KMD
WORKZONE
_Content Server

2021.3

CVR/CPR Integration

Configuration Guide

Contents

WorkZone Content Server 2021.3 CVR/CPR Integration Configuration Guide

This guide describes how you configure WorkZone Content Server and integrate with a service delivering CPR and CVR on-line information.

The purpose of this guide is to ensure correct configuration of the CPR and CVR integration with WorkZone Content Server.

The target audience is technicians responsible for the configuration of CPR and CVR integration with WorkZone Content Server.

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Related product documentation

- WorkZone Content Server Database Installation Guide

WorkZone links

- WorkZone documentation
- WorkZone support
- WorkZone website
- WorkZone portal

What's new in WorkZone Content Server

WorkZone Content Server 2021.3

Update CVR contacts using the CVR Update module

A new update feature has been introduced to WorkZone which uses the CVR Datafordeler to automatically update company contacts (with CVR) or Production unit contacts in WorkZone with changes from the Danish Central Business Register. The following core data is updated: name, address, email, phone number and industry code.

The CVR Update module utilizes the KMD Logic platform to communicate with the CVR Datafordeler, as well as to manage the subscription and events from CVR Datafordeler, so only relevant and specific CVR data is updated.

The CVR Update module contains two underlying components: the CVR Update Service and the CVR Subscription Service. The CVR Update service schedules and performs the actual updates to WorkZone. The CVR Subscription service manages subscription and events to and from KMD Logic platform and WorkZone. It will ensure that only relevant and specific company contacts are updated with changes from CVR Datafordeler.

The CVR Update module must be configured and enabled before use. The feature is disabled by default after the initial installation of WorkZone.

For more information, see About CVR Update.

WorkZone Content Server 2021.2

CPR Batch and guardians without CPR numbers

When importing CPR contact data from CPR Online or updating CPR contact data using CPR Batch, contacts with guardians that do not possess a Danish CPR number (for example legal companies acting as interim guardians) are now automatically imported into WorkZone as a Person (without CPR) contact. A Guardian reference is also automatically created between the contact and the guardian. System Administrators can change the default contact type a guardian without CPR number is created as.

For more information, see Configure CPR Connection

If a new guardian without CPR number is assigned to the contact and the contact subscribes to CPR Batch updates, the next update will create the new guardian in WorkZone along with a new reference with the Guardian role. The old guardian contact will not be deleted from WorkZone but the reference between the old guardian and the contact will be removed.

CPR Batch subscriptions

A subscription to CPR Batch update is now first created when a contact is imported into WorkZone. Previously, a subscription to CPR Batch update was automatically created for a contact when a user performed a search for the contact.

Contact data is only updated if a contact has been imported into the WorkZone database and also subscribes to CPR Batch updates.

Changed contact CPR number imported

When using WorkZoneCPR Batch to update contact information, CPR numbers that have been changed are now automatically imported and the CPR number updated in WorkZone. The contact's previous CPR number is registered in the **Previous name code** field to enable WorkZone users to search for the contact by using the contact's previous CPR number as well as the new one.

The **Previous name code** field can only be updated by the system and not through user interaction.

WorkZone Content Server 2021.1

CPR Batch and Guardian/Ward relationships

When importing contacts from the Danish CPR registry, WorkZone contacts are created, updated and maintained in accordance with the new Guardian record type (017 and 052) from the Danish CPR registry. Likewise, Guardian/Ward references for WorkZone contacts are also created, updated and maintained by the CPR import.

WorkZone Content Mobility 2021.0

New CVR Integration parameter

The new `Certificatefilename` parameter has been introduced. The parameter enables you to reference a FOCES certificate when the certificate file is located in the **Certificates** folder in the WorkZone installation folder.

If the certificate file is located in a Windows Certificate Store, you must still use the `Certificate` parameter.

WorkZone Content Server 2020.3

The CPR Integration and CVR Integration modules can now be activated separately in WorkZone Configurator. Previously, both modules were enabled simultaneously, even if the organization only had installed and configured one of the two. Now the organization need only select the module they employ.

WorkZone Content Server 2020.2

No changes in this release.

WorkZone Content Server 2020.1

No changes in this release.

WorkZone Content Server 2020.0

The **C/O** field for companies is now included in WorkZone CPR/CVR Integration.

WorkZone Content Server 2019.3

No changes in this release.

WorkZone Content Server 2019.2

No changes in this release.

WorkZone Content Server 2019.1

No changes in this release.

WorkZone Content Server 2019.0

- **CVR Integration:**WorkZone CVR integration has been changed due to new integration rules from Erhvervsstyrlsen. As a consequence, it is no longer possible to search by company addresses or post code. You can still search by CVR number, P-number and/or company name.

WorkZone Content Server 2018.2

- **Captia Web Client no longer supported:** The Captia Web Client is no longer part of the WorkZone product and can not be installed with the WorkZone product.

WorkZone Content Server 2018.1 - CPR Integration

- The changes in this release.

WorkZone Content Server 2018.0 - CPR Integration

CPR Integration, CVR Integration and CVR Integration

- The online help for all three modules have been merged into the CVR/CPR Integration online help to reduce the number of online help modules and to increase overview of the three related modules.

WorkZone Content Server 2017 - CPR Integration

No changes in this release.

WorkZone Content Server 2016 R2 - CPR Integration

No changes in this release.

WorkZone Content Server 2016

- CPR Integration

  - A new **ForceUpdate** parameter has been added to the CPR source driver. CPR Integration now updates CPR records even if manual changes have been made. Changed addresses are closed, and the new addresses are imported. See Configure CPR Connection.

- CVR Integration

  - It is now possible to automatically unsubscribe from a person if it is no longer allowed to subscribe to this person, and then automatically subscribe to a person again when it is allowed again. See Subscribe and unsubscribe automatically.

- CVR Integration

  - A new **ForceUpdate** parameter has been added to the CVR source driver. CVR Integration now updates CVR records even if changes have been made manually. See Configure connection to CVR Online.

WorkZone Content Server 2014 R2 - CPR Integration

No changes in this release.

About CPR Integration

CPR Integration is a WorkZone application module that enables users to search for a contact using the contact's CPR number and then import central contact data from the Danish CPR-Office and into the WorkZone database.

The Danish Ministry of Interior Affairs and Health's Central Office of Civil Registration (the CPR-Office), located under the Ministry of Interior Affairs and Health's Department, is in charge of the Danish CPR (Civil Registration System in English) and functions as the main supplier of basic personal information to public authorities and the private sector.

The CPR-Office is responsible for the content, maintenance and development of the Danish Civil Registration System.

The Danish CPR (Civil Registration System)

The CPR is a centralized, nationwide civil register in Denmark whose purpose is to administer the personal identification number system, to administrate general personal data reported from the national registration offices to the CPR, and to forward personal data in a technically or economically suitable manner in accordance with the Registers Act and the legislation governing civil registration.

CPR Direkte

For use in peer-to-peer communication from a customer's administrative system to the CPR, the CPR-Office has developed an application called **CPR Direkte** (CPR Direct). When you send a transaction from your administrative system with identification information to the CPR, you get relevant data back.

Subscription

With **CPR Direkte** the user can make a "subscription" to a person. This means that the user is informed, when the data of a person changes. For example, when the person's name is changed, the person is changing residence or dies.

CPR Klient

CPR Klient (CPR Client) integrates WorkZone Content Server with **CPR Direkte** and is implemented in WorkZone Content Server using the standard module Import Manager. This module is configured to import data into WorkZone Content Server.

CPR Batch

CPR Batch is an application module that handles CPR subscriptions in batch mode, see About CPR Batch.

Prerequisites

To use the CVR/CPR Integration, the customer must have a contract with the hosting service provider (DXC Technology) to be able to extract data from the CPR system. DXC Technology is the hosting service provider for the CPR-Office[1] and delivers an application (CprDirekte_V180.exe) used in connection with the installation of the application CPR Klient. The application CPR Klient is configured with the required parameters (user name, and so on) according to the signed contract.

WorkZone Content Server must be prepared using the CPR integration including custom label and so on.

Additionally, you must have access to the WorkZone Content Server installation and the contract with DXC Technology. In this contract you will find the required configuration information concerning CPR port, CPR IP, CPR transaction code (CPR Trans. kode), custom number, user id, and password.

Activate the CPR Integration module

The WorkZone Content Server CVR Integration module is installed by default when WorkZone Content Server is installed but the module is not activated by default. You must

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[1]The Danish Ministry of Interior Affairs and Health's Central Office of Civil Registration (the CPR-kontoret/CPR-Office) is in charge of the Danish Civil Registration System (CRS) and functions as the main supplier of basic personal information to public authorities and the private sector.

manually activate the CPR Integration module after installation in order to use the module.

To activate the CPR Integration

In WorkZone Configurator > **Global** > **Feature settings**, activate WorkZone Content Server CPR.

Service operation

You can launch the **CPR Klient** application in two ways:

- As an ordinary application with a visible user interface.
- As a Windows NT service.

When the application is running as a service, it is only visible in the Services window. It will be automatically started or stopped along with the PC.

> **Important:**
>
> You must choose whether to run the application as an ordinary application or as a NT-service. They cannot run simultaneously.

Configure CPR Connection

This procedure describes how you configure the connection between WorkZone Content Server and the CPR using WorkZone Configuration Management.

You must apply the parameters `IP` and `DefFiles`. Regarding the compatibility with earlier versions of WorkZone Content Server, the parameter `Subscription` is introduced in connection with subscription.

Guardians without CPR numbers

The Name Type for guardians without CPR numbers is by default set to Name Type P (Person without CPR), but you can change the Name Type by specifying **guardianNameType=X** in the **Parameters** column below (step 4), where X is the Name Type to be used instead of P.

Configure the CPR Connection

1. Select **Start** >**Configuration Management**. The **WorkZone Configuration Management** window displays.

2. Select **Operation** > **External Sources**. The WorkZone Configuration Management - **Module: External Sources** window displays where you can see the configurations for the external data sources.

3. Find **CPR** in the **Name** column.

4. In the **Parameters** column, enter the following:

```
IP=<IP portnummer for CPRKli-
ent>;DefFiles=.\CPRkilde\P12170.*; Assembl-
y=Scanjour.CPRDriver;
Class=Scanjour.ImportManager.CPRDriver;ForceUpdate=J
```

- IP indicates the IP address for the internal connection for the CPR integration.

- `Subscription=0` indicates that there is no subscription added to the persons (default value). If the parameter `Subscription` is not included in the parameter string, then it corresponds to `Sub-scription=0`.

- `Subscription=1` indicates, that subscription is added to the persons.

- `ForceUpdate=J` updates CPR records, even if manual changes have been made to addresses. If addresses have been changed, the addresses are closed, and the new addresses are imported. This is the default. If the parameter is set to N, the addresses that have been changed are not updated if imported again.

5. Click the empty field to the left of the **Name** column, and select **Database** > **Save**. The information is stored, and the connection between WorkZone Content Server and CPR is defined.

Test of the CPR Integration

Test from the CPR Klient

1. Select **Start** > **All Programs** > **CPR Klient** > **CPR Klient**. The **CPR Klient** window displays.
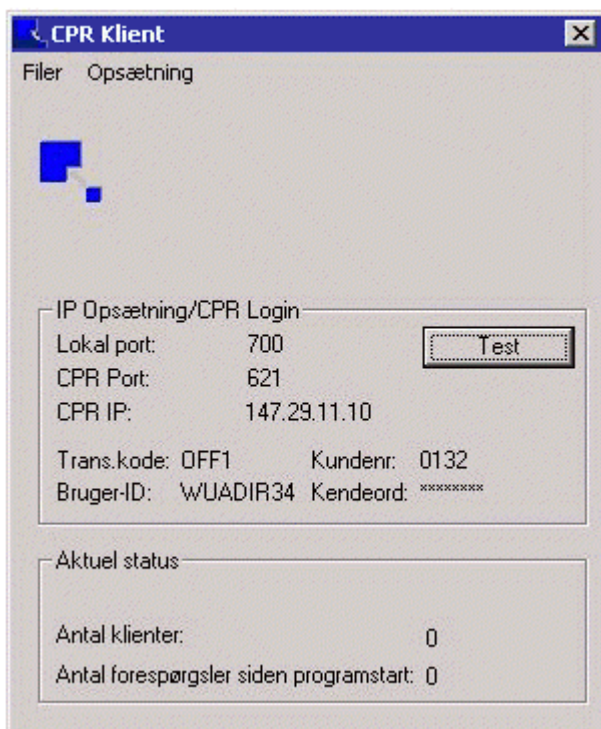
2. Click **Test**. The **CPR Klient** window displays with a string containing codes and the text **Forbindelse og login er OK**, if the configuration is correct.

   The first four characters in the string indicate the CPR customer number (kunde nr.). In the example above, it is 0132.

   Character position 15-22 indicates the user id (Bruger-ID). In the example above, it is WUADIR34.

   The next 2 positions contain the error message from CPR Direkte. If two characters 00 are returned there, as in the example above, then the connection is established and the login is correct.
   The last 4 characters indicate the length of string. In the example above, it is

0028.

3. Click **OK**. The test is completed.

OFF4 mapping information from CPR

The following table shows how the OFF4 record types from CPR are mapped into WorkZone Content Server.

The use of different styles and fonts in the table below:

- **Bold** typeface is used for field names.
- Monospacing font is used for words to be typed in exactly as they appear.
- *<Italics in angle brackets>* are used for words to be substituted. This means that name2 = <surname> is interpreted as the field name2 holds the surname of a person. For example, you type Jensen in the field name2, whereas text = <full name> means that you must enter the full name, for instance, Karl Bay Jensen.

CPR OFF4 document number	Field in WorkZone Content Server
001	Register = contact **name_type** = C **name_code** = *<CPR number>*
008	**name1** = *<first name, middle name>*
008	**name2** = *<surname>*
001	Group name = contact_info custom_label = GældendePNR **info** = *<CPR number>*
001	Group name = contact_date custom_label = Fødselsdag **date** = *<date of birth>*

CPR OFF4 document number	Field in WorkZone Content Server
001	Group name = contact_info custom_label = Køn **info** = M|K
001	Group name = contact_date custom_label = Statusfra **date** = *<status date>*
001	Group name = contact_info custom_label = Status **info** = *<status code>*
001	If statuskode = 90, then the person is dead, and end_date is filled in. end_**date** = *<status date>* See CPR Status codes
001	**position** = *<occupation>*
003	**text** = *<full name>*
003	Group name = address, restrictor = HA **address1** = *<street name house number>*
003	Group name = address **address2** = *<locality>*
003	Group name = address **address3** = *<care of name>*
003	Group name = address **municipality** = *<municipality code>*
003	Group name = address

CPR OFF4 document number	Field in WorkZone Content Server
	If landekod = 5100 then **country_code** = DK
003	Group name = address **postcode** = *<postcode>*
002	Group name = address **start_date** = *<date for moving in>*
004	Group name = address **protection** = *<date for start of protection of information>*
003	If the address of the person already exists in WorkZone Content Server, and it is different from the received address, then existing (that is, primary) address is considered to be invalid, and the following is inserted: **address_type** = CPRADR **end_date** = *<date for moving in>* (that is, the end_date for the old address is equal to start_date for the new address)
003	Group name = contact_info custom_label = Bynavn **info** = *<name of city>*
003	Group name = contact_info custom_label = Postdist **info** = *<post district>*
016	Group name = contact_date custom_label = Umyndig **date** = *<date where legal guardians has been appointed to the person>*

CPR OFF4 document number	Field in WorkZone Content Server
	If the date for appointing legal guardians to the person is blank in the received record, then any former legal guardian attachment is removed.
009	Group name = contact_info custom_label = Fødregkode **info** = *<authority code for place of birth>*
009	Group name = contact_info custom_label = Fødreg.myn. **info**= *<place of birth>*
012	Group name = contact_info custom_label = Civilstand **info** = *<marital status, civilstand i form af G>*
012	Group name = contact_date custom_label = Civst.fra **date** = *<wedding date>*
012	custom_label = *Ægtefælle* A case relation is created for the spouse through **name_ref_key** Group name = part **name_type** = C **name_code** = *<CPR number of spouse>* If the spouse is not registered in WorkZone Content Server, then the following is inserted: **name1**= Person med cprnr *<CPR number of spouse>* **name2** = - ikke importeret
015	A case relation is created for the father through **name_ref_key**

CPR OFF4 document number	Field in WorkZone Content Server
	Group name = part, restrictor = Forældre
	If the CPR number of the father is present in the received record:
	name_type = C
	name_code = *<CPR number of father>*
	If the CPR number of the father is not present in WorkZone Content Server, then the following information is added:
	name1 = Person med cprnr *<CPR number of father>*
	name2 = - ikke importeret
	If the name of the father is present in the received record:
	name_type = P
	name1 = *<name of father>*
	If the name of the father is not present in WorkZone Content Server, then the following information is added:
	name2 = Far til *<CPR number of person>*
	text = Person fra CPR uden cprnr
015	A case relation is created for the mother through **name_ref_key**
	Group name = part, restrictor = Forældre
	If the CPR number of the mother is present in the received record:
	name_type = C
	name_code = *<CPR number of mother>*
	If the CPR number of the mother is not present in WorkZone Content Server, then the following information is added:
	name1= Person med cprnr *<CPR number of mother>*
	name2 = - ikke importeret
	If the name of the mother is present in the received record:

CPR OFF4 document number	Field in WorkZone Content Server
	name_type = P
	name1 = *<name of mother>*
	If the name of the mother is not present in WorkZone Content Server, then the following information is added:
	name2 = Mor til *<CPR number of person>*
	text = Person fra CPR uden cprnr
017	custom_label = Værge
	A case relation is created for the guardian through name_ref_key
	If reltyp = 1:
	Group name = part
	name_type = C
	name_code = *<CPR number of guardian>*
016	If the CPR number of the guardian is not present in WorkZone Content Server, then the following information is added:
	name1 = Person med cprnr *<CPR number of guardian>*
	name2 = - ikke importeret
	If reltyp = 2:
	Group name = part, restrictor = Værge
	name_type = P
	name1 = *<name of guardian>*
	If the name of the guardian is not present in WorkZone Content Server the following information is added:
	name2 = Værge til *<CPR number of person>*
	text = Person fra CPR uden cprnr

CPR Status codes

CPR status codes are codes from the Danish Ministry of Interior Affairs and Health's Central Office of Civil Registration that indicate the status of a specific CPR number (Active/Inactive) as well as the reason.

Danish CPR status codes - in English

Status code	Status	Description
01	Active	Registered with residence in Danish population register
03	Active	Registered with high street code (9900 - 9999) in Danish population register
05	Active	Registered with residence in Greenlandic population register
07	Active	Registered with high street code (9900 - 9999) in Greenlandic population register
20	Inactive	Registered without residence in Danish/Greenlandic population register - and administrative civil registration numbers
30	Inactive	Canceled civil registration numbers
50	Inactive	Deleted civil registration numbers
60	Inactive	Changed civil registration numbers due to changed date of birth and/or sex.
70	Inactive	Disappeared
80	Inactive	Emigrated
90	Inactive	Deceased

Danish CPR status codes - in Danish

Status code	Status	Description
01	Aktiv	Bopæl i dansk folkeregister
03	Aktiv	Speciel vejkode (9900 - 9999) i dansk folkeregister

Status code	Status	Description
05	Aktiv	Bopæl i grønlandsk folkeregister
07	Aktiv	Speciel vejkode (9900 - 9999) i grønlandsk folkeregister
20	Inaktiv	Uden bopæl i dansk/grønlandsk folkeregister men tildelt personnummer af skattehensyn (kommunekoderne 0010, 0011, 0012 og 0019)
30	Inaktiv	Anulleret personnummer
50	Inaktiv	Slettet personnummer ved dobbeltnummer
60	Inaktiv	Ændret personnummer ved ændring af fødselsdato og køn
70	Inaktiv	Forsvundet
80	Inaktiv	Udrejst
90	Inaktiv	Død

Troubleshooting

In case of errors, check the following prerequisites:

- Is CPR Direkte up and running with the correct password and other parameters?
- Is the CPR client application installed and running?
- Is the WorkZone Content Server database configured to handle the CPR integration?
- Are there problems with firewalls or other programs blocking the connections between the applications?

About CPR Batch

CPR Batch is a WorkZone application module that manages the import and update of CPR contact data in the WorkZone database. Only CPR contacts that have been imported into WorkZone using CPR Online and that also subscribe to CPR Batch updates are updated. CPR contacts that have been manually created in WorkZone Client are not subscribed to the CPR Batch updates.

CPR Batch handles CPR subscriptions in two steps:

1. Transfer of subscription files from CPR to an interim directory.
2. Import of source items from the interim directory to the database.

Transferring subscription files

Subscription files from CPR contain among other things a time stamp indicating date and time for the storing of data. This stamp is used by CPR Batch to check whether updates have been made to the current subscription files in the interim directory with CPR Direkte, see About CPR Integration

Import of source items

CPR Batchcompares subscription items in the interim directory with the items in the database. If the Interim directory contains subscription items with an older time stamp than the subscription items in the database, these items are not imported byCPR Batch into the database.

Therefore, subscription data in the database cannot be overwritten with old subscription data. Unprocessed subscription items in the interim directory are only imported into the database, if the data is newer than the existing data in the database. This means that the order of importing unprocessed subscription items to the database is irrelevant.

Format description

The format description for the subscription files, and thereby for the source items, is identical to the format description for the online integration. This means, that you can use

the same descriptions as the one used by the online integration, see About CPR Integration.

Firewalls

When you launch CPR Batch for the first time, you will get a warning from the Windows Firewall, because CPR Batch communicates with an external server through an FTP protocol. You must allow this type of communication. Warnings on blocking of traffic may appear. Therefore, you must get the necessary permissions to operate the system.

Prerequisites

Before you begin to configure CPR Batch, you need the following:

- Permissions for accessing the FTP-site at the CPR-Office.
- Path to the format descriptions for the CPR extract.
- Path to the Interim directory.
- Permissions for accessing the database when importing the subscription files.

When the prerequisites are in place, follow these steps in the CPR Batch process:

1. Configure CPR Batch
2. Configure network connection
3. Transfer subscription files
4. Import source items
5. Simulate batch job

Important:

CPR Batch will never delete files on the server or in the interim directory. This means that over time there will be an accumulation of files at the FTP site and in the interim directory. At the FTP site, the files will be moved to a mass storage after some time by DXC Technology who is the hosting service provider for the CPR Office. The user must decide on a strategy for the maintenance of the interim directory.

Configure CPR Batch

The initial settings shown in the CPR Batch user interface are found in the configuration file Scanjour.CPRBatch.exe.config located in the same directory as the executable. Any subsequent user modifications are stored locally in:

`c:\Users\<user_name>\AppData\Local\SCAN•JOUR_A_S\Scan-jour.CPRBatch.exe_Url_<hash_key>\<VersionNumber>\user.config`

This file is automatically read when the application starts. This means that merely editing Scanjour.CPRBatch.exe.config may not have the desired effect if user settings have been saved previously.

A possible way of avoiding this is to move (copy and delete) the user.config file to Scan-jour.CPRBatch.exe.config in the same directory as the executable.

Interactive or batch mode

You can launch CPR Batch in two different modes – interactive or batch.

- Interactive – the application is launched using the parameter `/window`. The first time CPR Batch is launched, there is no configuration file and the application starts automatically in the interactive mode.

- Batch – in ordinary operation the application is launched using Windows Task Scheduler similar services. CPR Batch is typically activated at a certain time every day with the parameter `/nowindow`.
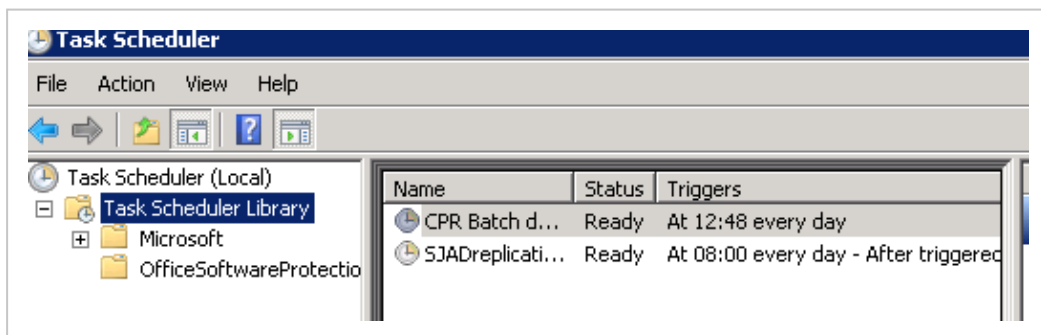
The CPR Batch configuration process

The CPR Batch configuration process consists of data verification and two coherent process stages:

1. Transferring subscription files from CPR.

2. Importing source items to the database.

Configure network connection

This procedure describes how you configure CPR Batch to access the FTP site at CPR.

Configure network connection

1. Open the command prompt window.

2. Type `scanjour.cprbatch` and press Enter. The **Batch Import from CPR** window opens.
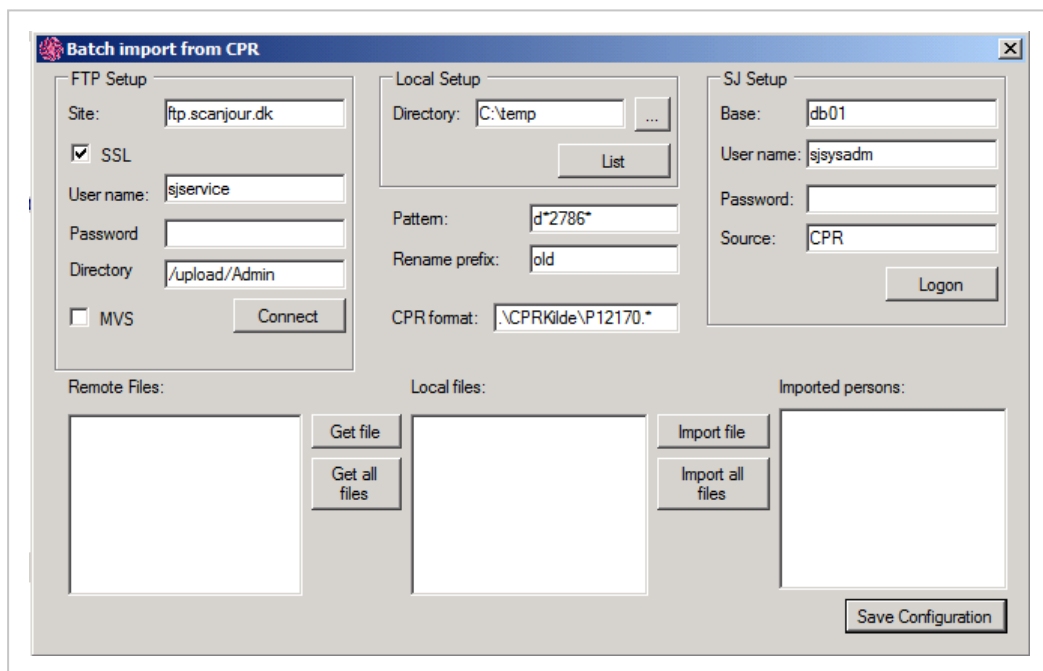
3. In the **FTP setup** group box, do as follows:

- In the **Site** field, enter the IP address or domain name for the FTP server at CPR.
- Select the **SSL** check box.
- In the **User name** field, enter the user name delivered by the CPR Office.
- In the **Password** field, enter the corresponding password to the user name in the **User name** field.

- In the **Directory** field, enter the name of the directory at CPR. The default directory is the home directory of the FTP site. Normally, the subscription files are placed here, but if you have an agreement with the CPR Office to locate the subscription files elsewhere, you can specify the directory here.

- Select the **MVS** check box when the CPR server is used. This means that the application makes an extract (max. 5000 pcs.) and matches them against the contents of the **Pattern** field.

7. In the **Pattern** field fill in the mask for the subscription files you wish to get from the FTP site.

> **Important:**
>
> The content of the **Pattern** field must not be changed between stage 1 and 2 in the CPR Batch configuration process, see The CPR Batch configuration process.

8. Click **Connect**. A list of files is shown in the **Remote files** list. The list contains the files from the specified directory at the FTP site matching the specified mask in the **Pattern** field.
   A file name in brackets indicates that the file is 'Migrated' at CPR, which means that the subscriptions file is located at a mass storage and is not accessible momentarily.

9. Click **Save Configuration** to save the current configuration.

Consistent data

In the **Batch Import from CPR** window, the **Pattern** and the **Rename prefix** fields are used and valid for both the **FTP setup** group box and the **Local Setup** group box.

The **FTP setup** group box is used in the above procedure Configure network connection.

The **Local Setup** group box is used in the procedure Transfer subscription files.

To ensure a consistent data flow of the two process stages, see Configure CPR Batch, the values in the **Pattern** field and in the **Rename prefix** field must not be changed during the 2 process stages.

Transfer subscription files

This procedure describes how you transfer one or more subscription files from the **Remote files** list to the **Local files** list in the interim directory.

1. Open the command prompt window.

2. Type `cprbatch` and press Enter. The **Batch Import from CPR** window opens.
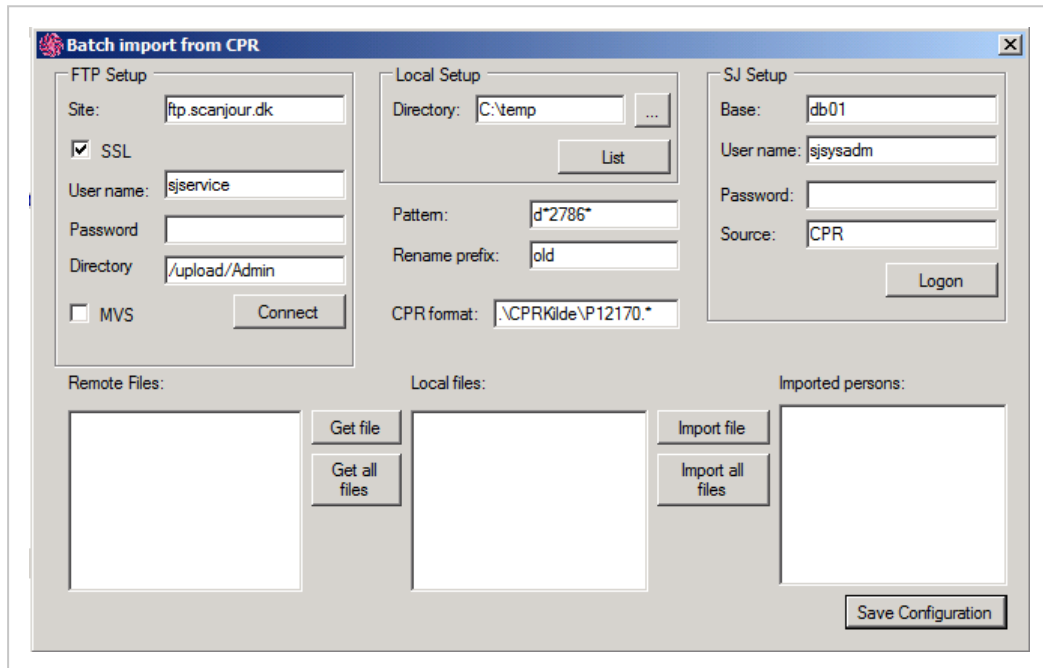
3. In the **Local setup** group box, do as follows:

○ In the **Directory** field in the **Local Setup** group box, enter the name of the interim directory or browse to find the relevant directory.

If you want to see the files in the interim directory, click **List**. The **Directory** field specifies the interim directory on your local PC. This directory should not be used for other purposes.

○ In the **Rename prefix** field, enter the prefix of your choice.

After transferring the remote files their file name is changed by adding the given prefix. The content of the **Rename prefix** field must not be changed between stage 1 and 2, see Configure CPR Batch.

4. To transfer a single subscription file to the interim directory, select a file in the **Remote files** list and click **Get file**. To transfer all subscription files to the interim directory, click **Get all files**. The names of the subscription files appear in the **Local files** list.

   The **Local files** list shows the files that match the mask specified in the **Pattern** field.

5. Click **Save Configuration** to save the current configuration.

Renaming

After transferring the specified subscription files, CPR Batch will rename these files by adding the prefix from the **Rename prefix** field to the file names. As a consequence, the file names disappear from the **Remote files** list, but the files still physically exist.

Import source items

To import the source items from the subscription files in the **Local files** list to a database, you must fill in the **CPR format** field and in the **SJ Setup** group box you must specify the database name, logon information, and source.

This procedure describes how you import the source items from the subscription files in the **Local files** list.

1. In the **Batch Import from CPR** window, do as follows:

   ○ In the **CPR format** field, enter the format description, for example:
      `.\CPRkilde\P12170.*` (OFF4).

   ○ In the **Base** field in the **SJ Setup** group box, enter the ODBC name for the database.

   ○ In the User name field in the SJ Setup group box, enter the name of a WorkZone Content Server user for the database.

   ○ In the **Password** field in the **SJ Setup** group box, enter the corresponding password to the user name.

   ○ In the **Source** field in the **SJ Setup** group box, enter the name of the source for importing – as a rule **CPR**.

2. Click **Logon**. CPR Batch logs on to the specified database, localizes the source specified in the **Source** field, and initializes it with the format description given in the **CPR format** field.

3. Do one of the following:

   - Select a file in the **Local files list** and click **Import file** to import a single file.
   - Click **Import all files** to import all files.

     The names of persons appear in the Imported persons list.

4. Click **Save Configuration** to save the current configuration.

Configuration file

If you click **Save Configuration**, the configuration is stored in the file `user.config` in the location described in Configure CPR Batch.

Passwords are encrypted in this file. When you launch the application without user interaction, CPR Batch will use this configuration. If you have changed the configuration and you leave CPR Batch without saving, you are requested to save the configuration.

Renaming

After importing the specified subscription files, CPR Batch will rename these files by adding the prefix from the **Rename prefix** field to the file names. As a consequence the file names disappear from the **Local files** list, but the files still physically exist.

Log file

Regardless of the mode for launching, the important actions of CPR Batch are stored in the file `cprbatch.log`.

Error log

If any errors occur or there are comments on the import, an error log file is created in the interim directory. The name of the error log file is the concatenation of the prefix `err` and the name of the imported file.

Check import

After the import, you can double-click on the name of a person in the **Imported persons** list and get further information from the log file on the status of the import.

Simulate batch job

Typically, CPR Batch launches as a batch job initiated Windows Task Scheduler or similar at a certain time of day with the parameter `/nowindow`.

This procedure describes how you simulate a batch job. A batch job resembles the following procedure where you launch the application with a given configuration file, `Scanjour.CPRBatch.exe.config`.

1. Type `cprbatch/window` in the command prompt window and press Enter.
   The **Batch Import from CPR** window appears.

2. Do as follows:

   - Click **Logon** in the **SJ Setup** group box.

   - Click **Connect** in the **FTP setup** group box.

   - Click **Get all files**.
     The subscription files are transferred to the interim directory and renamed on the server.

   - Click **Import all files**.

> **Note:**
>
> The files are imported to the database and renamed in the interim directory.

Subscribe and unsubscribe automatically

A subscription for updates from CPR Batch will automatically be created for the contact when the contact is imported into WorkZone Client.

With CPR Batch, it is possible to automatically subscribe a person when the person is related to one or more open cases, and is not already subscribed to at CPR.

If the person no longer may be subscribed, CPR Batch will automatically unsubscribe the person. For example, if a person is not related to any open cases and the subscription was created more than 7 days ago, the continued CPR subscription for the person is not permitted.

Subscription settings in the Source_record Table

CPR Batch handles subscribing to or unsubscribing from persons that are marked to be subscribe or unsubscribed in the **SOURCE_RECORD** table.

When you subscribe to a person, the data for this person is retrieved from CPR.

In the **SOURCE_RECORD** table, two fields are used for subscription settings:

- **SRC_SUBSCRIBED**:

  `'J'` means that the persons is subscribed to CPR. `'N'` means that the person is unsubscribed from CPR. The field is maintained by the ImportManager that sets it to `'J'` when retrieving data from CPR, and to `'N'` when sending unsubscribing data to CPR.

- **SUBSCRIBED**:

  `'J'` subscribes a person if the person is not already subscribed to CPR. `'N'` means unsubscribes a person if the person is subscribed to CPR.

When you upgrade the database to WorkZone Content Server 2021.3, all records for the source 'CPR' are updated to set the **SRC_SUBSCRIBED** field to `'J'` and the **SUBSCRIBED** field to null. This is based on the assumption that all persons for source = 'CPR' are subscribed to CPR.

> **Note:**
>
> At a customer site, it may be necessary to adjust the setting for the **SRC_SUBSCRIBED** field, if the assumption that all persons are subscribed is not correct.

A customer can get a file from CPR that includes all CPR numbers that the customer has subscribed to. The data in this file can be used to set the **SRC_SUBSCRIBED** field.

The SJP_CPR_ADM.SET_SUBSCRIPTION job

You use the SJP_CPR_ADM.SET_SUBSCRIPTION job to set the **SUBSCRIBED** field automatically.

Subscribe

The **SUBSCRIBED** field is set to `'J'` if the person:

- Is not subscribed to CPR (`SRC_SUBSCRIBED='N'`).
- Is related to one or more open cases.

If a customer wants another algorithm for automatically subscribing to or unsubscribing from a person, you can create another job that sets the **SUBSCRIBED** field. You can use the standard WorkZone Content Server Oracle package SJP_CPR_ADM as a template for the job.

Unsubscribe

The **SUBSCRIBED** field is set to `'N'` if the person:

- Is subscribed to CPR (`SRC_SUBSCRIBED='J'`).
- Is not related to any open cases.
- And it is more than 7 days ago that the data of that person was updated from CPR.

> **Note:**
>
> The default value is 7 days but when you start the job, you can specify any number of days.

Start the SJP_CPR_ADM.SET_SUBSCRIPTION job

Execute the following statement to start the job:
```
sjp_cpr_adm.job_set_subscription(<start_time>, <delay_days>)
```

- `<start_time>` is '`trunc(sysdate+2)`' by default. The job runs every night 2 hours after midnight.

- `<delay_days>` is 7 by default. It specifies how many days ago the person's data was updated from CPR, see above.

About CVR Integration

CVR Integration is a WorkZone application module that enables users to search for a business contact using the contact's CVR number and then import central contact data from the Danish Central Business Register and into the WorkZone database. The CVR Integration module does not automatically update existing CVR contacts, only retrieves CVR data during creation. If you want to subscribe to and automatically import update to the CVR data, you must also configure and enable CVR Update.

This chapter describes how to configure the CVR Integration in WorkZone Content Server to enable the import of central CVR information of your business contacts.

About the Central Business Register (CVR)

The Danish Business Authority (Erhvervsstyrelsen) owns and administers the Central Business Register (CVR[1]) which contains primary business data for all businesses in Denmark. Governmental and municipal institutions and departments as well as professional & private unions and public clubs are also included in the CVR.

Small, privately-owned businesses with an annual turnover of less than 50,000 DKK are exempt from the register, but may submit their company data to the CVR voluntarily.

CVR Data

The CVR contains information on all businesses in Denmark including business sector classification, company contact address, credit information, fiscal reports, status and management reports. The CVR also contains information of persons who are connected with the company in question - for example owners, board members, major shareholders and founders.

The contents in the CVR is populated based on information and mandatory reports which the companies submit to the CVR.

---

[1]The Danish Central Business Register contains primary business data from all business in Denmark save small, privately-owned companies with a turnover of less than 50,000 DKK.

Publicly accessible

Previously, access to the CVR could be purchased on a single-use basis or by subscription but today business data from the CVR itself is public and freely accessible if electronic means are used to extract the data. Company data registered and made publicly accessible from other public governmental venues might also be accessed when looking up CVR data, depending on the type of business queried.

Data from the CVR may be utilized and distributed freely but any company data regarding protection from direct advertizing must be respected.

Target audience

The target audience for this guide is project managers and technicians responsible for the configuration of the CVR Integration.

Related product documentation

- [WorkZone Content Server Database Installation Guide](#)

Prerequisites

The following prerequisites must be in place before your organization can start to use WorkZone's CVR Integration module.

Required Contact type

The **J** (virksomheder (med CVR)/Companies (with CVR) and **V** (Produktionsenheder/Production units) Contact type must be created in the Contact type table. Otherwise, the CVR contacts will not be created in the contact register.

Contact types are created and maintained in WorkZone Configurator > **Contact** > **Contact type**.

Create the following contact types:

Name type	Auto id	Name length	Text	Code validation*
J	N	8	Virksomheder (med CVR)/Com- panies (with CVR)	CVR (Legal Units)
V	N	10	Produktionsenheder/Production units	CVR (Production Units

See [Code validation algorithms](#) for more code validation algorithms.

> **Note:**
>
> If you use other addressee types than **J** and **V**, a customer specific solution is required.

Activate the CVR Integration module

The WorkZone Content Server CVR Integration module is installed by default when WorkZone Content Server is installed but the module is not activated by default. You must manually activate the CVR Integration module after installation in order to use the module.

To activate the CVR Integration

In WorkZone Configurator > **Global** > **Feature settings**, activate WorkZone Content Server CVR.

Create a CVR online subscription

To access CVR-online, you must have a subscription with the Agency for Data Supply and Efficiency (Danish: Styrelsen for Dataforsyning og Effektivisering.)

The WorkZone Content ServerCVR Integration module is an online integration to the Data-fordeler WebService. The DataFordeler WebService is managed and made publicly available by the Agency for Data Supply and Efficiency and requires a subscription in order to access the data it contains,

Create a service user for the Datafordeler site

Once you have an registered your agreement, you can create a service user in order to a create a FOCES certificate which you need to access the Datafordeler WebService.

For more information ,see https://datafordeler.dk/ (external link)

> **Note:**
>
> CVR Integration is limited to handling legal units and production units only.

Create a FOCES certificate

After you have created a service user, you can create and download a valid FOCES certificate (Funktionscertifikat) from The Agency for Data Supply and Efficiency (Danish: Styrelsen for Dataforsyning og Effektivisering) on the the agency's website. (https://datafordeler.dk/ (external link)

> **Note:**
>
> The FOCES certificate is not permanent and must be renewed periodically.

Open access to the Datafordeler WebService

Once you have created and set up the necessary agreements and certificates, you must ensure your organization can access the Datafordeler WebService.

You must grant access to the URL https://s5-certservices.datafordeler.dk.

Install the FOCES certificate

Before you configure the CVR Integration, the CVR Integration prerequisites must be fulfilled. and you must know the name of and have access to the IIS server you want to install the FOCES certificate on.

Install the FOCES certificate

When you have received the FOCES certificate file (*.p12), you can either place the certificate file in a folder reserved for WorkZone related certificates on the IIS server or add the certificate file in a Windows Certificates Store, also on the IIS server.

The FOCES certificate file can be renamed if a more readable name is desired.

The FOCES certificate file must be placed on each IIS server WorkZone uses. If the FOCES certificate file is not correctly placed on the IIS server, CVR Integration cannot be used by any WorkZone clients that connect to the IIS server.

The WorkZone Certificates folder

Copy the FOCES certificate file (*.p12) to the **Certificates** folder on the IIS server.

The default location of the **Certificates** folder is **C:\ProgramFiles (x86)\KMD\WorkZone\Certificates**.

If the certificate is placed in the **Certificates** folder, you must use the `Certificatefilename` parameter when configuring the connection to CVR Online.

The Microsoft Certificate Store

You can also place the FOCES certificate file (*.p12) in a Microsoft Certificate Store on the IIS machine. The **MMC Console** can be used to add or move a certificate file to a Microsoft Certificate Store.

> **Prerequisite:**
>
> To run the **MMS Console**, you must have administrator privileges.

If the certificate is placed in a Microsoft Certificate Store, you must use the `Certificate` parameter when configuring the connection to CVR Online.

See Also

Prerequisites

Configure connection to CVR Online

Configure connection to CVR Online

> **Prerequisite:**
>
> You must have access to the **Operation** module in WorkZone Configuration Management.
>
> Your AD profile must contain the system access code DATAADM.

1. Open WorkZone Configuration Management.

2. Click **Operation** > **External Sources**.

3. In the **External Sources** module, select **CVR-J** in the **Name** column.

4. In the **Parameters** column, you enter the following string in the **CVR-J** row:

```
 Level:<0>, UserID:<UserID>,Password:<Password>, Cer-
tificate:<Certificate name>, Cer-
tificatefilename=<Certificate file name>,
Assembly-
=Sca-
njour.CVRDriver-
,Class-
=Sca-
njour.Im-
portManager.CVRDriver;Jtype=J;Ptype=V;ForceUpdate=J
```

5. Click in the cell and enter the following changes:

- Replace <0> with the value 1, 2, or 3 according to the Access level of information covered by the CVR agreement.

- Replace `<UserID>` with the username provided by CVR Online.

- Replace `<Password>` with the password provided by CVR.

- Use the `Certificate` parameter if the certificate is located in a Windows Certificate Store, specify the certificate file name in `<Certificate name>` and remove the entire `Certificatefilename` parameter.

- Use the `Certificatefilename` parameter if the certificate is located in the **C:\ProgramFiles (x86)\KMD\WorkZone\Certificates** folder, specify the certificate file

name in `<Certificate file name>` and remove the entire `Certificate` parameter.

6. Click in another cell and then click **Database** > **Save** to save the changes. The connection between WorkZone Content Server and CVR Online is now defined.

Test the CVR Integration

After the CVR Integration module has been set up and the FOCES certification file copied to the IIS Server, you can test if the CVR integration works as expected.

To test the

1. Open WorkZone Client and create a new contact of the type Companies (with CVR) to open the **New Companies (with CVR)** detail page
2. In the **ID** field on the **New Companies (with CVR)** detail page, click the circle to open the **Import Company** form.
3. In the **Import Company** form> **ID** field, enter 1003387453 and click **Search**.
4. If the CVR Integration module has been set up correctly, the **Import Companies** form will be populated with the KMD A/S - Ballerup company.

Mapping CVR information

The table below shows the alignment of data transferred from Datafordeleren and WorkZone Content Server.

The table below is an overview of the field to field mapping.

> **Note:**
>
> - The record received from Datafordeler either contains GeneralAddress or CPRValidAddress. WorkZone Content Server uses whichever information is

available.

- A primary as well as a secondary activity class may be available in the record. Activity classes are inserted into the **info** field. They are inserted with `mode=replace,` which means that if the **info** field already contains activity classes, they are deleted and replaced with the new information.

Information from Datafordeler	Field in WorkZone Content Server
CVR no.	Register=`Contact` name_type J **name_code**=`<CVR no.>`
P. Unit no.	Register=`Contact` name_type V **name_code**=`<P.Unitno.>`
LegalUnitNameInfo/LegalUnitName	**name1**=`<LegalUnitName>`
GeneralAddress The following information is used: - Roadname - HouseNumberFrom - PostalCode	Group name=address, restrictor=HA restrictorField=address_type Address1=`<RoadName HouseNumberFrom>` **Postcode**=`<PostalCode>`
CPRValidAddress The following information is used: - Roadname - HouseNumberFrom - PostalCode	Group name=address restrictor=HA restrictorField=address_type Address1=`<RoadName HouseNumberFrom>` **Postcode**=`<PostalCode>`
Telephone/TelephoneNumber	Group name=address restrictor=HA restrictorField=address_type

Information from Datafordeler	Field in WorkZone Content Server
	phone_no=`<TelephoneNumber>`
Fax/FaxNumber	Group name=address
	restrictor=HA
	restrictorField=address_type
	fax=`<FaxNumber>`
Email/EmailAddress	Group name=address
	restrictor=HA
	restrictorField=address_type
	email=`<EmailAddress>`
MainActivity/ActivityClass Sec-ondaryActivity/ActivityClass	MultiValuedGroup name=info
	restrictor=Branche
	restrictorField=custom_label mode=replace
	info=`<ActivityClass>`

About CVR Update

> **Important:** Using the CVR Update module requires a separate license.

The CVR Update module is a WorkZone application module that manages the import and update of CVR and Production unit contact data from the Danish Central Business Register into the WorkZone database, much like the CPR Batch module does for CPR data. Only Companies (with CVR) and Production unit contacts (NAME_TYPE J and V) are automatically updated , all other contact types are not updated by the CVR Update module.

Unlike the CPR Batch module, all Companies (with CVR) and Production unit contacts in WorkZone are updated by the CVR Update and users cannot exempt specific contacts from automatic updates.

When enabled and configured correctly, the contact name, main address and industry code of all CVR contacts will be automatically updated.

Install, configure and enable

The CVR Update module must be installed, configured and enabled before use. The feature is disabled by default after the initial installation of WorkZone. Once the CVR update module has been enabled, all Companies (with CVR) and Production unit contacts are updated with the newest data from the Danish Central Business Register.

The CVR Update module will automatically check for and apply new updates every hour.

CVR Datafordeler and KMD Logic

CVR data is imported from the Danish Central Business Register's CVR Datafordeler, but the CVR Update module does not connect directly to the CVR Datafordeler. Instead, the CVR Update module utilizes the KMD Logic platform to connect to the CVR Datafordeler as well as to manage the connection and filter the CVR data imports.

The KMD Logic platform increases update performance by selecting which data from the CVR Datafordeler is applicable to the WorkZone CVR contacts, which reduces the amount of irrelevant data the WorkZone system must process before importing.

The use of KMD Logic platform and CVR Datafordeler are currently free of charge but in both cases, an account must be created and the subscription or connection must be configured correctly to import CVR data into WorkZone.

WorkZone Service_Queue

The CVR Update module uses the Service_Queue table in the WorkZone database to queue the CVR updates to the WorkZone database and can be monitored there.

Set up and configure the CVR Update module

Before the CVR Update module can be used, the following installation and configuration steps must be completed:

1. Configure and enable CVR Integration (CVR Datafordeler and WorkZone Configurator)
2. Configure the CVR Datafordeler (CVR Datafordeler)
3. Configure the KMD Logic platform (KMD Logic platform)
4. Configure the CVR Update OAuth2 credentials (WorkZone Configurator)
5. Install the CVR Update Module (WorkZone Agent server and WorkZone Web server)
6. Configure the CVR Update module services WorkZone Agent server and WorkZone Web server)
7. Enable the CVR Update module (WorkZone Configurator

Configure and enable CVR Integration

The CVR Update feature is an extension of the CVR Online application module and the CVR Integration module must be configured, activated and fully functional in order to perform automatic updates to Companies (with CVR) and Production unit contacts.

See the prerequisites for CVR Online Prerequisites

Configure the CVR Datafordeler

As CVR and Production unit contact data is imported from the Danish Central Business Register's CVR Datafordeler, you must configure the Datafordeler service user correctly to subscribe to CVR-based events. You can create a new service user for the KMD Logic platform and then configure the service user to subscribe to CVR-based events.

> **Prerequisite:** You must have a CVR Datafordeler account to create and configure a service user.

Create a Datafordeler service user for the KMD Logic platform

Log in to your CVR Datafordeler account with your Datafordeler username and password. As the CVR Update requires the use of CVR Integration, you can reuse your organization's Datafordeler account. If you do not have a Datafordeler account, you must create a new Datafordeler account.

In the CVR Datafordeler, create a service user for KMD Logic platform. The service user must use the FOCES certificate as authentication and you must upload your FOCES certificate when creating the service user.

You can re-use the FOCES certificate used for CVR integration or you can request a new FOCES certificate that is to be used for CVR updates only, keeping it separate from the FOCES certificate used for CVR Integration.

If you request a new FOCES certificate for CVR Update use only, you must wait until you have received the physical certificate as the certificate file must be uploaded to the CVR Datafordeler.

If you use multiple FOCES certificates, make sure to use the correct FOCES certificate for the appropriate service user and to store the certifiactes in a safe location.

Create events and subscriptions for the KMD Logic platform user

Once you have created a Datafordeler service user, you must create a new event with the following values:

Field name	Value
Visningsnavn	Enter a name for the event.
Aktiv	Enabled
Registermyndighed	CVR
Abonnementtype	Datahændelser
Beskedtype	Select which notification type the service user is to subscribe to. Each Beskedtype can only be selected separately. As a minimum, the following must be selected • ProduktionsenhedCreate • VirksomhedCreate • AdresseringCreate • BrancheCreate • NavnCreate It is strongly recommended you subscribe to all Beskedtypes to ensure the CVR Update module receives all potential updates.
Leveringsformat	JSON
Leveringstype	Pull

Configure the KMD Logic platform

The KMD Logic platform is developed, managed and distributed byKMD A/S and used by the CVR Update module as an endpoint to manage and administer imports from the CVR Datafordeler web service. Using the KMD Logic platform increases update performance by selecting which data from the CVR Datafordeler webservice is applicable to the WorkZone CVR contacts, which reduces the amount of irrelevant data the system must process before importing into WorkZone.

After you have configured the CVR Datafordeler and obtained the FOCES certificate. you can configure the KMD Logic platform subscription. The KMD Logic platform must be configured correctly to import CVR data into WorkZone.

To configure the KMD Logic platform, you must:

- Create a KMD Logic subscription
- Configure the connection to CVR Datafordeler

Once you have set up your KMD Logic account, you must record or copy 5 important identifiers that are to be used when configuring the CVR Update module in WorkZone.

Create a KMD Logic subscription

The KMD Logic platform portal is located at https://console.kmdlogic.io and contains three log-in options: As KMD employees, Danish municipality or Logic Users.

Sign in to the KMD Logic platform portal as a Logic User. If you do not have a KMD Logic account , you must create one.

Record or copy the KMD Logic subscription identifier

In the KMD Logic portal, create a KMD Logic subscription and record or copy your subscription identifier (GUID).

Record or copy KMD Logic Client ID and KMD Logic Client Secret

When your subscription is saved, record or copy the Client ID (GUID) and Client Secret (GUID) subscription credentials. These unique identifiers are generated when the subscription is saved.

The credentials and scope are used to authenticate the CVR Update module when connecting to the KMD Logic service and are required when configuring the CVR Update module in WorkZone.

Configure the connection to CVR Datafordeler

Once the subscription has been created, configure the connection from the KMD Logic platform to the CVR Datafordeler by adding a product in the resource overview of your KMD Logic subscription.

When you add a product, you can define any name to your product, but you must select **Data Fordeler** as the provider and upload the FOCES certificate you received from the CVR Data Fordeler as well as provide the correct certificate password.

When you have saved your KMD Logic product, a unique product identifier is generated and displayed in your subscription overview.

Record or copy the product identifier

Record or copy the product identifier (GUID)

The product identifier is to identify which KMD Logic product the CVR Update module is to use to retrieve contact date and is also required when configuring the CVR Update module in WorkZone.

Identifiers from your KMD Logic account

Once you have set up your KMD Logic account and product, the following 4 identifiers must be recorded or copied. The identifiers are used when configuring the CVR Update module in WorkZone.

- KMD Logic Client ID: GUID formatted.
- KMD Logic Client Secret: GUID formatted.
- KMD Logic Subscription ID: GUID formatted.
- KMD Logic Product ID: GUID formatted.

Configure the CVR Update OAuth2 credentials

After you have configured the KMD Logic platform, and you have the 5 identifiers from your KMD Logic service user, you must generate the CVR Update module's OAuth2 credentials in WorkZone. You need record or copy two OAuth2 credentials to complete the number of required identifiers for CVR Update configuration.

- The Client ID of the CVR Update module
- The Client secret of the CVR Update module

Generate CVR Update OAuth2 credentials

1. In WorkZone Configurator > **Global** > **OAuth2 settings**, click ⊕ **Add** to open the **Create OAuth2 settings** form.

2. In the **Create OAuth2 settings** form:

    1. In the **Client ID** field, enter a valid Client ID. Do not use spaces in the client ID. You must to copy or record the client ID as it will be used to configure the CVR Update services.

    2. In the **Client name** field, enter a name for the client. This name will displayed in the OAuth2 settings list and can be more descriptive if required.

    3. Select the **Enabled** check box to enable the OAuth2 setting.

    4. Clear the **Allow Access token Via Browser** check box

    5. Clear the **Allow offline access** check box

    6. Clear the **Require proof key for code exchange** check box

    7. In the **Grant type** field, select **CLNTCRED, Client credentials** from the drop-down list in the field.

    8. In the **Client secret** field, enter a valid client secret. You can click **generate** to randomly generate a client secret or you can enter your own client secret.
    You must to copy or record the client secret now as it will be used to configure the CVR Update services and once the OAuth2 setting is saved, the value in the Client secret field will no longer be displayed. You cannot select the client secret to copy it to the clipboard and must manually type or write the secret down for later use.

    9. In the **User** field, select **Captia CVR batch afvikler, CVRBATCHUSER** from the drop-down list in the field.

3. Click **Save** to save the settings and close the form.

CVR Update identifiers - total

You should now have the 6 identifiers required to configure the CVR Update module:

From your KMD Logic account

- KMD Logic Client ID: GUID formatted.
- KMD Logic Client Secret: GUID formatted.

- KMD Logic Subscription ID: GUID formatted.
- KMD Logic Product ID: GUID formatted.

From the CVR Update module OAuth2 settings

- CVR Update Client ID
- CVR Update Client Secret

Install the CVR Update Module

After you have configured the KMD Logic platform, and you have the Client ID and Client Secret to the cloud service, you can install and configure the CVR Update module in WorkZone.

Install the CVR Update module

The CVR Update module must be manually installed after WorkZone has been installed. While the CVR Update module installation program is included in your WorkZone installation it is not automatically installed when WorkZone is installed.

The CVR Module contains two components: The CVR Update Service and the CVR Subscription Service. Each service must be installed on separate WorkZone servers.

> **Important:** In case of manual reinstallation of the CVR Update module, you will need to reconfigure the services (step 4 in the Deploy and configure the CVR Update service and step 4 in the Deploy and configure the CVR Update Subscription service).

The CVR Update service

The CVR Update service employs OData to schedule and perform the actual updates to WorkZone data. The CVR Update service is an Agent.COM-based Windows service and is installed on the WorkZone Agent server.

> **Note:** The CVR Update service can only be installed on one instance to ensure data consistency during import synchronization.

Install the CVR Update service

To install the CVR Update service, on the WorkZone Agent server machine, run the **Kmd.WorkZone.CvrUpdate.Setup.Msi** file, located in the **CVR Update** folder in the installation folder of WorkZone. The default location is C:\Program Files(x86)\KMD\WorkZone\Program.

In the **KMD CVR Update Setup** form > **Custom set up** page, select **Update service** and click **Next** to start the installation.

> **Important:** The CVR Update service will be installed on the machine but the service is not configured, deployed or started. You must deploy and configure the CVR Update service before the service can be started on the machine.

The CVR Subscription service

The CVR Subscription service is an ASP.NET web-service and manages the connection between KMD Logic events and WorkZone and also helps to ensure that only data for to the existing CVR and Production unit contacts in WorkZone is imported from the CVR Datafordeler. The CVR Subscription Service is installed on the WorkZone web server.

Install the CVR Subscription service

To install the CVR Subscription service, on the WorkZone Web server machine, run the **Kmd.WorkZone.CvrUpdate.Setup.Msi** file, located in the **CVR Update** folder in the installation folder of WorkZone. The default location is C:\Program Files(x86)\KMD\WorkZone\Program.

In the **KMD CVR Update Setup** form > **Custom set up** page, select **Subscription service** and click **Next** to start the installation.

Configure the CVR Update module services

When the two CVR Update services have been installed correctly, you must deploy and configure both services separately to access the KMD Logic platform. Both services will be started automatically during the configuration process. After you have configured the services, you can test the connection to make sure you have configured the services correctly.

> **Prerequisite:** The CVR Update services must be able to reach the following KMD Logic endpoints:
>
> - `https://identity-api.kmdlogic.io`
> - `https://gateway.kmdlogic.io`

To configure the services, you will need the 4 identifiers you recorded during configuration of your KMD Logic subscription and product:

- KMD Logic Client ID: GUID formatted.
- KMD Logic Client Secret: GUID formatted.
- KMD Logic Subscription ID: GUID formatted.
- KMD Logic Product ID: GUID formatted.

From this step: Configure the KMD Logic platform

You will also need the CVR Update Client ID and CVR Update Client Secret from the OAuth2 setting that was created in WorkZone Configurator

- CVR Update Client ID
- CVR Update Client Secret

From this step: Configure the CVR Update OAuth2 credentials

Both CVR update services need to be configured identically and since each service is located on a separate machine (the WorkZone Agent server and the WorkZone web server), you will be switching machines during configuration.

The services are deployed and configured using Windows Powershell commands on the respective servers.

Deploy and configure the CVR Update service

To configure the CVR Update service, you must first import the **CvrUpdate.psm1** powershell module into a Windows Powershell window and then enter the configuration commands.

Import the CvrUpdate.psm1 module (WorkZone Agent server)

The **CvrUpdate.psm1** powershell module is located in the **CVR Update** folder in the installation folder of WorkZone Agent server.

The default location is C:\Program Files(x86)\KMD\WorkZone\Program but the folder may be different if you have selected another folder to install WorkZone to.

> **Prerequisite:** You must log on to the WorkZone Agent server with administrator privileges.

> **Note:** Each command is separated by a single space. Do not include the chevrons (angle bracket) < > in the script and use single quotation marks ('). Do not use double-qoutation marks (")

1. On the WorkZone Agent server machine, open a Windows Powershell window with Administrator privileges and navigate to the folder that contains the **CvrUpdate.psm1** module.

2. In the powershell command line, enter `Import-Module .\CvrUpdate.psm1` and press return to load the module.

3. In the powershell command line, enter `Add-CvrUpdateService -Dsn <Database>` where <Database> is the name of your WorkZone database. Press enter to deploy CVR Update service to the WorkZone Agent server. The CvrUpdateservice is displayed in the Microsoft Services window but is not started as it hasn't been configured yet.

4. In the powershell command line, enter `Update-CvrUp-dateServiceConfiguration -OAuth2ServerUrl 'http://`**`<WZ Main page>`**`/oauth2' -OAuth2ClientId '`**`<CVR Update Client ID>`**`' -OAuth2ClientSecret '`**`<CVR Update`**

```
Client Secret>' -ODataServerUrl 'http://<WZ Main
page>/odata' -LogicClientId '<KMD Logic Client ID>' -
LogicClientSecret '<KMD Logic Client Secret>' -
LogicCvrSubscriptionId '<KMD Logic Subscription ID>' -
LogicCvrConfigurationId '<KMD Logic Product ID>',
```
where the placeholder values are as follows:

- **<WZ Main Page>:** The name of your WorkZone main page (landing page), for example http://MyOrg.WZLandingPage.Local/odata or http://MyOrg.WZLandingPage.Local/oauth2

- **<CVR Update Client ID>** The CVR Update Client ID from the OAuth2 setting created in WorkZone Configurator

- **<CVR Update Client Secret>** The CVR Update Secret ID from the OAuth2 setting created in WorkZone Configurator

- **<KMD Logic Client ID>** The KMD Logic Client ID, created in the KMD Logic platform

- **<KMD Logic Client Secret>** The KMD Logic Client Secret, created in the KMD Logic platform

- **<KMD Logic Subscription ID>** The KMD Logic Subscription ID, created in the KMD Logic platform

- **<KMD Logic Product ID>** The KMD Logic Product ID, created in the KMD Logic platform

5. Press enter to execute the script. When the powershell script has been executed successfully, the **CvrUpdateService** service will be configured and started automatically on the WorkZone Agent server.

Deploy and configure the CVR Update Subscription service

To configure the CVR Update Subscription service, you must first import the **CvrUpdate.psm1** powershell module into a Windows Powershell window and then enter the configuration commands.

Import the CvrUpdate.psm1 module (WorkZone web server)

The **CvrUpdate.psm1** powershell module is located in the **CVR Update** folder in the installation folder of the WorkZone Web server.

The default location is C:\Program Files(x86)\KMD\WorkZone\Program but the folder may be different if you have selected another folder to install WorkZone to.

> **Prerequisite:**
>
> - You must log on to the WorkZone Web server with administrator privileges.
> - The CVR Update Subscription web app service requires the ASP.NET Core 5.0 Hosting Bundle is installed on the web server. The bundle can be downloaded from Microsoft. See the **See Also** section below for the link.

> **Note:** Each command is separated by a single space. Do not include the chevrons (angle bracket) < > in the script and use single quotation marks ('). Do not use double-qoutation marks (")

1. On the WorkZone web server machine, open a Windows Powershell window with Administrator privileges and navigate to the folder that contains the **CvrUpdate.psm1** module.

2. In the powershell command line, enter `Import-Module .\CvrUpdate.psm1` and press return to load the module.

3. In the powershell command line, enter `Install-CvrSubscriptionService.` Press enter to install the CvrSubscriptionService to the WorkZone Web server. The CvrSubscriptionService is displayed in the Microsoft Application Pools window but is not started as it hasn't been configured yet.

4. In the powershell command line, enter `Update-CvrSubscriptionServiceConfiguration -OAuth2ServerUrl 'http://`**`<WZ Main page>`**`/oauth2' -OAuth2ClientId '`**`<CVR Update Client ID>`**`' -OAuth2ClientSecret '`**`<CVR Update Client Secret>`**`' -ODataServerUrl 'http://`**`<WZ Main`**

`page>`/odata' -LogicClientId '**<KMD Logic Client ID>**' –
LogicClientSecret '**<KMD Logic Client Secret>**' –
LogicCvrSubscriptionId '**<KMD Logic Subscription ID>**' –
LogicCvrConfigurationId '**<KMD Logic Product ID>**', where
the placeholder values are as follows:

- **<WZ Main Page>:** The name of your WorkZone main page (landing page), for example http://MyOrg.WZLandingPage.Local/odata or http://MyOrg.WZLandingPage.Local/oauth2

- **<CVR Update Client ID>** The CVR Update Client ID from the OAuth2 setting created in WorkZone Configurator

- **<CVR Update Client Secret>** The CVR Update Secret ID from the OAuth2 setting created in WorkZone Configurator

- **<KMD Logic Client ID>** The KMD Logic Client ID, created in the KMD Logic platform

- **<KMD Logic Client Secret>** The KMD Logic Client Secret, created in the KMD Logic platform

- **<KMD Logic Subscription ID>** The KMD Logic Subscription ID, created in the KMD Logic platform

- **<KMD Logic Product ID>** The KMD Logic Product ID, created in the KMD Logic platform

5. Press enter to execute the script. When the powershell script has been executed successfully, the **CvrSubscriptionService** web app will be configured and started automatically on the WorkZone Web server.

You can test the CVR Update connections to verify if the configuration of the services was successful.

See Also

Test the CVR Update connections

The JSON appsetting files

[Download the ASP.NET Core 5.0 Hosting Bundle](link) (External link)

Enable the CVR Update module

When the CVR Module has been installed in WorkZone and configured to connect to the KMD Logic platform, you can enable the module for all WorkZone users.

The CVR Update module is disabled by default after the initial installation of WorkZone and must be enabled before use in WorkZone Configurator > **Global** > **Feature Settings** > **Content Server** > **CVR** > **CVR Update**.

When the CVR Update module is enabled, all existing CVR and Production unit contacts in WorkZone will subscribe to updates from the Danish Central Business Register and will be updated accordingly. If your organization has many CVR and production unit contacts, the update may take some time to complete and may have a noticeable impact on network performance.

All new CVR and Production unit contacts created after the CVR Update module has been enabled will automatically subscribe to updates from the Danish Central Business Register.

Disabling the CVR Update module

If the CVR Update module is disabled, existing CVR and Production unit contact data will remain as it was when the module was disabled and all subscriptions for future updates from the Danish Central Business Register will be canceled.

> **Note:** The CVR Integration module and the CVR Update module can be enabled separately.

Test the CVR Update connections

After you have installed, configured and enabled the CVR Update module, you can test the connection to verify if the configuration works as expected.

Test the CVR Update Subscription Service - service accessibility

In an internet browser, enter the following address `http://<WZ Main Page>/CvrSub-scriptionService/liveness` where **<WZ Main Page>** is the name of your WorkZone

main page (landing page), for example http://MyOrg.WZLandingPage//CvrSubscriptionService/liveness

Result

The web page will display the result **Healthy** if the subscription service has been configured correctly and is currently accessible.

The web page will display **HTTP != 200** if the subscription service has not been configured correctly or is currently inaccessible.

Test the CVR Update Subscription Service - connection status

In an internet browser, enter the following address `http://<WZ Main Page>/CvrSubscriptionService/readiness` where **<WZ Main Page>** is the name of your WorkZone main page (landing page), for example http://MyOrg.WZLandingPage//CvrSubscriptionService/readiness

Result

The web page will display a summary of a sample connection to the KMD Logic platform which may take a few seconds to render, depending on your organization's internet connections and network status.

The summary is split into a connection status for the entire connection, the OData and the KMD Logic part of the conneciton as well as the total duration of the entire connection, the Odata processing part of the connection time and the KMD Logic part of the connection time.

> **Example**: Healthy connection
>
> {"status":"Healthy","totalDuration":"00:00:24.4954484","entries":{"self":{"data":{},"duration":"00:00:00.0000435","status":"Healthy","tags":["liveness","readiness"]},"OData":{"data":{},"duration":"00:00:24.4947925","status":"Healthy","tags":["readiness"]},"Logic":{"data":{},"duration":"00:00:02.2812385","status":"Healthy","tags":["readiness"]}}}

If the connection is faulty or incorrectly configured, the result will report **Unhealthy** and contain error codes or descriptions, for example *BadRequest* or *Unable to access*.

Example: Faulty connection

{"status": "Unhealthy","totalDuration": "00:00:05.3817914","entries": {"self": {"data": {},"duration": 0:00:00.0005463","status": "Healthy","tags": ["liveness","readiness"]},"OData": {"data": {},"description": "Failed to get the access token from http://<WZ Main Page>/oauth2/connect/token. Status code: BadRequest","duration":0:00:05.3506721","exception": "Failed to get the access token from http://<WZ Main Page>/oauth2/connect/token. Status code:BadRequest","status": "Unhealthy","tags": ["readiness"]},"Logic": {"data": {},"description": "Unable to access the token issuer, request returned BadRequest. Reason: unauthorized_client.","duration": "00:00:00.5253802", "exception": "Unable to access the token issuer, request returned BadRequest. Reason: unauthorized_client.","status": "Unhealthy","tags": ["readiness"]}}}

The JSON appsetting files

All configuration settings for the CVR Update module are saved into two JSON files, one for each service. You can open the JSON files in a text editor and view and/or edit the configuration settings.

The appsetting files are located in the installation folder of WorkZone for each service.

Each .JSON appsetting file must be opened and edited configured separately but the CVR Update settings should be identical. The JSON files themselves are not identical and cannot be interchanged.

The CVR Update service

On the WorkZone Agent server, by default in C:\Program Files (x86)\KMD\WorkZone\Program\CVR Update\SubscriptionService\appsettings.json

The folder may be different if you have selected another folder to install WorkZone to.

> **Important:** Restart the Windows service **Scanjour Service COM CVRUPD DB01** after making changes to the appsetting JSON file for the CVR Update service.

The CVR Subscription service

On the WorkZone Web server, by default in C:\Program Files (x86)\KMD\WorkZone\Program\CVR Update\UpdateService\appsettings.json

The folder may be different if you have selected another folder to install WorkZone to.

> **Important:** Recycle the **CvrSubscriptionService** IIS app pool after making changes to the appsetting JSON file for the CVR Subscription service.

CVR Update databases

The CVR Update module uses three tables in the database to manage and register updates:

CVRUPDATE_IMPORT

The CVRUPDATE_IMPORT table contains the relation between the WorkZone contact via the NAME_KEY field and the KMD Logic subscription via the LOGIC_ID field as well as providing information about any import failures when importing updates to specific contacts.

CVRUPDATE_SUBSCRIPTION

The CVRUPDATE_SUBSCRIPTION table contains information about which KMD Logic events have been subscribed to. These subscriptions can be unsubscribed afterward.

CVRUPDATE_SETTING

The CVRUPDATE_SETTING table contains information about when the subscription service has last synchronized with the events and also detects the consolidated service queue tasks by using the AGENT_ACTIVE_TASKS_TOKEN field to mark old update

tasks in the service queue as obsolete. Obsolete CVR update tasks in the service queue are skipped and removed from the service queue.

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Glossary

C

CPR

CPR is the Danish abbreviation for "Det Centrale Personregister" which contains the personal identification numbers of Danish citizens stored in CRS.

CPR-Office

The Danish Ministry of Interior Affairs and Health's Central Office of Civil Registration (the CPR-kontoret/CPR-Office) is in charge of the Danish Civil Registration System (CRS) and functions as the main supplier of basic personal information to public authorities and the private sector.

CPR number

The Danish personal identification number.

CRS

The Danish Civil Registration System (CRS), in Danish called CPR, is a nationwide civil register whose purpose is to administrate the personal identification number system and to administrate general personal data reported from the national registration offices to the CPR.

CVR

The Danish Central Business Register contains primary business data from all business in Denmark save small, privately-owned companies with a turnover of less than 50,000 DKK.

R

Registers Act

In Danish "persondataloven". The act that governs legislation concerning Civil Registration.

S

Subscription

From WorkZone Content Server it is possible to make a "subscription" to a person. This means that the user is informed when the data of a person changes. For example, when the person's name is changed, the person is changing residence or dies.