

Docusnap Connect

Create your own queries and export data



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1. Introduction

By default, there are more than 200 pre-built reports providing information and analysis about your IT infrastructure in Docusnap. The reports here provide information on different areas, in different levels of detail.

Now, you may need information that is not available in Docusnap in the form of a report, or the report may be too detailed or too superficial.

With Docusnap Connect, you can now specifically create your own queries with the information you need. You can use these queries for further analysis in Docusnap itself. Furthermore, these queries can also be used for documentation within the concepts.

In addition to use in Docusnap, the prepared data can also be exported and be sent by e-mail. In this way, you can, for example, use the information located in Docusnap in third-party products. The export can also be performed automatically and time scheduled.

The great advantage of Docusnap Connect in the preparation of data is that no database or SQL knowledge is required. The queries are generated by a simple click.



2. Creating a Docusnap Connect package

When using Docusnap Connect, the first step is to create a package. Within this package, you subsequently create the queries.

You can create a new Connect package or manage the existing Connect packages in the Connect section from the main navigation bar.

Within a package you have the possibility to create more than one query. This way you can, for example, categorize queries or combine all data necessary for later export in one Connect package.

For a query to provide data, Docusnap objects are selected. These Docusnap objects mirror the tree structure. This means that it is best to get an overview of the required objects, as well as the columns, in particular the column name, before creating a new query.

If data for different object types (Windows Server, Windows Workstations, Linux etc.) are to be combined in a query, this can be done using a UNION. It is not possible to output the different object types in a query without a union.

After selecting the objects and columns, grouping and filtering functions are still available.

In the following chapters all topics are treated in detail:

- Create a package
- Create a guery
- Union implementation
- Set up grouping / filtering

As an application example, a package is generated that outputs the members of the local administrator groups to Windows Server and workstations.



2.1 Create a package and query

A new Docusnap Connect package is created in the Connect area, accessible from the main navigation bar.

The package can be created via New.

A title, German and English text is required.

After saving the package, a first table / query is automatically listed

By clicking on the automatically generated name, you can assign a new one.

Note that in case of export, the file, the Excel datasheet or the MS SQL / MySQL table will be given this name.

Especially when exporting to databases, we recommend avoiding special characters and spaces.

View the meaning of ONC and Output records only,... can be found in the later chapters.

Now use the Add Docusnap Objects button to select the corresponding objects for which the desired information is to be output.

The following objects are required for the application example – the selection takes place by activating the checkbox in front of the object name:

Company – Infrastructure – Domain – Server

- Server
 - Local Group Local Group
 - Local group members

The next step is to select the desired columns.

First, in the **Element** column, the previously selected Docusnap object is selected.

Then one of the available columns.

If desired, the alias name can be adjusted.

The following selection is required for the application example:

Element	Column	Alias	Display	Use Reference	Grouping	Sort Order	Filter
Workstations	Name	System	✓			1	
Local Groups	Name	Group	1			2	
Local Group Members	Name	local Administrator	1			3	
			1			0	
Zeilenanzahl: 4 von 4							
1	\						

Figure 1 - Element and Column Selection

The package can now be saved and is available in the Inventory pane. Note the possibility to filter the list again and perform groupings:

• Your company - Connect



2.2 Using filters

If you now select **Preview (Test)**, you can see that all local groups with their members are now displayed. There is still a filtering needed:

We set up a filter on the column Local Groups - Name - Group: like 'Administrator%'

Element	Column	Alias	Display	Use Reference	Grouping	Sort Order	Filter
Workstations	Name	System	✓			1	
Local Groups	Name	Group	✓			2	like 'Administrator%'
Local Group Members	Name	local Administrator	✓			3	
			V			0	
Zeilenanzahl: 4 von 4							

Figure 2 - Filtering on the Administrators Group

If you want to filter on several groups, you can also do this with the following expression:

- like 'Administrators%' OR {Alias: Group} SQL filter expression for example:
- like 'Administrators%' OR {Alias: Group} = 'Device Owners' OR {Alias: Gruppe} = 'Gerätebesitzer'

The specified group corresponds to the alias name, the column on which you want to perform filtering.

Always pay attention to the system languages you use when filtering. If several languages are used, these must be considered in the filtering!

The filters to be used are MS SQL filters. Filter options exist here in abundance and go beyond the scope of the HowTo. The most common filter expressions are:

- 1. LIKE with the use of % as a placeholder
- 2. NOT LIKE using % as a placeholder
- 3. = (equal) no placeholders can be used
- 4. <> (not equal) no placeholders can be used



2.3 Using UNION

In our application example, we have now included the local administrators for the Windows servers – now missing those of the Windows workstations. In order for these to be listed in the same query, a UNION is required.

The UNION combines the results of two queries on two different objects – here, Windows Server and Windows workstations.

You can activate the UNION via the plus icon in the middle of the window.

In the first step, we recommend adjusting the names Query and Union.

By double-clicking on it, you can adjust the names accordingly – this is for better clarity.

In the second step, you now create the same query that you previously created for the Windows servers, but now for the Windows workstations:

Select the following Docusnap objects:

Company - Infrastructure - Domain - Workstations

- Workstations
 - Local Group Local Group
 - Local group members

In the next step, the columns are selected again. For a UNION, it is necessary that the column labels (alias) of both queries are identical and have the same number of columns.

Filtering must also be set up.

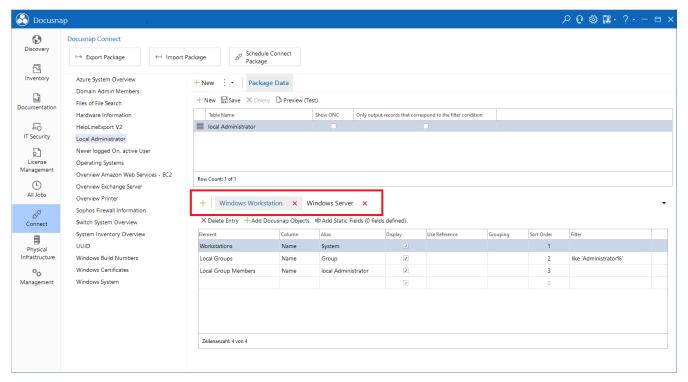


Figure 3 - Setting up UNION



2.4 Automatic grouping of equal values

When using records with the same value, Docusnap Connect performs automatic grouping. This may manifest itself in such a way that only parts of your required information are displayed. To avoid this, you also need unique fields.

This behavior can occur, for example, when using memory. Typically, systems have more than one RAM bar, which can be the same size.

A package is created that outputs the hostname and RAM latch capacity. If a system now has multiple RAM bars of the same size, only one line is output for that system. The RAM bars of the same size are automatically grouped.

If an additional, unique field is added per RAM bar, all RAM bars are listed – for example, the slot.

The following screenshots illustrate the topic again:

System	Processor	RAM Size
WKNA3007	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	8589934592

Figure 4 - RAM bar automatically grouped

System	Processor	RAM Size	RAM Bank
WKNA3007	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	8589934592	ChannelA
WKNA3007	Intel(R) Core(TM) i5-7500 CPU @ 3.40GHz	8589934592	ChannelB

Figure 5 Auto-grouping has been ungrouped



3. Export Docusnap Connect package (data)

Docusnap Connect packages can be exported manually and scheduled. The following export formats are available:

- Excel
- CSV
- XML
- MySQL
- MS SQL

3.1 Manual export

The fastest and easiest way to export the data to Excel can be found in the inventory section – Your Company – Connect.

Open the Connect package and right-click in the data area. In addition to the ability to enable filtering and grouping, you can also export the displayed list to Excel.

3.2 Time scheduled export

In the Connect area, in addition to creating and managing Connect packages, you can also schedule them.

This is done via the button Schedule Connect package.

In the first step, select New and select the Connect package under Configuration – Save.

Now edit the configuration selection for the previously selected package.

Select the destination selection – e.g., Excel, CSV, or XML

Furthermore, a file name and a path are required.

In the case of a scheduled export, it is essential to ensure that the selected path can be reached from the Docusnap Server with the executing user!

The export to a database is described in chapter Interface to third-party products.

Now you can set a schedule for the export or run the export directly.

If you run the export on a scheduled basis, you can also send the query results by mail. The prerequisite for this is that the export is performed as CSV, Excel or XML.



3.3 Export to databases - interface to third-party products

In addition to the previously discussed export to the file formats Excel, CSV and XML, the queried data from a Docusnap Connect package can also be exported to Microsoft SQL Server Databases and MySQL Server Databases.

This function is useful if the data located in Docusnap may also be used in third-party products – e.g. ITSM systems.

In the first step, the Connect package is created with the desired data and then the export is started via Schedule Connect Package.

When creating the Connect package, make sure that you designate both the tables and the column labels (alias) in a database-compliant manner. It is recommended to avoid special characters and spaces.

After selecting the Connect package in the configuration, edit the target selection and select, for example, SQL.

Both SQL and MySQL now require information regarding the SQL server, the database, and the authentication.

Make sure here that in case of a scheduled execution, the user running the Docusnap Server service is used. This user must have permissions on the target SQL server!

If the server service is executed as local system account, it can only be authorized on a local SQL server – the alternative is SQL Server authentication.

If the export is not scheduled to run, the user who started Docusnap is used for Windows authentication. He must then have the appropriate authorizations.

In both cases, the connection must now be checked, or the database must be created.

The previously specified user must have the appropriate permissions on the SQL server when the database is created.

Once configured, you can now set a schedule for the export or run the export directly.



4. Further topics

4.1 Further functions in the field selection

In addition to the filter function already used in the application example, there are other functions for field selection.

Display

• Defines whether the selected data field itself is displayed. For example, it can only be used for filtering.

Use Reference

• Is used to resolve and output values that have been stored in the database as initial values.

Sort Order

• Determines, by entering a numeric value, the order of the selected records in the output

4.2 Grouping and summing

Some information may cause some systems to be output multiple times after selecting it - e.g. processor, RAM, storage media. This is because, for example, the system has several processors, RAM bars and / or hard disks.

To sum up the total memory or disk space and group the CPUs and perform other aggregate functions, you can select them via the Grouping column.

4.3 Import/export

The Connect packages created in Docusnap are not limited to the database used. With the Export Package function, a definition can be exported and used in another Docusnap database using Import Package. The file type that describes the package has a .dcp file extension.



4.4 Static fields

A static field is an additional column that is inserted into Docusnap Connect. Values that are the same for each data record are displayed here.

In the simplest use case, you could add a missing column when using a UNION so that both queries have the same number of columns as is necessary for the UNION.

In addition, the static fields can reflect a result when using UNIONS, which have different filtering, for example.

A Connect package that outputs the name and operating system for workstations can serve as an application example. A UNION is used for this purpose.

In the first query (Win 7 & 8), a filter is set to the operating system Windows 7 and Windows 8. Within the second query (Win 10 & 11), a filter is set to the operating system Windows 10 and Windows 11.

In both queries, a static field is also defined:

Win 7 & 8

o Name: Update required

o Value: Yes

• Win 10 & 11

Name: Update required

o Value: No

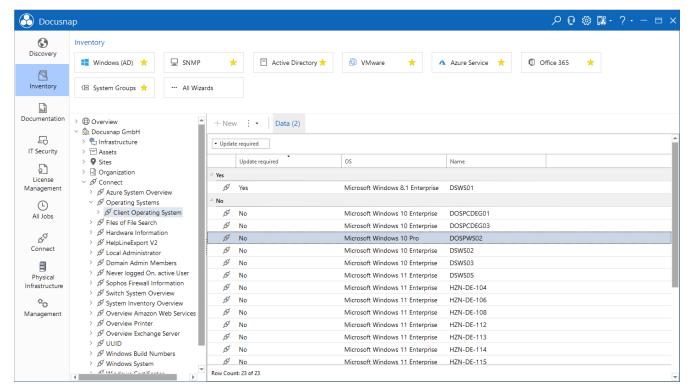


Figure 6 - Using static fields



4.5 Output only records that correspond to the filter condition (Inner Join)

If a new query/table is created within a package, the option Only output records that match the filter criterion is available. Translated" to SQL, this option means that an inner join is performed. Inner joins create a result table without null values. All selected objects within the Connect package must supply values so that, for example, the system is output in the list. Such a result table is necessary if, for example, a count is to be performed.

4.6 Show ONC path

The Show ONC option is also available when creating a new query / table.

The ONC path uniquely identifies an object within the Docusnap data tree. Once you have exported the information requested in the Connect package, you can use the ONC path to link back to Docusnap.

In this way, you can, for example, program a button in the third-party product, which calls DocusnapLink.exe and receives the ONC path:

DocusnapLink.exe -ONC "[4,1]\[4,2]\[7,4]\[7,5]\[1009,6]"

The call can also be transferred to Docusnap Web:

• http(s)://DocusnapWeb:Port/ONC/[4,1]\[4,2]\[7,4]\[7,5]\[1009,6]



4.7 Use self-created views in Connect packages

If you have created your own views via customizing in Docusnap and want to output these views within Connect packages, you must ensure that the foreign key is queried within the view you have created yourself.

For example, if you have included the following view in the Docusnap data tree - below the domain:

```
SELECT thosts.HostID, thosts.HostName, tDocuWindows.OS

FROM thosts

INNER JOIN tDocu ON thosts.HostID = tDocu.HostID

INNER JOIN tDocuWindows ON tDocu.DocuID = tDocuWindows.DocuID

WHERE thosts.HostTypeID = 1

AND tDocu.Archiv = 0

AND thosts.DomainID = {FilterID}
```

will result in the following error message when used in a Connect package:

Cannot connect to parent table. Please add the foreign key 'DomainID' for the customized table 'xvWorkstationOS' (EXP_U_WorkstationOS_Data)!

The foreign key - tHosts.DomainID - must be queried within the view. After customizing the SQL statement, the self-created view can also be used in Docusnap Connect.



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VERSION HISTORY

date	description
November 24, 2016	Version 1.0 – Screenshots adapted to the RTM version
December 15, 2017	Version 2.0 – Publication of Docusnap Connect v2
January 03, 2018	Version 2.1 – HowTo document structure revised
October 24, 2018	Version 2.2 – Changed Screenshots and inserted Chapter 4
January 23, 2019	Version 2.3 – Chapter 3.3.7 – insert possibility to use an alias in the filter function
October 01, 2019	Version 3 - New functions regarding Connect Packages in the data tree described in the HowTo
January 24, 2020	Version 3.1 – Minor formulation adjustments; correction of the multiple filter in the advanced topics;
April 28, 2020	Version 4.0 - Revision of the HowTo for Docusnap 11
January 04, 2022	Version 4.1 - New function for automatic grouping described
May 25, 2022	Version 4.2 - Added the Chapter 2.3.7 - Only output records that correspond to the filter condition
November 2, 2022	Version 5.0 – General adaptation of the HowTo, CSV Import Part has been accommodated in its own HowTo
November 13, 2023	Version 6.0 – Revision of the HowTo for Docusnap 13

