

## SEEBURGER Cloud – Setup Assistant – AS2 Configuration

How to Setup your AS2 Connection using the Setup Assistant

### Short introduction to AS2

The purpose of AS2 is to allow the secure exchange of EDI data over the public Internet. AS2 is based on HTTP. AS2 uses two different message types:

- **The payload message (EDI message)**

It encapsulates the EDI file (e.g. INVOIC or ORDERS), thus it can be transmitted via HTTP. The message you'll receive is encrypted and signed by the customer. It is not compressed.

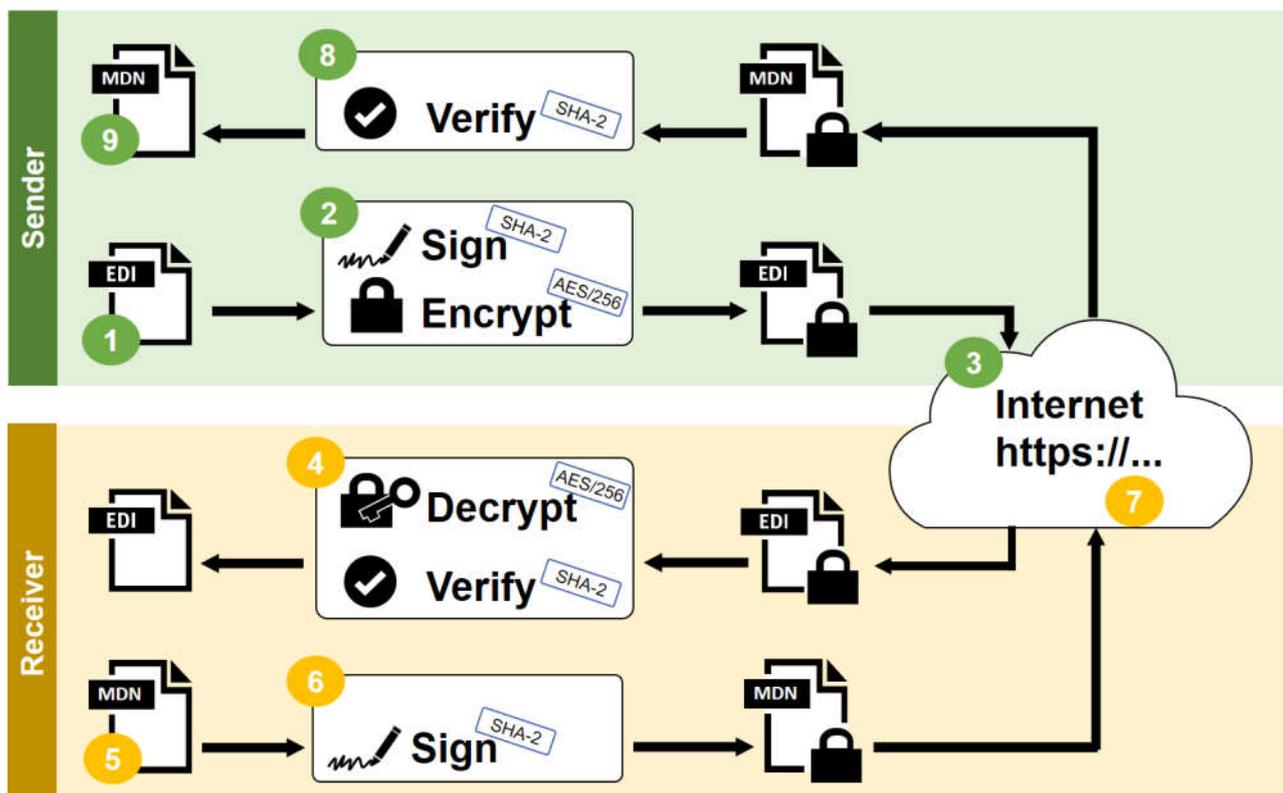
- **The Message Disposition Notification (MDN)**

The purpose of the MDN is to acknowledge the receipt of the message. We want you to send the MDN (which belongs to the message you received) asynchronously. If you do not send the MDN correct, the AS2 communication will fail.

### Advantages of AS2:

- Decreases turn-around time for business processes by real-time data transfer
- Designed to transfer data secure and reliable over the public Internet
- Fast and reliable connectivity
- Encryption ensures that only you and your partner can see the content of the data
- Signatures ensure authentication; only messages from authorized senders are accepted
- The use of a hash algorithm ensures data integrity by detecting whether the data was altered during transmission
- Provides non-repudiation, ensuring that the intended party did receive the data

### The individual steps of an AS2 communication





1. Prepare your Message Payload, for example, the invoice you want to send to your customer.
2. Signature and Encryption
  - The data is encrypted with the sender’s private key to create a signature which is attached to the data.
  - Both, the signature and the data are encrypted for the transfer.
3. Sending data via Internet (HTTPS) to the receiver. When your customer creates an order, it is send immediately to you. You will not receive the data via unsecure email or expensive dial in to collect the data.
4. Decryption and Signature Verification
  - The data and signature are decrypted to restore the unencrypted document and the sender's original hash.
  - The signature is verified to ensure that the message was sent from the expected sender.
5. An MDN (Message Disposition Notification) is generated to inform the sender whether the receipt of the data was successful (or unsuccessful).
6. The MDN data is encrypted with your private key to create a signature which is attached to the MDN.
7. Sending MDN via Internet (HTTPS) to the original sender.
8. The signature of the MDN is verified by the original sender to ensure that the original recipient has received the data.
9. Processing of the MDN to complete the transmission successfully.

**Using the SEEBURGER Cloud’s Setup Assistant to configure your AS2 connection**

**How do you want to communicate?**

**i** You will be able to configure the depending parameters on the next screen.

Options:  I will use the SEEBURGER BIS Link as Cloud Client  
 I will use a service provider / VAN  
 **I will use a technical connection**

Your technical connection:

You decided to connect the SEEBURGER Cloud via AS2.

Please have a look at the following restrictions:

**Your technical connection: AS2**

To use the "default AS2" provided by the SEEBURGER Cloud, it is required to use TLS/SSL and your AS2 system needs to support an SHA2 algorithm for signature and an AES algorithm for encryption of data. These conditions are required to meet the highest standards of security.

Definition "Security level **high**":

- using https as transfer protocol
- using AES/256, AES/192 or AES/128 as encryption algorithm
- using SHA 2 (SHA-256, SHA-384, SHA-512) as signature hash algorithm

Security level **medium** allows the following alternatives:

- using http as transfer protocol
- using 3DES as encryption algorithm
- using SHA 1 as signature hash algorithm

Please be aware of the following problems that occurred in the past:

<b>MDN</b>	Please be aware of your asynchronous MDN settings. The URI /cbr must only be used for EDI messages – not for MDNs. Find more details in the data sheet.
<b>Firewall</b>	Do not forget to open your firewall. Find Details about IP-Range and Port in the data sheet in the end of the AS2 Setup page. Alternatively, you can download the data sheets <a href="#">here</a> .

You can find more details about the restrictions like security levels, SEEBURGER Cloud configuration or firewall activations on our website:

English:  
<https://seeburger.cloud/en/connect-the-cloud/>.

German:  
<https://seeburger.cloud/connect-the-cloud/>



### Certificates

**i** AS2 is secured by certificates for encryption and signature. Please upload your certificates here. Certificates for encryption and signature can be the same.

– **Encryption Certificate** –

**i** The encryption certificate is used for the encryption of the messages. The SEEBURGER cloud will encrypt messages with this certificate when sending them you.

Encryption Certificate \*

– **Signature Certificate** –

**i** The signature certificate is the certificate the SEEBURGER Cloud will use for verifying the signatures of messages and MDNs received from you.

Signature Certificate \*

The encryption and signature of the data is essential. Therefore we expect you to upload certificates.

Use the upload button to select your certificate.

The certificates for encryption and signature do not need to differ. You can use the same certificate twice.

### Algorithms

**i** To use certificates for AS2 we need to know, what algorithms are supported by your system. We recommend to use strong security settings but also support some older algorithms, which might be considered as unsecure in the near future. Based on your choice we will therefore categorize your connection as „high secure“ or „medium secure“. Please have a look at your system and let us know, what algorithm will fit our requirements.

– **Encryption Algorithm** –

**i** We recommend to use AES/256.

Encryption Algorithm \*

– **Signature Hash Algorithm** –

**i** We recommend to use an SHA2 algorithm.

Signature Hash \*   
Algorithm

Because the encryption and signature algorithm of your AS2 system must match the encryption and signature algorithm of our AS2 system, please select the appropriate algorithm from the drop-down list.

The drop-down list contains the values that are supported by the SEEBURGER Cloud.

### TLS/SSL

**i** TLS/SSL is used to secure the HTTP-Connection, which AS2 is based on. If you don't want to use secure HTTP-Connection, set "Use TLS/SSL" to no. If you want to use secure HTTP-Connection (HTTPS), set "Use TLS/SSL" to yes. In this case you have to upload a TLS/SSL certificate.

– **Will you use TLS/SSL ?** –

**i** The SEEBURGER Cloud recommends the usage of TLS/SSL.

Use TLS/SSL \*  **yes (recommended)**  
 no

– **HTTPS Certificate** –

**i** The certificate for TLS/SSL (HTTPS) is used to verify that the SEEBURGER Cloud establishes a connection to the correct host. Please upload your certificate and ensure that the "Common Name" (CN) of the TLS/SSL Certificate matches the host name used in your AS2 HTTPS URL. You will be able to configure this URL at the next page.

HTTPS Certificate \*  **i**

To meet the highest standards of security, we use TLS/SSL to secure the HTTP connection. We also recommend our partners to use TLS/SSL.

If your system supports TLS/SSL please choose "yes" and use the upload button to select your certificate.

Please make sure that the CN matches the host name used in your AS2 HTTPS URL.



**TLS/SSL**

**i** TLS/SSL is used to secure the HTTP-Connection, which AS2 is based on. If you don't want to use secure HTTP-Connection, set "Use TLS/SSL" to no. If you want to use secure HTTP-Connection (HTTPS), set "Use TLS/SSL" to yes. In this case you have to upload a TLS/SSL certificate.

– Will you use TLS/SSL ? –

**i** The SEEBURGER Cloud recommends the usage of TLS/SSL.

Use TLS/SSL \*  yes (recommended)  
 **no**

If you decide not to use HTTPS, you can still exchange data with the SEEBURGER cloud.

In this case your AS2 connection will be classified as "medium secure".

Choose "no" and click next.

**System Information**

**i** Please give us some information about your AS2 system.

– AS2 ID –

**i** This is the AS2 ID you configured for communication with us.

AS2 ID \*

– AS2 URL using TLS/SSL –

**i** The URL is needed to access the AS2 Connection and requires a host, port and path. Example: https://sub.mycompany.com:443/path/to/cloudlink

AS2 HTTPS URL \*

– Email for Notifications –

**i** In case of communication errors, the error messages will be sent to this specified email address.

Email for Notifications \*

After you have configured all security settings, please enter your master data:

- Your AS2 ID
- Your AS2 HTTPS URL consisting of host name, port and AS2 path. The URL starts with https if you decided to use TLS/SSL.
- Your Email address that can be used for notification in case of problems and communication errors.

– AS2 URL without TLS/SSL –

**i** The URL is needed to access the AS2 Connection and requires a host, port and path. Example: http://sub.mycompany.com:80/path/to/cloudlink

AS2 HTTP URL \*

If you decided to not use TLS/SSL, your AS2 HTTP URL starts with http.

In the next step the connection data of the cloud will be provided to you. **Please be aware of the security level!**

Depending on which security level you are assigned to, the following features of your AS2 connection to the SEEBURGER Cloud may differ:

- **AS2 ID** of the SEEBURGER Cloud
- **HTTP / HTTPS URL** of the SEEBURGER Cloud
- **Certificates** of the SEEBURGER Cloud



**SEEBURGER Cloud Certificates**

To use certificates for AS2 you need to import our SEEBURGER Cloud certificates as well. We'll use the same certificate for encryption and signature. For TLS/SSL a different certificate is used. Please download the certificates by clicking the certificate names (Links) below. Please import the certificates in the following order:

1. [as2-root-ca.cer](#) (GlobalSign Root CA)
2. [as2-intermediate-ca.cer](#) (GlobalSign Validation CA)
3. [as2\\_seeburger.cloud.cer](#) (SEEBURGER Cloud certificate for encryption and signature)
4. [as2-ssl\\_seeburger.cloud.cer](#) (SEEBURGER Cloud certificate for TLS/SSL)

Download the zip file that contains all certificates named above: [as2\\_seeburger.cloud.zip](#)

**SEEBURGER Cloud System Data**

**i** Please use the following parameters to configure your connection to the SEEBURGER Cloud on your system:

SEEBURGER Cloud AS2 ID	<input type="text" value="SEECLLOUDID"/>
HTTPS URL	<input type="text" value="https://as2.seeburger.cloud:443/cbr"/>

**SEEBURGER Cloud Data Sheet**

More detailed information can be found in our data sheet which can be downloaded by clicking the following link: [SEEBURGER Cloud – B2B Routing Service – Datasheet AS2 \(High Security\)](#)

**SEEBURGER Cloud Certificates**

To use certificates for AS2 you need to import our SEEBURGER Cloud certificates as well. We'll use the same certificate for encryption and signature. Please download the certificate by clicking the certificate name (Link) below:

- [as2-ms\\_seeburger.cloud.cer](#) (SEEBURGER Cloud certificate for encryption and signature)

**SEEBURGER Cloud System Data**

**i** Please use the following parameters to configure your connection to the SEEBURGER Cloud on your system:

SEEBURGER Cloud AS2 ID	<input type="text" value="SEECLLOUDID_RS"/>
HTTP URL	<input type="text" value="http://as2-rs.seeburger.cloud:9800/cbr"/>

**SEEBURGER Cloud Data Sheet**

More detailed information can be found in our data sheet which can be downloaded by clicking the following link: [SEEBURGER Cloud – B2B Routing Service – Datasheet AS2 \(Medium Security without TLS/SSL\)](#)

This will be the SEEBURGER Cloud's master data in case your AS2 connection is classified as "high secure".

You have fulfilled the following conditions:

- You are using TLS/SSL
- You are using an AES encryption algorithm
- You are using an SHA-2 signature algorithm

This will be the SEEBURGER Cloud's master data in case your AS2 connection is classified as "medium secure" because your AS2 system is not supporting TLS/SSL..



**SEEBURGER Cloud Certificates**

To use certificates for AS2 you need to import our SEEBURGER Cloud certificates as well. We'll use the same certificate for encryption and signature. For TLS/SSL a different certificate is used. Please download the certificates by clicking the certificate names (Links) below:

1. [as2-ms.seeburger.cloud.cer](#) (SEEBURGER Cloud certificate for encryption and signature)
2. [as2-ms-ssl.seeburger.cloud.cer](#) (SEEBURGER Cloud certificate for TLS/SSL)

Download the zip file that contains all certificates named above: [as2-ms.seeburger.cloud.zip](#)

**SEEBURGER Cloud System Data**

**i** Please use the following parameters to configure your connection to the SEEBURGER Cloud on your system:

SEEBURGER Cloud AS2 ID:

HTTPS URL:

**SEEBURGER Cloud Data Sheet**

More detailed information can be found in our data sheet which can be downloaded by clicking the following link: [SEEBURGER Cloud – B2B Routing Service – Datasheet AS2 \(Medium Security using TLS/SSL\)](#)

**Confirmation**

**i** In the next step, we will set up the test mode for your connection to the SEEBURGER Cloud. Please confirm that you have configured your EDI system before you continue. Setting up the test mode may take a moment.

- Confirmation\*  **I have configured my EDI system and am prepared for testing**
- I have problems with establishing an AS2 connection

This will be the SEEBURGER Cloud's master data in case your AS2 connection is classified as "medium secure".

You are using TLS/SSL, but your encryption and/or signature algorithm is not secure enough to be classified as "high secure".

Your encryption algorithm:

- AES-256-CBC
- AES-192-CBC
- AES-128-CBC
- 3DES (Medium Security)**

Your signature algorithm:

- RSA-256 (SHA-2)
- RSA-384 (SHA-2)
- RSA-S12 (SHA-2)
- SHA-1 (Medium Security)**

Finally, please confirm that you have completed the configuration and that you are ready to test your settings.