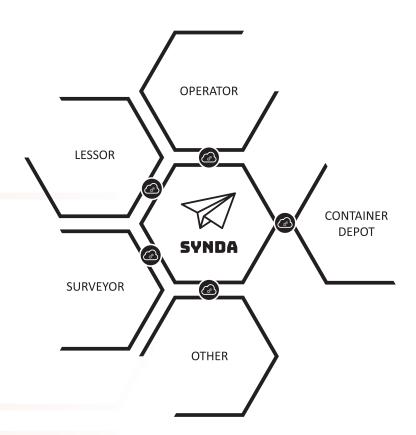


The new way of communication between tank container stakeholders changes the exchange from one-to-one to one-to-many.

Once you are connected to SYNDA, you can start exchanging messages with everyone.



SYNDA connections can be reused over and over again, thus creating a sustainable growth and minimizing costs.

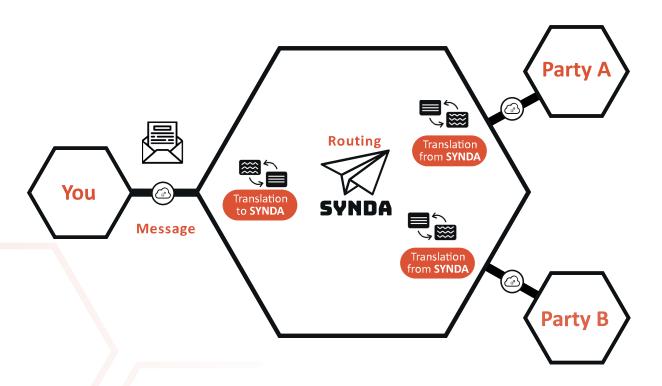
Once connected, you are part of the SYNDA VALUE ADDED NETWORK and you can communicate with all connected parties. This makes it extremely easy to set up new relations with suppliers and customers.

You will need only one SYNDA Connect Unit (SCU) to exchange the same type of message with a multitude of parties regardless of their preferred message format or transport type.

SYNDA

SYNDA CONNECT UNIT

A SYNDA Connect Unit is the fundamental component on which the SYNDA system operates.



You will need only your own SYNDA Connect Unit (SCU) to transfer the same type of message with a multitude of parties regardless of their preferred message format or transport type.

A SYNDA Connect Unit (SCU) is the fundamental component on which the SYNDA system operates. This unit represents one direction (send or receive) of a specific message type (for example: invoice) in a particular format (eg: OTF21) from or to one Postbox (a company or site) transported over a single communication channel.

The concept of the SCU can be expressed in the following diagram:



Every 'path' through this diagram, that is applicable to your situation, counts as a SYNDA Connect Unit.

SCU CALCULATION SCU CALCULATION

A sample calculation based on the current SYNDA implementation. Where N is the number of connected depots.

	Postbox	SCU per address	Total SCU	
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Operational Control Co				
Customer Global sends 4 messages (pre- announce, release notifications, M&R response, vendor booking) in one format (OTF) with one transport to SYNDA	1	1	4	
Customer Global receives 2 messages (status update, M&R estimate) in one fomat (OTF) with one transport from SYNDA	1	1	2	
A Customer DEPOT receives 4 messages (pre-announce, release notification, M&R response, vendor booking) in one format (OTF) with one transport from SYNDA	N depots	1	4 * N	
A Customer DEPOT send 2 messages (status update, M&R estimate) in one format (OTF) with one transport to SYNDA	N depots	2	4 * N	

Financial			
Customer Global – receive 1 message (receivable) in one format (UBL) with one transport from SYNDA	1	1	1
A Customer DEPOT sends 2 messages (payable and receivable) in one format (UBL) with one transport to SYNDA	N depots	2	2 * N

With, for example, 10 operational sites, you will need 87 SCU's for the specified messages, directions, formats and transportation options.

In the appendix there are other examples to explain the SCU principle.

SYNDA

APPENDIX - DEFINITIONS

SYNDA Connect Unit (SCU)



- One direction
- One message type
- One logical address
- One message format
- One transport type

Direction



The direction can be either:



- receive from SYNDA
- send to SYNDA

Message type



The kind of message, eg:



- Gate IN
- Gate OUT
- Estimate
- Invoice

Postbox



The specific 'place' that is sending to SYNDA or receiving from SYNDA, eg:



- Financial entity
- Site
- Headquarters
- Specific Department
- Regional office

Message format



The digital format of the message, eg:



- JSON
- UBL
- EDIFACT
- Codeco

Transport Protocol



The way the message is transported, eg:



- SFTP
- API call
- Blob Storage



APPENDIX - SCU CALCULATION EXAMPLES

Example A



Operator A wants to connect to SYNDA to receive invoices from their service providers.

These invoice(s) (message type) need to be received (direction) on one administration (postbox).

The operator has determined that the invoices need to be UBL (message format) and needs to be transported using the AS2 protocol (transport protocol).

In this case Operator A needs a total of one SCU.

Example B



Operator B wants to connect to SYNDA to:

• Send (direction) pre-announcements (message type) to their service providers from their main office (postbox) in JSON (message format) by means of an API call (transport protocol).

For this communication with SYNDA Operator B needs one SCU.

 Receive (direction) gate in, available and gate out messages (message type) from their service providers to be delivered to one administration (postbox). These messages are to be received in EDIFACT (message format) by SFTP (transport protocol).

For this communication with SYNDA Operator B needs three SCU.

 Receive (direction) invoices (message type) from their service providers, which need to be directed to one of three financial departments (postbox). Each department is able to process UBL-invoices (Message format) and requires the AS2 Protocol (transport protocol).

For this communication with SYNDA Operator B needs three SCU.

In this case Operator B needs a total of seven SCU.

Example C



Depot C wants to connect to SYNDA to:

 Send (direction) Gate in, estimate, available and gate out messages (message type) to their customers to be sent from two sites (postbox). The messages they already have are EDIFACT (message format) and uses SFTP (transport protocol).

For this communication with SYNDA depot C needs six SCU.

 Receive (direction) estimate approval messages (message type) on boths sites (postbox) depending on which site has sent the estimate message. They already have an EDIFACT (message format) message available using SFTP (transport protocol).

For this communication with SYNDA depot C needs two SCU.

• Receive (direction) pre-announcements (message type) in their main administration. This message can be received in a JSON format (message type) using an API-call (transport protocol). The main administration will later decide on which site will process the pre-announcement.

For this communication depot C with SYNDA depot C needs one SCU.

In this case depot C needs a total of nine SCU.