



CM Sign Implementation Guide

CM Identity Services
October 2018
V1.1



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1 General

CM Sign is a service to sign documents online. This implementation guide can be used as a guide for the step-by-step implementation of CM Sign in your organisation. Should you have any questions or need clarification, please contact CM on +31 (0)76 752 7000 or via support@cmdisp.com

1.1 Target group

This document is intended for CM customers interested in CM Sign and is a supplement to the available API documentation. CM Sign can be used via an API or via the CM Sign web app. This document describes usage of the Sign API service.

This document first explains the roles involved in the signing process. Then the service is explained in more detail, including visuals of the signing process. The final chapter is about the technical implementation.

1.2 The roles

The various roles represented in this service.

Role	Explanation
End user / Invitee	A person who is asked to sign a dossier.
Customer	An organisation that wants to sign documents online and has a contractual relationship with CM Identity Services.
Dossier owner	A person within a Customer organisation who creates the dossier.

1.3 General points of attention

CM Sign is only a signing service and does not store or retain dossiers and documents beyond the expiration date of the dossier. This is to simplify compliance with the General Data Protection Regulation (GDPR). Customers are thus required to download their dossiers after completion and to store them within their own company records.

If you plan on sending a large amount of documents, please verify your plans with your CM account manager, to make sure CM can offer you the best possible service.



2. Service description

CM Sign offers the ability to have end users sign PDF documents online.

The steps for using the service are roughly:

1. Consumer uploads a PDF document that needs to be signed
2. Consumer creates a dossier which references this document. A dossier includes information about the end users who need to sign the document, as well as the location within the PDF document where they need to place their signature and initials.
3. Create an invitation URL for each invitee to sign the document
4. The end user is directed to the invitation URL
5. The end user is presented a web interface where he can read and sign the document
6. The dossier owner is notified of the completion of the dossier
7. The dossier owner downloads the signed document

2.1 Dossiers

A dossier is a collection of information related to the signing process of a document.

Dossiers consist of:

- **Documents (files):** the PDF document to be signed
- **Invitees:** the persons who have to sign the dossier (see 2.2)
- **Owners** (optional): the contact person, who will be informed about status updates of the dossier. If set, the owner's name will be used in communication to the invitees, otherwise the organisation name is used instead.

A dossier automatically expires after 30 days by default, this can be customised when creating the dossier (with a maximum of 90 days).

2.2 Invitees

Invitees are persons asked by the customer to sign a specific dossier. An invitee has:

- **Fields:** locations within a PDF document for information to be added (see 2.3)
- **Name** (optional): the name that will be used in communication to address the invitee
- **Email** (optional): the email address that will be used to notify the invitee about this dossier and send the signed document
- **Reference** (optional): allows the invitee it to be linked to an ID known within your organisation



2.3 Fields

Fields are locations within a PDF document where information will be added. Fields belong to a specific file and invitee and have parameters to configure its position(s) in the document.

The following field types are supported:

- **Signature:** the invitee is asked for a signature
- **Signature date:** the date the invitee signed the document, automatically determined
- **Initials:** the invitee is asked for its initials. Initials can be specified for a page range and the invitee has to confirm its initials each page.
- **Text:** a text field that can be filled in by the invitee
- **Label:** a text field that contains a predefined text and cannot be modified

2.4 Invites

An invite is a unique URL for each invitee to view the dossier. CM Sign can email these invites to the invitees or you can distribute the URL yourself, for example by redirecting or sending customised emails yourself.

An invite can have a custom expiration time, specified during creation. Creating multiple invites for an invitee is possible and this might be required if an invite expires before the invitee signed the document.

2.5 Digital signature

When a dossier is completed, the fields are added to the PDF document, which is then digitally signed with a certificate. This certificate is trusted by Adobe Reader, as it is part of the Adobe Approved Trust List. The signature allows end users to verify the integrity of the document. This proves the document has not been altered, and by whom and when the document has been signed.

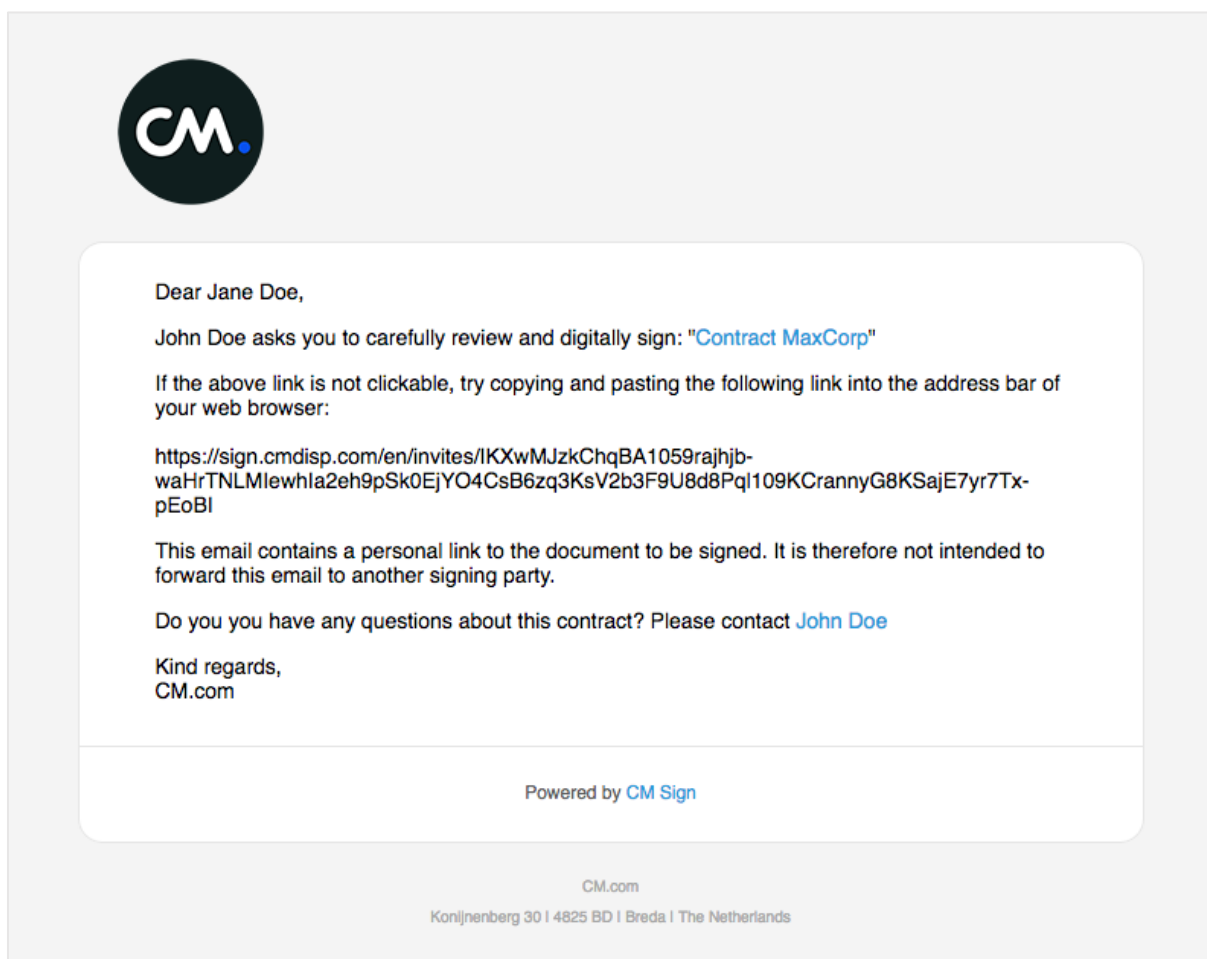


3 Signing a document

This section gives an overview of what an invitee will encounter when asked to sign a document.

3.1 Invite email

An invite email sent by CM Sign to an invitee, containing an invite URL.





3.2 View and sign document

The invitee opens the invite URL and is asked to agree to the terms of use before he starts reviewing the document.

Sign

Sign document

John Doe asks you to review "Contract MaxCorp" and sign it digitally.

I agree with the [terms of use](#) [Decline](#) [Start \(0/4\)](#)

Contract MaxCorp

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Phasellus laoreet libero et odio lobortis volutpat. Sed tempus purus sit amet neque feugiat, sit amet pharetra sem scelerisque. Pellentesque euismod, ex ut vehicula porta, mauris felis accumsan urna, ac placerat leo purus id tellus. Mauris id egestas ipsum. Cras fringilla cursus ipsum, eget lobortis lorem molestie et. Ut euismod interdum orci. Vivamus ex augue, eleifend in finibus quis, molestie ut sapien. Maecenas malesuada nisl mauris, non malesuada lacus vestibulum sed. Pellentesque volutpat elit vel magna accumsan, at varius massa molestie. Phasellus eu finibus magna. Fusce rhoncus lorem sit amet laoreet tincidunt. Suspendisse pulvinar ex et sapien rhoncus, at ornare nisi semper. Donec luctus odio justo, a imperdiet velit lobortis et. Pellentesque suscipit odio id aliquet consequat. Vestibulum mollis, metus id condimentum volutpat, justo velit egestas neque, a molestie sem ligula vitae quam. Aenean fermentum ex in erat lobortis efficitur.

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Highlighted areas indicate an action to be performed by the invitee. The Next button walks you through the actions and indicates your progress.

Sign

Next (3/4)

Contract MaxCorp

Page 2 of 3

Signed Client: JD

Signed MaxCorp:

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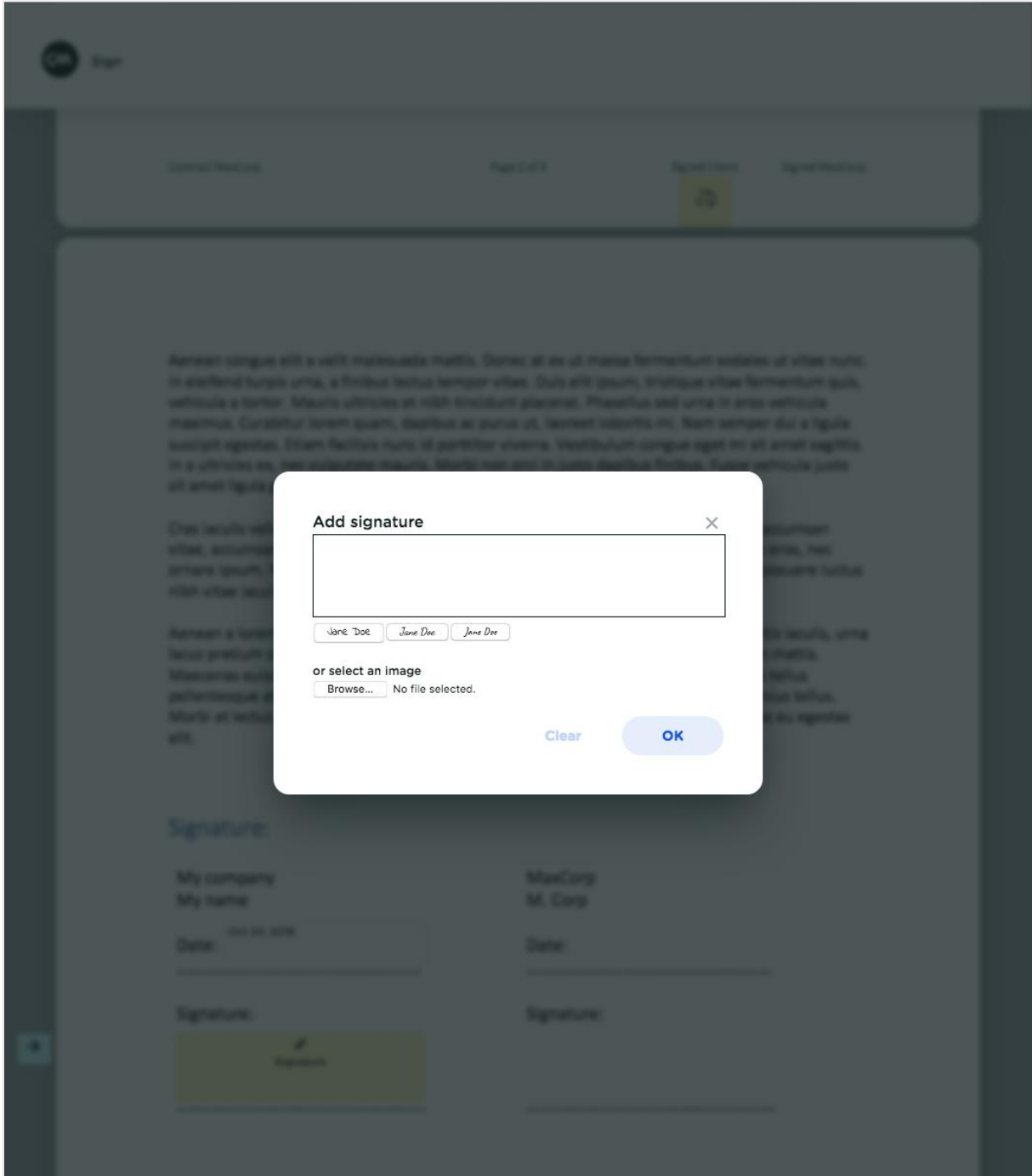
Signature:

<p>My company My name</p> <p>Date: <input style="width: 100%;" type="text" value="Oct 24, 2018"/></p> <p>.....</p> <p>Signature:</p> <div style="border: 1px solid #ccc; background-color: #fff9c4; padding: 5px; text-align: center; margin-top: 5px;"> Signature </div> <p>.....</p>	<p>MaxCorp M. Corp</p> <p>Date:</p> <p>.....</p> <p>Signature:</p> <p>.....</p>
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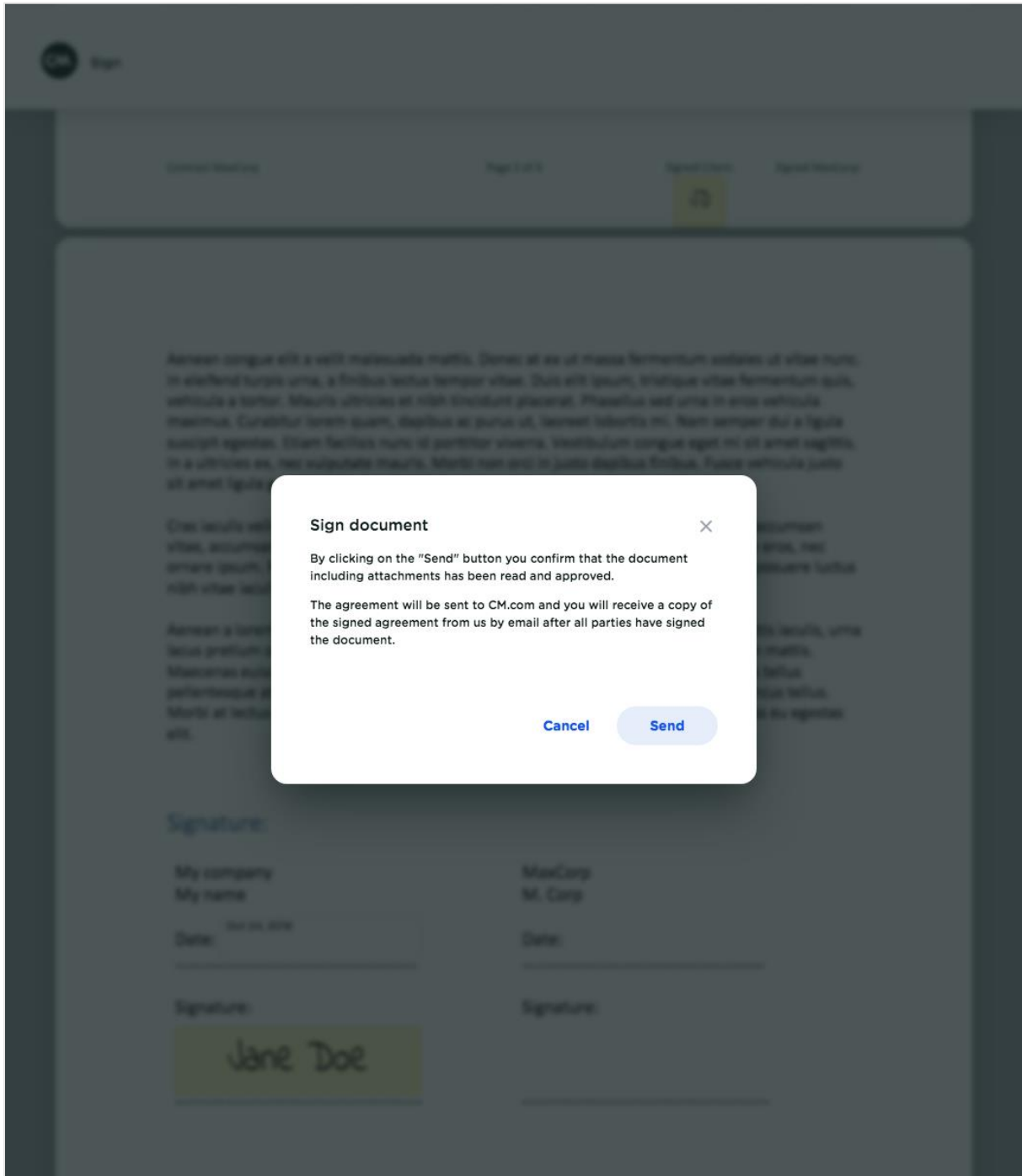


Signature and initials areas can be clicked to bring up a signing dialog.



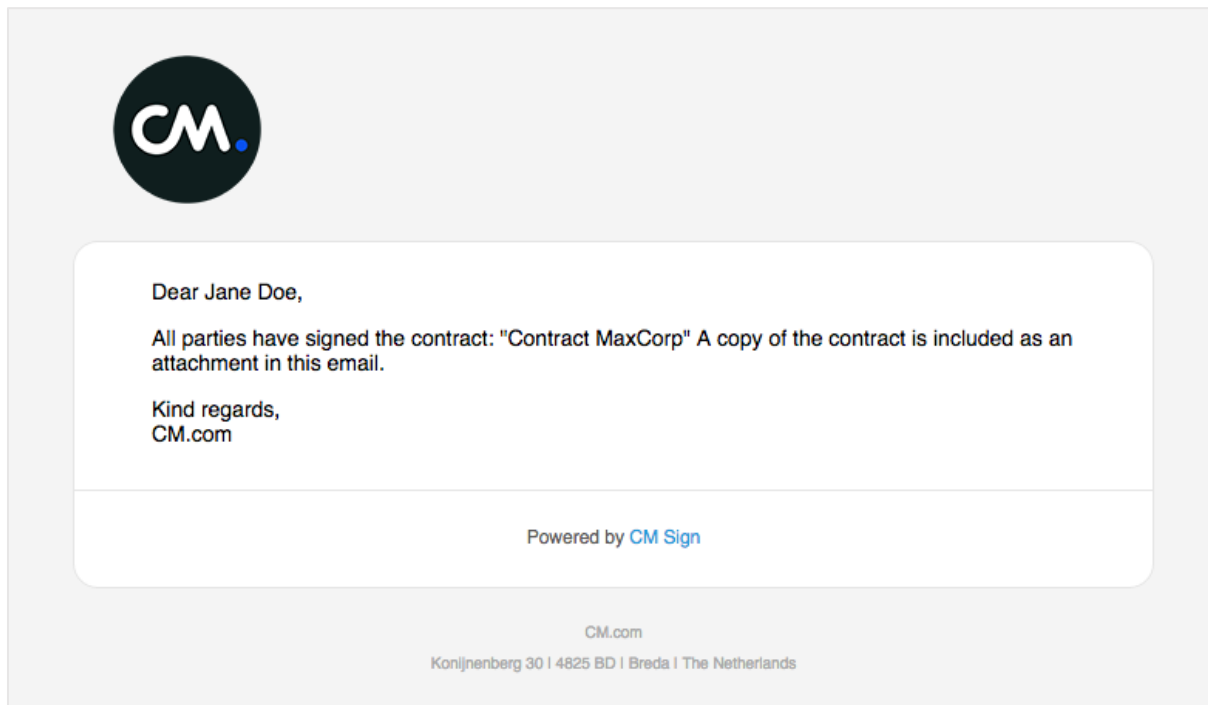


When all actions are completed, the invitee can confirm to approve and sign this document.





If all invitees signed the document and the dossier is complete, the signed document will be sent via email, if an email address was provided.





4 Technical implementation

Using the *credentials*¹ provided, you can integrate the API in your own service.

For the technical implementation, CM provides a detailed [Swagger specification](#).

4.1 Authentication

In order to authenticate you need to use your credentials to generate a [JWT](#) (JSON Web Token). The JWT token has to be signed using the HS256 algorithm, the 'kid' attribute in the header must contain the Key ID of your credentials.

The generated token needs to be passed via the HTTP Authorization header, in the form of:
Authorization: Bearer GENERATED_TOKEN

4.2 Test environment

For testing purposes, a sandbox environment is available via <https://api.sandbox.cmdisp.com/sign/v1/>. The sandbox allows you to test your integration and will create PDF files watermarked with 'SANDBOX'. These PDF files are not digitally signed and won't be charged.

4.3 Scenarios

Please make sure to account for the following situations which may require you to take actions:

- A dossier you own was signed by all invitees:
 - The dossier is completed and you can download the signed document
- A dossier has expired before all invitees have signed and completed the dossier:
 - Consider starting a dossier again
- An invite is created:
 - The invite URL needs to be send to an invitee
- An invite has expired before the user signed the dossier:
 - You might have to create a new invite

4.4 Webhook

In order to be notified of relevant events, you can request a webhook to be configured for your account, so the Sign API can notify your service. This can be used in addition to the email notifications.

¹ The credentials provided by CM are confidential and should be kept secret. If you have not yet received any credentials, you can request them via this [link](#).