Edora

WFP Connect integration guide

Information about integrating to WFP Connect

Content

Use case

To be able to use WFP Connect, you need an integration to Edoras WFP Connect service. Then you will be able to ship .pdf-documents from your system to Edoras WFP Connect solution, and Edoras print center will print the documents and ship them physically to the address printed on the document.
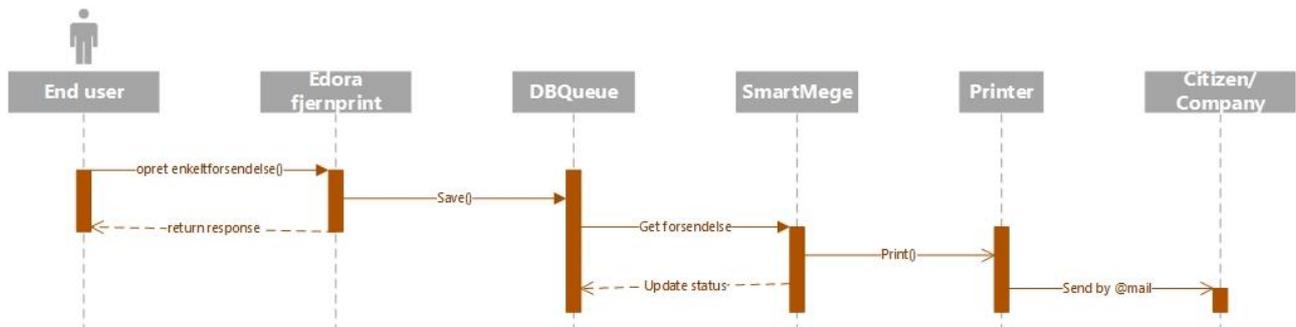
Overview

Opret enkeltforsendelse (Create single shipment)

Edora can receive data from the end user system directly or through an intermediary party.

From the end user to Edora using an intermediary party:
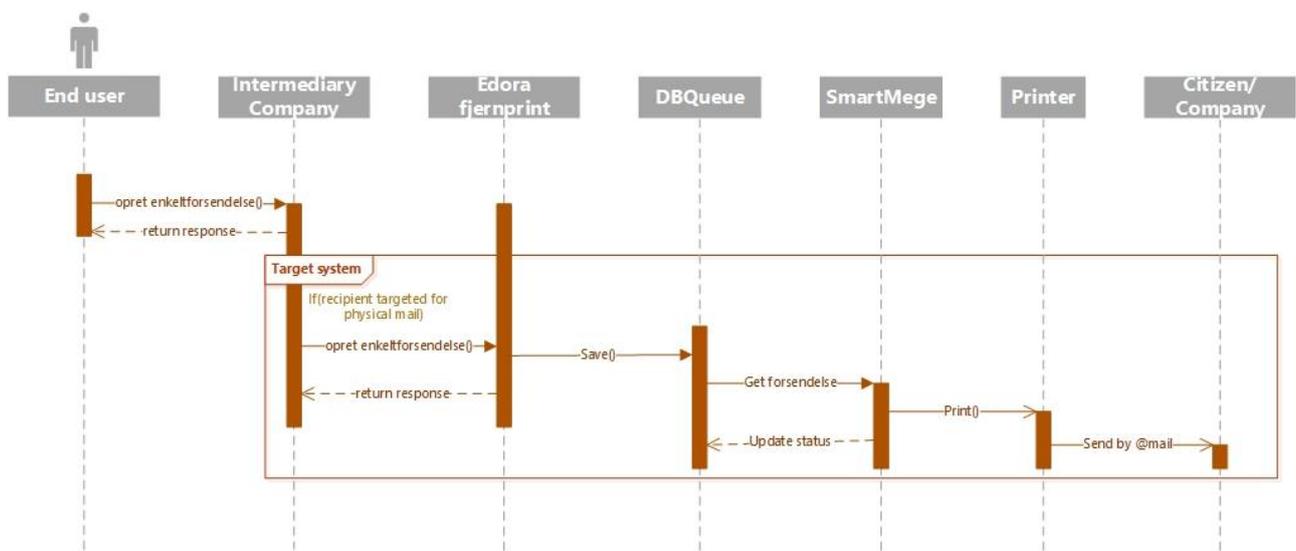
From the end user to Edora directly:

In both cases, the end user sends documents either to an Intermediary company or to Edora directly.

When Edora receives the documents, they will store it in the DBQueue. Once the documents are stored in the DBQueue, the system that sends the data to Edoras print center can consider the documents as delivered. If anything goes wrong before the documents are saved, it will return in an error message within the response that the calling system is receiving from Edora.

Edora uses a system called SmartMerge. This system is monitoring the DBQueue. When new documents arrive, it will automatically be processed. SmartMerge will print the documents at Edora's print center. Once printed, the documents will be enveloped and Edora will send the documents by physical mail.

Once the documents are saved successfully to DBQueue, Edora is monitoring the shipments. If any error happens before the documents are send physically, an Edora print sender employee will contact a user at the end user systems end, manually.

Tasks prior to integrating

Setting up a new customer

To be able to use the WFP Connect solution, you need to be aware of some key concepts.

The end user system can choose to send the information directly to Edora, or send the information to an intermediary organization, whom will send the data to Edora. This affects the FOCES certificate and the Afsendersystem bullet points listed below.

- FOCES certificate – A certificate that uniquely identifies the sender. This identifies the system that sends the information to Edora. This can be the end users organization, or it can be the intermediary organization. Edora need the public part of the certificate.
- Afsendersystem (sender system) – Defines the end customer. The end user system is not necessarily the system that sends the information to Edora. As already described, the end user system can send the information to an intermediary organization. The Afsendersystem defines the end customer.
- Forsendelsestype (Shipping type) – Defines the kind of information that can be received.

How to get the information needed?

If the end user system and the sending organization is the same, this is how to get the information needed:

- FOCES certificate – The end user systems organization need a certificate. They will need to send the public part of the certificate to Edora. The certificate is used to authenticate the end user system each time they call the service.
- Afsendersystem – Edora provides this upon request.
- Forsendelsestype - Edora provides this upon request.

If the end user systems organization is sending the data to an intermediary organization, and the intermediary organization sends the data to Edora:

- FOCES certificate – The intermediary organization need a certificate. They will need to send the public part of the certificate to Edora. The certificate is used to authenticate the intermediary organization each time they call the service.
- Afsendersystem – Edora provides this upon request. This defines the end user system.
- Forsendelsestype - Edora provides this upon request.

In this case, the intermediary organization probably needs the Afsendersystem and the Forsendelsestype to be able to send the data to Edora on behalf of the end user system. The end user system needs an integration to the intermediary organization to be able to send the data to them, before they send it to Edora.

Security

Security is enforced by always authenticating with a certificate. The certificate belongs to the system that sends data to Edora. The certificate is the only way we can identify a caller.

Furthermore, the Afsendersystem needs to be correct to be able to identify the end user system, and Forsendelsestype needs to be correct to be able to identify which kind of data the end user system will be able to send to Edora.

RemotePrint services

Edora is providing a REST API.

All services must be called with a certificate. Please see the sections "Setting up a new customer" and "Security".

The following services are available:

- Opret enkeltforsendelse (Create single shipment)

Versioning

The service method calls are versioned according to the OIO Rest specification.

Opret enkeltforsendelse service call (Create single shipment service call)

The URL for calling the Opret enkeltforsendelse service in Edoras test environment is:

https://preprod.workforce-planner.dk/Planner.External.Api/fjernprint/1.0.0/{afsendersystem}/enkeltforsendelse/{afsendelsesid}

The URL for the live environment is provided upon request.

You can test the service using swagger:

https://preprod.workforce-planner.dk/Planner.External.Api/swagger/ui/index#!/ExternalRemotePrint/ExternalRemotePrint_Put

The OIO Rest specification uses .xsd files extensively. You can use these xsd files to validate xml, or to create proxy objects in your code. The xsd files can be provided upon request.

These are the parameters needed:

- Afsendersystem - Please read the section "Setting up a new customer" to get familiar with the afsendersystem parameter.
- Afsendelsesid – This is a unique number identifying each unique shipment within each afsendersystem.
- Furthermore, you need to provide a payload in either XML or JSON. The payload must comply with the validation rules defined in ForsendelseIType.xsd. Be aware that this XSD references several other XSD's. The XSD's comply with the OIO Rest documentation "SF1600 – Print på Serviceplatformen". Only parts are implemented in Edoras service, which will be introduced in this document.

CVR/CPR

Data send to Edora will be about a specific person or organization, whom will receive the printed letter. To be able to link the communication to the person or organization, we need the CPR/CVR number. This way it is possible for the end users to see metadata about the communication with the person or organization. This is not a required field according to the OIO Rest specification, but Edora will **require** this field.

Objects

ForsendelseI

ForsendelseI is the name of the object populated from the payload (XML or JSON) received by Edora.

ForsendelseI is generated from xsd files according to the OIO Rest specification. Be aware that the ForsendelseI.xsd file is only one of many xsd files. All other xsd files are child xsd files to the ForsendelseI.xsd file. The xsd files can be delivered upon request.

It is necessary to comply with the rules of the .xsd files to be able to send data to Edora. Edora "can" do xsd validation, but will not necessarily do this. It is important that the data send to Edora be validated before it is send to Edora.

Edora further validates specific values to ensure that values needed to be able to print successfully, exist within the received data.

This is the fields within the ForsendelseI object, which corresponds to the fields in the XML:

forsendelseRequest	
AfsendelseIdentifikator	This is the unique identification number afsendelsesid, which must be completed in every call. It is created by the sending system. Must be a unique number in the sending system.
ForsendelseTypeIdentifikator	This is the ForsendelsesTypeID, which must be completed in every call. It corresponds to the content type and the different possible default values for various parameters. It must correspond to a valid version.
ForsendelseModtager.AfsendelseModtager.Item	Required from Edora. CPR- or CVR-number.
ForsendelseModtager.AfsendelseModtager.ItemElementName	Required from Edora. Indicates whether this is a CPR or a CVR number.
ForsendelseModtager.ModtagerAdresse.PersonName	The name of the person whom are to receive the printout.
ForsendelseModtager.ModtagerAdresse.Items[]	Address information.
ForsendelseModtager.ModtagerAdresse.ItemsElementName[]	Type of address information.
ForsendelseModtager.ModtagerAdresse.CountryIdentificationCode	Country code
ForsendelseModtager.ModtagerAdresse.CountryIdentificationCode.scheme	Country code scheme
filformatNavn	The file format. For physical mail, this must be TNO or PDF according to the OIO Rest documentation. Edora only support PDF for physical mail. For digital mail vaious other file formats are supported.
MeddelelseIndholdData	The actual base64binary encoded document.
forsendelseRequest.TransaktionsParametreI	
TransaktionsDatoTid	Cannot be used.

	TransaktionsParametre must be completed in the request according to OIO Rest, but the functionality is not used. Creation time in the sender system.
TransaktionsDatoTidSpecified	Cannot be used. TransaktionsParametre must be completed in the request according to OIO Rest, but the functionality is not used.
MasseForsendelseIdentifikator	Cannot be used. TransaktionsParametre must be completed in the request according to OIO Rest, but the functionality is not used.
KvitteringsTypeKode	Cannot be used. TransaktionsParametre must be completed in the request according to OIO Rest, but the functionality is not used.
KvitteringsTypeKodeSpecified	Cannot be used. TransaktionsParametre must be completed in the request according to OIO Rest, but the functionality is not used.
KvitteringsEmail	Cannot be used. TransaktionsParametre must be completed in the request according to OIO Rest, but the functionality is not used.
forsendelseRequest.DokumentParametre	
TitelTekst	Cannot be used. DokumentParametre must be completed in the request according to OIO Rest, but the functionality is not used.
UUIDIdentifikator	Cannot be used. DokumentParametre must be completed in the request according to OIO Rest, but the functionality is not used.
BrevDato	Cannot be used. DokumentParametre must be completed in the request according to OIO Rest, but the functionality is not used.
BrevDatoSpecified	Cannot be used. DokumentParametre must be completed in the request according to OIO Rest, but the functionality is not used.
MeddelelsesFormatObjekt	Cannot be used. DokumentParametre must be completed in the request according to OIO Rest, but the functionality is not used.
forsendelseRequest.KanalUafhaengigeParametreI	
EnhedTekst	Cannot be used.

	KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
BrugerNavn	Identification of the user that produced the shipment. The user must be set if PaatrykBrevDatoIndikator is "Ja". Edora uses this for the CreatedBy in the database, if it has a value.
KonteringsGruppeTekst	We use this for grouping the invoice by the value sent to us in this field.
PaatrykAfsenderAdresseIndikator	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
PaatrykAfsenderAdresseIndikatorSpecified	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
PaatrykModtagerAdresseIndikator	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
PaatrykModtagerAdresseIndikatorSpecified	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
PaatrykBrevdatoIndikator	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
PaatrykBrevdatoIndikatorSpecified	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
HasteBrevIndikator	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
HasteBrevIndikatorSpecified	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
ForsendelseAfsender.AfsenderAdresse.Items[]	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
ForsendelseAfsender.AfsenderAdresse.ItemsElementName[]	Cannot be used.

	KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
ForsendelseAfsender.AfsenderAdresse.PersonName	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
ForsendelseAfsender.AfsenderAdresse.CountryIdentificationCode	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
ForsendelseAfsender.AfsenderAdresse.CountryIdentificationCode.scheme	Cannot be used. KanalUafhaengigeParametreI must be completed in the request according to OIO Rest, but the functionality is not used.
KanalKode	Must be set to FysiskPost, if physical printing must happen.
forsendelseRequest.PrintParametre	
FarveSHKode	Indicates whether the document should be printed in Black/White or Color. Edora always uses color.
KuvertTypeKode	The envelope type. Edora can override this. Acceptable values are C5, C4 eller MA (MA is not applicable in this version).
SimplexDuplexKode	Simplex or Duplex printing.
forsendelseRequest.DigitalPostParametre	
AfsendelseDatoTid	Only applies to Digital Post.
AfsendelseDatoTidSpecified	Only applies to Digital Post.
MeddelelseIndholdstypeIdentifikator	Only applies to Digital Post.
MeddelelseSvarTypeNavn	Only applies to Digital Post.
MeddelelseSvarPostkasseIdentifikator	Only applies to Digital Post.
MeddelelseSvarEmneIdentifikator	Only applies to Digital Post.
MedsendDokumentRegistreringIndikator	Only applies to Digital Post.
MeddelelseFESDmetadata.FESDaktoerIdentifikator	Only applies to Digital Post.
MeddelelseFESDmetadata.FESDdokumentIdentifikator	Only applies to Digital Post.
MeddelelseFESDmetadata.FESDsagIdentifikator	Only applies to Digital Post.
MeddelelseFESDmetadata.FESDsagsklassifikationIdentifikator	Only applies to Digital Post.
forsendelseRequest. PostParametre	Cannot be used.
PostKategoriKode	Cannot be used.
PostKategoriKodeSpecified	Cannot be used.
AllokeringsIdentifikator	Cannot be used.
SideKvantitet	Cannot be used.
InformationVedAdresseAendringIndikator	Cannot be used.
InformationVedAdresseAendringIndikatorSpecified	Cannot be used.
PostParametre.ReturposthaandteringHosLeverandoerIndikator	Cannot be used.

ReturposthaandteringHosLeverandoerIndikatorSpe cified	Cannot be used.
bilag (forsendelseRequest.bilagSamling)	
BilagNavn	Name of the attachment
FilformatNavn	File format for VedHaeftningIndholdData or VedhaeftningIndholdURLreference. Edora only support PDF for physical mail. For digital mail various other file formats are supported. If BilagID is used the format will be disregarded when processing the shipment.
BilagSorteringsIndeksIdentifikator	SortIndex of the attachments. Lowest number is printed first (after the main document).
bilagIdentifikator	ID on the attachmentdocument
vedhæftningIndholdData	The actual base64encoded document.
VedhaeftningIndhold-URLreference	Cannot be used.
VedhaeftSomIndholdData-Indikator	Cannot be used.

Error handling

If an error happens during code execution, the calling party receives an error from which they can identify what went wrong. In case the error returned does not fully identify the problem, a unique identifier in the return message will be the key to Edoras support team, whom can investigate further.

An IHttpActionResult is returned with the Http error code and an error object further describing the error.

The error object is built this way:

```
<Fejl>
    <FejlKode>
        1000
    </FejlKode> <!-- Errorcode, defining the error type -->
    <FejlTekst> <!-- Text describing the error -->
        Internal Server Error
    </FejlTekst>
    <FejlIdentifikator> <!-- RemotePrintQueueId. Defines the request that was made. This field is optional,
    and in some cases it is not possible to identify the current request (in which case the error should be
    clear from the other fields) -->
        9FB33CE4-43EC-4483-B0E6-9D2FA204080B
    </FejlIdentifikator>
</Fejl>
```

On the client side, you must handle the errors accordingly.

You can receive the following error codes from the service:

Http return codes:

Code	Text	Additional information
2xx	Success	
200	Ok	This will not generate an error object.
4xx	Client errors	
400	Bad request	Invalid input parameters

401	Unauthorized	No access
404	Not found	Resource does not exist
5xx	Server error	
500	Internal Server Error	

Error codes:

Code	Text	HTTP code
ServerErrors		
1000	Internal server error	500
3001	Invalid system ID	400
3004	Invalid certificate	401
4000	Invalid query parameter	400
4005	Invalid forsendelse type	404
4007	Unknown end user	404
4010	Invalid sender ID	404
4012	Invalid content type	404
4052	Missing indholds data	400
4069	Invalid attachment filename	400