d.velop

d.3one: Administrator

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1. d.3one: Administrator

1.1. Installation

This topic provides you with information about the installation of d.3one. Starting with preparing the setup, the configuration of the d.3 repository, the authentication up to a description of an update installation, you get a number of useful notes and tips on performing the installation.

> **Warning**
> We urgently recommend to perform the preparatory tasks first and start the installation afterwards. If, for example, not all preparatory tasks were performed or settings for the d.3 repository were configured, then this can lead to issues when running the setup program or later.

See also:

- System requirements
- Architecture of a d.3ecm system environment (basics)
- Preparing the installation
- Clean installation
- Update installation

1.1.1. System requirements

This topic provides you with information about the system requirements for the installation and execution of the d.3one integrations. The common basis for all products is the application server with d.3one. The chapter d.3one (application server) describes the general system requirements. For all other specific and client-side system requirements, see the chapter d.3one in the browser in this documentation.

It is taken for granted that there is a running d.3 system if you want to install d.3one. For information about installing, configuring and managing the d.3 server and d.3 repository (d.3 archive) see the respective product documentation.

Please refer to the central system requirements for d.velop products (on-premises). You can find deviating or more extensive system requirements in the documentation.

d.3one (application server)

The following minimum requirements apply to the d.3one application server:

d.velop infrastructure components (d.ecs infrastructure)

With d.velop software manager you install the required d.velop software components from the corresponding feed: Select the product **Infrastructure** under **Select product**.

Prerequisites for the d.3ecm system environment

> **Warning**
> In combination with d.3one Current, you have to use d.3 server version 8.2.0 Rising Release 16. You need to make sure that d.3 server and d.3one use the same d.ecs http gateway app. You also need to ensure that all d.ecs jstore instances operate in the cluster.

> **Note**
> Support is only guaranteed for systems which meet the minimum requirements!

See also:

- Authentication procedures
- Architecture of a d.3ecm system environment (basics)
- Certificate selection (Setup)

d.3one in the browser

This chapter provides you with the specific system requirements for installing d.3one on the user's devices. All general system requirements are listed in the chapter d.3one (application server).

Recommended browsers:

- Google Chrome (desktop)
- Safari (Mac desktop)
- Mozilla Firefox (desktop)
- Microsoft Edge Chromium (desktop)

The browser performance can differ from browser to browser. If you notice that your chosen browser may be slow, you can use a different recommended browser.

Supported Microsoft Office versions

To directly edit Office documents, a Microsoft Office installation is needed on the client PC. The following versions are supported:

- Microsoft Office 2016
- Microsoft Office 2016 for Mac
- Microsoft Office 2019
- Microsoft Office 2019 for Mac
- Microsoft Office 2021
- Microsoft Office 2021 for Mac
- Microsoft 365 (Word, Excel and PowerPoint) for Windows, version 1705 (build 8121.1000) or higher

See also:

- Authentication procedures

1.1.2. Architecture of a d.3ecm system environment (basics)

We in d.velop AG focus on a modern software architecture based on microservices amongst others.

For example, d.3one is a collection of single microservices that interact and provide the user with DMS functionality in the user interface. Each microservice is a standalone application.

In the d.3ecm architecture, a microservice is referred to as app.

Each d.velop product consists of its own apps which are specific for the product and which are installed using a product-specific setup. If, for example, an app was installed several times as separate app instances (e.g. for cluster operations or scaling purposes), all apps must have the same version.

Based on this architecture, you can decide freely according to the requirements of your server environment, which app should to be install on which host how many times in the d.3ecm environment. This architecture design offers you the maximum freedom to consider your specific requirements for the IT environment.

Besides the product-specific apps, there are the core apps that you need to consider separately.

Core apps in the d.3ecm architecture

There are a number of apps that are of crucial importance for many d.velop AG products in the d.3ecm system landscape. All the apps below are installed as **infrastructure** products using d.velop software manager and are not part of other d.velop products:

d.ecs http gateway

The d.ecs http gateway app is the core HTTP interface to all app in a d.3ecm environment. Any HTTP communication is done by using this app. From a technical point of view, this is a reverse proxy. Each app is registered in the d.ecs http gateway app. The newly registered app can then be accessed by all the other apps under https://<BaseUri>/<AppName>. If there must be run several d.ecs http gateway apps in a d.3ecm environment, all d.ecs http gateway apps must be accessed under the identical base address. Per each d.3ecm environment, there must be only a single base address.

d.ecs jstore

The d.ecs jstore app is a NoSQL database, which caches frequently requested data from the d.3 server in the memory of the application server, such data are e.g. property values for frequently used documents. Thus the requested database accesses on the d.3 database are reduced and therefore the performance of the whole system is increased.

In addition, d.ecs jstore is used by the different d.velop components (e.g. d.3one, d.ecs monitor) to store data permanently.

d.ecs jstore is based on Redis (Remote Dictionary Server) and replaces Couchbase as cache storage, which was used until d.3ecm Version 8.0. Amongst others, the app is easier to configure and, thus provides considerable advantages compared to the latest solution.

The d.ecs jstore app is installed on each Windows host, on which a d.velop app is run.

In a d.3ecm environment, each single d.ecs jstore instance on a Windows host must be clustered in order to allow data communication.

d.ecs identity provider

The d.ecs identity provider app authenticates the users on behalf of each app. You can use systems like the Windows Active Directory service for authentication. The authorization of a user is done by each app.

d.ecs shell

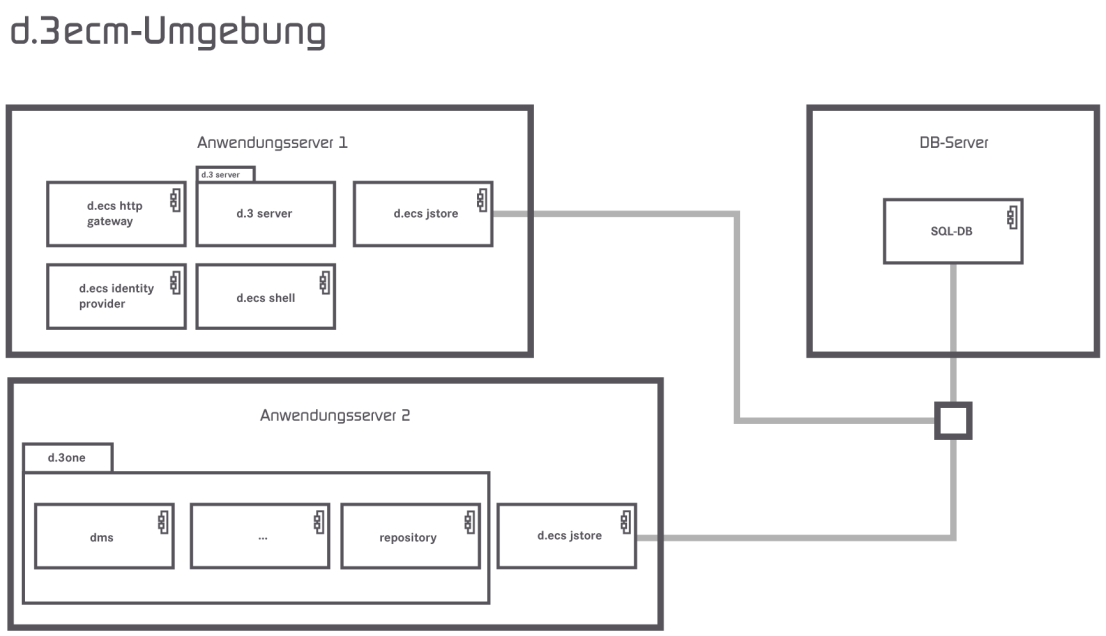
The d.ecs shell app provides the common frame for the HTML interface of each app and implements a uniform look & feel user experience so that the interface of the apps is consistent and appears to be made in one piece. The app also provides access to the native functions of the host. In this context a host is for example an e-mail application, an ERP application or even a browser.

Potential scenarios for a d.3ecm environment with d.3one

You can design your d.3ecm environment especially according to the requirements of your enterprise or organization. You can either use at least a single core application server or you can distribute the apps on different application servers. You can choose and decide according to your needs and requests related to your IT environment how to organize your d.3ecm environment.

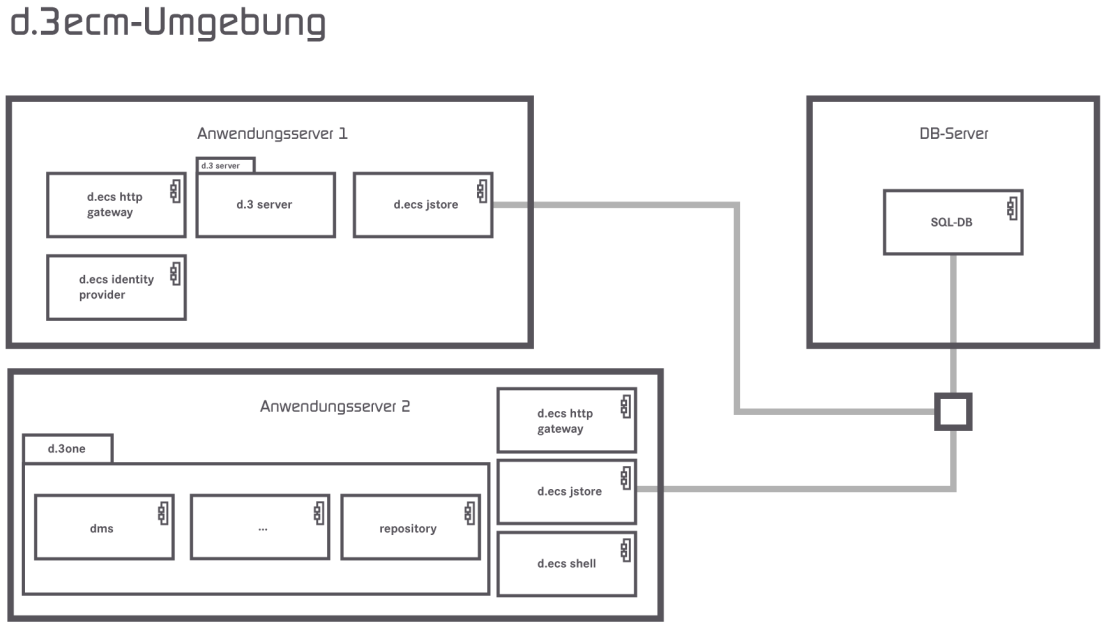
Example 1

The core apps were installed on a single application server, while the product-specific apps are installed on a different application server.



Example 2

The core apps are distributed on two application servers and the d.ecs http gateway app exists two times in the d.3ecm environment.



If there are questions regarding the cluster operation or scaling, contact your d.velop representative.

1.1.3. Preparing the installation

Before you install d.3one, it is helpful to analyze and plan some aspects in advance. You may want to consider the following aspects, for example:

- Plan how to install d.3one and the core apps into your IT infrastructure, e.g. to ensure scalability.

- You must run the d.3one setup as administrator.
- Initially, perform the installation in a test environment.
- Test the software in the test environment based on real-life scenarios.
- Create a backup of all servers, data and configurations in the production environment before the installation.
- Plan the time of the installation and distribution in agreement with the departments of your organization.

An installed and operational d.3 repository is required which you can then prepare for the d.3one installation.

As a technical prerequisite for a clean installation under Windows Server 2016 and Windows Server 2019, you must first specify a default browser in order to download tools from the Internet, if applicable. We recommend to use Internet Explorer.

This topic with the following chapters provides you with support for the planning and performing of the preparatory tasks:

- Installing the core apps and essential administrative tasks: Learn more about the order and essential administrative tasks related to installing the core apps, namely for a clean installation as well as for an update installation.
- Latest version of d.3one: Inform yourself about the latest version and possible sources to obtain.
- Preparing the d.3 server: Find out more about the preparation of d.3 server, the d.3 repositories, and the required settings.
- Connecting to the license server: Make sure that the connection to the license server works properly.
- Authentication procedures: Find out more about the authentication methods in d.3one and the integrations.
- Issuing a domain web server certificate for d.ecs http gateway: Get information about the required steps for issuing and exporting a HTTPS certificate.
- Enabling HTTPS for a secure communication (optional): Learn more about the HTTPS communication and how to configure it for some apps.
- Opening ports in the firewall (optional): Make sure that the apps can pass the firewall.

Once the preparation is completed, you can start with the installation.

See also:

- System requirements
- Architecture of a d.3ecm system environment (basics)
- Clean installation
- Update installation

Installing the core apps and essential administrative tasks

Before running the setup to install the d.3one integrating application, you need to install the core apps. In this chapter you can learn which aspects to be considered while installing and configuring in order to make the additional preparations for d.3one in the context of d.3ecm. For information about installing the core apps, see the d.velop software manager manual. For more information about configuring the infrastructure components, see the configuration guidelines for d.velop infrastructure components.

- Preparing the clean installation of d.3one: Learn more about essential tasks which must be finished before installing d.3one.
- Preparing the update installation of a previous version: Get perfectly ready with preparing the update from a previous d.3one version.

See also:

- Preparing the installation
- Architecture of a d.3ecm system environment (basics)

Preparing the clean installation of d.3one

If you install d.3one for the first time and you already use Internet Information Services (IIS), you need to modify the binding prior to installing d.3one.

Internet Information Services (IIS) already exist:

If a site in IIS has a binding on port 443, then this binding must be deleted before installing d.ecs http gateway. Otherwise, the port is already in use so that d.ecs http gateway cannot be started correctly. Existing applications with a binding on port 443 must use a different port, if applicable. You can also register the application as app in d.ecs http gateway, provided the app should still be accessed on port 443. For more information see the Configuration guidelines for d.velop infrastructure components.

This is how it works

1. Close all applications using the port 443.
2. In IIS Manager, open the default web site (**Default Web Site**).
3. Select **Bindings** under **Edit Site**.
4. Delete the port 443 for this site.

Once the binding is deleted, install the core apps.

Once the required components are installed, you can proceed with the preparing tasks for installing d.3one and then run the d.3one setup.

See also:

- Preparing the installation
- Architecture of a d.3ecm system environment (basics)

Preparing the update installation of a previous version

You can update d.3one to the Current version only, if you have already installed version 1.7.0. For earlier versions of d.3one, you need to follow the following installation order.

1. Update the software to version 1.4.0.
2. Then update to version 1.5.0. When updating to version 1.5.0, you need to take the migration steps into consideration which are described in this chapter in the administration manual for version 1.5.0.
3. Update to version 1.6.0.
4. Update to version 1.7.0.

Finally, you can update your environment to the d.3one Current version.

d.velop infrastructure components (d.ecs infrastructure)

With d.velop software manager, you can install the required d.velop software components. Make sure to install the appropriate infrastructure components (d.ecs infrastructure). For more information see d.3one (application server).

> **Warning**
> In combination with d.3one version 1.7.0, it is required to use d.3 server since version 8.1.0 Hotfix 5. You need to make sure that d.3 server and d.3one use the same d.ecs http gateway app. You also need to ensure that all d.ecs jstore instances operate in the cluster.

See also:

- Preparing the installation
- Architecture of a d.3ecm system environment (basics)
- Enabling HTTPS for a secure communication (optional)
- Preparing the d.3 server

Latest version of d.3one

You can find main version of d.3one in the d.velop service portal. You can get information about updated versions such as hotfixes (HF) at the following locations and obtain the latest setup there:

- d.velop Partner
- d.velop support
- d.velop service portal

d.3one is continuously enhanced and also provides new functions. You can use the new functionality in the Current version.

For more information about the releases visit the d.velop service portal and see your d.velop partner.

Preparing the d.3 server

To properly run the various d.3one integrations, certain requirements must be met on the d.3 system. Among these requirements are the seamless collaboration between a d.3 repository and the d.3one integration, for which certain requirements must be met and settings must be applied. This is, e.g., the installation of the latest version of d.3 server and certain settings to be applied in the repository.

This topic describes which measures you should take and how to prepare the server with d.3 server for running d.3one.

> **Warning**
> In combination with d.3one version 1.7.0, it is required to use d.3 server since version 8.1.0 Hotfix 5. You need to make sure that d.3 server and d.3one use the same d.ecs http gateway app. You also need to ensure that all d.ecs jstore instances operate in the cluster.

> **Warning**
> All measures and settings must be successfully applied before running the setup. If not all preparatory tasks were performed or settings were not configured, then this may lead to issues when running the setup program later on.

If you already have a d.3 system, you should first update the database tables in d.3 server using the update script as described under Running the JPL update script. This step can be skipped when performing a clean installation of d.3 server. Moreover, make sure that d.3 server is accessible in both directions on port 3400.

Optionally, you can set the faceted search function for each category in the d.3 administration to provide your users with a simple option to find in an complex result list more quickly what they are looking for. Find out more in the chapter Configuring the faceted search function.

See also:

- System requirements
- Associating dependent d.3 formats to file types

Running the JPL update script

For d.3one properly running, at least d.3 server version 8.1.0 is required. For the smooth collaboration between d.3one and an already existing d.3 repository, the database tables must be updated.

> **Warning**
> It is mandatory to execute the JPL update script when updating d.3 server which is valid for the d.3 server version.

If you want to specify several d.3 repositories in d.3one, you must perform the update operation using the JPL update script for each d.3 repository.

Associating generated d.3 formats to file types

You can store and manage at least two different file formats for a single document in a d.3 repository. A document consists of an original file (e.g. Microsoft Word or AutoCad file) needed for additional editing and a so-called "dependent" file. This "dependent" file is generated in a specific format (e.g. as PDF format) so that the generated file automatically represents the original file in the d.3 repository. You can use a generated PDF file for a Word document to quickly view and print it in an app.

A generated file reflects the master or original file. The generated file has no properties of its own and is managed by the same document ID as the original file.

Generally, the file extension for generated files consists of two parts (e.g. ***.t1**). Usually, the file extension consists of a letter followed by a digit. In the d.3 Administration, you need to specify the file extensions for the d.3 repository, which are to be used to store documents into the d.3 repository (option **File name Extensions for Dependent Documents**). Apart from managing these files, you can also specify in d.3 admin which file name extensions for the file type can be downloaded (e.g. to display them). The so-called dependent file is associated to a specific file format by the number (position) in the d.3 configuration dialog (option **File Extensions for visualizing Dependent Documents**). If there is no association defined, the original file extension of the dependent file is used (e.g. **t1**). You can define the following associations for the generated file, for example:

File name Extensions for Dependent Documents		File Extensions for visualizing Dependent Documents		Effects for downloading	
No.	Value	No.	Value	Current file name	File name after download
1	or	1	txt	Document1.or	Document1.txt
2	t1	2	tif	Drawing23.t1	Drawing23.tif
(...)	(...)	(...)	(...)	(...)	(...)
12	x1	12	zip	Infoleaflet77.x1	Infoleaflet77.zip
13	z1	13	---	Information49.z1	Information49.z1

This association only affects the download of documents.

For additional information about d.3 admin and d.3 config see the respective manuals.

Configuring the faceted search function

The user can use a faceted search functionality. With the faceted search the user can refine complex search results by selecting facets to reduce the complexity of the result list. The faceted search is useful for huge sets of data in the d.3 repository.

In order to achieve optimal results for the users in your organization, it is recommended to collaborate and plan with representatives from the departments which properties should be facets. Not every category's property is suitable for faceting. The **doc_id** property, for example, is not suitable for the faceting function because this property is used for each document in the result list and thus generates its individual facet value.

Connecting to the license server

The server running d.ecs license server manages the licenses for all d.velop products you purchased. For additional information about d.ecs license server and configuration see the d.ecs license server manual.

The d.3one integrations need an individual license. If you have obtained a language pack in addition, also specify the language in d.ecs license server.

> **Warning**
> The server running d.ecs licence server must be accessed using the DNS name "d-velop-license" and that the firewalls must not block the port 3489 for UDP and TCP.

See also:

- Managing additional languages

Authentication procedures

The authentication methods are provided by d.ecs identity provider. For each d.3 repository, the same instance of d.ecs identity provider must be configured, since the user can only authenticate himself or herself at a single d.ecs identity provider instance.

If you set the option for enabling single sign-on in d.ecs identity provider (e.g. Kerberos), your users can use the single sign-on (SSO) functionality. For more details, see the Configuration guidelines for d.velop infrastructure components in the d.ecs identity provider articles.

Issuing a domain web server certificate for d.ecs http gateway

In this chapter, you can learn how to create a web server certificate without the IIS role that is valid across the domain and how to export the web server certificate including the private key. A certificate is needed to ensure a secure HTTP connection (HTTPS).

The advantage of a certificate which is valid across the domain is that the certificates on the computers can always be verified within the domain due to the certificate chain. Domain certificates in the certificate chain are automatically provided to each computer which joins the domain at a later point in time.

If you use the d.3 mobile app on mobile devices, you need a certificate of an official certification authority.

The creation of a certificate consists of two tasks.

1. To create a certificate template is the preparation and done only once.
2. A certificate must be created for each web server address.

An existing certificate only has to be recreated if the properties of the certificate have changed, because you can use the same certificate on multiple computers.

Creating the certificate template

1. Start the management console (**mmc**) with administrator rights on the computer with the certification body for your domain.
2. Add the **Certificate Templates** snap-in.
3. Select the **Web Server** template.
4. Choose **Duplicate Template** in the context menu.
5. In the **Properties of New Template** dialog box, enter a name for your new certificate template under **Template display name** on the **General** tab.
6. Activate the **Allow private key to be exported** checkbox on the **Request Handling** tab. Thus, you make sure that the certificate including the private key can be exported and be provided for d.ecs http gateway later.
7. On the **Cryptography** tab, you can make optional adjustments that affect the properties of the certificates issued with this certificate template.
8. Enter a value under **Minimum key size** (the recommended value as of January 2020 is 2048) and finish creating the certificate template.

> **Warning**
> To ensure sufficient security, the key size (which is also referred to as the key length) must comply with the current guidelines for key sizes in asymmetrical encryption algorithms. At minimum, the certificate must use SHA-256 as the signature hash algorithm.

As soon as the certificate template is created, you must enable it.

1. Start the management console (**mmc**) with administrator rights on the computer with the certification body for your domain.
2. Add the **Certification Authority** snap-in.
3. Choose **Certificate Templates**.
4. In the **New** context menu, choose the **Certificate Template to Issue** entry.
5. Select the certificate template created by you in the list of certificate templates.
6. Choose **OK** to activate the selected certificate template.

The certification template was enabled only for this certification authority.

Creating a certificate

In this step you learn more about the required tasks to create a web server certificate which you can use for d.ecs http gateway.

If you create a certificate for third-party software, you may specify additional certificate properties.

> **Note**
> To create a web server certificate, you do not necessarily have to be logged in on the computer on which the certification authority is installed. A web server certificate can be created on any computer.

1. Start the management console (**mmc**) with administrator rights.
2. Add the **Certificates** snap-in for the **Computer account** area.
3. Choose **Personal**.
4. In the **All Tasks** context menu, choose the **Request New Certificate** entry.
5. Enable the checkbox next to the name of the certificate template created by you.
6. Click the link below your certificate template to go to the **Certificate Properties** dialog box and enter the missing properties for the certificate.
7. On the **Subject** tab in the **Certificate Properties** dialog box, enter the required certificate properties for **Subject name** and **Alternative name**.

There are certain certificate properties visible in d.ecs http gateway. In order to display these certificate properties, you need to specify these when creating the certificate. The overview represents the mapping of the terms between the d.ecs http gateway and Microsoft terminology.

d.ecs http gateway	Certificate property	Sample value	Alias/type	Data type
Country code (2 characters)	Country/Region	DE	C	String (2 characters)
Country/Region	Status	North Rhine-Westphalia	S	String (128 characters)
City	City	Gescher	L	String (128 characters)
Company	Organization	d.velop AG	O	String (64 characters)
Department	Organizational unit	<department>	OU	String (64 characters)
Host name of server	Common name	<base address>	CN	String (64 characters)
Host name of server	Alternative Name	<base address>	DNS	String (64 characters)

> **Note**
> In the **Key options** area on the **Private Key** tab, you can select a key size that differs from the minimum key size and use the **Make private key exportable** checkbox to ensure that the private key can be exported later.

Choose **Register** to start the creation of the certificate. Once the certificate is created, it must be exported.

1. Open the created certificate by double-clicking on it.
2. To export it, go to the **Details** tab and click **Copy to File**.
3. Select the **Yes, export the private key** radio button and enter a password to protect the private key.

> **Warning**
> The password can contain only characters from the CP 850 character set.

You must specify this password when importing the certificate in d.ecs http gateway. It is recommended not to use the password in another context.

The certificate created is selected in the setup when installing d.3one.

See also:

- Enabling HTTPS for a secure communication (optional)

Enabling HTTPS for a secure communication (optional)

The communication between the integrating applications as well as the browser and the d.ecs http gateway app is in general encrypted using HTTPS. However, the d.ecs http gateway app and the instance of an app communicates unencrypted using HTTP. The apps hosted in Internet Information Services (IIS) are an exception from this since the communication is already encrypted using TLS (Transport Layer Security protocol). You can encrypt the communication between the d.ecs http gateway app and the app instances with a certificate, which uses the TLS protocol.

In this chapter you can find a step-by-step instruction how to encrypt the communication. The protocol used correspond to the current security standard while SSL (Secure Socket Layer) is used as a synonym for TLS.

Self-signed certificate are considered as insecure in general and must not be used if you want to configure a secure connection.

This is how it works

First, you need to enable TLS in the respective apps and assign the fixed port to the app. Do the following:

Enabling TLS in the apps d.ecs repo, d.ecs process portal, d.ecs identity tunnel, d.ecs file container, d.ecs pdf:

1. Go to the folder conf in the installation directory of the app.
2. If the **appsettings.config** file does not yet exist, create the file and copy the content from the file **appsettings.config.template** into the file.
3. Open the **appsettings.config** file.
4. Set the value **protocol** to **https** (e.g.: **<add key="protocol" value="https"/>**).
5. For the value **baseaddress**, specify the complete URI with the host name of the computer with the d.ecs app (e.g.: **<add key="baseaddress" value="https://d3one.contoso.local/"/>**). If this value is empty, the base address (**System.BaseUri**) is used automatically.

6. For the value **hostname**, specify the host name of the computer with the d.ecs app (e.g.: **<add key="hostname" value="d3one.contoso.local"/>**). If this value is empty, the hostname of the computer is automatically determined.
7. Set the values **port** to a fixed value (e.g.: **<add key="port" value="4010"/>**).
8. Save the file.
9. Restart the service d.ecs repo, d.ecs process portal respectively d.ecs identity tunnel.

For the next step you need the hash value of the certificate to be linked. You can use the same certificate you already use in IIS. Do the following:

1. Start the Windows command prompt as administrator.
2. Enter the command **netsh http show sslcert ipport=0.0.0.0:[Port]**, while you replace **[Port]** by the port number, which you specified during the installation of d.3one (default value: 3401).
3. The hash value is displayed under **Certificate Hash**.

If you want to use a different certificate, you can determine the hash value (thumb print) in the properties of the certificate. Remove any space characters.

Besides this hash value, an application ID (**appid**) is also needed. You can use as application ID any valid GUID in the format "XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX".

Using both values you can now link the certificate to the app port. Do the following:

1. Start the Windows command prompt as administrator.
2. Enter the command **netsh http add urlacl url=https://*:[Port]/ user=[User]**, while you replace **[Port]** by the port number and **[User]** by the user running the app (e.g. **SYSTEM**).
3. Then, enter the command **netsh http add sslcert ipport=0.0.0.0:[Port] certhash=[hash] appid={[appid]}**, while you replace **[Port]** by the port number, **[hash]** by the saved hash value and **[appid]** by the application ID mentioned above.
4. Confirm the command.

The commands may look like this:

```
netsh http show sslcert ipport=0.0.0.0:3401
netsh add urlacl url=https://*:4000/ user=SYSTEM
url=https://*:4000/ user=SYSTEM
netsh http add sslcert ipport=0.0.0.0:4000
certhash=e31c06568e4b222a92c8434eaa770b26f09a31a3 appid={2131f4cd-
d05b-4308-9af1-9caa44b2c74a}
```

> **Note**
> If the port was successfully linked, it is listed in the command prompt when using the command **netsh http show sslcert**. You can also directly display the linked port using the command **netsh http show sslcert ipport=0.0.0.0:[Port]**, while **[Port]** is to be replaced by the port number.

Restart the respective apps to make sure that the apps use HTTPS instead of HTTP when registering at the d.ecs http gateway app.

You can verify in the d.ecs http gateway administration, how the apps registered at the d.ecs http gateway app. Do the following:

1. Open the administrative interface of the d.ecs http gateway app using **https://<computer name>:4200**.
2. Open **Registered apps**.
3. Select an app.

4. Under **Registered app instances**, you can determine the URL used of the respective app instance.

Opening ports in the firewall (optional)

If you want to install the product-specific apps and the core apps, e.g. d.ecs http gateway, on different server, the opening of ports for the apps is essential for you.

You have the option and it is recommended to assign each product-specific app a fixed port.

If you decide to open fixed ports in the firewall, you must assign the d.3one apps d.ecs repo, d.ecs process portal, and d.ecs identity tunnel, d.ecs file container and d.ecs pdf a fixed port number.

This is how it works

1. Go to the folder conf in the installation directory of the app.
2. If the **appsettings.config** file does not yet exist, create the file and copy the content from the file **appsettings.config.template** into the file.
3. Open the **appsettings.config** file.
4. Set the value for **port** to a fixed value (e.g.: **<add key="port" value="4010"/>**).
5. Save the file.
6. Restart the respective services.

For apps hosted in IIS, the port is specified when installing d.3one.

For more information about assigning ports for the core apps, see the appropriate product manual.

See also:

- Architecture of a d.3ecm system environment (basics)
- Enabling HTTPS for a secure communication (optional)
- Installing the core apps and essential administrative tasks

1.1.4. Clean installation

In this topic you learn fundamental aspects about the clean installation of d.3one. Internet Information Services (IIS) is also set up during the clean installation process. It is assumed that there is a d.3 system available.

The setup program guides you through each installation setup. Thus, only those setup steps are displayed that you need to view according to your installation settings.

The system and installation requirements are automatically checked during installation. Required applications are offered for installing either automatically or manually. You can install the missing applications manually in order to continue the d.3one setup program.

In general, you got the opportunity to run the setup program either in English or in German.

You can cancel the setup program in each step by clicking on the cross on the top right of the page.

Warning

You cannot cancel the setup in the step Installation without changes made to your system. Changes are made to your system as soon as you click on **Install** on the page Summary. You can cancel the setup by clicking on the cross but all changes done at that time are applied.

If you want to restart the setup after cancelling, you may be guided through the steps of an update installation. If you want to restart the clean installation, you need to uninstall the d.3one first. For more information about uninstalling see the chapter Uninstalling.

Before you start the installation, make sure that all required preparatory tasks are done for a successful installation. For additional information about the preparatory tasks and planning see the topic Preparing the installation. You can find the installation steps described in chapter Installing d.3one (step-by-step.

> **Note**
> On the server, run the setup program with local administrator rights.

Installing d.3one (step-by-step)

This chapter provides you with details, e.g., about the installation steps, the settings done automatically by the setup and the application to be installed manually. After finishing preparing the installation, the d.3one setup wizard guides you through each step.

In the setup program, you can always go back one step so that you can verify the settings again and modify them if applicable. You can cancel the setup wizard by clicking on the cross on the top right of the page.

> **Warning**
> Before starting the setup program, we strongly recommend to check the system requirements, the required applications and settings in each d.3 repository and in each d.3 application as well as for d.3one. Verify the requirements with regard to your system environment, the security, the applications and the needed settings. Perform the required steps in order to run the d.3one setup correctly. You will find more information in the chapters listed under "See also".

The setup steps are described in single setup chapters.

> **Note**
> On the server, run the setup program with local administrator rights.

After finishing all preparatory tasks the setup program welcomes you with the language selection and welcome page.

See also:

- System requirements
- Preparing the installation

Language selection and Welcome page (Setup)

After starting the setup, you can select in the first dialog in which language the setup should be run. By default, there is German and English available. The language selection only applies to the setup program and does not affect the language displayed for the d.3one integrations. In addition, information about the d.3one version is displayed.

On the Welcome page, e.g. the contact information is displayed.

The next step follows up with Terms of License (Setup).

Terms of License (Setup)

The step **Terms of License** offers you the license terms of d.velop AG. Read the terms carefully, before you accept or reject them.

Only if you agree with the Terms of License, you can go to the next step by clicking on **Next**. If you disagree with the terms of license, you are not able to install d.3one; you can only go one step back in the setup wizard.

The next step follows up with the Verifying the system requirements.

System requirements (Setup)

In this installation step the required applications and their status are displayed. Missing applications are installed. You can download applications that are not part of the setup from the Internet. You must install the required d.3 applications and core apps manually. As a technical prerequisite for a clean installation under Windows Server 2016 and Windows Server 2019, you must first specify a default browser in order to download tools from the Internet, if applicable. We recommend to use Internet Explorer.

The progress of the installation is continuously displayed. After installing the missing applications, you can click on **Next** in the setup wizard to continue the setup program.

The table shows you the verified system requirements and the installation location for the applications:

System requirements	Installation	Description
Microsoft .NET Framework 4.7.1.	Manually, per link: Microsoft MSDN website	After clicking on **Install** the link is opened in a browser and you can install the application manually. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.
Internet Information Services (IIS) since version 7.0	Automatically with **Dism.exe** or **ServerManagerCMD.exe**	After clicking on **Install** the EXE file is executed to install IIS. For installation, either use the **Dism.exe** or **ServerManagerCmd.exe** file in the Windows folder \System32\.
Microsoft Windows features	Automatically with **Dism.exe** or **ServerManagerCMD.exe**	After clicking on **Install** the EXE file is launched to install the Windows features. For installation, either use the **Dism.exe** or **ServerManagerCmd.exe** file in the Windows folder \System32\.
URL Rewrite module	Manually, per link: URL Rewrite website	Up to Windows Server 2012 R2 for offline installation: After clicking on **Install** the link is opened in a browser and you can install the application manually. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.
d.3 logview	Manually with d.velop software manager; to be downloaded from the d.velop service portal	For more information see the manual. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.
d.ecs pdf extension	Manually; to be downloaded from the d.velop service portal	During setting up d.ecs pdf extension select the **d.ecs pdf extension (Centralized installation)** option in the **Product choice** step. Make sure that the **PDF/A validator** option is enabled.
d.ecs jstore	Manually with d.velop software manager; to be downloaded from the d.velop service portal	For more information see the manual. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.
d.ecs http gateway	Manually with d.velop software manager; to be downloaded from the d.velop service portal	For more information see the manual. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.
d.ecs identity provider	Manually with d.velop software manager; to be downloaded from the d.velop service portal	For more information see the manual. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.
d.ecs shell	Manually with d.velop software manager; to be downloaded from the d.velop service portal	For more information see the manual. The setup wizard waits until the installation process is finished. The setup program silently checks the status every 5 seconds.

The next step continues with the IIS settings.

See also:

- System requirements

IIS settings (Setup)

Under **IIS settings** in the setup wizard, specify the website name, the installation directory for d.3one and the port used to access d.3one.

IIS configuration options	Description
Website name	By default, the name is **d.3one**. You cannot modify this name.
Directory	By default, the directory %SystemDrive%\d3\d.3one is suggested. You can edit the path, if applicable.
Port	The port is 3401 by default. You can modify the IIS settings, if applicable. This port is used to access the d.3one integrations.

After you have checked the input and modified it, if needed, the next step continues with defining a certificate.

Certificate selection (Setup)

For a correct and secure functionality of d.3one, a certificate is required for the HTTPS encryption. In this step you can either select an appropriate certificate for d.3one from the dropdown menu or create a self-signed certificate using the setup wizard that is used for testing purposes only. In setup step you can only choose from certificates that are stored in the Windows certificate store of the computer account.

> **Warning**
> The certificate must at least include the base address as **CN** (Common Name). For additional information about creating a certificate, see chapter Issuing a domain web server certificate for d.ecs http gateway.
>
> We strongly recommend to use self-signed certificates for testing purposes only and never use them in a productive environment, because browsers usually do not consider a self-signed certificate as trustworthy.

After finishing all required tasks for the needed certificate, at least one certificate is displayed in the drop-down field. Select the certificate that is suitable for your purposes. If the required common names (**CN**) exists in the certificate, a green check mark is displayed below the drop-down field.

The next step continues with the cache settings for d.3one.

See also:

- Preparing the installation

Cache settings (Setup)

On this page, the d.3one setup program offers the opportunity to improve the performance for the search feature and the display of content in the integrating application and to change the directory.

Setting	Description
d.3one cache	Specifies the directory path for the d.3one cache. Default: %InstallPath%\caches
Maximum storage (in GB)	Specifies the maximum used storage in GB for the Image app. Default value: 5 GB. This disk space is used by the Image app to save the processed files and the interim results. There is no check to verify if there is enough storage for this setting available.

> **Warning**
> Make sure that there is enough disk space available.

In the next step, a summary is displayed for the applications, apps and settings in the back end to be installed.

Summary (Setup)

Before installing you are provided with an overview of each installation option and the settings in the step **Summary**. You got the opportunity to check the options again before you install the selected d.3one integrations and back end settings.

Click on **Install** to start the installation. In the step Installation the progress during setup is displayed.

> **Warning**
>
> You can only cancel the setup in this step by using the cross on the top right. As soon as you click on **Install** to move to the **Installation** page, changes made to your system. You can then cancel the setup program by clicking on the cross but all changes done at that time are applied.
>
> If you want to restart the setup after cancelling, you may be guided through the steps of an update installation. If you want to restart the clean installation, you need to uninstall the d.3one first. For more information about uninstalling see the chapter Uninstalling.

Installation (Setup)

With this step, the installation was started. The progress of the setup is displayed.

> **Warning**
>
> You cannot cancel the setup in the step **Installation** without changes made to your system. Changes are made to your system as soon as you click on **Install** on the page Summary. You can then cancel the setup program by clicking on the cross but all changes done at that time are applied.
>
> If you want to restart the setup after cancelling, you may be guided through the steps of an update installation. If you want to restart the clean installation, you need to uninstall the d.3one first. For more information about uninstalling see the chapter Uninstalling.

After finishing the setup, the next step follows up with the App initialization.

App initialization (Setup)

During app initialization, all back end apps are initialized at once so that these are ready for the first request. The app initialization can take several minutes.

After finishing the app initialization, you are directed to the last page of the setup program.

Completing the installation (Setup)

On the last page of the setup wizard, you can go to the previous page by using the **Back** button. By clicking on **Finish** you complete the installation.

Afterwards, you can configure a d.3 repository for d.3one.

See also:

- Configuration

1.1.5. Update installation

Please check the current general and specific system requirements before updating the software. We also recommend to read the topic Preparing the installation to check whether all required preparatory tasks are done so that d.3one works properly.

The d.3one setup program exclusively updates the component d.3one in the browser. Already installed components of the integrating applications like d.3one in Microsoft Outlook remain unchanged since

d.3one version 1.6.0. The components d.3one in Microsoft Outlook, d.3one in Microsoft Office and d.3one in IBM Notes are updated by standalone setup programs which you can download from the d.velop service portal.

The installation steps for an update differ from a clean installation, for example, in displaying only certain setup wizard pages, since d.3one is already installed and configured on a server. Furthermore, the basic configuration has been done, e.g. d.3one administrators and the repository configuration. All steps that you have already performed during a clean installation are skipped. Your attention is only needed for changes.

> **Warning**
> If you have set some settings in the **web.config** file of the d.3one apps manually, keep in mind that only the settings under **appSettings** of the former **web.config** file are applied.

If you want to update d.3one from an earlier version to the current version, we recommend to keep in mind the following aspects:

- Familiarize yourself with the system requirements and update the system environment, if applicable.
- Perform the required installation preparatory tasks for d.3one.
- A successful installation of the full version d.3one 1.7.0 is required for the installation of d.3one since version 1.8.0.
- Familiarize yourself with the installation steps.
- Plan the deployment together with the decision makers in your organization.

The links to the Setup chapters of the clean installation support you in case you need information about the installation steps.

Important steps in the setup wizard:

- Select the language: You set the display language for the setup and you can inform yourself about the version.
- Confirm the terms of license: You can read the current terms of license and accept them.
- Verify the system requirements: The setup wizard verifies the system requirements.
- Complete the installation: If applicable, you can specify a repository.

1.1.6. Managing additional languages

With the d.3one setup program you have the opportunity to use d.3one in various languages. By default, you can use the d.3one in German and English. The language packs are also part of the setup program and, thus, automatically installed. You must purchase a license for each language and register each in d.ecs license server in order to use the languages.

The language selection depends on the language settings of the browser. If, for example, Spanish is set as main language in the browser and there is no licensed Spanish language pack available, d.3one is by default displayed in English.

For information about selecting the languages, see the d.3one user manual.

See also:

- Connecting to the license server

1.2. Configuration

This topic provides you with additional information about the settings and configuration option.

See also:

- Monitoring d.3one
- d.3one application server (configuration options)
- d.3one in the browser (configuration options)
- Managing mappings
- Specifying user rights for working with items

1.2.1. Adjusting the configuration parameters for DMSApp, InboxApp and ImageApp

The d.3one apps DMSApp, InboxApp and ImageApp are run in Internet Information Services (IIS). Following the installation, you can find the **web.config** file in the installation directory. In the file, you can find the available configuration parameters as **add** items under **appSettings**. A configuration parameter consists of a name (**key**) and value (**value**). The parameters are each predefined with a default value.

If you want to change the configuration parameters, make the changes in the **web.config** file.

This is how it works

1. On the d.3one application server, go to the installation directory for the apps you want to adjust. The default name for the installation directory is c:\d3\d3one\<app name>.
2. Open the **web.config** configuration file and go to the **<appsettings>** section.
3. Adjust the relevant **<add key="xxx" value="xxx"/>** entry by entering one of the possible configuration values for the **value** property.

The change to the **web.config** file automatically triggers a restart of IIS. The changes take effect on the application server immediately. When using a distributed d.3one installation, please note that the configuration parameters must be adjusted to all the servers on which d.3one is installed.

If you update d.3one on the server at a later point in time, all the configuration parameters predefined by d.3one in the **web.config** file during the last installation are applied. Your changes to these configuration parameters are also applied automatically.

Some configuration parameters cannot be preassigned through the **web.config** file because their name has a variable structure. For these parameters, for example, you must add the ID of the d.3 repository in the name. Since only predefined configuration parameters with a fixed name can be applied during a software update, you must save the parameters with variable names in an additional configuration file, **appsettings.config**.

You create the **appsettings.config** file in the same directory as the **web.config** file. The file is then detected automatically after IIS is restarted. When using a distributed d.3one installation, you create the **appsettings.config** file on all the servers on which d.3one is installed.

Let's assume you want to create the **appsettings.config** file.

This is how it works

1. On the d.3one application server, go to the installation directory for the apps you want to adjust. The default name for the installation directory is c:\d3\d3one\<app name>.
2. Rename the template file **appsettings.config.template** as **appsettings.config**.
3. Open the **appsettings.config** configuration file and go to the **<appsettings>** section.
4. Create an **<add key="xxx" value="xxx"/>** entry for the relevant configuration parameter.
5. Define the **name** property and the **value** property for the configuration parameter.

Then, manually restart IIS. Changes from the **appsettings.config** file are not automatically detected by IIS.

If you want to add configuration parameters that were not predefined during the installation, enter the parameters in the **appsettings.config** file. This lets you ensure that the new parameters are retained during updates.

If you accidentally created the same configuration parameter in both the files **web.config** and **appsetting.config**, the setting from **appsettings.config** always takes priority.

You can find more information about enabling feature toggles (a preview of new or changed functions) at: Enabling new functions (feature toggles)

See also: Adjusting the configuration parameters for d.ecs repo, d.ecs process portal, d.ecs file container, d.ecs pdf and d.ecs identity tunnel

1.2.2. Adjusting the configuration parameters for d.ecs repo, d.ecs process portal, d.ecs file container, d.ecs pdf and d.ecs identity tunnel

The d.3one apps d.ecs repo, d.ecs process portal, d.ecs file container, d.ecs pdf and d.ecs identity tunnel are Windows services that are not run in Internet Information Services (IIS). For these apps, you always define the configuration parameters in the **appsettings.config** file. When using a distributed d.3one installation, you create the **appsettings.config** file on all the servers on which d.3one is installed.

Let's assume you want to create the **appsettings.config** file.

This is how it works

1. On the d.3one application server, go to the installation directory for the apps you want to adjust. The default name for the installation directory is c:\d3\d3one\<app name>.
2. Go to the folder **\conf**.
3. Rename the template file **appsettings.config.template** as **appsettings.config**.
4. Open the **appsettings.config** configuration file and go to the **<appsettings>** section.
5. Create an **<add key="xxx" value="xxx"/>** entry for the relevant configuration parameter.
6. Define the **name** property and the **value** property for the configuration parameter.

Then, restart the service. The **appsettings.config** file is also retained after you update the software.

See also: Adjusting the configuration parameters for DMSApp, InboxApp and ImageApp

1.2.3. Monitoring d.3one

You can easily check the status of d.3one easily by using a HTTPS call for each app. If the call returns the HTTP status code 200, the app can be used.

You also got the opportunity to manage the monitoring process automatically. You can use the application d.ecs monitor for monitoring purposes. For more information about monitoring see the manual about d.ecs monitor.

The following d.3one apps register themselves at to locally installed tool d.ecs monitor agent and return the current status:

- RepoApp
- PdfApp
- FileContainerApp
- ProcessPortalApp
- TunnelApp

If you want to monitor the d.3one apps, which are hosted in Internet Information Services (IIS), then you need install the tool d.ecs monitor webservice analyzer in addition to d.ecs monitor. You can then configure in d.ecs monitor webservice analyzer the following IIS apps:

App name	URL	HTTP verb	Potential HTTP status code
DMSApp	https://<Baseaddress>/dms	GET	200
ImageApp	https://<Baseaddress>/image	GET	200

App name	URL	HTTP verb	Potential HTTP status code
InboxApp	https://<Baseaddress>/inbox	GET	200
HomeApp	https://<Baseaddress>/home	HEAD	200

For more information about configuring the apps, see the d.ecs monitor webservices analyzer manual.

1.2.4. d.3one application server (configuration options)

Either before or after finishing installation, you can optionally set which document types can be downloaded. This can be configured by using the user rights in d.3 admin.

After successfully finishing installation, you can add additional d.3 repositories or remove existing repositories and adjust the log level for single apps.

You can also set an additional reverse proxy. For additional information see Using an additional reverse proxy.

See also:

- d.3one in the browser (configuration options)

Managing d.3 repositories

You can add, edit or remove d.3 repositories for your users in the feature **d.3 Repositories**. In addition, you can, for example, assign a single d.3 repository to a dedicated user group so that only this user group can access the d.3 repository.

You can find the feature on the start page https://<Baseaddress>/home. You can also view the feature on any client PC in a browser using https://<Baseaddress>/repo/repositories/.

> **Note**
> JavaScript must be enabled in the browser in order to manage d.3 repositories.

In this chapter you can learn how to add, edit and remove a d.3 repository. You can also define a d.3 repository as default repository for your users in order to always have the definite repository selected in the features. If you users already selected a different repository, the user-specific d.3 repository is displayed as default in the features.

> **Note**
> To configure a connection to a d.3 repository, you need to log in using a user account of the administrator group (**Admin Group** in d.ecs identity provider). For more information, see the Configuration guidelines for d.velop infrastructure components in the d.ecs identity provider articles.

Options and actions in the start section

If you have already added d.3 repositories, these repositories are displayed in the start section of the feature. Per each entry for a repository, you can view the d.3 repository name (e.g. **Production system**) and the d.3 repository ID (e.g. **P**). If you have set a repository as default, this repository is displayed on the top of the list and is indicated as default repository. As soon as you have defined a repository as default, you can change the definition only, if you define a different repository as default.

Use the actions on the toolbar , for example, to edit or remove the selected d.3 repository connections, and define a d.3 repository as default. The actions are only displayed, if you logged in as administrator. The **Define as default** action is not displayed to you, only if a repository is already defined as default.

If you select an existing d.3 repository, the properties for this repository are displayed.

Information in the section "Details"

This information is specified when you establish a connection to a d.3 repository. The same information and connection data to a d.3 repository is then displayed in this section once it is created:

- **Repository ID**: Specifies the connection ID. The ID matches the ID which is generated automatically by d.3 server for identifying a repository
- **Repository display name**: Specifies the display name of the d.3 repository. You can specify any name. The name is used as a guidance for the user. You can change the display name at any time.
- **d.3 repository ID**: Specifies the ID of the d.3 repository to be connected.
- **Host**: Specifies the name of the computer hosting the d.3 repository.
- **Port**: Specifies the port number used to access a d.3 repository.
- **d.3 gateway encryption**: Specifies, whether to encrypt the communication with the d.3 repository (D3FC encryption). When adding a connection to a repository, select the d.3 gateway **public.key** file to enable the encryption. If you do not select a **public.key** file, there is no encrypted communication. You can change the d.3 gateway encryption at any time.
- **Visible for**: Specifies the ID of a d.ecs identity provider user group for which this d.3 repository should be available. The value is a GUID or empty. If you do not specify an ID, then this d.3 repository is visible to all users. You can also assign a d.3 repository to a dedicated user group. If you have specified an ID, then this d.3 repository is only visible for users in this user group. You can edit a user group or remove an existing user group at any time.

> **Note**
> The available repositories are cached for some times in d.3one so that changes in the repository configuration are not instantly applied, provided the data are cached previously.

> **Note**
> When opening the feature **d.3 Repositories**, you may need to enter your credentials again, although the authentication was correctly set.
>
> Cause: The fully qualified domain name (FQDN) for the server is not added to the security zone **Local Intranet** for the browser. For additional information see, e.g. KB303650 on the Microsoft support website.
>
> Make sure that you logged in using a user account of the administrator group (**Admin Group**) and that the page is added to the security zone **Local Intranet**.

Using an additional reverse proxy

You can use functionality that uses the base address with an additional reverse proxy which is used in front of the d.ecs http gateway app. In order to use the OpenSearch functionality, for example, you need to use the URL of the reverse proxy in the DMSApp.

If you want to specify the URL of the reverse proxy, you can modify the **web.config** file in the installation directoryc:\d3\d.3one\dms.

This is how it works

1. Open the **web.config** file in the installation directory **\dms**.
2. In the file, go to the following section and change the value:

```
    <!-- This parameter defines the base address of the client. -->
    <!-- Must be set when you use an additional reverse proxy. -->
    <add key="Client.BaseUri" value="" />
```

Adjusting the log level in the d.3one apps

You can individually configure the log level for each app (microservice) in d.3one. By default, the log level for each app is set to **INFO**.

Adjusting the log levels for the Apps DMSApp, InboxApp, ImageApp and HomeApp

For adjusting the log level, do the following:

1. On the d.3one application server, go to the installation directory for the apps you want to adjust. The default name for the installation directory is c:\d3\d3one\<app name>.
2. Open the **Web.config** configuration file and go to the section **<log4net>**.
3. Go to the **<level value="INFO"/>** entry and set the value for the log level for the **value** property. The possible values are **DEBUG**, **INFO, WARN** and **ERROR.**
4. Once the log level is changed, restart the Internet Information Services (IIS) Manager.

```
<log4net>
        [...]
        <root>
                <level value="INFO"/>
                <appender-ref ref="DvelopAppender"/>
        </root>
</log4net>
```

Adjusting the log level for the apps d.ecs repo, d.ecs process portal, d.ecs file container, d.ecs pdf, and d.ecs identity tunnel

For adjusting the log level, do the following:

1. On the d.3one application server, go to the installation directory for the apps you want to adjust. The default name for the installation directory is c:\d3\d3one\<app name>.
2. Go to the \conf\ folder.
3. Rename the template file **appsettings.config.template** as **appsettings.config**.
4. Open the **appsettings.config** configuration file and go to the **<appsettings>** section.
5. Go to the **<add key="logLevel" value="INFO"/>** entry and set the value for the log level for the **value** property. The possible values are **DEBUG**, **INFO**, **WARN** and **ERROR**.
6. Restart the service of the app you adjusted.

```
<appSettings>
        <!-- Define log level -->
        <add key="logLevel" value="INFO" />
        [...]
</appSettings>
```

1.2.5. d.3one in the browser (configuration options)

When integrating d.3one in the browser, you can also specify after installation which users and groups can work with d.3one. The number of access permissions depends on the number of licenses acquired and the licensing package.

In addition, you can use OpenSearch technology to make the daily work of d.3one users even easier.

If you are already using d.3 links, you can use these d.3 links in d.3one as well and configure d.3 links for downloads, searches and views.

You can also provide your users with a mailbox function where they can process their tasks and messages in d.3.

Since you can integrate your own custom functions in d.3one as well, you have the option of making these functions available to your users as tiles on the start page. The process portal lets you integrate business processes.

You are also provided with functions for:

- Defining the number of files to be exported into a PDF file
- Defining the number of files when exporting properties
- Directly editing documents in Microsoft Office
- Printing PDF documents
- Specifying the user group for dossier creation
- Enabling new functions (feature toggles)
- Setting the initial column order in the table view
- Deactivating manual links with a dossier
- Disabling column functions for multi-value properties in the tabular view
- Using keywords

d.3 link configuration (d.3one in the browser)

On the **d.3 link Configuration** page you can configure the ACLs for d.3one application server as known from d.3 web. ACLs are shortcuts for frequently used parameters in an URL. You can also manage the repository indices on this page, these are used to associate the d.3 web repository indices to repositories, which you have already added in the **Repository** feature on the d.3one application server.

You can open and view the page at a later stage on the d.3one application server or on any client PC using Internet Explorer by entering the URL: https://<Baseaddress>/dms/d3web/.

Using d.3 links

There are three basic types of usage:

1. Download
2. Search

1. Download

The d.3 links for downloading documents are structured as follows: **https://<Baseaddress>/d.web/download?<Query_parameter>**

Sample links look like this:

- https://<Baseaddress>/d.web/download?doc_id=P0004639
  The document with the document ID **P0004639**.
- https://<Baseaddress>/d.web/download?Q2=WHITE&P43=missionstatement
  The document located in document type **WHITE** containing the term **missionstatement** in field 43.
- https://<Baseaddress>/d.web/download?ACL=ZEICH&S=test
  Depending on the configured ACL named **ZEICH**, the document containing **test** in the full-text.

> **Note**
> In case a document is not found for downloading, the HTTP error code 404 "Not Found" is displayed. If the query does not return a unique result, the HTTP error code 400 "Bad Request" is displayed.

2. Search

The d.3 links for searching documents are structured as follows: **https://<Baseaddress>/d.web/dxplorer/dweb?goto=resultgroups&<Query_parameter>**

An example link looks like this:

- https://<Baseaddress>/d.web/dxplorer/dweb?goto=resultgroups&Q2=WHITE
  Show result list with all documents in the document type **WHITE**.

The parameter **openDoc=openDoc** opens the document automatically in the d.3one perspective **Details**, provided the whole query returns exactly one single document. If the query returns several documents, then the result list is displayed.

An example link looks like this:

- https://<Baseaddress>/d.web/dxplorer/dweb?goto=resultgroups&openDoc=openDoc&Q4=P0004639

In this table you find the allowed query parameters for d.3 links:

Parameter name	Parameter short name	Valid for	Possible values
doc_number=	Q1=	**Search**, **Download**	d.3 document number
doc_type_short=	Q2=	**Search**, **Download**	Short name of the d.3 document type
doc_id=	Q4=	**Search**, **Download**	d.3 document ID
doc_type=	N/A	**Search**, **Download**	Name of the d.3 document type
doc_status=	Q5=	**Search**, **Download**	d.3 document type status. A value that refers to the following statuses: • Fr = Release (Freigabe) • Be = Processing (Bearbeitung) • Ar = Repository (Archive) • Pr = Verification (Prüfung)
doc_field_{0}=	P{0}=	**Search**, **Download**	Values from the specified d.3 property field, e.g. **P1=test**. Documents with the value **test** in the property field 1. Always specify **doc_type** or **doc_type_short** to restrict the search.
searchtext_expression=	S=	**Search**, **Download**	Full-text search term. You need to have installed d.3 search to use the full-text search.
archiv_index=	AI=	**Search**, **Download**	The d.3 repository index (archive) to be used. The index must be configured on the tab **Repository indexes**. This assigned a number to the d.3one repository ID, that is, the number of the d.3 web archive index. This assignment must be done for more than one repository.
dependent=	N/A	**Download**	A typical d.3 short name for a document for dependent documents. A value that refers to the following dependent file formats: • p1 = dependent PDF • t1 = dependent TIF • z1 = dependent signature file If a value is set, then **original=1** must not be set.
original=	N/A	**Download**	If **original=1** was set, then the original document is set. The value must not be set, if you use the parameter **dependent**.
acl=	N/A	**Search**, **Download**	The name of an ACL that is created on the **d.3 link Configuration** page.
goto=	N/A	**Search**	This is the only valid value: **resultgroups** Must always be set for links that perform a search.
openDoc=	N/A	**Search**	This is the only valid value: **openDoc** If exactly a single document is found, it is navigated to the d.3one perspective**Details**.

(N/A = Not available)

ACL configuration

By using ACLs it is possible to apply existing d.3 links from d.3 web. ACLs also allow you to customize d.3 links globally at a later stage in order to adjust existing links to, for example, new d.3 configuration.

If an ACL is marked as default, then this is always apply. Parameters which are set in the default ACL can be overwritten in the d.3 link at a later stage by explicitly selecting or explicitly setting an ACL.

Example:

An example for an ACL configuration for the following search scenario: Determining documents in a specific document type that have a specific status and displaying its dependent TIF file, provided a result is found.

For an ACL, specify the value **ZEICH** on the **d.3 link Configuration** page on the **ACLs** tab in the **Name** field. The values in the **Value** field could be entered as follows:

- **doc_type_short=zeich;doc_status=Fr;dependent=t1**

Separate several parameters by a semicolon (;).

In this example, the link means the following: If **ACL=ZEICH** is defined for the d.3 link, then a search is performed in the document type **zeich** for the documents in the status **Release** and the dependent TIF file is loaded.

If the name of an ACL contains extended characters, the name of the ACL in the URL must be encoded so that it meets the standard of the URL encoding.

Example:

- Name of the ACL: **abc&def?ghi**
- Using the ACL in the URL: **acl=abc%26def%3Fghi**

Repository index configuration

A repository index must be configured in case there are more than one d.3 repository. While configuring you map a number to a d.3 repository. Later on, you can use this number in a d.3 link with the parameter **AI** to select the d.3 repository in which the search is to be performed.

If a repository is marked as default (Default), then all queries are sent to this d.3 repository for which the parameter **AI** is not set.

Example:

An example for a repository index configuration: A search operation is performed across only one repository.

Specify the value 1 on the **d.3 link Configuration** page on the **Repository indexes** tab in the **Repository index** field. Select a configured repository under **Repository ID**, e.g. **ProductiveArchive**. This configuration cause the following: If the following value **AI=1** is defined as a parameter in a d.3 link, a search is performed in the **ProductiveArchive** repository.

OpenSearch configuration

The OpenSearch functionality d.3one allows the users to search in a simple manner for items in different formats, and the result is displayed and can be read independently from the application. The OpenSearch technology defines a standard used by search providers to browse a defined section.

The advantages for OpenSearch in combination with d.3one consist of how simple a kind of search container in a basic format can be provided to the user on the one hand, and on the other hand in the appearance of the search results independently from source to browse.

With a defined OpenSearch range search you can, for example, define a search query that selectively searches for items in a d.3 repository. You can use this OpenSearch functionality in Windows Explorer so that users can display their search results from a d.3 repository in Windows Explorer.

> **Note**
> For the OpenSearch functionality you need one d.3one license per user.

This topic provides you with basic information about OpenSearch and further details about configuring a federated search for OpenSearch:

- Basic functioning of OpenSearch
- Defining an OpenSearch URL
- Deploying and defining federated searches in OpenSearch

For additional information about the fundamentals of the OpenSearch functionality see the OpenSearch website.

You can use functionality that uses the base address with an additional reverse proxy which is used in front of the d.ecs http gateway app. If you want to use the OpenSearch functionality and set up an additional reverse proxy, you need to use the URL of the reverse proxy in the DMSApp. For additional information about the configuration, see Using an additional reverse proxy.

Basic functioning of OpenSearch

OpenSearch is a collection of simple formats for manufacturer-independent exchange of search results.

The underlying idea of the OpenSearch functionality is that a website makes its search function available by means of a OpenSearch description document. This document contains information on the use of the search engine by an application.

You can use the OpenSearch functionality in Windows Explorer or in browser search dialogues, among other things.

d.3one enables provisioning of OpenSearch description documents for general full-text searches as well as for a specific search via properties. The search results are provided by d.3one via the DMS app as an OpenSearch-compliant XML-based RSS feed.

For more information on URL definition for your d.3one users, see Defining an OpenSearch URL.

Defining an OpenSearch URL

Using an example for a search operation in a d.3 repository, in this chapter you can learn more about the XML structure of a search result using OpenSearch and the potential information to be specified in an URL for applications which either support cookies or not. In addition, you learn more about the potential restrictions of the search query using properties.

You need the base address of the d.3one application server for the URL and the ID of the d.3 repository, for which you want to define a search query:

- The base address is specified while installing the core apps.
- You can find the repository ID in the Detail section of the d.3 repositories feature (https://<Basead-dress>/repo/repositories/) when establishing a connection. You can obtain the ID either by using the URL or clicking in the Start menu on **All Programs > d.velop > d.3one > Repository Configuration**.

In general, search queries for OpenSearch are designed as follows: https://<Baseaddress>/identitytun-nel/auth?url=/dms/r/<RepositoryID>/sr/?<SEARCHSPECIFICATIONS>&format=opensearch

As a rule of thumb, this common schema is valid for search queries in applications that do not support any cookies.

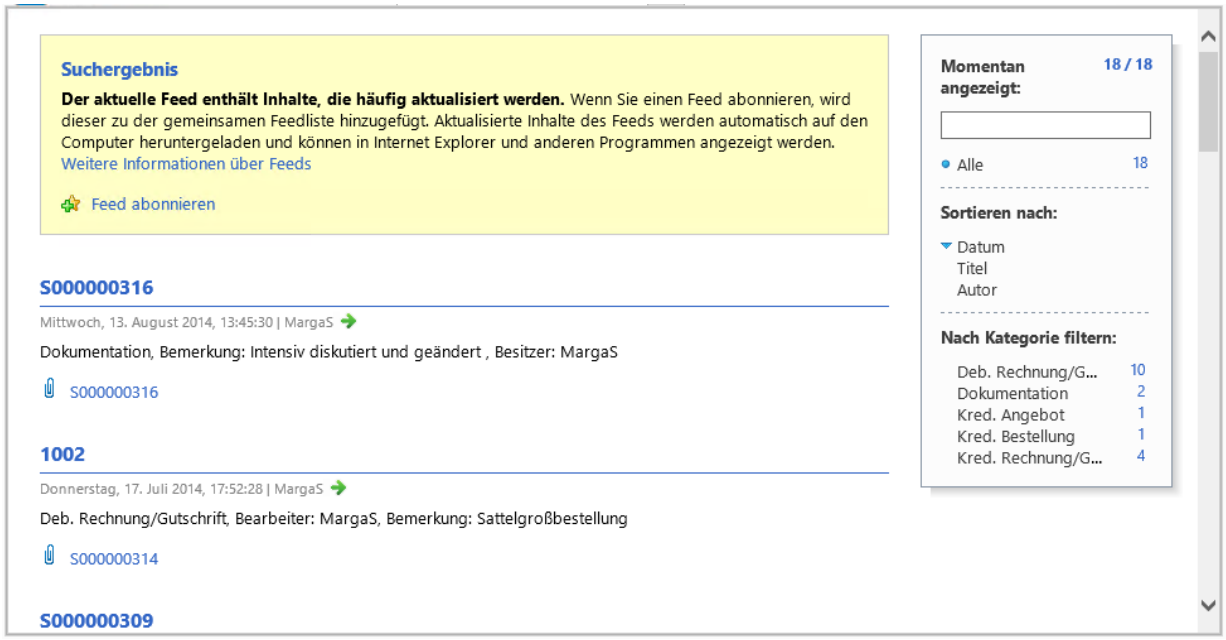
> **Note**
> You can only use search queries performed by applications that do not support any cookies, if you have enabled the authentication mechanism Basic or Kerberos in d.ecs identity provider.

For example, the search query must be slightly adjusted in order to use a browser for searching by deleting the part **/identitytunnel/auth?url=** from the link.

Example: performing a OpenSearch search query as full-text search in Internet Explorer (only with d.3 search installed)

Let us suppose, you want to perform a dedicated full-text search for the keyword "invoice" in the repository with the ID **9263b97e-fa3c-52ca-b3af-45c762b5cbd8**.

1. In the link https://<Baseaddress>/dms/r/<RepositoryID>/sr/?fulltext=<keyword>&format=opensearch replace the respective data (base address, repository ID and keyword).
2. Copy the link https://<Baseaddress>/dms/r/9263b97e-fa3c-52ca-b3af-45c762b5cbd8/sr/?fulltext=invoice&format=opensearch to the browser's address bar.
3. Press **ENTER**.
4. The following view is displayed:



Other browsers display the response in form of XML data as text. Provided you have not specified any other parameters, a query returns 25 matches based on the default sort order (dossiers prior to documents, the recently modified items).

Structure of an OpenSearch result

The OpenSearch result contains the following default properties that describe the items in a d.3 repository.

XML element	Description
<title>	Corresponds to the **title** field (caption) in the d.3 repository.
<author>	Corresponds to the owner in the d.3 repository.
<description>	Contains a short description based on the properties of the document.
<category>	Corresponds to the label of the category (dossier type or document type respectively) for the dossier or the document in the d.3 repository.

The properties with the prefix **win:** and **media:** are used for an improved display of the search result in Windows Explorer. The document properties with the prefix **dvelop:** are used, for example, to use OpenSearch in Microsoft SharePoint. The common and advanced properties for a result are listed.

You can view the OpenSearch result in any text editor as XML structure (e.g. use the option to display the source text in a browser):

Performing a search using applications that do not support cookies

The previously mentioned example for OpenSearch queries cannot be entirely applied to applications that do not store any cookies between requests (e.g. Windows Explorer). In this context, the redirection option of d.ecs identity provider is used. The mechanism based on the fact that d.ecs identity provider passed the URI of the search as parameter. The d.ecs identity provider app redirects the query while using the user authentication and stores the cookies on behalf of the application. Compared to a browser call this alternative is a bit slower, because there are some costs for the internal authentication for each query.

Example: performing a OpenSearch search query as full-text search in an application that do not support cookies

Example URI for the OpenSearch call using the identity provider (d.ecs identity provider):

You can deduce the URI from a link by inserting the part **identitytunnel/auth?url=**:

- **Browser-based call**: https://<Baseaddress>/dms/r/<RepositoryID>/sr/?fulltext=<keyword>&format=opensearch
- **Redirected call**: https://<Baseaddress>/identityprovider/tunnel/?uri=/dms/r/<RepositoryID>/sr/?fulltext=<keyword>&format=opensearch

Parameterization of the search in connection with a d.3 repository

Usually, the full-text search in a d.3 repository is not specific enough. Thus, you can restrict the search query by using query parameters.

You must encode extended characters for the URL appropriately (e.g. spaces in **%20**). The length of the encoded query parameter is limited to 8000 characters.

Parameter	Description
fulltext	Specifies a full-text keyword. You need to have installed d.3 search to use the full-text search.
page	Specifies the page to be queried in the results. If **page** is not specified, the first page (**page=1**) is requested. If you open the result list in the HTML5 display of the d.3one browser integration, any existing **page** parameter is ignored and the beginning of the result list is displayed. It is not possible to directly go to a specific position in the result list.
pagesize	Specifies the number of results per search query. If this parameter is not set, up to 25 matches are returned (**pagesize=25**). The value of the parameter can be 10 (minimum) and 1000 (maximum).

Parameter	Description
propertysort	Specifies the ID of the property that is used to sort the result. If no sort property is specified, the default sort order using the sort criteria **Last modified** is applied. Furthermore, the **Last modified** sort order displayed dossiers prior to documents and within dossiers and documents the recently modified date is used for sorting. • Title: **property_caption** • Owner: **property_owner** • File type: **property_filetype** • Comment: **property_remark** • Last access: **property_access_date** • Editor: **property_editor** • Document ID: **property_document_id** • Document number: **property_document_number** • File size: **property_size** • Document status: **property_state** • Last modified: **property_last_modified_date** • Last file update: **property_last_alteration_date** • Color marking: **property_colorcode** • Category: **property_category** • Created on: **property_creation_date** • Last access: **property_access_date** You can also sort the result list based on an advanced property. The ID of the property corresponds to the ID (RID) of a property that you can determine for each advanced property in d.3 admin. Depending of the application that is used with OpenSearch, it may happen that the application independently sorts the results, e.g. for the modified date (Internet Explorer, Windows Explorer).
ascending	Specifies the direction of the sort order. • **ascending=true**: results in an ascending sort order (from small to big (A-Z) and from old to young). • **ascending=false**: results in an descending sort order (from big to small (Z-A) and from young to old). In case the **ascending** parameter is not explicitly specified, the ascending sort order is applied. This is not true for the default sort order: If the criteria **Last modified** is used for sorting and sort order is not specified, the sort order is descending. In addition, dossiers are displayed prior to documents in the result list. Within documents and dossiers, the items are sorted by the sorting criterion. Depending of the application that is used with OpenSearch, it may happen that the application independently sorts the results, e.g. for the modified date (Internet Explorer, Windows Explorer).

Parameter	Description
properties	Specifies the search restriction according to the properties of documents and dossiers. Use the following criteria to restrict a search operation to certain aspects: • Document ID: **property_document_id** • File type: **property_filetype** • Owner: **property_owner** • Document number: **property_document_number** • Document status: **property_state** (Allowed values are **Be** for Processing (Bearbeitung), **Pr** for Verification (Prüfung), **Fr** for Release (Freigabe) and **Ar** for the status Archive (Archiv). • Editor: **property_editor** (d.3 user name) • File name: **property_filename** • Last file update: **property_last_alteration_date** • Import date: **property_creation_date** • File size: **property_size** (When searching for the file size, the size must be specified in bytes and as integer. A search within a specific range can be done using the separator pipe and minus character (|-): Search for documents whose document file is smaller than or equal to 1024 bytes with the expression **{"property_size ":["|-1024"]}**. • Last modified: **property_last_modified_date** • Access date: **property_access_date** • Comment: **property_remark** • Color marking: **property_colorcode** (is an integer value between 1 and 24 that correspond to the number of the color code you want to assign). • Variant number: **property_variant_number** You can define at least one value for each property. Examples: • **properties={"property_filetype":["docx"]}**: for searching the file type DOCX. • **properties={"property_filetype":["docx","pdf"]}**: for searching for items with the file type DOCX or PDF. You can also limit the result list based on an advanced property. The ID of the property corresponds to the ID (RID) of a property that you can determine for each advanced property in d.3 admin. Examples: • **properties={"227":["KND001"]}**: for searching for items which have the advanced property with the ID **"227"** and this property has the value **"KND001"**. • **properties={"227":["KND001","KND002"]}**: for searching for items which have the advanced property with the ID **"227"** and this property has the value **"KND001"** or **"KND002"**. You can also use several properties as search restriction simultaneously. Examples: • **properties={"227":["KND001"],"231":["|-100"]}**: for searching for items with the customer number (advanced property with the ID **"227"**) **"KND001"** and an invoice amount (advanced property with the RID **"231"**) less than or equals to 100. • **properties={"227":["KND001"],"property_filetype":["pdf"]}**: for searching for items with the customer number (advanced property with the ID **"227"**) **"KND001"** and the file type PDF.
objectdefinitionids	Sets the categories used for searching items. You can at least define one category. Specify the ID of a category. If this value is not specified, the search is done across all categories in a d.3 repository. Examples: • **objectdefinitionids=["RECH"]**: for performing a search across the document type "Invoice" (Rechnung) (**RECH**). • **objectdefinitionids=["RECH", "AUFT"]**: for performing a search across the document types "Invoice" (Rechnung) (**RECH**) and "Order" (Aufträge) (**AUFT**).
viceuser	Restricts the search result to those matches that a user, whose d.3 user name is specified in the parameter **viceuser**, is allowed to view. In this case, the search result only contains the items for which the authenticated user (d.3 service user) as well as the **viceuser** user are granted the required permissions. The **viceuser** parameter is exclusively used to restricting the search. If the user performs further actions based on the returned links which are part of the results (e.g. open the link for downloading purposes), the permissions of the authenticated users are used. In order to use the permissions of the user for any further actions, you must make sure that the links from the results are used in an individually authenticated user interface (e.g. browser).

Note

Specific values for the **properties** parameter with regard to the various options to restrict the result purposefully:

1. **Search for a numeric value or a money value:**
   Specify the value without using a thousand separator. The decimal separator is the dot (.). Example: For the value 1,000.20 EUR specify **1000.20**.
2. **Search for a date and time:**
   Specify the date in the format YYYY-MM-DD. Example: Enter 2018-12-05 for the date 12/05/2018 (MM/DD/YYYY).
   Time is specified in the format YYYY-MM-DDTHH:mm:ss+01:00. You must encode the plus character (+) with **%2b**. Example: **2018-02-18T23:59:59%2b01:00** for 02/18/2018 at 11:59 p.m. and 59 seconds in the time zone UTC+1 for standard time in Germany.
3. **Search for items that are located in a specific range:**
   For searching in a range use a combination of pipe and minus character (|-) as separators. Examples for a numeric field with the ID **231**:

- • Values greater than or equal to 100: **{"231":["100|-"]**}
  - Values smaller than or equal to 100: **{"231":["|-100"]}**
  - Values between 100 and 200: **{"231":["100|-200"]}**

Use cases for various search queries using the OpenSearch functionality:

- **Searching across a document type**: Complete the URL by the part **objectdefinitionids=["<Document type name short>"]**.

https://<Basesaddresse>/dms/r/<RepositoryID>/sr/?fulltext=5353&format=opensearch&objectdefinitionids=["RECH"]

- **Searching across several document types**: Complete the URL by the part **objectdefinitionids=["<Document type name short>"]**.

https://<Baseaddress>/dms/r/<RepositoryID>/sr/?fulltext=5353&format=opensearch&objectdefinitionids=["RECH","AUFT"]

- **Searching for PDF documents restricted to the file type**: Complete the URL by the part **properties={"property_filetype":["<File type>"]}**.

https://<Baseaddress>/dms/r/<RepositoryID>/sr/?fulltext=test&format=opensearch&properties={"property_filetype":["pdf"]}

- **Searching for an alphanumeric property**: Complete the **properties** parameter in the URL by **properties={"227":["KND001"]}** in order to find the property field with the RID **227** (customer number) and the value **"KND001"** as customer number.

https://<Baseaddress>/dms/r/<RepositoryID>/sr/?objectdefinitionids=["RECH"]&fulltext=&properties={"227":["KND001"]}&format=opensearch

- **Defining the sort order of the result list based on the title**: Complete the URL by the part **propertysort=property_caption**.

https://<Baseaddress>/dms/r/<RepositoryID>/sr/?fulltext=&format=opensearch&objectdefinitionids=["RECH"]&propertysort=property_caption

For details about defining and deploying search connectors to be used with Windows Explorer see Deploying and defining federated searches in OpenSearch.

See also:

- Basic functioning of OpenSearch
- Deploying and defining federated searches in OpenSearch

Deploying and defining federated searches in OpenSearch

Since Windows 7 Microsoft support using OpenSearch in Windows Explorer naming the feature "Federated Search". For additional information about the federated search under Windows see the Windows Develop Center website.

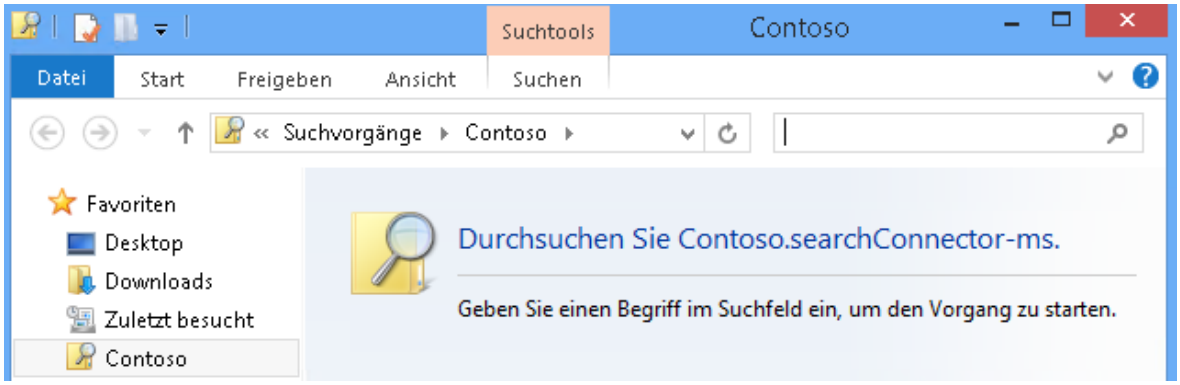
The basic idea of the OpenSearch functionality under Windows is that a website provides its search function using an OpenSearch description document. An OpenSearch description document is needed to ease the usage in connection with Windows Explorer. Primarily, the OpenSearch description document describes how search results are retrieved by the d.3one application server. You need to have installed d.3 search to use the full-text search.

In order to provide the users with the OpenSearch functionality, e.g. to use it in Windows Explorer, you as an administrator create a link to an OpenSearch description document. Provide the link to your users.

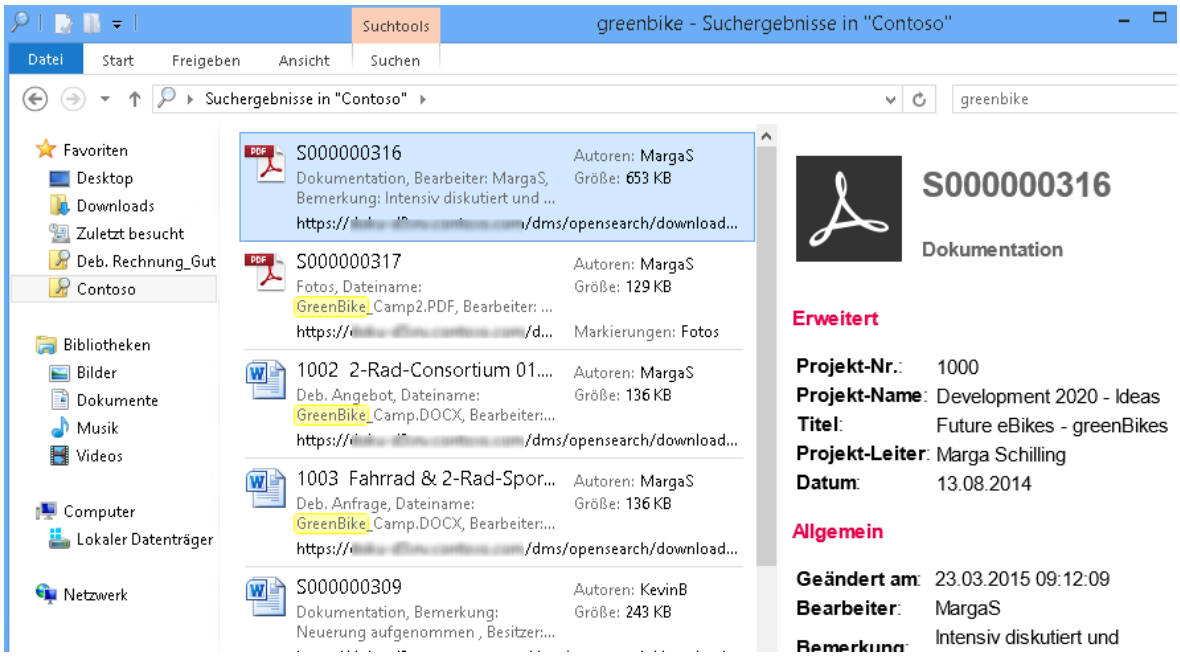
> **Note**
> To perform the search using a search connector in Internet Explorer, the user must be authenticated automatically based on the Windows credentials. Make sure that the **Enable HTML login** option in d.ecs identity provider is disabled. Otherwise the preview of the document properties is not displayed in Windows Explorer.
>
> To use auto log on within the intranet zone, you can specify it in the security settings for the local intranet zone in the section **User authentication**.

Do this to create a link to a description document used for a general full-text search across documents in the d.3 repository:

1. Form a URL according to the following pattern and replace the placeholders: https://<Baseaddress>/dms/opensearch/description/<RepositoryID>/?<Search_parameter>
2. Insert this URL into the Internet Explorer address bar and press the **ENTER** key.
3. A dialog is displayed to add the search connector. Click on **Add** to add this search connector to the **Favorites** folder in Windows Explorer.



4. Enter a keyword in the search box next to the address bar and press the **ENTER** key.
5. The results are displayed in Windows Explorer.
6. If you have enabled the preview, you can display the common and advanced document properties.



7. If you double-click on a document in the list, the file is opened in the current d.3 version using the associated application that is set for this file type under Windows.
8. If you double-click on a dossier in the list, the properties for a dossier are displayed in Internet Explorer.

By default, the search in Windows Explorer retrieves the first 100 results. Maybe, there are more matches; the user cannot determine it in Windows Explorer.

Besides a full-text search you can also define restrictions for a search using the Windows search connector. The principle is similar to defining direct OpenSearch queries.

Example:

The query parameters **objectdefinitionids** and **properties** are taken into account. With the query parameter **shortname** you can define a custom name for the search connector.

Do this to refine Windows search connectors so that your users get even faster to where they want to go:

- **Searching across a category**: Complete the URL for a full-text search with the part **objectdefinitionids=[<Document type name short>]**.

https://<Baseadress>/dms/opensearch/description/<RepositoryID>/?objectdefinitionids=[DDRE]

- **Searching across several categories**: Complete the URL for a full-text search with the part **objectdefinitionids=[<Document type name short>]**.

https://<Baseaddress>/dms/opensearch/description/<RepositoryID>/?objectdefinitionids=[DDRE,DDBES]

- **Setting the name of a search connector**: Complete the already restricted URL by the part **&shortname=<NameForCollection>**.

https://<Baseaddress>/dms/opensearch/description/<RepositoryID>/?objectdefinitionids=[DDRE,DDBES]&shortname=Customer purchase order

You can distribute the defined URLs to your users.

Note

In Windows 10, the **Favorites** folder and, thus, the provided Windows search connectors are no longer found in the Windows Explorer navigation pane. If you still want to quickly access the provided Windows search connectors, you can use one of the following options:

To add the **Searches** folder that contains the available Windows search connectors for quick access:

1. Open the profile directory in Windows Explorer.
2. Open the context menu for the **Searches** folder.
3. Click on **Pin to Quick access**.

To add a Windows search connector to the Windows Start menu:

1. Open the profile directory in Windows Explorer.
2. Go to the **Searches** folder.
3. Open the context menu for the Windows search connector you want to add.
4. In the context menu, click on **Pin to Start**.

Tasks and messages (d.3one in the browser)

With d.3one integrated in the browser, you can provide the users by default with a kind of mailbox to work with messages and tasks. The **Tasks and Messages** feature in d.3one offers these capabilities.

In some organizations, business processes are implemented as workflow. If you want to use this capability in d.3one, you can, for example, use the standard workflows in d.3 basis workflows or the form-based workflows that are customized to the organizational needs in d.ecs forms and provide them to the entire organization. Regardless of which kind of digital workflow you use, you need to specify the d.3 presentation server host name in d.3 admin so that the workflow components works organization-wide.

You can start business processes (workflows) using various d.3 applications. Thus, there is the opportunity to use different d.3 application for the business processes in the organization. If one user started a workflow, e.g. in d.3 smart explorer, a different user can participate in this workflow also using d.3one.

If there are questions regarding the d.velop workflow components, contact your d.velop representative.

Configuring tiles on the start page

Based on the d.3ecm architecture, any organization can configure its own features, which you can integrate as tiles onto the start page. In the configuration guidelines for d.velop infrastructure components, see the chapter “Adding tiles to the start page” for technical details on configuring the tiles.

Note

Contact the d.velop AG Technology Partner Management to get more information about the plug-in concept and und the integration of your own features.

Process portal for integrating business processes (d.3one in the browser)

The Process portal offers various functions. The process portal offers you the opportunity to integrate your own business processes in a d.3 application using a link. You can provide links in easily without leaving the application. You paste your link, e.g. to a leave application or to the intranet, in d.3 admin. By clicking on the tile **Processes** you can open these links. You can also use the Process portal to create document-related forms. Then, you can decide, whether the user sees the form or the document first. If the document is shown first, the user can view the document’s form anytime with the context action **Show forms**.

If you enabled the Process portal and set up workflows, you can start workflows by selecting the context action **Start workflow**.

Make sure that the links meet the following requirements in order to display the contents in d.3one correctly:

- The links must be HTTPS links to correctly load the contents. Otherwise you get an error type "Mixed Content Error".
- Embedded contents must not contains the flag **X-Frame-Option** with the values **DENY** or **SAMEORIGIN** in the response header. Otherwise the embedded contents are not displayed.

By default, the displaying links in the process portal is disabled. To enable it, do the following:

1. Navigate on the d.3one application server to the d.3one installation folder under \processportal\conf\.
2. Rename the template file **appsettings.config.template** as **appsettings.config**.
3. Open the configuration file **appsettings.config.**
4. Go to the entry **<add key="enabled" value="false"/>** and set the property **value** to **true**.
5. Check in the control panel under **Services**, whether the service for the process portal was started, and start it if applicable.

If you use forms in the process portal, the preview of the document content in the perspective **View** is replaced and forms are displayed. If you want to prevent viewing forms in the perspective **View** and to provide forms as context action, you can set the value for **formAsContextAction** to **true** in the **appsettings.config** file.

Defining the number of files to be exported into a PDF file

Your users can use the **Combine into PDF file** context action to export items into a PDF file. The PDF file generated during the export process contains the selected documents. Thus, the users get the opportunity to export several selected document to a local file. The PDF file is a kind of file container and your users can use this file anytime out of a d.3 repository, for example, to send the file to someone else. The exported files are contained as attachments in the PDF file. To read the embedded documents, the users need to have the appropriate applications in use.

> **Note**
> If you use d.velop documents collector, the context action **Combine into PDF file** is not displayed.

It is recommended to set an upper limit for the number of files that can be exported. The upper limit depends, for example, on the performance of your system and the size of the files to be exported. The default value for this feature is limited to 100 items. Dossiers cannot be exported.

You can change the value if you determine that your users make heavy use of the feature which has an impact on the system. You can increase the default value, however, it is recommended to increase the value only if you detect a special need to do so. The value **0** disables the feature so that the context action is not displayed.

If you want to change the value, you can modify the **web.config** file in the installation directory c:\d3\d.3one\dms.

This is how it works

1. Open the **web.config** file in the installation directory \dms\.
2. In the file, go to the following section and change the value:

```
    <!-- This parameter defines the maximum number of files that can be
exported to a PDF file container. -->
```

```
    <!-- Default: 100 (A maximum number of 100 files can be exported.) -->
    <!-- Disabled: 0 (The context action "Export PDF file"  is disabled.)
-->
    <add key="Multiselection.PdfContainer.MaxCount" value="100"/>
```

Defining the number of files when exporting properties

Your users can use the **Export properties** context action to export properties of selected d.3 items into an Excel file or CSV file.

It is recommended to set an upper limit for the maximum number of items for which the properties are exported. The upper limit depends, for example, on the performance of your system, the number of the selected files and whether to values of the multi-value properties should be exported. The default value for this feature is limited to 5.000 items.

You can change the value if you determine that your users make heavy use of the feature which has an impact on the system. You can increase the default value, however, it is recommended to increase the value only if you detect a special need to do so. The value **0** disables the feature so that the context action is not displayed.

If you want to change the value, you can modify a separate **web.config** file in the installation directory c:\d3\d.3one\dms.

This is how it works

1. Open the **web.config** file in the installation directory \dms\.
2. In the file, go to the following section and change the value:

```
      <!-- This parameter defines the maximum number of documents for
which the properties can be exported to an Excel file or a CSV file. -->
    <!-- Default: 5000 (A maximum number of 5000 documents.) -->
    <!-- Disabled: 0 (The context action "Export properties" is disabled.)
-->
    <add key="Multiselection.ExcelExport.MaxCount" value=5000/>
```

Directly editing documents in Microsoft Office

If you work with Microsoft Office 2013, 2016 or 2019 in your enterprise or organization, you can enable the feature to directly edit Microsoft Office documents stored in your d.3 repository. Your users can use the context actions **Edit in Microsoft Word locally**, **Edit in Microsoft Excel locally** and **Edit in Microsoft PowerPoint locally** to simply work on Microsoft Office documents in the appropriate Microsoft Office application and again store them in the d.3 repository. The Microsoft Office documents must be in the status **Processing** and the user must be the owner of the document.

A WebDav interface allows the edit directly feature by extending HTTP with some verbs. By default, these verbs are permitted and allowed in the DMS app. If you changed some other settings, you must enable these WebDav verbs in Internet Information Services (IIS) again. The WebDav module in IIS must be disabled for the d.3one site.

To enable the function, change the **web.config** file in the installation directory c:\d3\d.3one\dms.

> **Note**
> The parameter in the **web.config** file is only effective, if you work with Microsoft Office as on-premises Installation in your organization. If you work with Microsoft Office 365 in the cloud, the parameter is ineffective.

This is how it works

1. Open the **web.config** file in the installation directory **\dms**.
2. In the file, go to the following section and change the value to **"true"**:

```
    <!--This parameter specifies whether editing Microsoft Office documents
(Microsoft Word, Microsoft Excel, or Microsoft Powerpoint) is enabled or
not-->
    <!--Before you use the feature, please read the manual to take care of
all needed requirements-->
    <!--Default: false (Editing Microsoft Office documents is not enabled)--
>
    <add key="WebDav.EditOfficeDocuments" value="false"/>
```

If you have enabled the HTML login (alternative login) in d.ecs identity provider, you need to change the value **"true"** in the same file in the following section:

```
    <!--This parameter specifies if you get a HTML login form when editing
Microsoft Office documents.-->
    <!--Only set this parameter to true if you have enabeld "OpenId
Connect" or "HTML login" in identityprovider-->
    <!--Default: false (Only Basic Auth for editing Microsoft Office
documents is supported)-->
    <add key="WebDav.EnableHtmlLogin" value="false" />
```

> **Note**
> If you use a different browser than Internet Explorer in your enterprise or organization, your users must log in to d.3one again when opening Microsoft Office.
>
> For more information about Single Sign-On, see the Configuration guidelines for d.velop infrastructure components in the d.ecs identity provider articles.

If you allow your users to take over a document which is edited by another user, it is recommended to establish an enterprise-wide or organization-wide policy. The user who currently edits a document in Microsoft Office cannot store the document any longer, if another user has taken over the document to edit it.

Printing PDF documents

By default, your users can print PDF documents. If your users view a PDF document in the **View** perspective, they can use to icon to print in order to print the content of a PDF file.

The printing quality of a PDF document in a web application is not as good as printing a PDF file in a native application.

If there are issues while printing or while printing large documents or the web application, your users can download the document locally and then print it using a different application.

You can globally disable the printing option.

To disable the printing function, do the following:

1. On the d.3one application server, go to the d.ecs pdf installation directory of the apps, e.g. under c:\d3\d3one\d.ecs pdf\conf.
2. Rename the template file **appsettings.config.template** as **appsettings.config**.
3. Open the **appsettings.config** configuration file and go to the **<appsettings>** section.
4. Go to the **<add key="Option.Print" value="true"/>** entry and set the value **false** for the log level for the **value** property.
5. Restart the service of the app.

Specifying the user group for dossier creation

Your users can use the **Dossier creation** feature to create new dossiers in the d.3 repository. You need to know the ID of a user group in d.ecs identity provider so that your users can see and use the **Dossier creation** tile on the start page. You specify this ID in the **web.config** file in the installation directory c:\d3\d.3one\dms. You can specify several user group IDs separated by a comma.

This is how it works

1. Open the **web.config** file in the installation directory **\dms**.
2. Specify the IDs of the groups in d.ecs identity provider in the file under the key **NewDossier.IdpGroups**. The specified groups can then display the **Dossier creation** feature. The IDs can be masked with URL encoding if they are not GUIDs.

```
<!-- This parameter defines for which IdentityProvider groups to show the
"Dossier creation" tile -->
<!-- Must be a list of ids of IdentityProvider groups, seperated with , -->
<add key="NewDossier.IdpGroups" value="DC4895EF-A72C-4489-95A1-
F38269D6E48D,cn%3Dd3admin%2Co%3Dadmin%2Ccn%3Daccounts%2Cdc%3Dcontoso%2Cdc%3D
net"/>
```

See also:

- Specifying user rights for working with items

Enabling new functions (feature toggles)

Our aim with feature toggles is to enable you to provide new and modified functions as previews (prereleases) of future versions.

You can enable these feature toggles at any time to make the new additions and modifications in the software available to your organization. These new functions are usually provided automatically in the next released version.

To enable a feature toggle, you must be a member of the administrative group for d.3one administrators. You can find the name of the administrative group in d.ecs identity provider.

Changes to the new functions may be made without prior notice.

This is how it works

1. Open the DMSApp configuration interface with the URL: https://<baseuri>/dms/config
2. As the parameter name, select the relevant feature toggle. The tooltip provides you with additional information about the feature toggle.
3. Enter **true** as the value.
4. Click **Add**.
5. Confirm the message stating that you know you are using a feature toggle.
6. Choose **Save** to save your changes.

Setting the initial column order in the table view

The order of columns in the table view for search results, favorites and in the dossier navigation is set for your users at initial display by internal program logic. You can even configure the order of columns at initial display per d.3 repository. However, if users have set their own column order, this individual order always takes precedence.

If you want to change the initial column order, you can modify the **appsettings.config** file in the installation directory c:\d3\d.3one\dms. If the file does not exist, copy the **appsettings.config.template** file, and rename the file to **appsettings.config**.

This is how it works

1. Open the **appsettings.config** file in the installation directory \dms\.
2. In the file, go to the following section and change the value:

```
    <!-- This parameter specifies the initial order of the columns in the
grid view.
         The key of this configuration item is
Grid.DefaultColumnOrder.<Repository_ID>.
         The value of this configuration item is a comma separated list of
property ids:
           __mimetype, __caption, __infos, __states , __colorcode,
__category,
           property_last_modified_date, property_last_alteration_date,
property_editor, property_remark, property_owner, property_filename,
           property_filetype, property_document_id,
property_document_number, property_variant_number, property_creation_date,
property_size, property_state,
           property_access_date
         Also property field ids (shown in d.3 admin as repository field
ids) are possible.
         Example: -->
   <add key="Grid.DefaultColumnOrder.999cab2c-fc3a-528c-8010-e0c68edc6fd5"
value="property_document_id, 12, 21, 1, 5"/>
```

Column IDs of the common properties:

ID	Column title
__mimetype	File icon
__caption	Title
__infos	More info
__states	Status (Icons)
__colorcode	Color marking
__category	Category
property_last_modified_date	Last modified
property_last_alteration_date	File changed on
property_editor	Editor
property_remark	Comment
property_owner	Owner
property_filename	File name
property_filetype	File type:
property_document_id	Document ID
property_document_number	Document number
property_variant_number	Variant number
property_creation_date	Created on
property_size	Size
property_state	Status (Text)
property_access_date	Access date

Disabling the manual linking with a dossier

You can link documents and dossiers with dossiers in d.3one. The links are normally created with the automatic structure rules.

If you want to disable the manual linking in the user interface, you can modify the **appsettings.config** file in the installation directory c:\d3\d.3one\dms. If the file does not exist, copy the **appsettings.config.template** file, and rename the file to **appsettings.config**. If the **appsettings.config** file already exists and the

following configuration is missing, copy the configuration from the file **appsettings.config.template** into the file **appsettings.config**.

This is how it works

1. Open the **appsettings.config** file in the installation directory \dms\.
2. In the file, go to the following section and change the value:

```
<!--This parameter specifies whether you can link or unlink documents or
dossiers with a dossier in the UI for a repository.
     The key of this configuration item is
DMSObject.HideLinkAndUnlink.<Repository-ID>.
     The value of this configuration item is true/false.
     The main rights are declared in d.3server, this parameter hides
only the buttons.
     Example: -->
<add key="DMSObject.HideLinkAndUnlink.f60c73a6-
bca9-523f-98cf-5d9e762df33b" value="true"/>
```

3. Restart the Internet Information Service (IIS).

Disabling column functions for multi-value properties in the tabular view

In d.3one you can group, sort or filter by multi-value property in the tabular view. A separate entry is then added for each item per line of multi-value properties.

If you want to disable the column functions for grouping, sorting and filtering of multi-value properties, you can modify the **appsettings.config** file in the installation directory c:\d3\d.3one\dms. If the file does not exist, copy the **appsettings.config.template** file, and rename the file to **appsettings.config**. If the **appsettings.config** file already exists and the following configuration is missing, copy the configuration from the file **appsettings.config.template** into the file **appsettings.config**.

This is how it works

1. Open the **appsettings.config** file in the installation directory \dms\.
2. In the file, go to the following section and change the value:

```
<!-- This parameter disables search result grid functions for multi
value properties for a given repository.

     The key of this configuration item is
DisableMultiValuePropertiesFeature.<Repository-ID>.
     The value of this configuration item is true/false.
     Example: -->
<add key="DisableMultiValuePropertiesFeature.f60c73a6-
bca9-523f-98cf-5d9e762df33b" value="true"/>
```

3. Restart the Internet Information Service (IIS).

Using keywords

You can enable your users to add keywords to items (documents or dossiers). They can use these keywords to organize items into thematic blocks. That makes it much easier for your users to find documents or dossiers related to a specific subject area.

You can only configure the function in the on-premises version.

To ensure that you can use the keyword function in your organization, you must specify the ID of an advanced multi-value property for each d.3 repository. This property is used to save the keywords. In the detailed view of an item, the user is then provided with another section for managing keywords. The multi-value property that is reserved for the keyword function is also available to your users in the search dialog and in the save dialog when you save items.

What you need to know

- Create a new advanced property for the d.3 repository in d.3 admin. You must assign the advanced property to the relevant categories as a multi-value property.
- Translate the title of the property in d.3 admin so that your users see the property in their language.
- If you use an existing property, any existing blank values for the multi-value property are overwritten by the user's keyword entry. Check whether this behavior may have undesired effects.

To enable the function, make the change in the **web.config** file in the installation directory c:\d3\d.3one\dms.

This is how it works

1. Open the **web.config** file in the installation directory **\dms**.
2. Add the following value in the file: **<add key="Tags.PropertyId" value="" />**

The value for each d.3 repository is structured as follows: **<ID of the d.3 repository>.<ID of the advanced property>**

If you want to enable the keyword function in multiple d.3 repositories, please enter the values separated by commas and without spaces.

```
<add key="Tags.PropertyId" value="dee1f3d3-
eae8-5d9d-84d8-2d758c5ddc27.100,1231f3d3-eff8-511d-2222-2d758cabcde.42" />
```

1.2.6. Managing mappings

This chapter provides information about how to map and manage properties from a source system (for example an e-mail application) to a d.3 repository. These mappings are used when storing items, retrieving item details and retrieving and displaying results of a search operation, using the d.3one integrating applications. When creating mappings, you can set which external data (e.g. the properties of an e-mail) is mapped to which d.3 document property.

> **Note**
> The feature **Mappings** is only available for you on the start page, if you use a source system such as d.3one in Microsoft Outlook or d.3one in IBM Notes, which supports the mapping functionality.

The feature **Mappings** is placed on the d.3one start page.

The following functions are available:

- Select repository
- Update mappings
- Create mappings
- Select mappings

The following elements are displayed by default:

- **Mappings in <name of repository>**: Selects a repository. The dropdown list in the heading provides you with the repositories, for which you have the right to access. You can select the repository for which you want to manage the mappings. The recently selected repository is automatically selected when opening it again.
- **Listing of mappings**: If you have already created mappings for a repository, these are displayed. If you select an entry, the detail section is displayed on the right of the screen.

You can create a new mapping using the **New mapping** context action.

See also:

Creating a mapping

In this chapter you will learn more about creating a mapping between information from source systems (third party applications) and the d.3 properties and d.3 categories, so that e.g. when saving an item, the matching d.3 properties and d.3 categories are directly specified. This simplifies the work of your users when saving an item into a d.3 repository.

With the mapping functionality, you can create a connection between any source system, such as an e-mail application or an ERP system, and a d.3 repository. A source system (e.g. an e-mail application) can define several sources (e.g. e-mail, e-mail attachment) that describe an item of the source system with the specific categories and properties. For example, if you want to store your e-mails in a d.3 repository by default, it is helpful to map the source "e-mail" directly to a d.3 category and the associated d.3 properties. Manual mapping by the user is not required if you define the mapping administratively. Your source system is the e-mail application, the target is a d.3 repository. Every e-mail has certain properties by default, these include, for example, the sender and the recipient as well as the subject of an e-mail. You can map these typical e-mail properties to a d.3 category and to the d.3 properties. With the help of this mapping, the e-mail is automatically mapped to the correct category, for example. The properties typical for an e-mail are then automatically written into the d.3 properties.

Creating a mapping between a source system and a d.3 repository

To create a mapping, proceed as follows:

1. Click or tap the context action **New mapping** to open the section.
2. Enter the name of the mapping under **Name**.
3. Under **Source**, select the source that provides the source categories and source properties for mapping.
4. Depending on the selected source, you will see the **Categories** mapping table and **Properties** or only **Properties**.
5. In the **Categories** mapping table select a source category under **Source** and a d.3 category under **Target** to define a mapping. Proceed accordingly for properties. You can only select those d.3 properties as target which are at least mapped to one d.3 category as a property.
6. In the **Properties** mapping table, the d.3 document properties can be filtered by selecting a d.3 category under **Target**. The selected category in the **Target** field is only used for simplified selection in the mapping table and is not saved for mapping. Mappings are always defined for the entire repository and are not specific to d.3 categories.
7. You can specify a regular expression for properties under **Regex** if required. For each line, you can specify a regular expression (**Regex**) that is used in the mapping processing. The regular expression is only applied when taking over the target value in the **Storage** feature.
8. Click or tap **Add row** for mapping of more categories or properties.

To map a source property composed of a date and a timestamp to a d.3 target property with the data type **Date**, the following regular expression that extracts the date part must be extracted:

```
[0-9]{4}-[0-9]{2}-[0-9]{2}
```

Properties marked "read only" are not taken into account when saving.

If you map a source property to a target property that cannot be changed in at least one target category, the supplied values for the property are ignored when updating items (DMS objects) of the category. You will receive a corresponding notice. The API developer also receives a corresponding note when the developer supplies values for combination of property and category.

> **Note**
> In your organization, you may use the d.3 functionality of automatic storage in a d.3 repository. If you use automatic storage, only the categories you have defined in d.3 admin are used for storage of the document, and not the categories defined by a mapping.

Mapping of multiple source properties

You can map several source properties to the same target property.

Example: The target property **Invoice Number** can appear in the source properties **Subject** or **Body** of an e-mail.

Note the following special features when mapping multiple source properties:

- Search: If several values are passed for the same target property, all values are used for the search in an OR query.
- Saving or updating of DMS objects: If multiple values are passed for the same target property, an error will be returned.
- Exporting or reading: All mapped source properties receive the value of the target property.

Specification of a user-defined value as the source of a property

If you want to write a fixed, custom value into a target field by mapping, you can select the **Custom value** in the **Source** field of the **Properties** mapping table. Enter the custom value in the additional input field. You can then continue with the mapping as usual.

A special feature applies when a user-defined value is specified as the source and the common property **Status** as the target. You can only enter the following values:

Value	Status
Release	Release
Processing	Processing
Verification	Verification

If you have mapped the status **Processing** as the target to the **Status** common properties and you have not created a mapping for the agent, then the current user is used as the editor.

If you use d.3one in Microsoft Outlook, d.3one in IBM Notes or d.ecs content crawler, you will find further information on the assignment of the individual fields in the administration manual of the respective d.3one integration.

1.2.7. Specifying user rights for working with items

In this chapter you can learn more about the details regarding the minimum requirements for the access rights, you can configure in d.3 admin. If you want to allow your users to display, save, update and export items (e-mails or files) or create dossiers, you must grant these d.3 users certain access rights for the respective categories in the d.3 repository. The rights you grant the user depend on the tasks the user needs to finish. If the user may read documents only in the status **Processing**, it is, for example, not needed to grant the user the right to read document in the status **Release**.

Saving files

If a user wants to work with the basic functions of the **Storage** feature to save files, you can grant the following rights for the respective category:

- **Document import**
- **Read attributes**

- **Read processing**

Saving items in a dossier

If a user is allowed to view dossiers in a d.3 repository and also want to store items in the dossier, you can grant the user the following rights for the respective category:

- **Document import**
- **Read attributes**
- **Read processing**
- **Create document link (parents)**. The right must be granted to the parent dossier, to which the items should be linked.
- **Create document link (child)**. The right must be granted to the category which should be linked to the dossier.

Instead of configuring the rights to link you can configure the dossier scheme so that the links are automatically generated with the dossier generation. Thus, the newly saved documents are linked to the parent dossier. Once it is saved successfully, the user gets a hint.

Saving items in a new version

If a user wants to save new versions of an item as a new version, you can grant the user the following rights for the respective category:

- **Change attributes processing/verification**
- **Document update**
- **Read attributes**
- **Read processing**
- **Read public**
- **Status transfer processing**
- **Status transfer release**

Editing items and taking over the editing rights for items, and finishing to edit items

If a user wants to edit a document in a d.3 repository and also want to take over the right to edit a document, which is currently edited by a different user, and if the user is authorized to finish the editing process of a document, you can grant the user the following rights for the respective category:

- **Change attributes processing/verification**
- **Document update**
- **Read attributes**
- **Read processing**
- **Read public**
- **Status transfer processing**
- **Status transfer “Withdraw Processing”**
- **Status transfer verification**
- **Status transfer verification**
- **Status transfer release**

Updating properties and changing categories

If a user wants to change the properties for a document or wants to assign a document to a different, you can grant the user the following rights for the respective category:

- **Read attributes**
- **Change attributes processing/verification**

- **Change attributes release**
- **Read processing**
- **Read verification**
- **Read public**
- **Change document type**

You can also combine the rights. If you grant a user the right to edit and finish editing, you can also grant the respective rights to update properties and change categories. A user can use the right **Change attributes public** to directly edit the properties of a document in the status **Release** and, thus, does not need the right for a status transfer. If you, however, intend only to allow the users to update properties and to change categories for items in the status **Processing**, for example, then you need to deny the right **Change attributes public** for the user.

If you want to additionally allow the user to change the category, then grant the user the right **Change document type**.

Displaying documents

If a user wants to view the content of a PDF document, you can grant the following rights for the respective category:

- **Read processing**
- **Read verification**
- **Read public**
- **Read archive**

If a user is allowed to view the content of a document exclusively in a certain document status, you only need to grant the user the read-only right for the corresponding status. If a user also wants to search for terms (full-text search) in the text when displaying PDF documents, you must also define the rights **Export Original** or **Export dependent document**.

Adding and changing comments and visual annotations

If a user wants to comment the content of a PDF document and add or change other annotations or highlighting, you can grant the following rights for the respective category:

- **Create/change redlining**
- **Export original**
- **Export dependent document**
- **Read processing**
- **Read verification**
- **Read public**

When comments are added or changed to a PDF document simultaneously, only the comments added or changed first are applied. If you want to prevent users from editing a PDF document at the same time, you can control it by combining the rights so that a user can only add or change comments provided the PDF document is marked for his or her own editing.

You can also grant and combine the following rights per item type: If the original document is a PDF document, define the right **Export original**. If the dependent document is a PDF document, define the right **Export dependent document**.

Deleting documents and dossiers in a certain status

If a user wants to delete a document or dossier in a specific status, you can grant the user the following rights for the respective category:

- **Delete archive**
- **Delete processing**
- **Delete public**
- **Delete verification**

As soon as you grant a user the permission to delete a document or dossier in the **Archive** status, your user can irrevocably delete all existing archived versions of the item just by clicking on the context action for deletion.

Exporting documents (downloading)

If a user wants to export or download the content of a document, you can grant the following rights for the respective category:

- **Read processing**
- **Read verification**
- **Read public**
- **Read archive**
- **Export original**
- **Export dependent document**

If a user is allowed to view the content of a document exclusively in a certain document status, you grant the user the read-only right for the corresponding document status only. By setting the **Export original** and **Export dependent document** rights, you specify whether a user can export or download documents in d.3one.

Creating dossiers

If a user wants to create dossiers, you can grant the following rights for the respective category:

- **Document import**
- **Read attributes**
- **Read processing**

Linking documents or dossiers to dossiers

If a user wants to link a document to dossiers or dossiers to dossiers or want to remove a link, you can grant the following rights for the respective category:

- **Create document link (parents)**. The right must be granted to the parent dossier, to which the items should be linked.
- **Create document link (child)**. The right must be granted to the category which should be linked to the dossier.
- **Remove document link (parents)**. The right must be granted to the parent dossier, from which the items are to be removed.
- **Remove document link (child)**. The right must be granted to the category, from which the items are to be removed.
- **Read processing**
- **Read verification**
- **Read public**
- **Read archive**

1.2.8. Activating and deactivating the display of activities

The activities function provides users with information on changes on items. Users can see who made changes and when. The multiple activities are either displayed per item in the perspective **Activities** or per user in the feature **Personal activities**.

For information on how to enable the display of activities, see the following article in our knowledge base: https://kb.d-velop.de/s/article/000001708

You can deactivate personal activities and item-specific activities for your individual users. The deactivation only hides the relevant user interfaces. The individual apps continue to record the activities in the background.

Let's assume you want to deactivate item-specific activities in various apps.

This is how it works

1. Click **Configuration** on the start page.
2. Choose **Display settings** under **Activities**.
3. Deactivate **Item-related activities in various apps**.
4. Save your change.

1.3. Backup and restore

The subject backing up and restoring of data is a comprehensive topic that must comply to various needs depending on the organization and the infrastructure of an organization. This chapter provides you with recommendations and hints about which aspects may be considered regarding back up and restore concepts:

If you have already a backup and restore concept in place for d.3, only the following are to be considered for d.3one:

The persistent data are always written to d.ecs jstore. With d.ecs jstore you can use different options for the persistence of data. For more information see the manual about d.ecs jstore.

1.4. Uninstalling

This topic provides you with information about uninstalling d.3one, which options are available, which configurations, components and apps in the back end are removed as well as how to keep certain settings.

> **Warning**
> Never remove any files or registry settings by yourself; this can result in failing to uninstall correctly.

The uninstall wizard applies the following changes in the back end:

Application/service/component	To be uninstalled (yes/no)	Description
d.3one website in IIS and the related d.3one server apps (d.ecs core)	Yes	The **d.3one** website in IIS as well as the files of the apps on the d.3one application server are removed. By default, these are located at: %Systemdrive%\d3\d.3one\
IIS settings	Yes	The settings in IIS (website, application pool, URL Rewrite rules) are removed.
Registry entries	Yes	The registry entries are removed, if you enable the **Keep product settings in installation path** option on the Backup Configuration page.

> **Note**
> The Windows and IIS features and components that might be installed and enabled by the d.3one setup program are not uninstalled.

The uninstall wizard guides you through the following steps:

- Language selection (Uninstall)

- Backing up configuration (Uninstall)
- Completing the uninstall process (Uninstall)

You can cancel the uninstall program in each step by clicking on the cross on the top right of the page.

Never remove any files or registry settings by yourself; this can result in failing to uninstall correctly.

1.4.1. Language selection (Uninstall)

Use the uninstall wizard to uninstall d.3one.

> **Warning**
> Never remove any files or registry settings by yourself; this can result in failing to uninstall correctly.

Do this to open the d.3one uninstall wizard under Windows:

1. Open the Control Panel on the computer, on which d.3one is installed.
2. Select **Programs and Features**.
3. Under **Uninstall or change a program**, select the **d.3one**.
4. Click on **Uninstall/Change** to start the uninstall wizard.

You can decide in the next step whether to save the configuration.

1.4.2. Backing up configuration (Uninstall)

On the **Backup configuration** page, you can decide whether to keep the product settings in the installation path (**web.config** files) and the persistent data in d.ecs jstore.

After uninstalling finished successfully, you are automatically guided to the last page in the wizard.

1.4.3. Completing the uninstall process (Uninstall)

On the last page of the uninstall wizard, you can complete the uninstallation by clicking on **Finish**.

1.5. Troubleshooting and FAQ

Visit our Knowledge Base on the d.velop service portal. In the Knowledge Base, you can find all our latest solutions, answers to frequently asked questions and how-to topics for specific tasks. You can find the Knowledge Base at the following address: https://kb.d-velop.de/

If you want to deepen your knowledge of d.velop software, visit the d.velop academy digital learning platform at https://dvelopacademy.keelearning.de/.

Our E-learning modules let you develop a more in-depth knowledge and specialist expertise at your own speed. A huge number of E-learning modules are free for you to access without registering beforehand.

This topic also provides you with solutions for different questions and issues.

Solutions for d.3one in the browser:

- d.3one in the browser: No restriction of categories possible

1.5.1. d.3one in the browser: No restriction of categories possible

Issue

The search results returned by d.3 search were restricted by a setting in d.3 server.

If a user performs a full-text search in d.3one using a term that frequently occurs in the documents, then the results to be displayed are limited by d.3 search. This means that d.3 search finds more relevant

documents as allowed by the limit; this is returned to d.3 server and, then, returned by d.3 server to the d.3one integration.

In d.3one integrated in the browser, the message "More than xx results found" means that the number of results and facets might be incomplete and, therefore, the category selection cannot be restricted. If the result list is restricted by facets later on, the phrase "About", however, does not disappear from the message, because the basis search results still base on the full-text search and thus the results are incomplete. It may happen that the message is "More than 1 result found".

Solution

The limitation for the full-text search results to be displayed should be increased. You can edit the value for the d.3 parameter **FULLTEXT_FETCH_LIMIT** as follows:

Go to the d.3 server with d.3 admin:

1. Open **d.3 admin**.
2. Open the node **d.3 Components > d.3 Config**.
3. Open the **d.3 configuration** dialog and go to the node **Full-text Search (d.search)**.
4. Click on **Maximum number of full-text matches** (parameter name: **FULLTEXT_FETCH_LIMIT**).
5. Enter a value that is greater than the current value. Make sure to enter a limit that includes the size of the complete result sets for the frequently used full-text search terms.

1.5.2. Which activities about an item are logged?

The activities function provides users with information on changes on items.

Different information is displayed based on the action and context. You can change the level of detail in the two views **Default view** and **Advanced view**. The default view provides an overview of the most important information, while the advanced view displays all the activities.

Documents and dossiers

You can use the document management activities to display the life cycle of a document or dossier. The activities show when an item was last changed and by whom. Changes include importing a document, reediting an item or adding comments in the form of notes or visual annotations. You can also track whether the properties, status or retention period of an item have changed. For item links, you can view whether new links have been created or existing links have been removed.

Configuring categories

As part of the configuration of categories, the system logs whether an administrator has made changes to settings related to audit-proof document storage.

These activities include changes to the settings **Released elements must not be deleted** and **Specify retention period** for a category.

1.6. Glossary

This topic provides you with terminology and concepts about d.3one.

Terminology	Concept
Dossier	An entity consisting of items and properties describing the items. Items of a dossier can be documents and/or dossiers.
Dossier type	Describes the type of a dossier (e.g. customer dossier, supplier dossier) and thus defines the properties that are available.
Common properties	Properties owned by a document or dossier despite of the document type or dossier type.
App	d.3one integration in a leading application that provides dedicated functions and user interface, if applicable.

Terminology	Concept
Tasks and Messages	Refers to the location at which messages and tasks initially arrive and remain until the user works on them.
Base address	The definable part of an URL under which any services of a system can be accessed and which serves as a reference point.
d.3 link	Reference to repository items.
d.3one application server	Collection of all apps, which can be expanded by third-party apps, if applicable. Abbreviated: d.3one server.
d.ecs domino	A service that is installed on the IBM Domino server. This service provides the access to the IBM resources and communicates with the d.3one server.
Document	An entity consisting of a file and the properties describing the file. Files can be, for example, images, digital writings, Excel files, etc.
Document type	Describes the type of a document (e.g. invoice, delivery note) and thus defines the available properties (e.g. invoice number, delivery note number).
Drop zone	A user interface section used to drop an item in order to store it.
Property	A trait that describes a document or dossier in condensed manner.
Results	Set of documents and dossiers found by a search.
Advanced properties	Customized additional property (optional) that describe a document or dossier.
Facet	Results can be viewed with regard to a specific property by using a facet.
Feature	A set of related functions in an integration. A feature has got a dedicated name.
Business process	A Business process consists of a collection of logically related actions (tasks, activities) that are performed in order to achieve a business or operational target. (see Wikipedia in German)
Main dossier	Dossier on top-level of a dossier structure. The main dossier is a logical parenthesis and is used to digitally combine additional items, such as dossiers and documents. Thus, a document can be part of several different top-level dossiers.
Integration:	A set of front-end functionality (features) that may be integrated in a leading application.
Category	Covers the items "dossier type" and "document type".
Context action	An action that provides a context-specific function related to a selected item.
Multi-value property	Special property to describe a document or a dossier. The multi-value property can consist of several values.
Source	Refers to an item in a source system with specific properties and categories, such as e-mail, e-mail attachments, contacts, and appointments.
Source property	Defines the item's property of any source system, for example, the source "e-mail" has the properties "Subject", "Sender", "Recipient" and "Body".
Source category	Defines the item's category of any source system, for example, the source "e-mail" has the categories "supplier invoice" and "customer invoice".
Source system	Refers to any systems providing source data (such as an e-mail application or ERP system) which can be used, for example, to map data in various systems.
Repository	Refers to a logical storage location, that is, a collection of documents and dossiers. These collections may also be used to separate information for security reasons, for example. A d.3 system can provide several repositories.
Workflow	Business process implemented by a rule-based, defined sequence of handling steps.

1.7. Additional information sources and imprint

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Find the central imprint at https://www.d-velop.com/imprint.