. If the Enterprise search is not activated, the default search is automatically used.

Choose the magnifying glass from the title bar - Settings - General - Activate Enterprise Search. The Enterprise search can also be displayed or hidden using the shortcut CTRL+F.

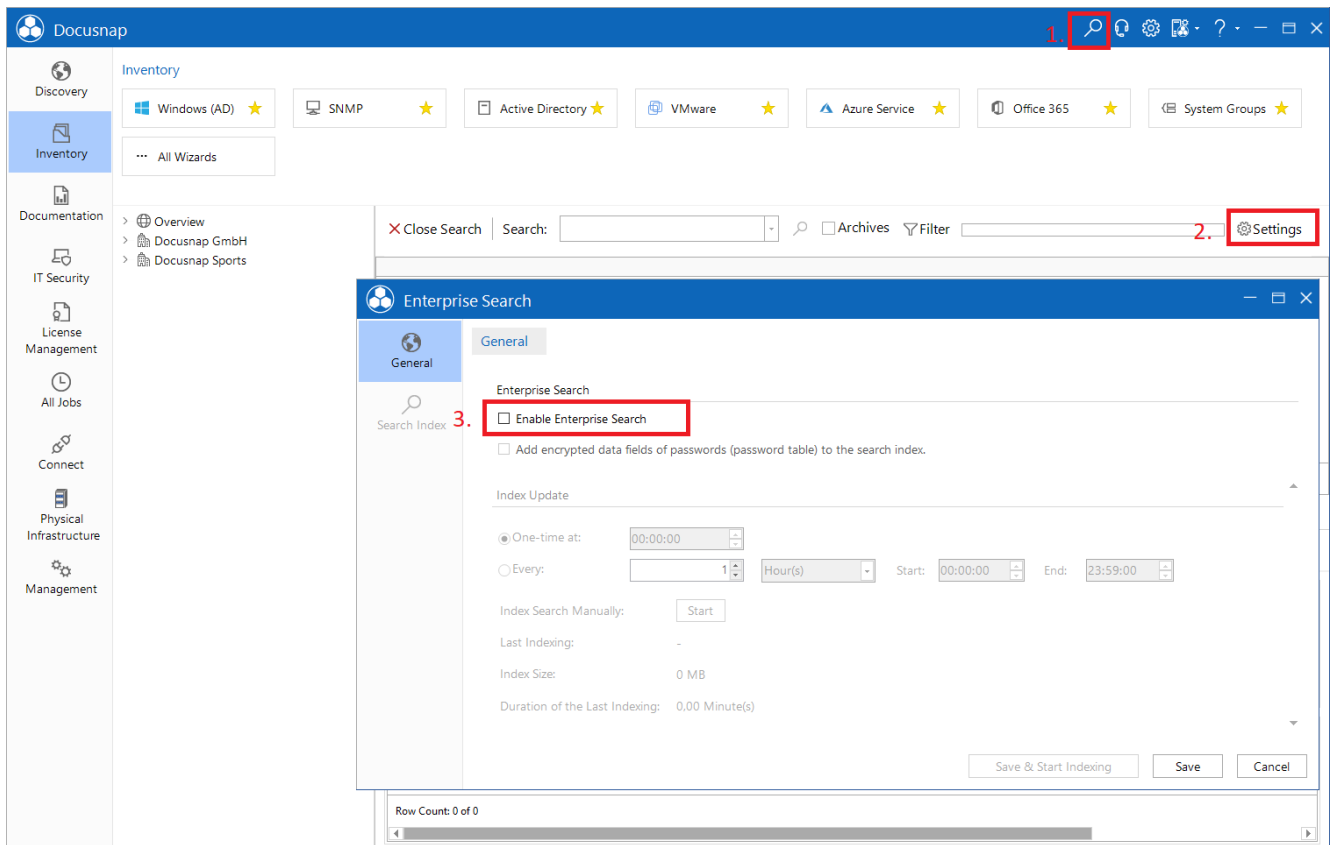


Figure 1 - Enable Docusnap Enterprise Search

2.3 Optionally – Installing the SQL Full-Text Search

To install the SQL full-text search afterwards, start the SQL Server Installation Centre. From the Start menu or via Control Panel - Programs and Features - Microsoft SQL Server 2019 - Modify.

The installation file may now be required. If this is no longer available on the system locally, you can download it and reference it. Make sure that the version of the installation file matches the installed version - for example SQL Server 2019 = SQL Server 2019 and not Installation file = SQL Server 2019 and SQL Server 2014 is installed.

Start the SQL Server Installation Centre and select **Installation – New SQL Server stand-alone installation or add features to an existing installation**.

Confirm the following steps and select the SQL server instance on which the Docusnap database is available in the **Installation type** step.

In the next step - **Function selection** - now activate the full text search and then execute the installation. If this feature is not available for selection, the Express Advanced installation package of SQL Server Express must be downloaded.

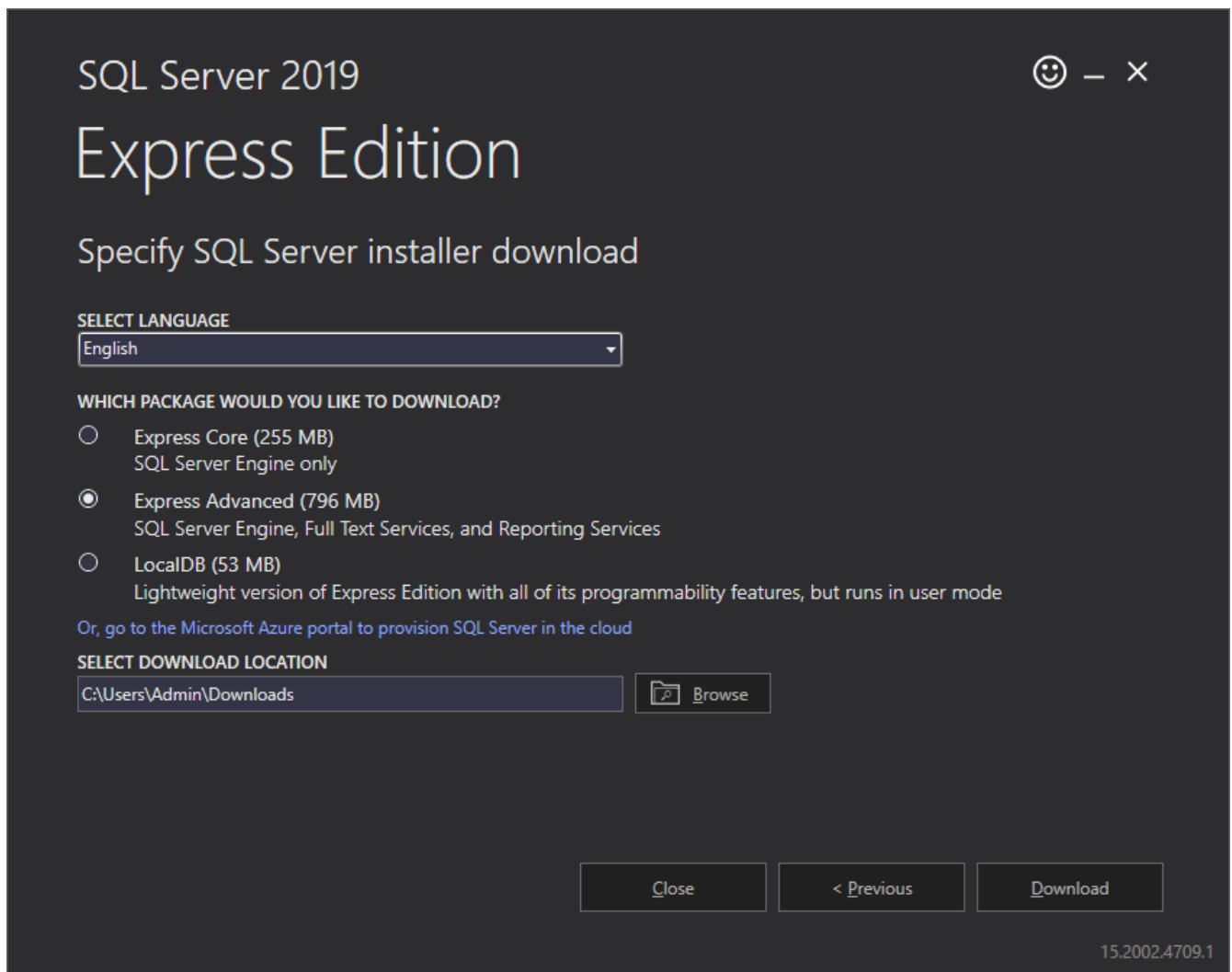


Figure 2 - SQL Server Express - Express Advanced Installation Package

3. From indexing to the result

The Enterprise Search is based on a search index. A preselected search index is already stored. Please note that this is a basic index and does not necessarily cover your search queries. Which objects and columns are indexed can be evaluated with help of the reports **Search Index** and **Search Index Excel**. You will find the reports in the tree structure as follows.

Overview – Reports – Docusnap

The basic index can be extended as required. You can customize the Enterprise Search to your individual requirements.

3.1 Adding Data to the Index

Docusnap Enterprise Search differentiates between objects and columns when indexing.

Objects

Objects are the objects in the tree structure. For example, if you want to find workstations and servers in the Enterprise Search, both objects must be indexed. Other objects will then not be found by the Enterprise Search unless they have been selected. (e.g., Linux systems and SNMP devices)

Columns

Columns are the values that can be added to the index. These are used to find the indexed objects. (e.g., name, IP address, operating system).

The more objects and columns are indexed, the more results the Enterprise Search will deliver. However, excessive indexing can have a negative effect on performance.

3.1.1 Index objects

Meta objects and columns are added to the search index in **Settings - Search index - Add object**. It is possible to index objects from the inventory and IT security.

In the following example, the objects **workstations**, **servers** and **detailed data** of the workstations and servers are added to the index. Meta objects are considered indexed as soon as the checkbox is active.

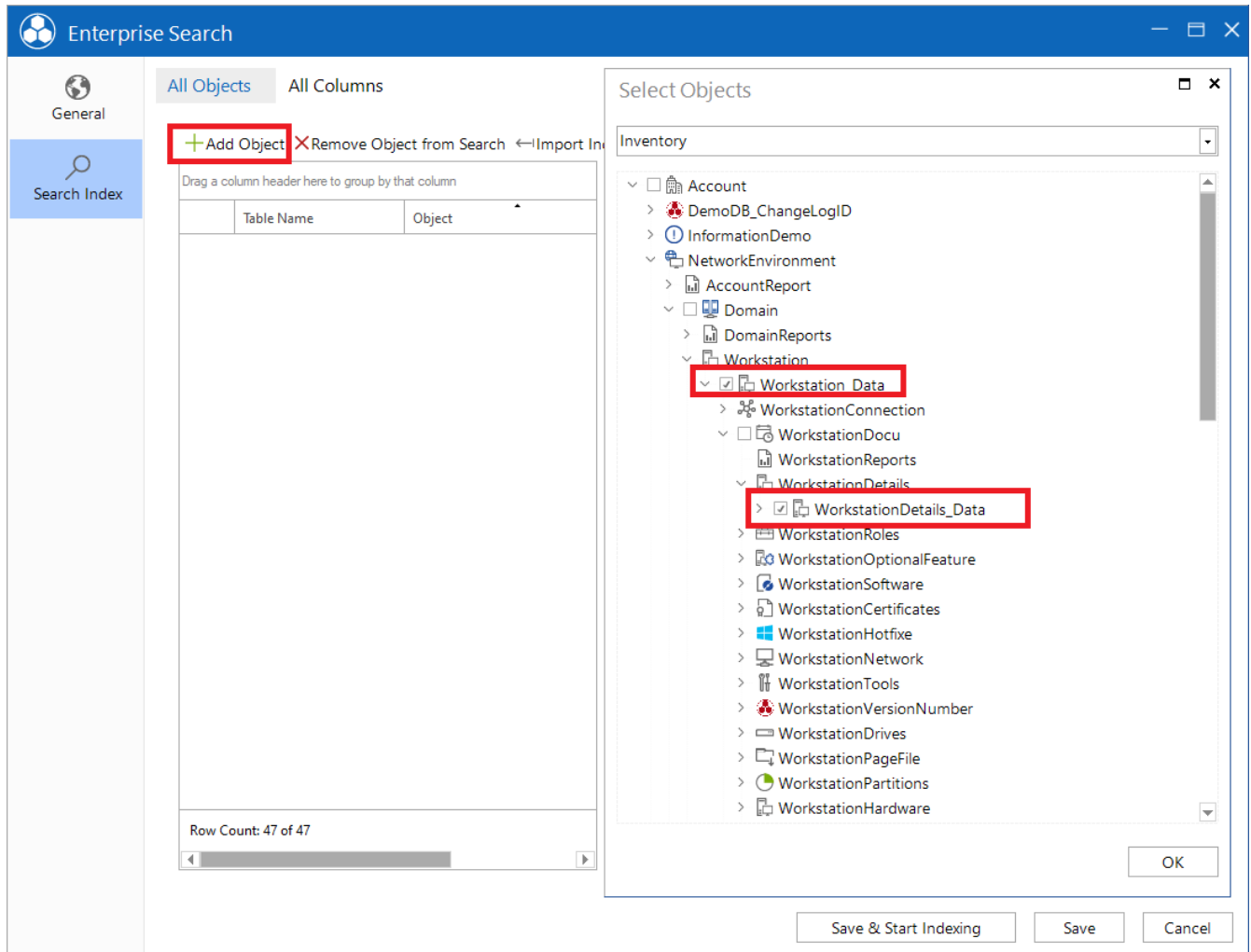


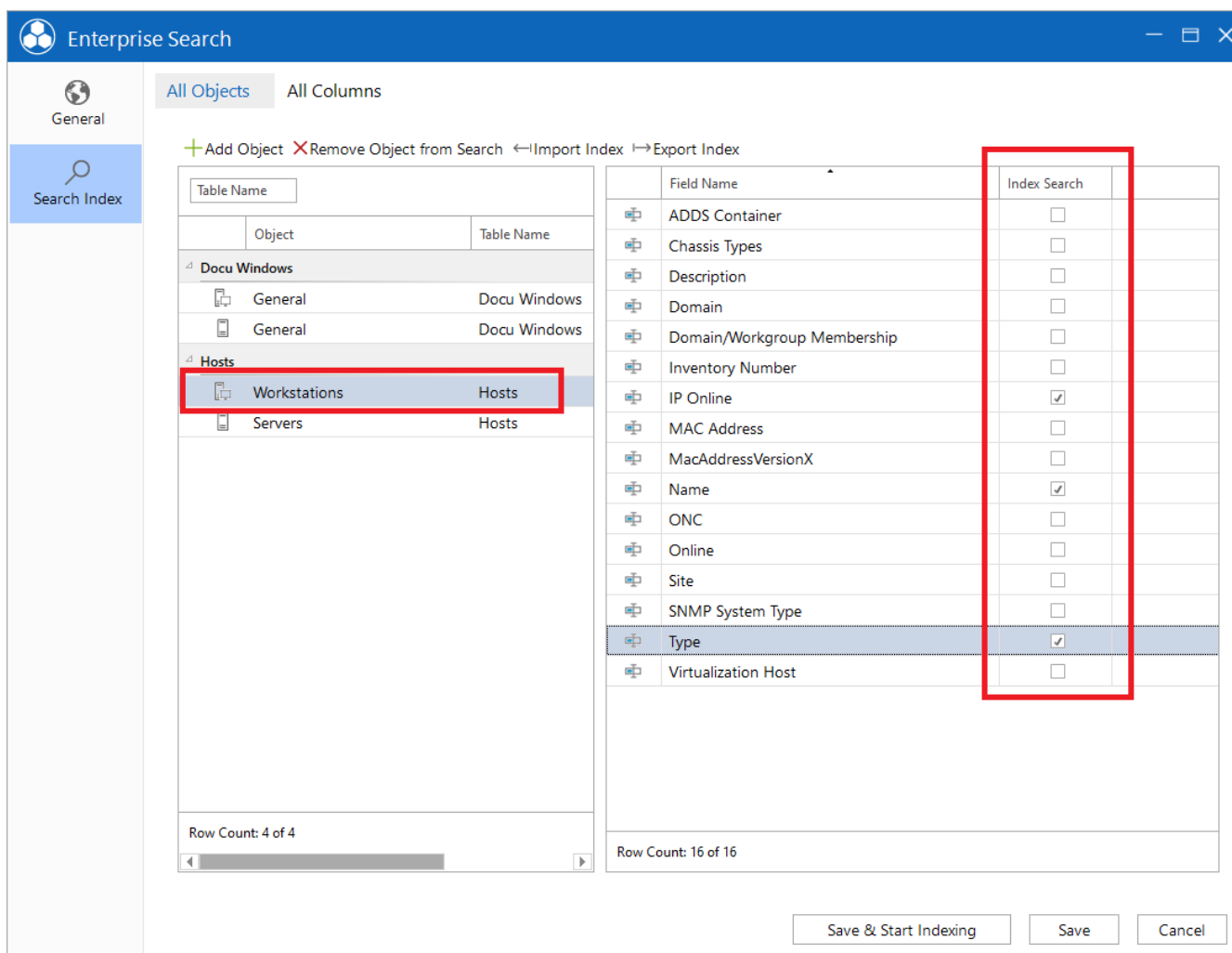
Figure 3 - Index objects

3.1.2 Index columns

As soon as a meta object has been indexed, the desired columns for the objects can be selected. All columns that can be indexed are listed in the field overview.

Columns are indexed across the board. This means that if the columns IP Online, Name and Location are indexed for workstations, this also applies to other systems. If you now switch to the Sever object, you will see that these columns are already active. The same applies if other objects are added later, for example Linux devices.

In the tab All Columns you will find an overview of all database columns added to the index.



Enterprise Search

General Search Index

All Objects All Columns

+ Add Object X Remove Object from Search ← Import Index → Export Index

Table Name	Object	Table Name
Docu Windows		
General	Docu Windows	
General	Docu Windows	
Hosts		
Workstations	Hosts	
Servers	Hosts	

Row Count: 4 of 4

Field Name	Index Search
ADDS Container	<input type="checkbox"/>
Chassis Types	<input type="checkbox"/>
Description	<input type="checkbox"/>
Domain	<input type="checkbox"/>
Domain/Workgroup Membership	<input type="checkbox"/>
Inventory Number	<input type="checkbox"/>
IP Online	<input checked="" type="checkbox"/>
MAC Address	<input type="checkbox"/>
MacAddressVersionX	<input type="checkbox"/>
Name	<input checked="" type="checkbox"/>
ONC	<input type="checkbox"/>
Online	<input type="checkbox"/>
Site	<input type="checkbox"/>
SNMP System Type	<input type="checkbox"/>
Type	<input checked="" type="checkbox"/>
Virtualization Host	<input type="checkbox"/>

Row Count: 16 of 16

Save & Start Indexing Save Cancel

Figure 4 - Index columns

3.1.3 Indexing via context menu

It is also possible to index objects and columns directly via the Docusnap tree structure. To do this, open the context menu by right-clicking on the object to be indexed. With the option **Add to Search Index**, the **Select Fields** window opens, and you can add new fields to the indexing of the search.

If the meta object is not yet indexed, the option **Index Objects for Search** must be activated.

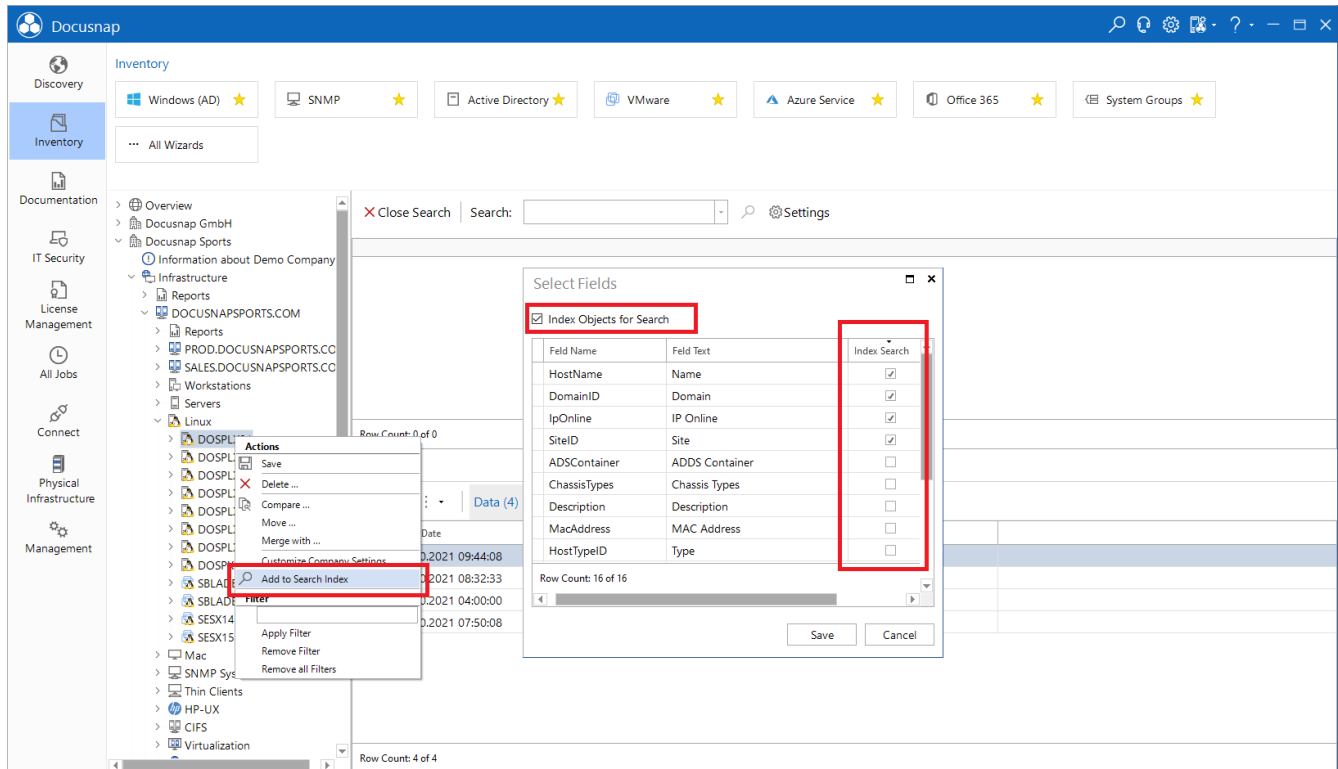


Figure 5 - add to index via right-click

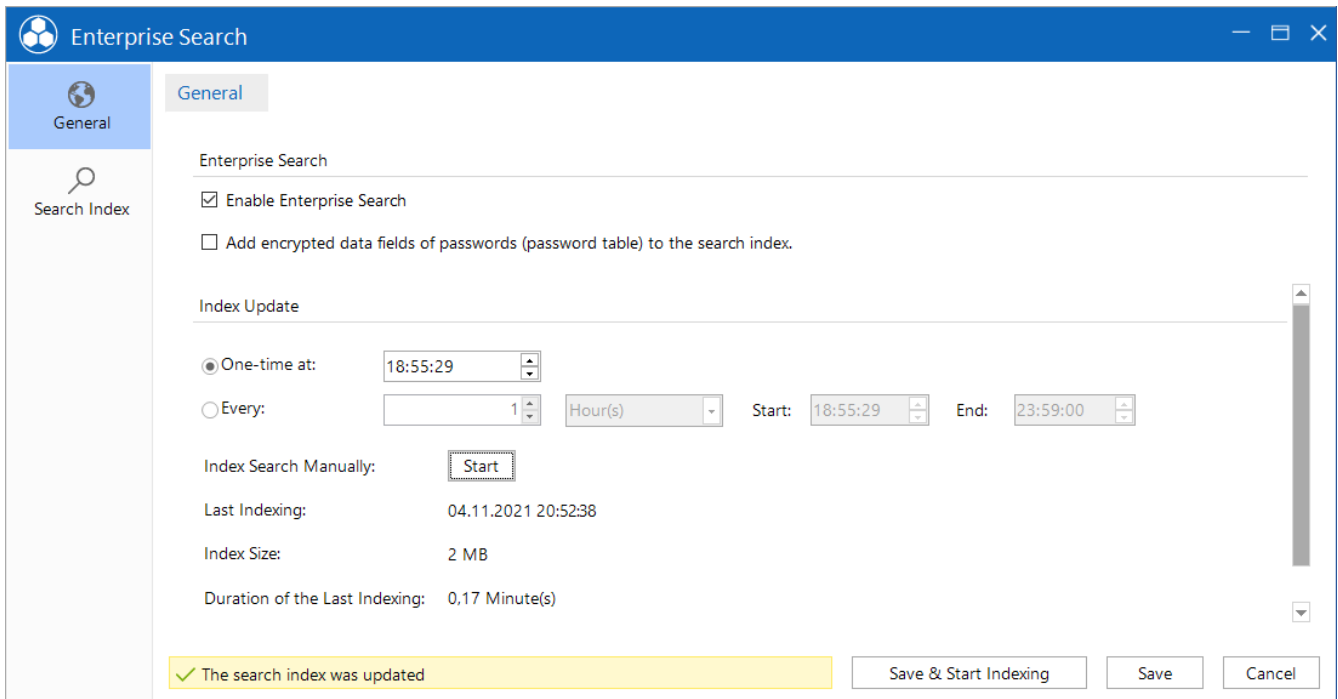
3.2 Index Update

The index must be updated before the Docusnap Enterprise search can find the indexed data. Updating the index can be done manually or automatically. Newly added values will only be found after a completed re-indexing.

Index Update One-time at:
updates the index daily at the choosen time

Index Update Every:
updates the index several times a day at the specified interval. It should be noted that the interval should be chosen according to the index size and update duration.

If the Docusnap Enterprise search is deactivated, the complete index record is deleted. Indexed meta objects and fields are not affected. Only the index has to be updated when reactivating the search.



Enterprise Search

General

Search Index

Enterprise Search

☒ Enable Enterprise Search

☐ Add encrypted data fields of passwords (password table) to the search index.

Index Update

☒ One-time at: 18:55:29

☐ Every: 1 Hour(s) Start: 18:55:29 End: 23:59:00

Index Search Manually: Start

Last Indexing: 04.11.2021 20:52:38

Index Size: 2 MB

Duration of the Last Indexing: 0,17 Minute(s)

✓ The search index was updated

Save & Start Indexing Save Cancel

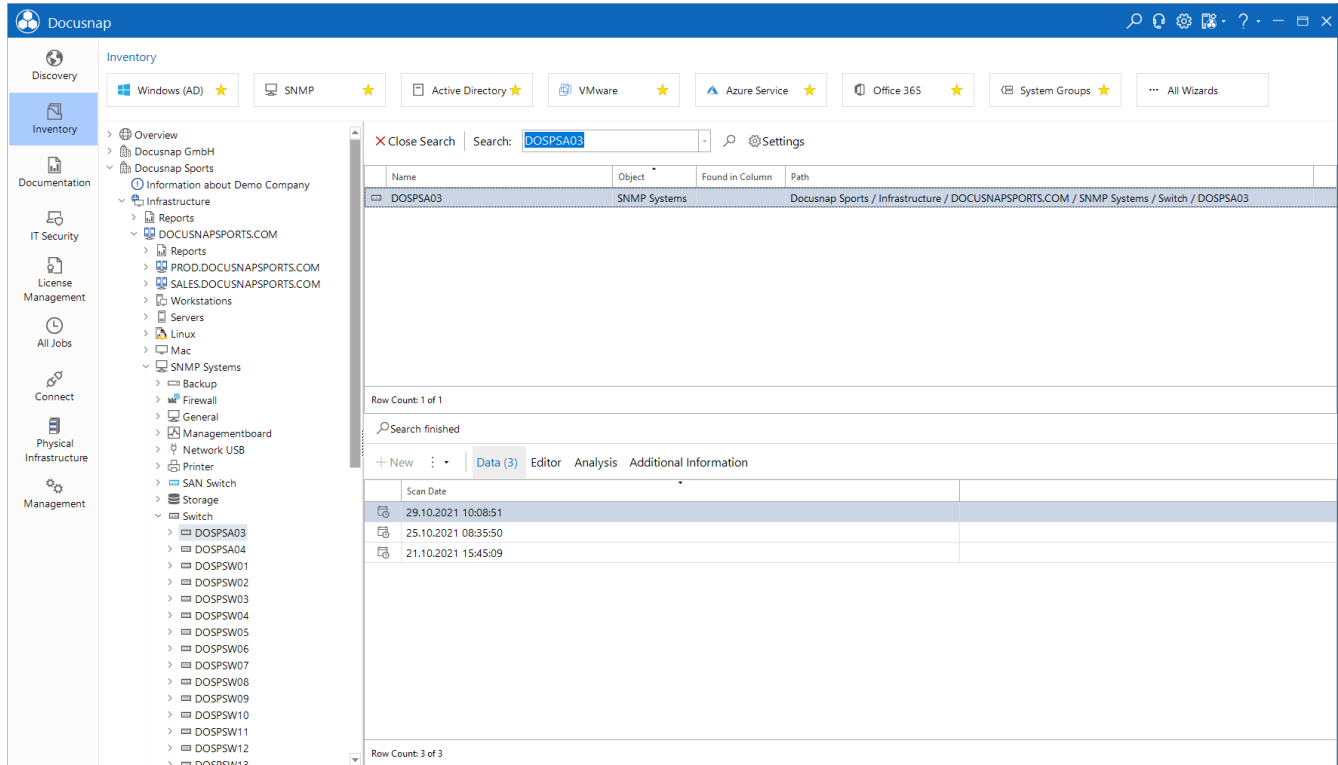
Figure 6 - Update Index

With larger databases, depending on the number of indexes, the index size can grow considerably. When the index is updated, the existing index is only deleted after the new index has been built. This guarantees that the search also works when the index is updated. As a result, the index size can more than double for a short time.

Sometimes the update process may not start immediately. This depends on whether an inventory is currently running, for example.

3.3 Results

To search for an object, enter the search word in the text field. Press Enter or click on the magnifying glass to start the search. By double-clicking on the icon of the search result, Docusnap automatically navigates to it in the tree structure.



The screenshot displays the Docusnap Enterprise Search interface. The left sidebar shows the 'Inventory' section expanded, with a tree structure listing various components like 'Overview', 'Docusnap GmbH', 'Docusnap Sports', 'Information about Demo Company', 'Infrastructure', 'Reports', 'DOCUSNAPSPORTS.COM', 'PROD.DOCUSNAPSPORTS.COM', 'SALES.DOCUSNAPSPORTS.COM', 'Workstations', 'Servers', 'Linux', 'Mac', 'SNMP Systems', 'Backup', 'Firewall', 'General', 'Managementboard', 'Network USB', 'Printer', 'SAN Switch', 'Storage', and 'Switch'. The 'Switch' section is currently selected, showing a list of switches including 'DOSPSA03', 'DOSPSA04', 'DOSPSW01', 'DOSPSW02', 'DOSPSW03', 'DOSPSW04', 'DOSPSW05', 'DOSPSW06', 'DOSPSW07', 'DOSPSW08', 'DOSPSW09', 'DOSPSW10', 'DOSPSW11', 'DOSPSW12', and 'DOSPSW13'.

The main search results pane shows a search for 'DOSPSA03'. The search bar at the top contains 'DOSPSA03'. Below the search bar, a table displays the search results:

Name	Object	Found in Column	Path
DOSPSA03	SNMP Systems		Docusnap Sports / Infrastructure / DOCUSNAPSPORTS.COM / SNMP Systems / Switch / DOSPSA03

Below the table, the 'Row Count: 1 of 1' is displayed. The search status is 'Search finished'. The results are categorized under 'Data (3)', 'Editor', 'Analysis', and 'Additional Information'. A table below shows the scan dates for the selected object:

Scan Date
29.10.2021 10:08:51
25.10.2021 08:35:50
21.10.2021 15:45:09

The 'Row Count: 3 of 3' is displayed at the bottom of the scan date table.

Figure 7 - Use Search

4. Search parameters

4.1 Single Value

A search for DOSPWS01 returns all objects whose index contains this value. Examples are the system name of an object or the description text of an indexed object.

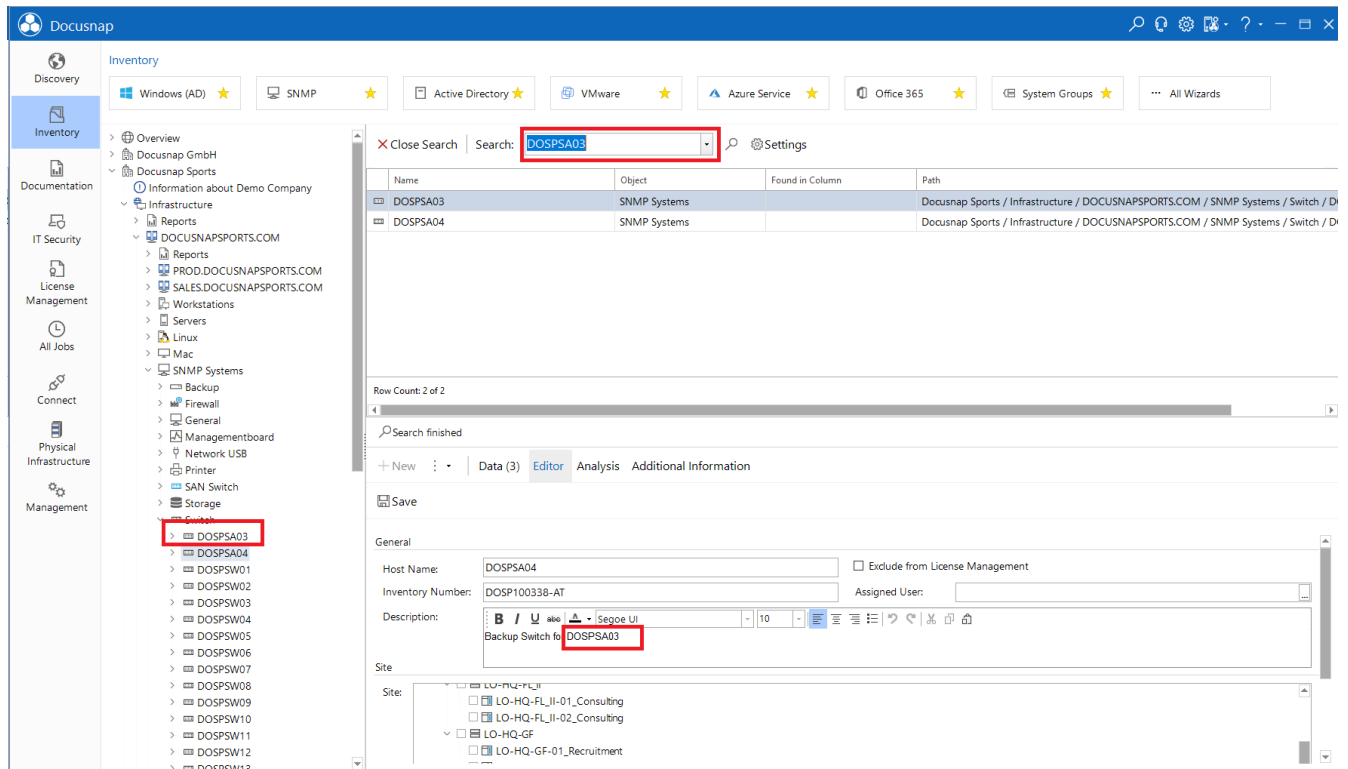


Figure 8 - Search for a single value

4.2 Wildcards

In the Docusnap Enterprise search, a star * can be used as a wildcard.

DOSPWS*4 returns all objects that begin with DOSPWS and end with the digit four. Independent of the characters in between.

- DOSPWS14
- DOSPWS004
- DOSPWS04

4.3 Sequence of words and special characters

If you are searching for objects that contain spaces or special characters such as *, the search word must be placed in quotes. This also makes it possible to search for whole sentences or partial sentences in descriptions.

- „fibre channel co“

4.4 Generic terms

With a generic term it is possible to search for several objects of a common denominator. A search for a generic term is marked with a double dot. You can get an overview of the available generic terms via the drop-down menu of the search.

Workstations: - *Output of all workstations*

Workstations: *NB* - *Output of all workstations with the substring NB*

5. Additional Information

5.1 General

Additional information is automatically added to the index.

If the search for additional information is successful, the linked objects are also found. If a search is made for a comment Installation instruction, the systems to which the comment is assigned are also displayed.

5.2 Passwords

To find additional information **passwords** also with the Enterprise Search, they must be explicitly activated in the Enterprise Search settings.

The password fields are encrypted in the database by the Docusnap encryption file. If the additional information Passwords is added to the index, its fields are stored in plain text in the index.

The password itself is not affected by this and cannot be found with the search.

6. Export and import search index

An import/export function for the index is available in the Docusnap Enterprise Search options. The file is available as an .xml file. This makes it possible to transfer the index to other databases.

When importing the index file, it is checked whether these fields are available in the database. It is not possible to index customizing fields that are not available in the target database.

7. Limitations of the Docusnap Enterprise search

- Both the Docusnap Enterprise and Standard search cannot be used in Docusnap Web
- The Docusnap Enterprise search is limited to the current inventory. Older inventories are not included
- Attachments of additional information cannot be searched
- It is not possible to index objects and fields from license management or documentation
- Passwords are not available in the index. It is possible to search for system names, usernames, etc
- There is no fallback to the standard search if the Docusnap Enterprise search does not find any results
- ADDS properties cannot be added to an index
- When indexing Other Assets, it is not possible to add individual fields to the index due to the flexible structure
- Only the OIDs and not their values can be indexed in the SNMP Explorer area
- Prerequisites/restrictions for a successful search in customizing
 - Foreign key must exist, otherwise no resolution from object to parent is possible
 - The value of the primary key of the table/view must be unique

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VERSION HISTORY

Date	Description
11/08/2021	Creation of the HowTo
03/12/2024	Limitations extended
