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Public

SAP Teched 2023

IN262 - Unlocking B2B Excellence: Efficiently Onboard and Manage Trading Partners

Exercise

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THE BEST RUN

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0 INTRODUCTION

In this session, you will learn how to onboard a new Trading Partner by using the following capabilities of the Integration Suite:

- Integration Advisor
- Trading Partner Management
- Cloud Integration

To make this session a successful one for all attendees, we recommend a good understanding of data structures (e. g. IDoc, SOAP, X12 or EDIFACT) along with some understanding of SAP Integration Suite capability Cloud Integration. The business process that we will simulate in this exercise depicts the transfer of an Order using IDoc as a message format over Cloud Integration to a (simulated) Trading Partner with an X12 850 message (Purchase Order). To minimize the additional effort for you, the IDoc order is already prepared and will be directly sent to Cloud Integration as soon as you deploy your integration flow. The output will not be sent to a real Trading Partner system for this exercise but to the mail address you specify during the exercise.

Usually, when onboarding business partners you need to define interfaces/messages – for each of them. Once defined, you can proceed modelling the mappings in need and document all pieces. Afterwards, you build an integration flow where you have to verify the incoming structure, implement the mapping and execute further checks on the outbound structure. This step, you are obliged to do repeatedly for each of your business partners. Last, but not least, you need to configure the outbound connection for each of your integration flows in your sending system.

With the usage of the Integration Advisor, developing and documenting of the structures needed will become much easier and faster than before as the Integration Advisor is using a machine learning approach on top of the knowledge base, which contains the knowledge of already implemented integrations. In this first part of the exercise, the creation of the interface/message structures and mappings in the Integration Advisor is already done. In exercise 2 you also have to work on the MIG structure (interface) and on the MAG (mapping).


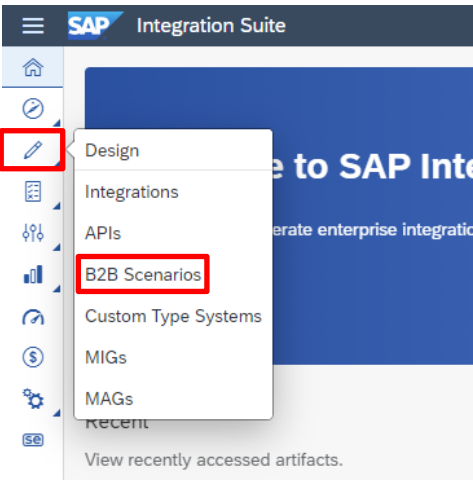
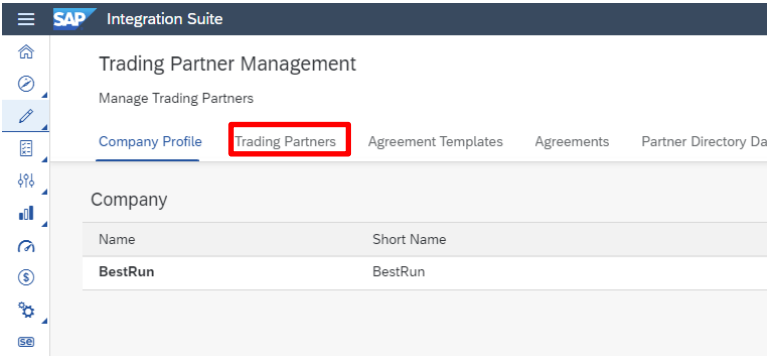
1 EXERCISE 1

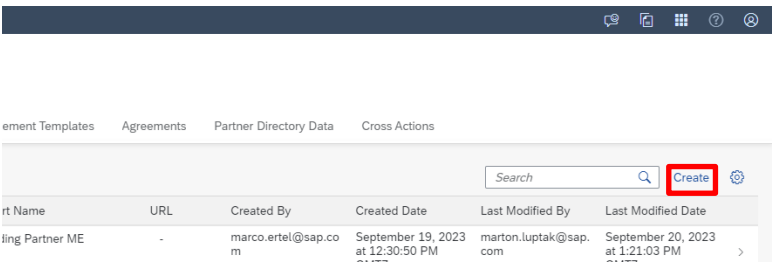
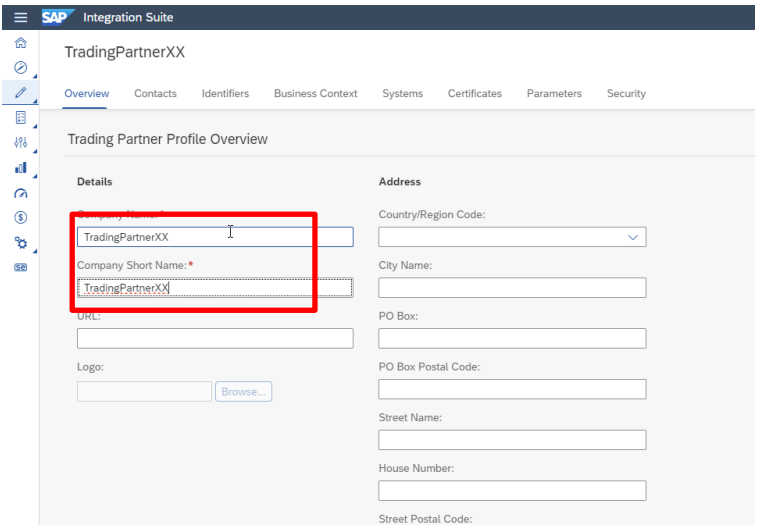
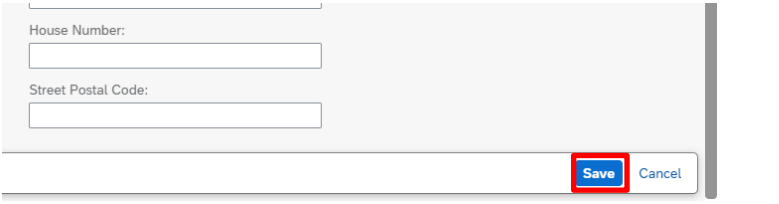
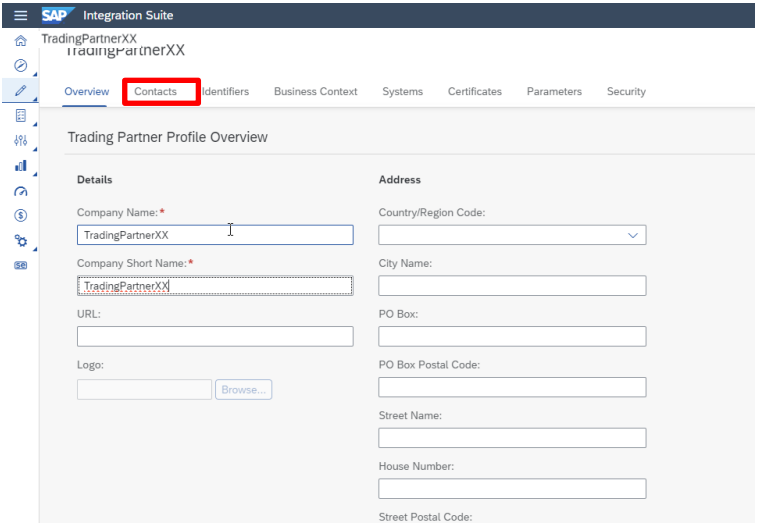
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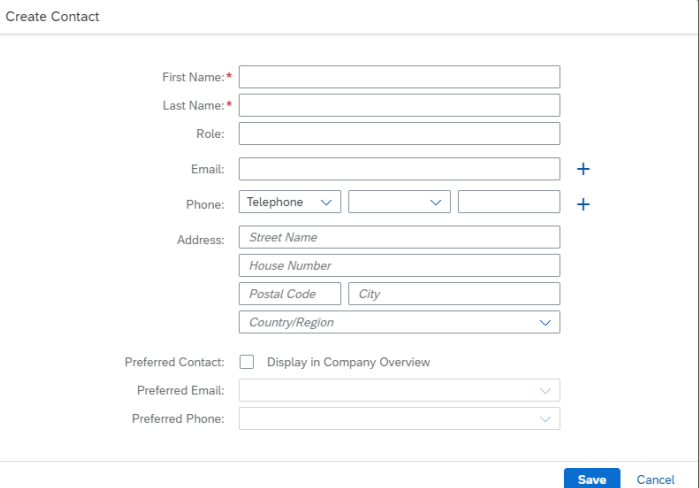
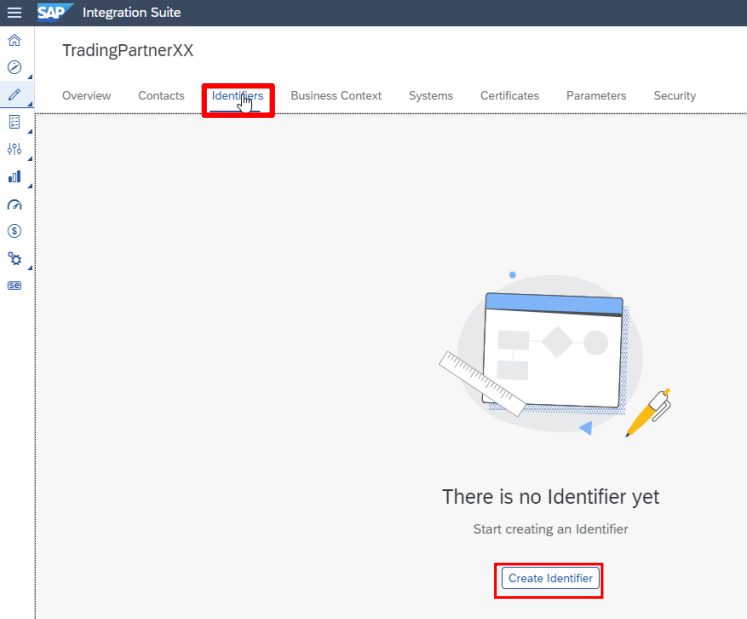
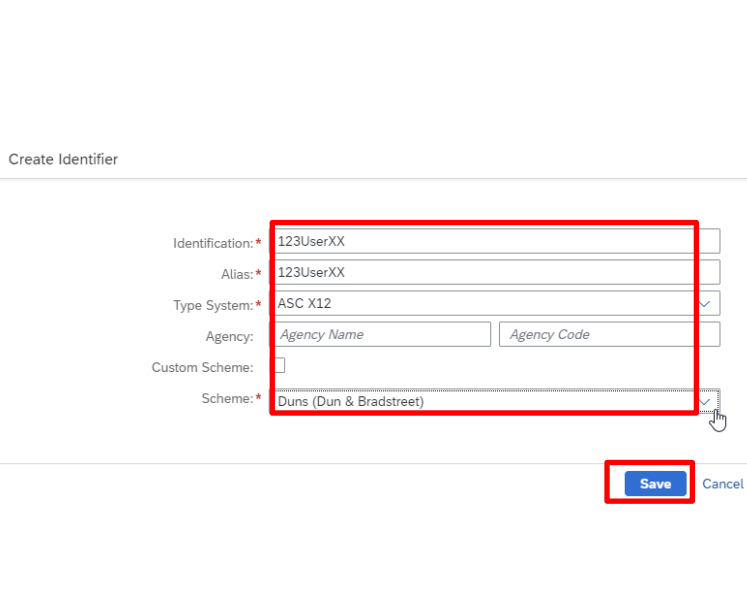
We have two tenants for this exercise. For the Groups 1-30 please use Tenant 1 and for the Groups 31-60 please use Tenant 2

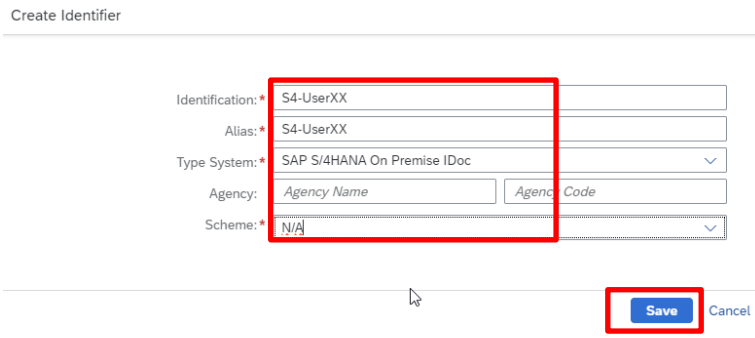
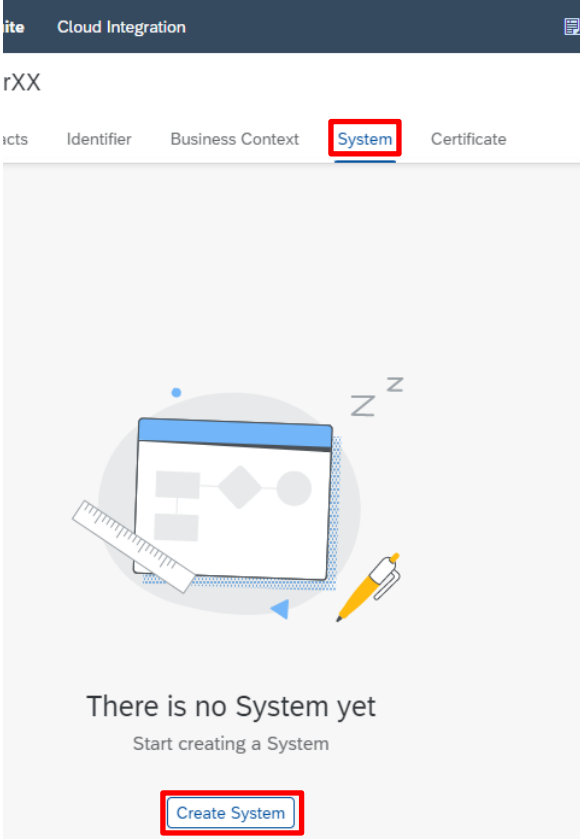
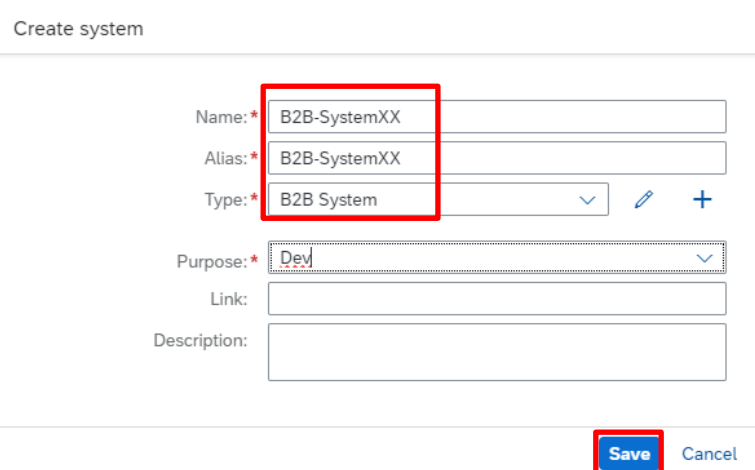
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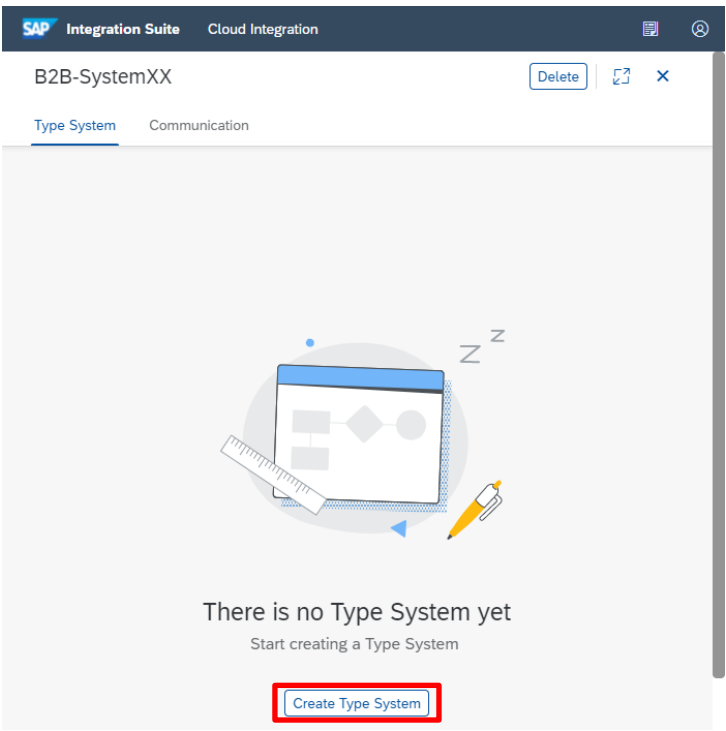
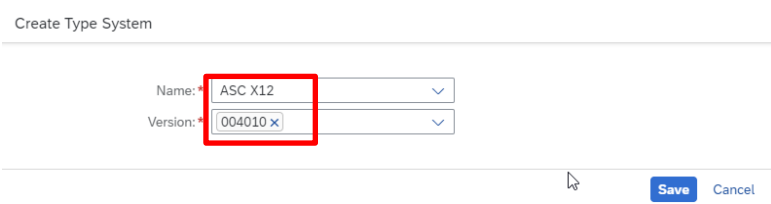
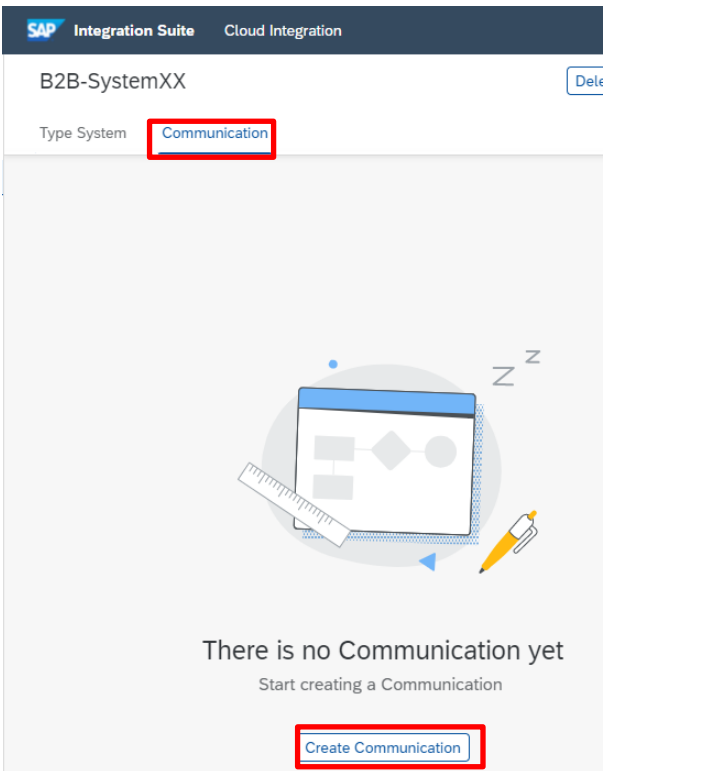
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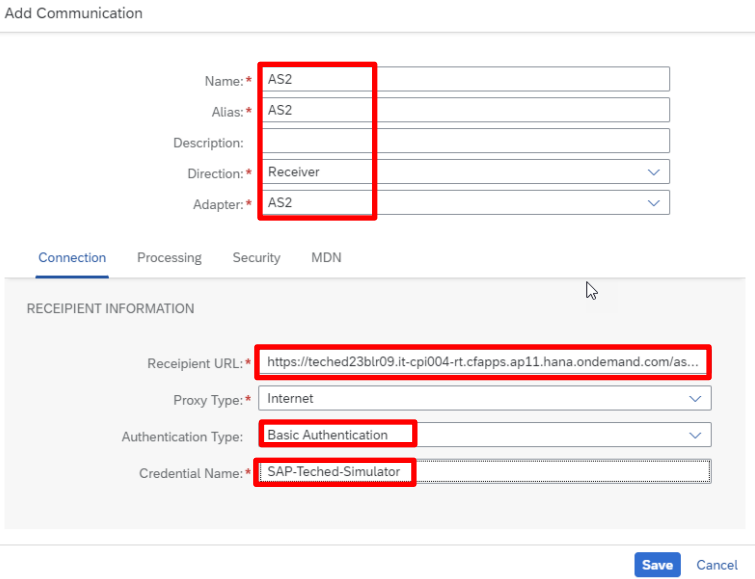
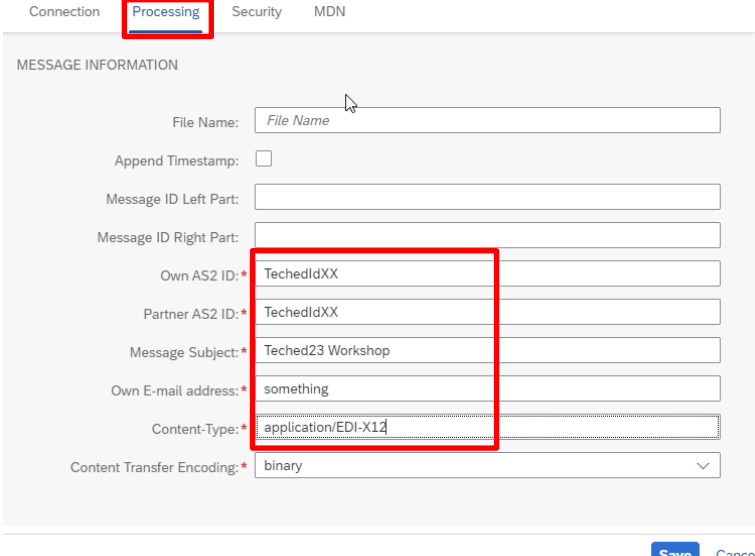
| Explanation | Screenshot |
|--|--|
| 1. Log on to the Integration Suite tenant with your system details provided to you by the instructors. |  |
| 2. Navigate to <i>Design</i> and select <i>B2B Scenarios</i> . |  |
| 3. As you want to onboard a new Trading Partner switch to the tab <i>Trading Partners</i> . |  |

| Explanation | Screenshot |
|---|--|
| 4. Select <i>Create</i> to create a new Trading Partner. |  <p>The screenshot shows the SAP Integration Suite interface with the 'Partner Directory Data' tab selected. A 'Create' button is highlighted with a red box in the top right corner of the main content area.</p> |
| 5. On the following screen, you need to maintain general data for the new trading partner as follows: Company Name: <i>TradingPartnerXX</i> (with XX your group number) Company Short Name: <i>TradingPartnerXX</i> (with XX your group number) All the other fields are optional. |  <p>The screenshot shows the 'Trading Partner Profile Overview' form. The 'Company Name' and 'Company Short Name' fields are highlighted with a red box. The 'Company Name' field contains 'TradingPartnerXX' and the 'Company Short Name' field contains 'TradingPartnerXX'.</p> |
| Please save the newly created Trading Partner. |  <p>The screenshot shows the bottom of the 'Trading Partner Profile Overview' form. The 'Save' button is highlighted with a red box.</p> |
| 6. Switch to the <i>Contacts</i> tab and select <i>Create Contact</i> . |  <p>The screenshot shows the 'Trading Partner Profile Overview' form with the 'Contacts' tab selected. The 'Create Contact' button is highlighted with a red box.</p> |

| Explanation | Screenshot |
|---|--|
| <p>7. On the <i>Contacts</i> tab, you can optionally add names and details of persons who are responsible at the Trading Partner side.</p> |  |
| <p>8. Navigate to the tab <i>Identifier</i> and select <i>Create Identifier</i>.</p> |  |
| <p>9. Every Trading Partner needs at least two identifiers, one which is used in the X12 exchange and a second which is used in the S/4 System. Maintain the first identifier as follows: Use Identification 123UserXX (with XX your group number), 123UserXX also for the Alias(with XX your group number), select Type System ASC X12, and Scheme <i>Duns (Dun & Bradstreet)</i>, then save the new identifier.</p> |  |

| Explanation | Screenshot |
|--|--|
| <p>Maintain the second identifier as follows: Use Identification <i>S4-UserXX</i> (with <i>XX</i> your group number), <i>S4-UserXX</i> (with <i>XX</i> your group number) as Alias, select Type <i>System SAP S/4HANA on Premise IDoc</i>, and Scheme <i>N/A</i>, then save the new identifier.</p> |  |
| <p>10. The Business Context is at the moment optional, but we need to create a system where the supported type system and communication details have to be maintained. Navigate to the tab <i>System</i> and select <i>Create System</i>.</p> |  |
| <p>11. Please add the following Details: Name <i>B2B-SystemXX</i> (with <i>XX</i> your group number), <i>B2B-SystemXX</i> (with <i>XX</i> your group number) as Alias, Type <i>B2B System</i>, Purpose <i>Dev</i> and save the new system.</p> |  |

| Explanation | Screenshot |
|---|--|
| <p>12. Select the beforehand created system to create the supported Type System. On tab <i>Type System</i>, select <i>Create Type System</i>.</p> |  |
| <p>13. Use ASC X12 and Version 004010, then save the new Type System.</p> |  |
| <p>14. Next, you need to maintain the communication details. Switch to tab <i>Communication</i> and select <i>Create Communication</i>.</p> |  |

| Explanation | Screenshot |
|---|--|
| <p>15. As this Trading Partner will receive (a) Purchase Order(s) with the AS2 protocol, you need to create an AS2 Receiver. As you have to authenticate at the AS2 Receiver you need here a credential (<i>SAP-Teched-Simulator</i>) and the Endpoint of that Trading Partner (if you are on BLR09 (Group 01-30) please use: https://teched23blr09.it-cpi004-rt.cfapps.ap11.hana.ondemand.com/as2/as2 (take care not to have spaces or linebreaks in that url) if you are on BLR10 (Group 31-60) please use https://teched23blr10.it-cpi021-rt.cfapps.in30.hana.ondemand.com/as2/as2)</p> |  |
| <p>16. AS2 needs additional information which you have to maintain on the Tab <i>Processing</i>. The IDs (Own and Partner) must start with <i>TechedId</i>. You can of course add something after that string. For the mail address you can in this exercise use any text. For the Content-Type use <i>application/EDI-X12</i></p> |  |

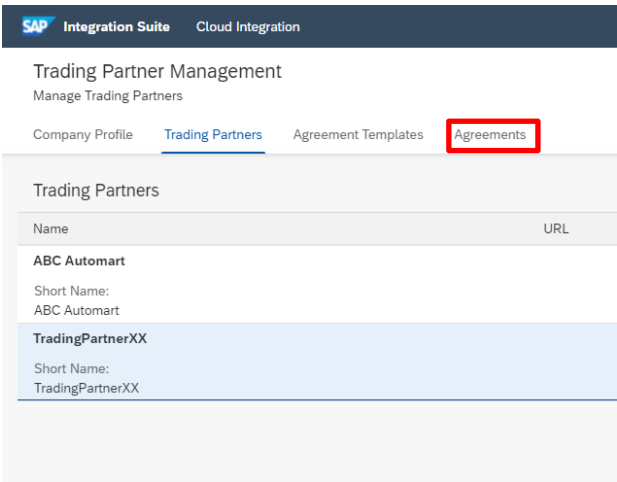
1.2 Use Agreement Template to create an agreement

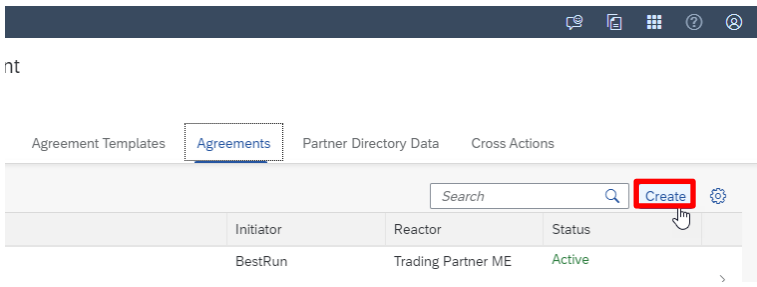
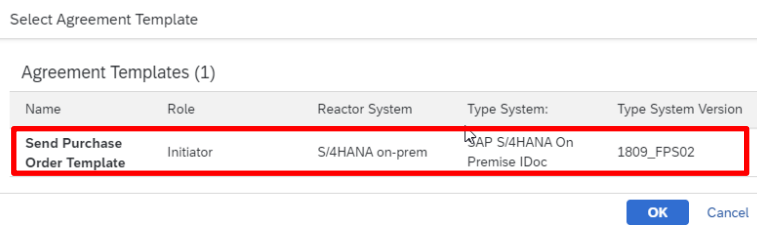
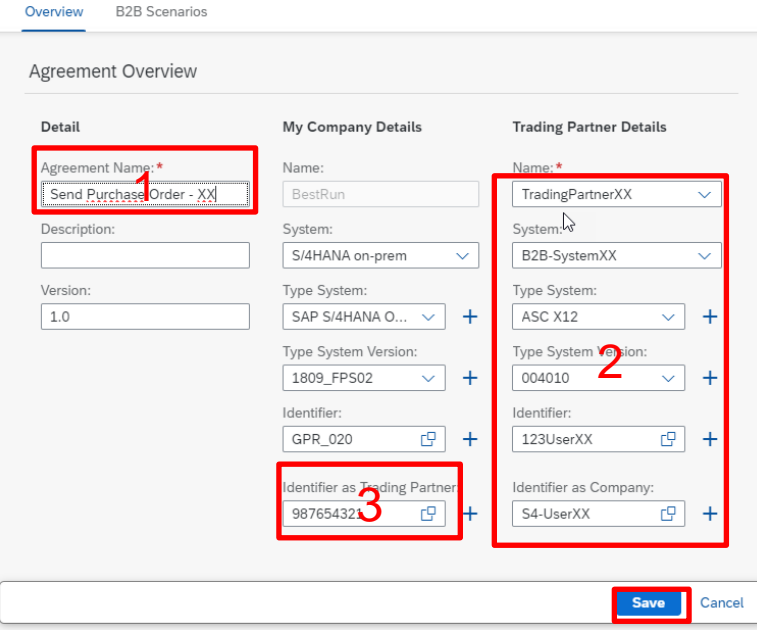
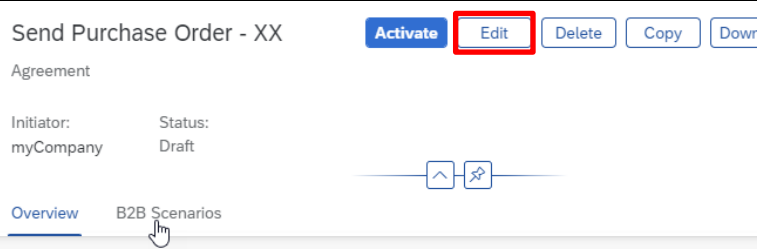
With the Agreement, you instantiate the agreement template where you need to fill out the details of the trading partners- TPM differentiates between Identifiers which will be used in the system of the company and Identifiers which are used in our example in the IDoc message. Let's have a look at the relevant part of our IDoc Payload:

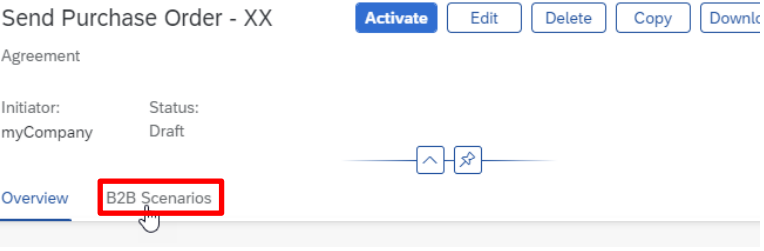

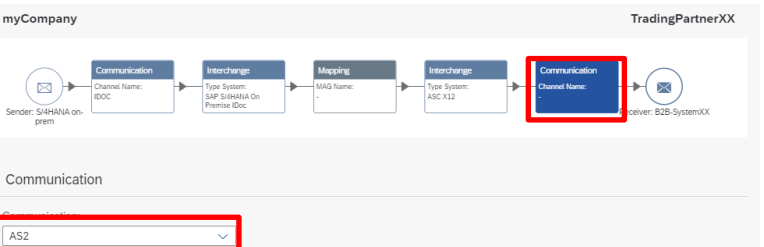
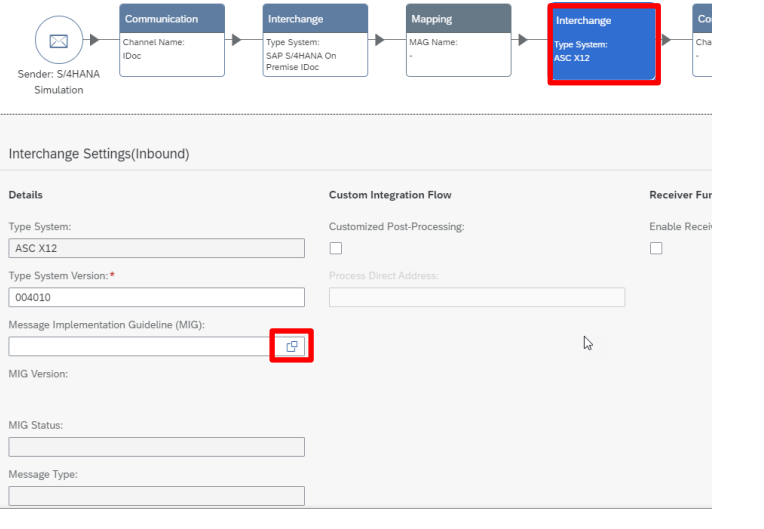
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<ORDERS05 xmlns="urn:sap-com:document:sap:idoc:soap:messages">
  <IDOC BEGIN="1">
    <EDI_DC40 SEGMENT="1">
      <TABNAM>EDI_DC40</TABNAM>
      <DOCNUM>0000000000000002</DOCNUM>
      <DOCREL>1809_FPS02</DOCREL>
      <DIRECT>2</DIRECT>
      <OUTMOD>3</OUTMOD>
      <IDOCTYP>ORDERS05</IDOCTYP>
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    <SERIAL>20221007071312</SERIAL>
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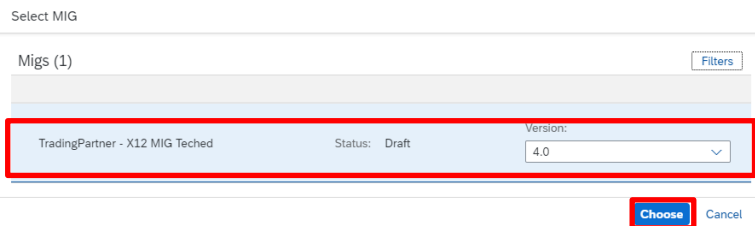
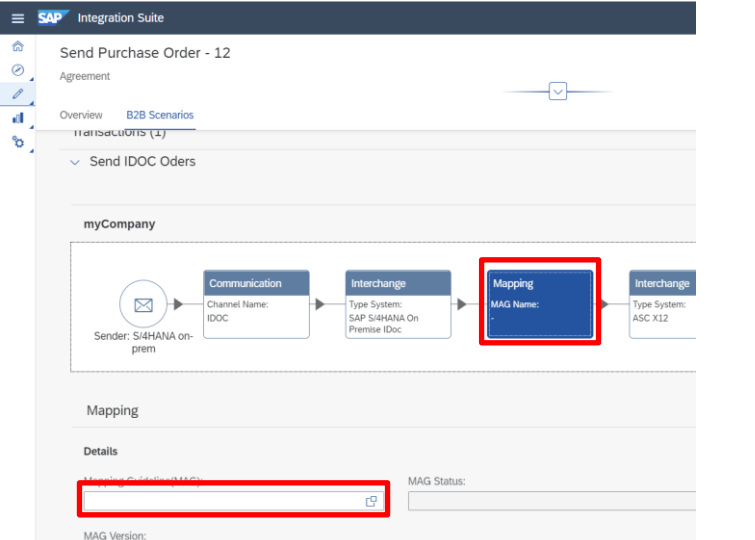
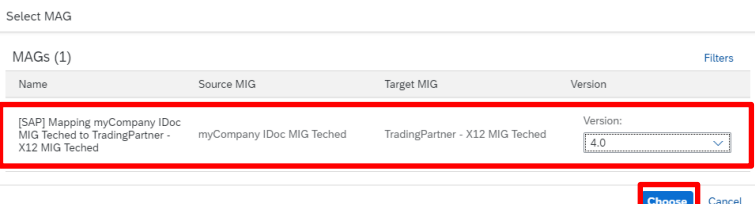
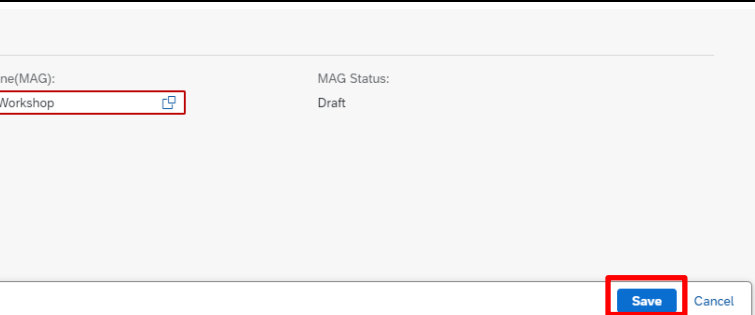
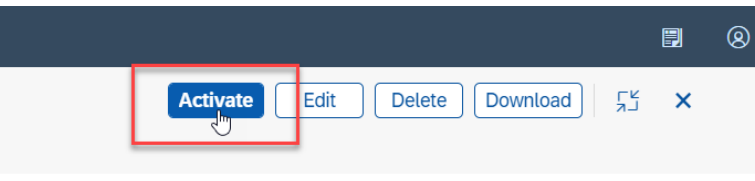
GPR_020 is the Identifier which you can find in the My Company Details.

S4-UserXX can be found in the Details of the Trading Partner under "Identifier as Company" (as usual the XX will then be your group number).

| Explanation | Screenshot |
|--|--|
| 1. Navigate back to <i>Design</i> → <i>B2B Scenarios</i> , and switch to the tab <i>Agreements</i> . |  <p>The screenshot shows the SAP Integration Suite Cloud Integration interface. The 'Trading Partner Management' section is active, with the 'Agreements' tab selected and highlighted by a red rectangle. Below the tabs, there is a table titled 'Trading Partners' with columns 'Name' and 'URL'. The table contains two entries: 'ABC Automart' and 'TradingPartnerXX'. The 'TradingPartnerXX' entry is highlighted in blue.</p> |

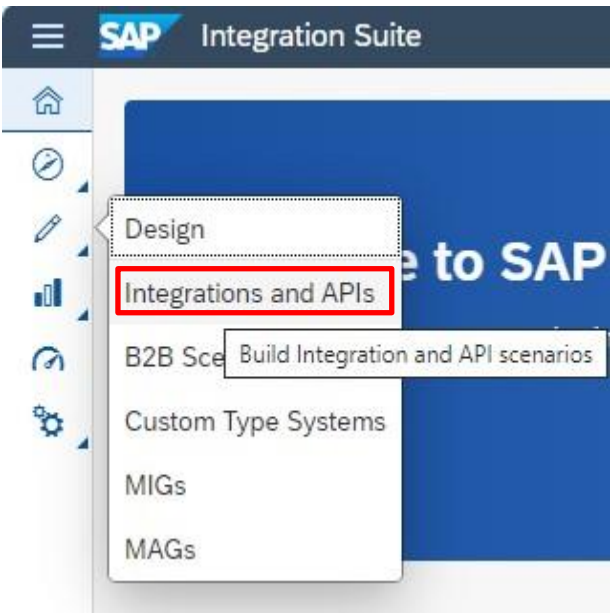
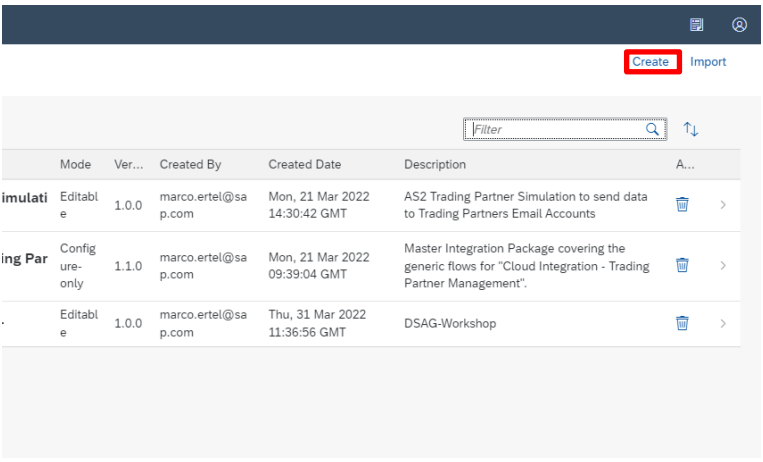
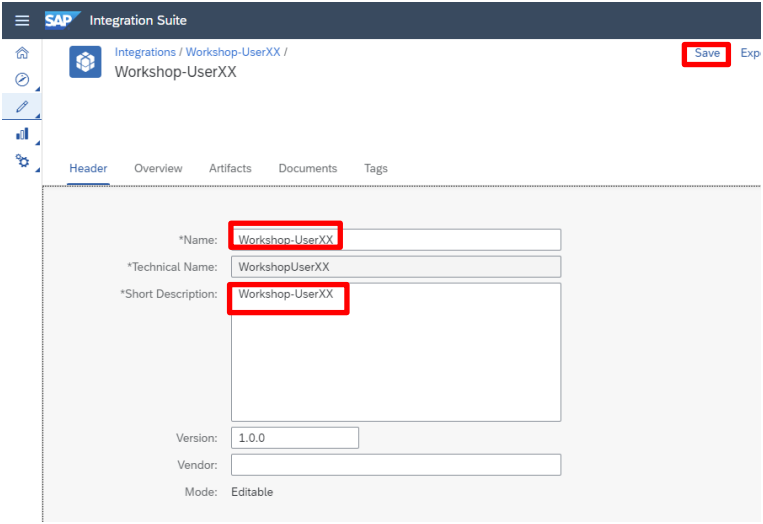
| Explanation | Screenshot |
|---|--|
| 2. On the <i>Agreements</i> tab, create a new Agreement. |  |
| 3. In the upcoming dialog, select the existing Agreement Template <i>Send Purchase Order Template</i> and select <i>OK</i> . |  |
| 4. Please start with renaming the Agreement to <i>Send Purchase Order – XX</i> and change the Description. Now you need to specify with which Trading Partner you want to communicate by entering the following details in the following order (with XX your group number): Maintain the Trading Partner Details with Name <i>TradingPartnerXX</i> , System <i>B2B-SystemXX</i> , Type System <i>ASC X12</i> , Type System Version <i>4010</i> , Identifier <i>123UserXX</i> , and Identifier as Company <i>S4XX</i> . Finally, select the Identifier as Trading Partner <i>987654321</i> from the drop-down. Hint: use the drop-down help but start with the Trading Partner Details and select the Identifier as Trading Partner as the last one. When done, save your settings. |  |
| 5. For the newly created agreement, switch to the <i>Edit</i> Mode |  |

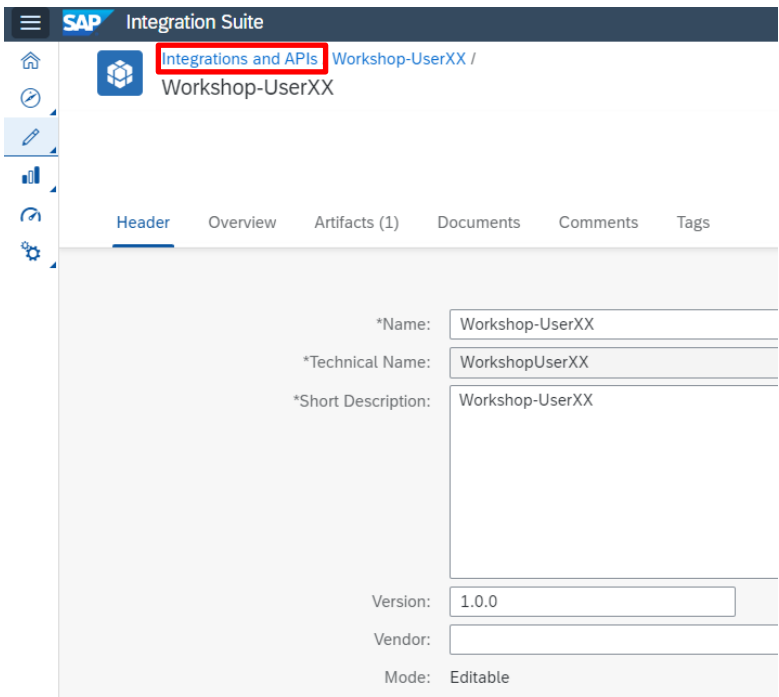
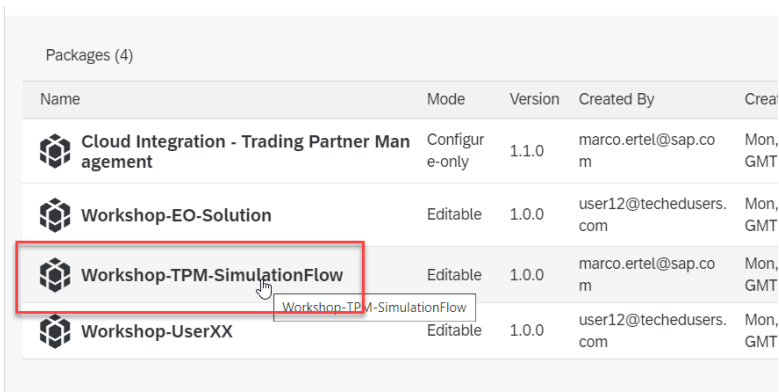
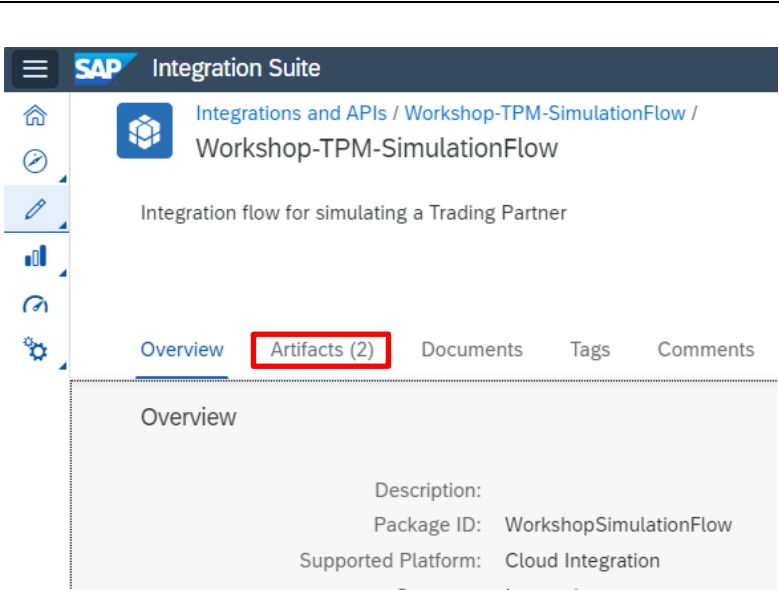
| Explanation | Screenshot |
|--|---|
| 6. Navigate to the tab <i>B2B Scenarios</i> . |  <p>Send Purchase Order - XX Activate Edit Delete Copy Download</p> <p>Agreement</p> <p>Initiator: myCompany Status: Draft</p> <p>Overview B2B Scenarios</p> |
| 7. There you see the transactions for the scenario. In our exercise, it is only one transaction (one-way). In general, it could be several and those could also be two-way transactions. The first two elements within the flow (note, flow goes from left to right) Communication and Interchange are pre-filled from the Agreement Template, but the others have to be filled out now. |  <p>Send Purchase Order</p> <p>BestRun</p> <p>Sender: S/4HANA on-prem</p> <p>Receiver: B2B-SystemXX</p> |
| 8. Please start on the right by clicking on the first <i>Communication</i> box within the flow and select AS2 for Communication. |  <p>myCompany TradingPartnerXX</p> <p>Sender: S/4HANA on-prem</p> <p>Receiver: B2B-SystemXX</p> <p>Communication</p> <p>Protocol: AS2</p> |
| 9. Please click now on the <i>Interchange</i> box to define the Message Implementation Guideline. Select the drop-down list. |  <p>Sender: S/4HANA Simulation</p> <p>Receiver: B2B-SystemXX</p> <p>Interchange Settings(Inbound)</p> <p>Details</p> <p>Type System: ASC X12</p> <p>Type System Version: 004010</p> <p>Message Implementation Guideline (MIG): [Dropdown Menu]</p> <p>MIG Version:</p> <p>MIG Status:</p> <p>Message Type:</p> <p>Custom Integration Flow</p> <p>Customized Post-Processing:</p> <p>Process Direct Address:</p> <p>Receiver Function</p> <p>Enable Receiver:</p> |

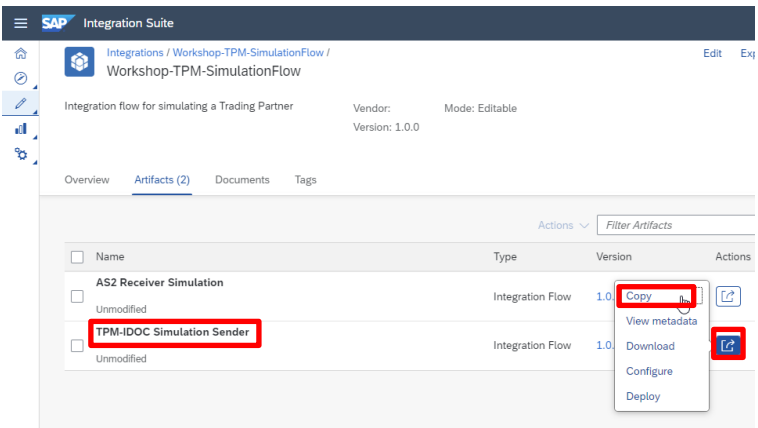
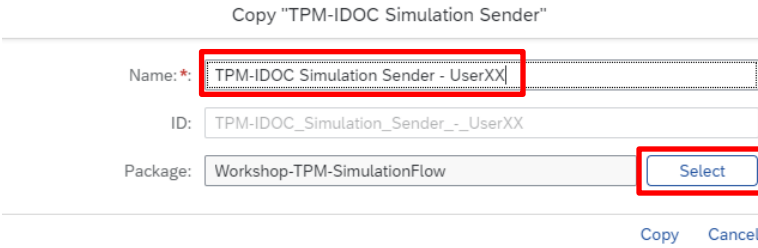
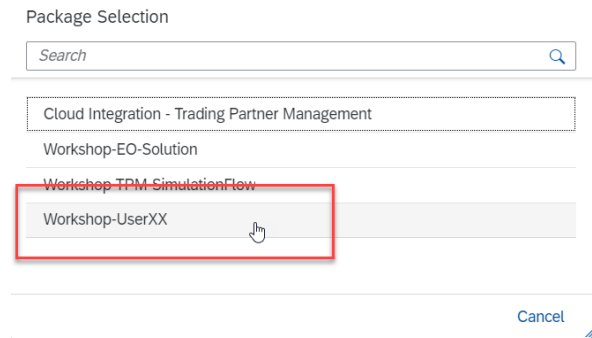
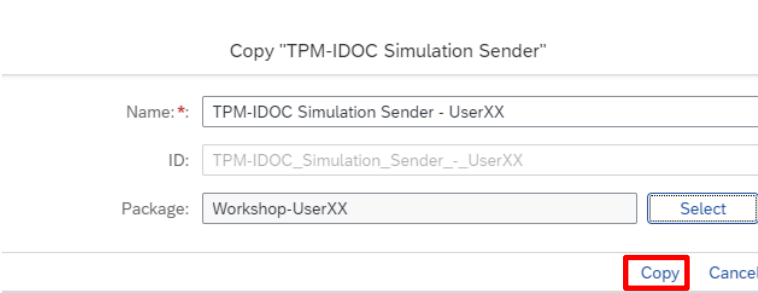
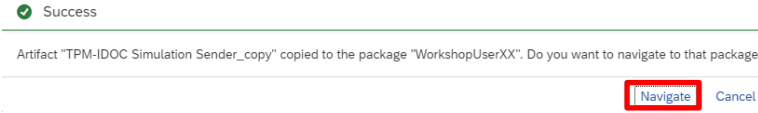
| Explanation | Screenshot |
|--|--|
| 10. In the pop up select <i>TradingPartner – X12 MIG Teched</i> and switch to the highest version. Then select <i>Choose</i> . |  |
| 11. Last step for the definition of the Agreement is to select the <i>Mapping</i> box (which is also prepared by using the Integration Advisor). Select the drop-down list. |  |
| 12. In the pop up select <i>[SAP] Mapping myCompany IDoc MIG Teched to TradingPartner - X12 MIG Teched</i> and switch to the highest version. Then select <i>Choose</i> . |  |
| 13. Please save now the Agreement. |  |
| 14. Activate the Agreement to publish all necessary data to the Partner Directory of Cloud Integration. With this, the Status will change from <i>Draft</i> to <i>Active</i> . |  |

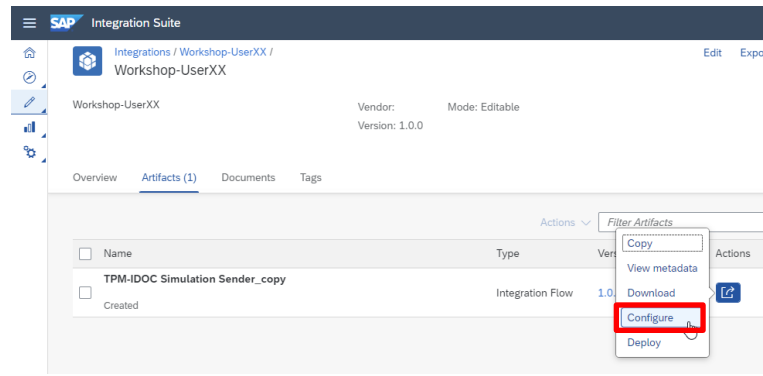
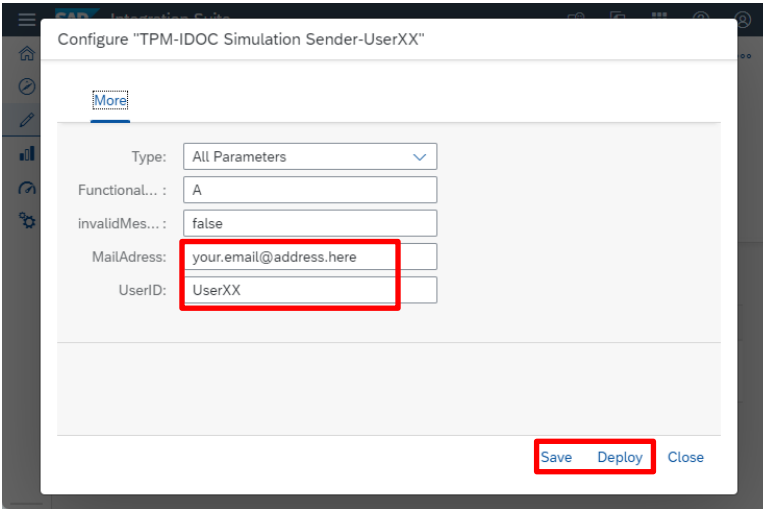
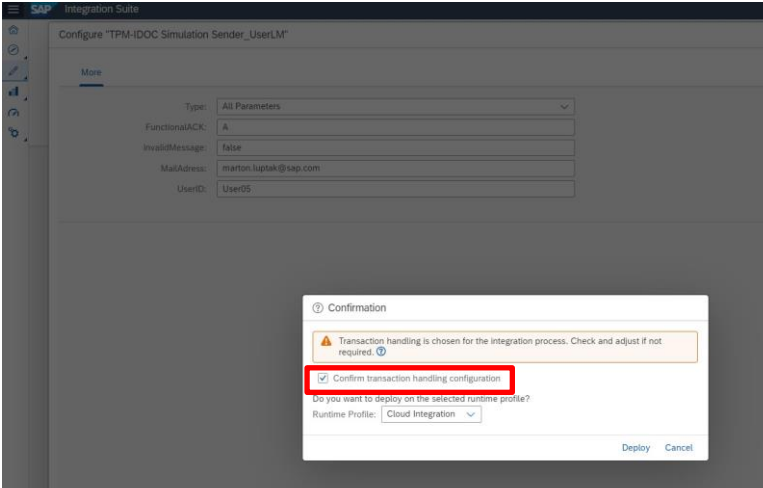
1.3 Prepare Simulation Flow and send a message

As we have defined that our Company will send an IDoc Order using the IDOC Protocol we need to simulate this sender. For this we have built an integration flow which you have to copy to a new package, configure and deploy. The IDoc message is sent as soon as the integration flow is deployed.

| Explanation | Screenshot |
|---|--|
| 1. Navigate to <i>Design</i> -> <i>Integrations and APIs</i> . |  |
| 2. If you haven't done so before, create a new Package by clicking <i>Create</i> . |  |
| 3. Use <i>Workshop-UserXX</i> for Name and Short Description with XX your user Id and save the package. |  |

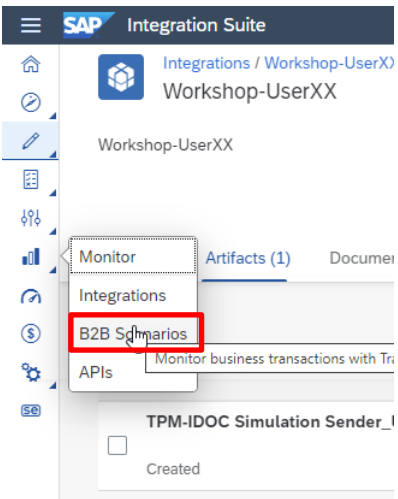
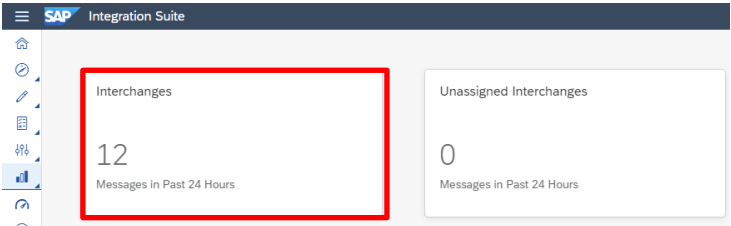
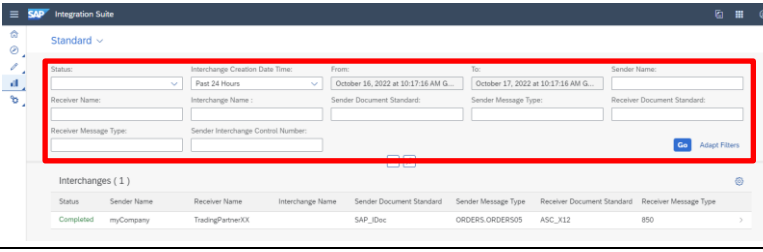
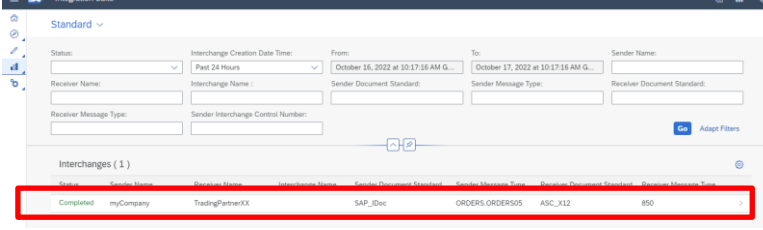
| Explanation | Screenshot | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|---------|------------------------|---------------|------------|---------------|--|----------------|-------|---------------------|----------|----------------------|----------|-------|------------------------|----------|------------------------------------|----------|-------|---------------------|----------|-----------------|----------|-------|------------------------|----------|
| 4. Navigate back to the list of existing packages by clicking <i>Integrations and APIs</i> . |  <p>The screenshot shows the SAP Integration Suite interface. The breadcrumb navigation at the top indicates the path: Integrations and APIs / Workshop-UserXX / Workshop-UserXX. The 'Integrations and APIs' tab is highlighted in the breadcrumb. Below the breadcrumb, there are tabs for Header, Overview, Artifacts (1), Documents, Comments, and Tags. The 'Header' tab is active, displaying fields for *Name (Workshop-UserXX), *Technical Name (WorkshopUserXX), *Short Description (Workshop-UserXX), Version (1.0.0), Vendor, and Mode (Editable).</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. Open the package <i>Workshop-TPM-SimulationFlow</i> . |  <p>The screenshot shows a list of packages under the heading 'Packages (4)'. The list has columns for Name, Mode, Version, Created By, and Creation Time. The package 'Workshop-TPM-SimulationFlow' is highlighted with a red box. A tooltip is visible over the package name.</p> <table><tr><th>Name</th><th>Mode</th><th>Version</th><th>Created By</th><th>Creation Time</th></tr><tr><td>Cloud Integration - Trading Partner Management</td><td>Configure-only</td><td>1.1.0</td><td>marco.ertel@sap.com</td><td>Mon, GMT</td></tr><tr><td>Workshop-EO-Solution</td><td>Editable</td><td>1.0.0</td><td>user12@techedusers.com</td><td>Mon, GMT</td></tr><tr><td>Workshop-TPM-SimulationFlow</td><td>Editable</td><td>1.0.0</td><td>marco.ertel@sap.com</td><td>Mon, GMT</td></tr><tr><td>Workshop-UserXX</td><td>Editable</td><td>1.0.0</td><td>user12@techedusers.com</td><td>Mon, GMT</td></tr></table> | Name | Mode | Version | Created By | Creation Time | Cloud Integration - Trading Partner Management | Configure-only | 1.1.0 | marco.ertel@sap.com | Mon, GMT | Workshop-EO-Solution | Editable | 1.0.0 | user12@techedusers.com | Mon, GMT | Workshop-TPM-SimulationFlow | Editable | 1.0.0 | marco.ertel@sap.com | Mon, GMT | Workshop-UserXX | Editable | 1.0.0 | user12@techedusers.com | Mon, GMT |
| Name | Mode | Version | Created By | Creation Time | | | | | | | | | | | | | | | | | | | | | | |
| Cloud Integration - Trading Partner Management | Configure-only | 1.1.0 | marco.ertel@sap.com | Mon, GMT | | | | | | | | | | | | | | | | | | | | | | |
| Workshop-EO-Solution | Editable | 1.0.0 | user12@techedusers.com | Mon, GMT | | | | | | | | | | | | | | | | | | | | | | |
| Workshop-TPM-SimulationFlow | Editable | 1.0.0 | marco.ertel@sap.com | Mon, GMT | | | | | | | | | | | | | | | | | | | | | | |
| Workshop-UserXX | Editable | 1.0.0 | user12@techedusers.com | Mon, GMT | | | | | | | | | | | | | | | | | | | | | | |
| 6. In the package, switch to tab <i>Artifacts</i> . |  <p>The screenshot shows the SAP Integration Suite interface for the package 'Workshop-TPM-SimulationFlow'. The breadcrumb navigation indicates the path: Integrations and APIs / Workshop-TPM-SimulationFlow / Workshop-TPM-SimulationFlow. The 'Artifacts (2)' tab is highlighted in the breadcrumb. Below the breadcrumb, there are tabs for Overview, Artifacts (2), Documents, Tags, and Comments. The 'Overview' tab is active, displaying the Description, Package ID (WorkshopSimulationFlow), and Supported Platform (Cloud Integration).</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

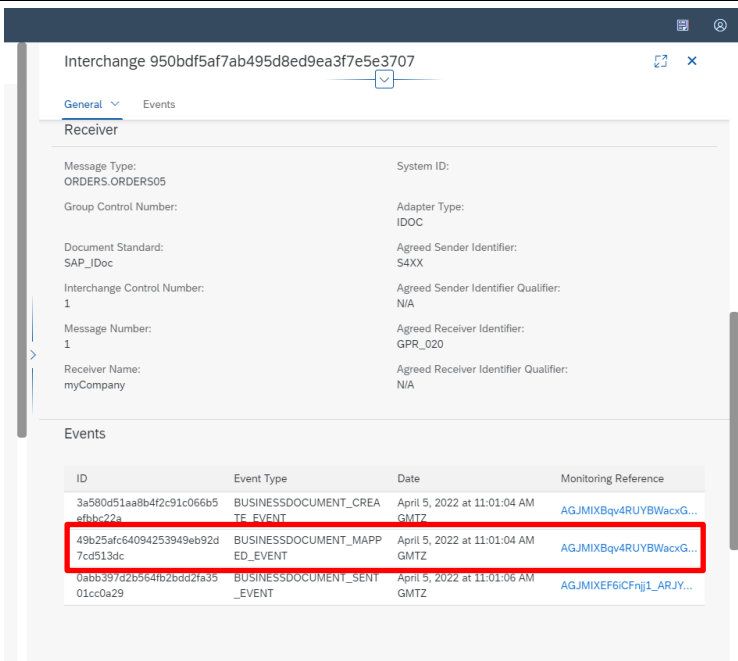
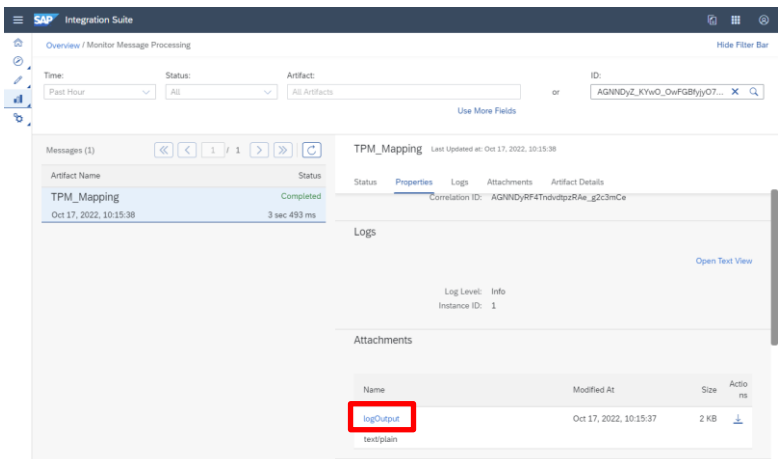
| Explanation | Screenshot |
|--|--|
| 7. Copy the integration flow <i>TPM-IDOC Simulation Sender</i> to your own package. Select <i>Copy</i> from the <i>Actions</i> menu of the <i>TPM-IDOC Simulation Sender</i> integration flow. |  |
| 8. In the popup, change the name to <i>TPM-IDOC Simulation Sender - UserXX</i> (with <i>UserXX</i> using your ID). Then select <i>Select</i> to change the target package. |  |
| 9. In the upcoming package selection screen, select your package <i>Workshop-UserXX</i> . |  |
| 10. Next, select <i>Copy</i> . |  |
| 11. On the next dialog, select <i>Navigate</i> to open your package. |  |

| Explanation | Screenshot |
|---|--|
| 12. You now have to <i>Configure</i> the integration flow. Select <i>Configure</i> from the <i>Actions</i> menu of the <i>TPM-IDOC Simulation Sender - UserXX</i> integration flow. |  The screenshot shows the SAP Integration Suite interface. At the top, it says 'Integrations / Workshop-UserXX / Workshop-UserXX'. Below this, there's a table with columns 'Name', 'Type', and 'Version'. The first row is 'TPM-IDOC Simulation Sender - UserXX' with type 'Integration Flow' and version '1.0.0'. To the right of this table, there's an 'Actions' menu with options: 'Copy', 'View metadata', 'Download', 'Configure' (highlighted with a red box), and 'Deploy'. |
| 13. Please configure the integration flow with your mail address and UserID <i>UserXX</i> . The transformed message will be sent to this Mail address. Then select <i>Save</i> and <i>Deploy</i> . Once the integration flow is successfully deployed, the message is sent and should appear in your mailbox a few seconds later. In case a warning message pop-up about IDOC[MessageFlow...] please close the warning message |  The screenshot shows a dialog box titled 'Configure "TPM-IDOC Simulation Sender-UserXX"'. It has several input fields: 'Type' (set to 'All Parameters'), 'Functional...' (set to 'A'), 'invalidMes...' (set to 'false'), 'MailAddress:' (set to 'your.email@address.here' and highlighted with a red box), and 'UserID:' (set to 'UserXX'). At the bottom right, there are three buttons: 'Save' (highlighted with a red box), 'Deploy' (highlighted with a red box), and 'Close'. |
| 14. Please select the Confirmation message about transaction handling by selecting the checkmark. The runtime profile is preselected as Cloud Integration and select deploy! |  The screenshot shows a dialog box titled 'Configure "TPM-IDOC Simulation Sender - UserLM"'. It has several input fields: 'Type' (set to 'All Parameters'), 'FunctionalACK:' (set to 'A'), 'invalidMessage:' (set to 'false'), 'MailAddress:' (set to 'marion.luptak@sap.com'), and 'UserID:' (set to 'User05'). Below these fields, there's a 'Confirmation' dialog box. It contains a warning icon and text: 'Transaction handling is chosen for the integration process. Check and adjust if not required.' Below this, there's a checkbox labeled 'Confirm transaction handling configuration:' which is checked and highlighted with a red box. At the bottom, there's a dropdown for 'Runtime Profile:' set to 'Cloud Integration' and two buttons: 'Deploy' and 'Cancel'. |

1.4 Monitor the Scenario

As the sent IDoc message is now sent to the generic integration flow and from there via the AS2 Adapter to other (already prepared) integration flow you should get an email in your inbox with the payload as an X12 850 message. To monitor B2B Scenarios let's have a look at the B2B Monitoring.

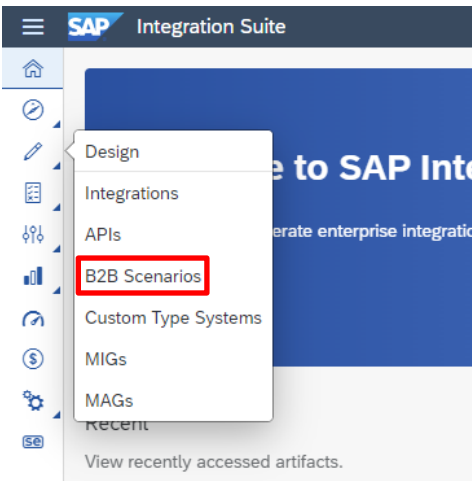
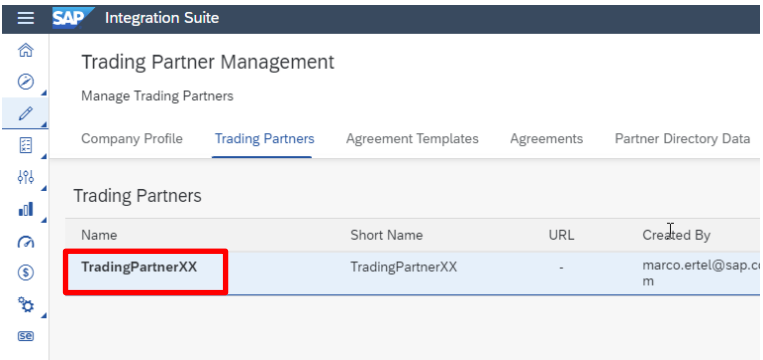
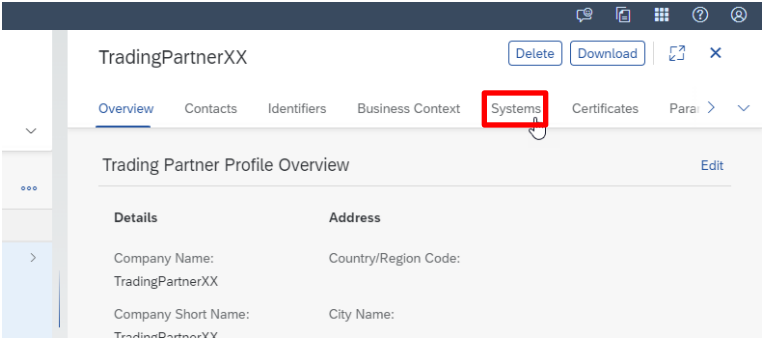
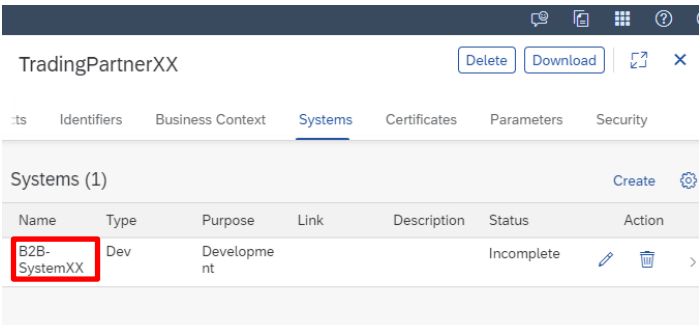
| Explanation | Screenshot |
|--|--|
| 1. Navigate to the B2B Monitoring by selecting <i>Monitor</i> → <i>B2B Scenarios</i> . |  |
| 2. On the tiles you see how many interchanges had been processed in the last 24 hours. Click on the left tile. |  |
| 3. Now you see all messages from the last 24 hours. You can restrict them by using the filters. |  |
| 4. Click on one of your <i>Completed</i> interchanges. |  |

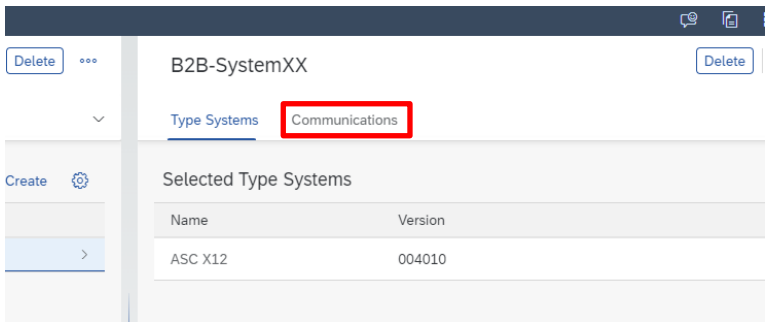
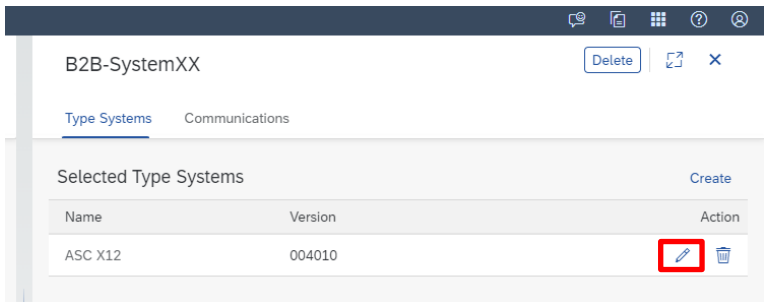
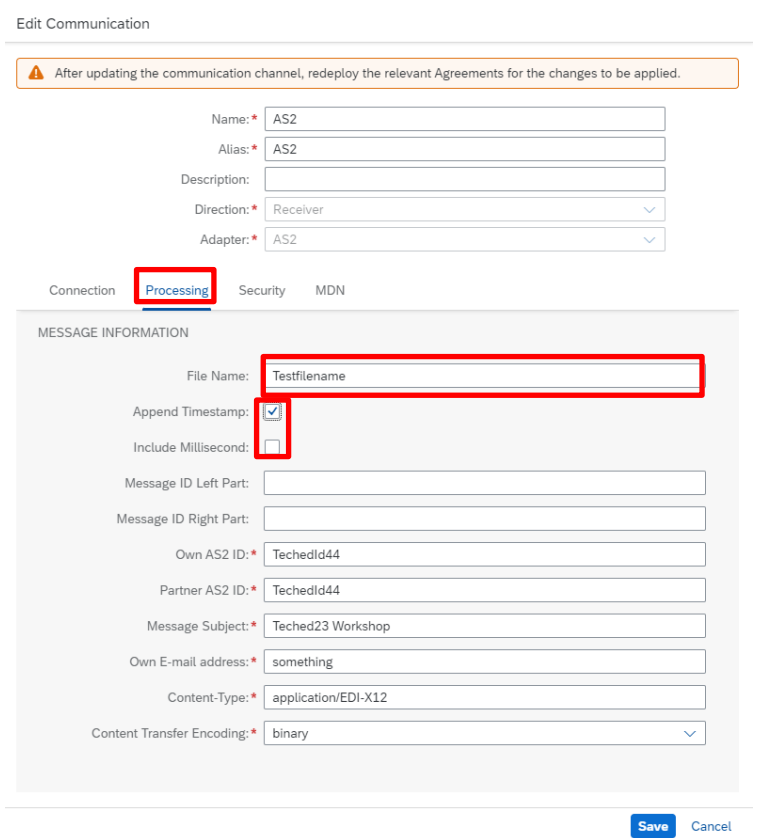
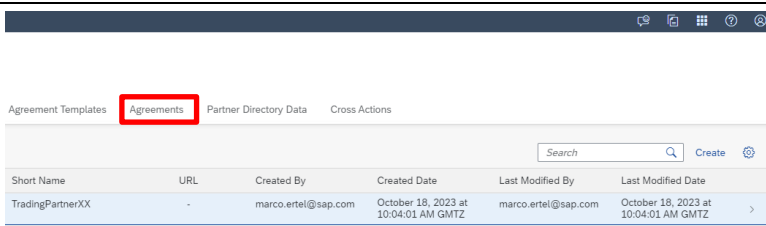
| Explanation | Screenshot | | | | | | | | | | | | | | | | |
|--|--|-----------------------------------|------------------------|-------------|----------------------|----------------------------------|---------------------------------|-----------------------------------|----------------------|----------------------------------|--------------------------------|-----------------------------------|----------------------|----------------------------------|--------------------------------|-----------------------------------|------------------------|
| <p>5. On this page, you see more details like Sender Name, Adapter Type, ... and you can also jump to the technical monitoring if this is necessary and you are also able to see the payload of the source and target message.</p> |  <p>Interchange 950bdf5af7ab495d8ed9ea3f7e5e3707</p> <p>General ▾ Events</p> <p>Receiver</p> <p>Message Type: ORDERS.ORDER505 Group Control Number: Document Standard: SAP_IDoc Interchange Control Number: 1 Message Number: 1 Receiver Name: myCompany</p> <p>System ID: Adapter Type: IDOC Agreed Sender Identifier: S4XX Agreed Sender Identifier Qualifier: N/A Agreed Receiver Identifier: GPR_020 Agreed Receiver Identifier Qualifier: N/A</p> <p>Events</p> <table><tr><th>ID</th><th>Event Type</th><th>Date</th><th>Monitoring Reference</th></tr><tr><td>3a580d51aa8b4f2c91c066b5efbhc22a</td><td>BUSINESSDOCUMENT_CREATION_EVENT</td><td>April 5, 2022 at 11:01:04 AM GMTZ</td><td>AGJMXBq4RUYBWacxG...</td></tr><tr><td>49b25afc64094253949eb92d7cd513dc</td><td>BUSINESSDOCUMENT_MAPPING_EVENT</td><td>April 5, 2022 at 11:01:04 AM GMTZ</td><td>AGJMXBq4RUYBWacxG...</td></tr><tr><td>0abb397d2b564fb2bdd2fa3501cc0a29</td><td>BUSINESSDOCUMENT_SENDING_EVENT</td><td>April 5, 2022 at 11:01:06 AM GMTZ</td><td>AGJMXEF6iCFnj1_ARJY...</td></tr></table> | ID | Event Type | Date | Monitoring Reference | 3a580d51aa8b4f2c91c066b5efbhc22a | BUSINESSDOCUMENT_CREATION_EVENT | April 5, 2022 at 11:01:04 AM GMTZ | AGJMXBq4RUYBWacxG... | 49b25afc64094253949eb92d7cd513dc | BUSINESSDOCUMENT_MAPPING_EVENT | April 5, 2022 at 11:01:04 AM GMTZ | AGJMXBq4RUYBWacxG... | 0abb397d2b564fb2bdd2fa3501cc0a29 | BUSINESSDOCUMENT_SENDING_EVENT | April 5, 2022 at 11:01:06 AM GMTZ | AGJMXEF6iCFnj1_ARJY... |
| ID | Event Type | Date | Monitoring Reference | | | | | | | | | | | | | | |
| 3a580d51aa8b4f2c91c066b5efbhc22a | BUSINESSDOCUMENT_CREATION_EVENT | April 5, 2022 at 11:01:04 AM GMTZ | AGJMXBq4RUYBWacxG... | | | | | | | | | | | | | | |
| 49b25afc64094253949eb92d7cd513dc | BUSINESSDOCUMENT_MAPPING_EVENT | April 5, 2022 at 11:01:04 AM GMTZ | AGJMXBq4RUYBWacxG... | | | | | | | | | | | | | | |
| 0abb397d2b564fb2bdd2fa3501cc0a29 | BUSINESSDOCUMENT_SENDING_EVENT | April 5, 2022 at 11:01:06 AM GMTZ | AGJMXEF6iCFnj1_ARJY... | | | | | | | | | | | | | | |
| <p>6. Depending on the Event you've selected, you see here more details on a technical level to solve issues if necessary.</p> |  <p>SAP Integration Suite</p> <p>Overview / Monitor Message Processing</p> <p>Time: Past Hour Status: All Artifact: All Artifacts ID: AGNNDyZ_KYwO_OwFG8HyjOT... X Q</p> <p>Use More Fields</p> <p>Messages (3)</p> <table><tr><th>Artifact Name</th><th>Status</th></tr><tr><td>TPM_Mapping</td><td>Completed</td></tr></table> <p>Oct 17, 2022, 10:15:38 3 sec 493 ms</p> <p>TPM_Mapping Last Updated at: Oct 17, 2022, 10:15:38</p> <p>Status Properties Logs Attachments Artifact Details</p> <p>Correlation ID: AGNNDyRF4TndvtpzRAa_g2c3mCe</p> <p>Logs</p> <p>Log Level: Info Instance ID: 1</p> <p>Attachments</p> <table><tr><th>Name</th><th>Modified At</th><th>Size</th><th>Actions</th></tr><tr><td>logOutput</td><td>Oct 17, 2022, 10:15:37</td><td>2 KB</td><td>Download</td></tr></table> | Artifact Name | Status | TPM_Mapping | Completed | Name | Modified At | Size | Actions | logOutput | Oct 17, 2022, 10:15:37 | 2 KB | Download | | | | |
| Artifact Name | Status | | | | | | | | | | | | | | | | |
| TPM_Mapping | Completed | | | | | | | | | | | | | | | | |
| Name | Modified At | Size | Actions | | | | | | | | | | | | | | |
| logOutput | Oct 17, 2022, 10:15:37 | 2 KB | Download | | | | | | | | | | | | | | |

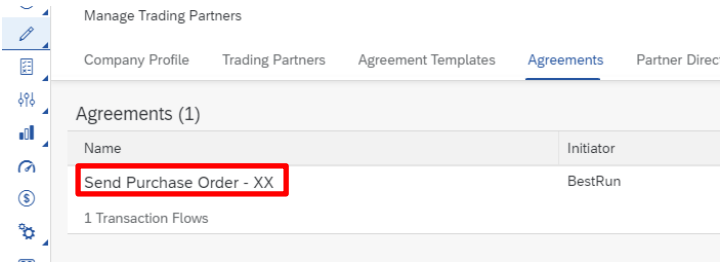
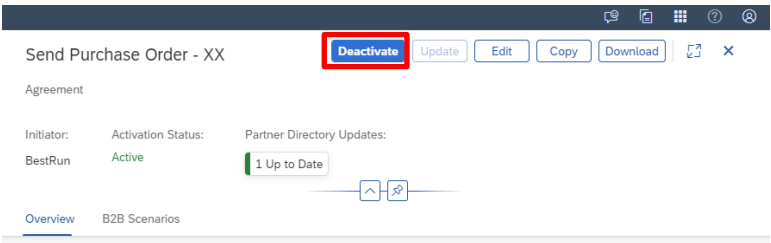
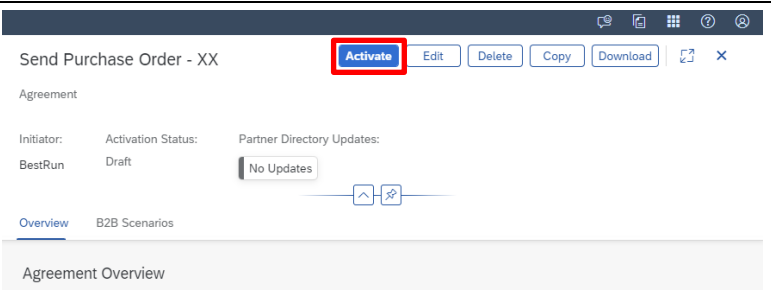
Congrats, you have successfully completed the first exercise.

2 OPTIONAL: EXERCISE 2- FILENAME

In the next step you will modify the filename and append a timestamp to the AS2 sent message as many B2B Systems expect that. This filename is also shown in the message you get via mail.

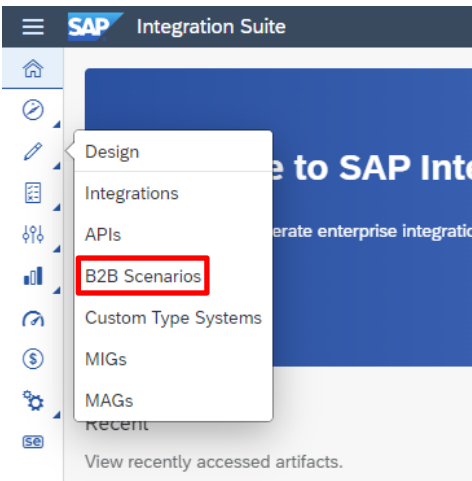
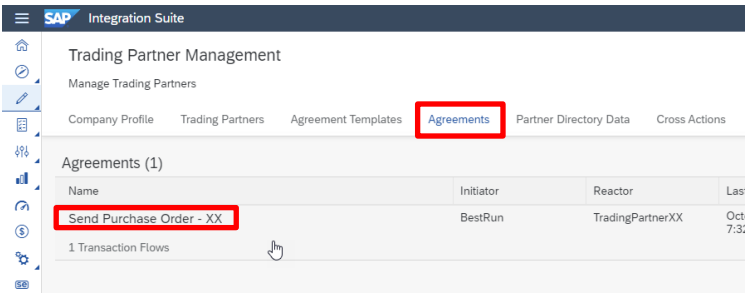
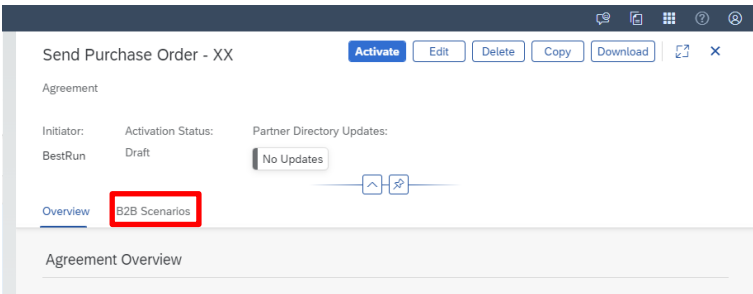
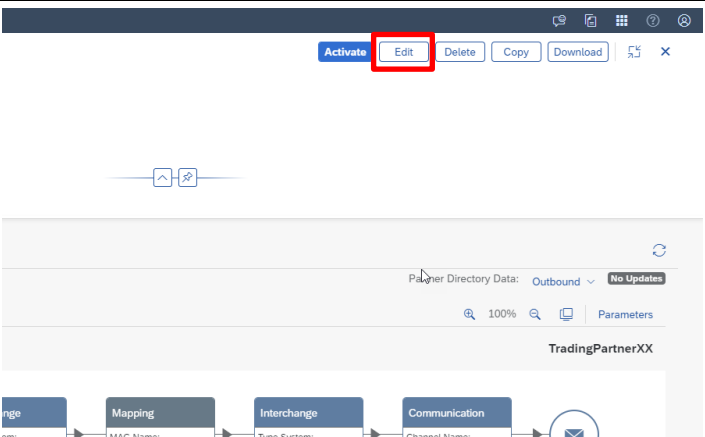
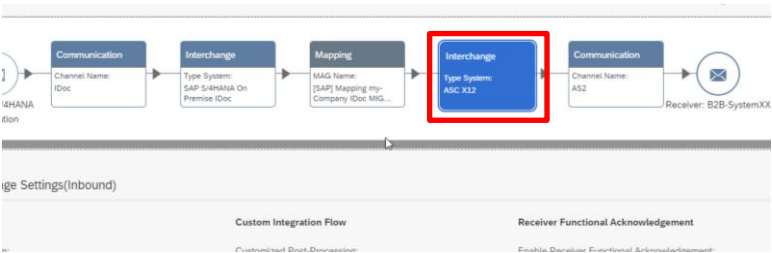
| Explanation | Screenshot |
|--|---|
| 1. Navigate to <i>Design</i> and select <i>B2B Scenarios</i> . |  The screenshot shows the SAP Integration Suite interface. A dropdown menu is open from the 'Design' icon in the left sidebar. The menu options are: Design, Integrations, APIs, B2B Scenarios (highlighted with a red box), Custom Type Systems, MIGs, and MAGs. The background shows a blurred view of the 'Design to SAP Integration Suite' page. |
| 2. Navigate to the Trading Partner you've created in Exercise 1 (TradingPartnerXX with XX your group number) |  The screenshot shows the 'Trading Partner Management' page in SAP Integration Suite. The 'Trading Partners' tab is selected. A table lists trading partners, with 'TradingPartnerXX' highlighted by a red box. The table has columns: Name, Short Name, URL, and Created By. The 'Created By' column shows 'marco.ertel@sap.com'. |
| 3. In the Trading Partner navigate to the Systems |  The screenshot shows the 'Trading Partner Profile Overview' page for 'TradingPartnerXX'. The 'Systems' tab is selected and highlighted with a red box. The page displays a 'Trading Partner Profile Overview' section with 'Details' and 'Address' tabs. The 'Details' tab is active, showing fields for Company Name, Company Short Name, Country/Region Code, and City Name. |
| 4. Open the System |  The screenshot shows the 'Systems' tab in the 'Trading Partner Profile Overview' for 'TradingPartnerXX'. A table lists systems, with 'B2B-SystemXX' highlighted by a red box. The table has columns: Name, Type, Purpose, Link, Description, Status, and Action. The 'Status' column shows 'Incomplete'. |

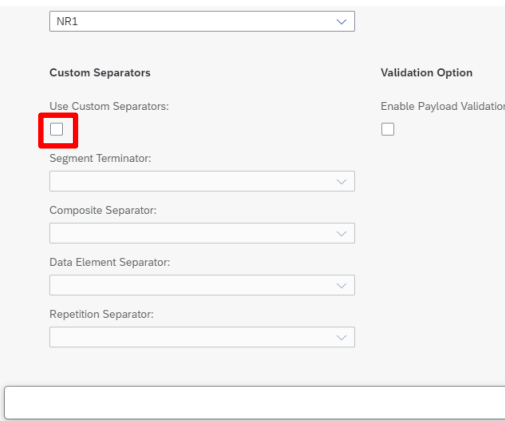

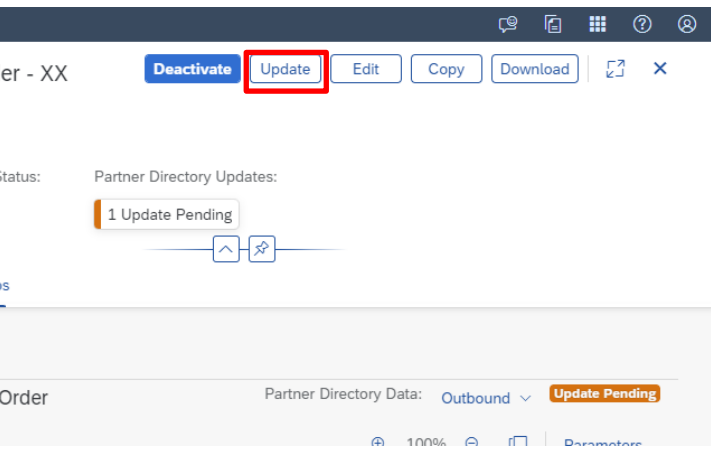
| Explanation | Screenshot |
|--|--|
| 5. Switch to the tab Communications |  |
| 6. Modify now the Communication |  |
| 7. Switch to the Tab Processing and add a filename and mark the <i>Append Timestamp</i> optionally also the <i>Millisecond</i> |  |
| 8. As the communication has changed the Agreement has to be deactivated and activated again. Please navigate to agreement |  |

| Explanation | Screenshot |
|--|---|
| 9. Open your Agreement (Send Purchase Order - XX with XX your group number) |  |
| 10. Deactivate your agreement |  |
| 11. Activate the Agreement again |  |
| 12. Now you can send a test message with your iflow you've copied in exercise 1.3. (go to the integration package you've created and deploy the iflow.) Then check your inbox how the output has changed | |

3 OPTIONAL: EXERCISE 3- SEPARATORS

Here you change the separators of the X12 message as different systems might need different separators.

| Explanation | Screenshot |
|--|--|
| 1. Navigate to <i>Design</i> and select <i>B2B Scenarios</i> . |  The screenshot shows the SAP Integration Suite interface. A dropdown menu is open from the 'Design' icon in the left sidebar. The menu options are: Design, Integrations, APIs, B2B Scenarios (highlighted with a red box), Custom Type Systems, MIGs, and MAGs. The background shows a blurred view of the 'Design to SAP Integration Suite' page. |
| 2. Navigate to your agreement (TradingPartnerXX with XX your group number) and open it |  The screenshot shows the 'Trading Partner Management' section in SAP Integration Suite. The 'Agreements' tab is selected and highlighted with a red box. Below the tabs, there is a table titled 'Agreements (1)'. The table has columns: Name, Initiator, Reactor, and Last Updated. One agreement is listed: 'Send Purchase Order - XX' (highlighted with a red box), with Initiator 'BestRun' and Reactor 'TradingPartnerXX'. Below the table, it says '1 Transaction Flows'. |
| 3. Switch to the Tab B2B Scenarios |  The screenshot shows the 'Send Purchase Order - XX' agreement details. The 'Overview' tab is selected, and the 'B2B Scenarios' sub-tab is highlighted with a red box. The page shows the agreement's status as 'Draft' and 'No Updates' for partner directory updates. There are buttons for 'Activate', 'Edit', 'Delete', 'Copy', and 'Download'. |
| 4. Go into the edit mode |  The screenshot shows the 'Send Purchase Order - XX' agreement in edit mode. The 'Edit' button is highlighted with a red box. The page displays the 'TradingPartnerXX' agreement overview, including a diagram of the transaction flow and a table of partner directory data. |
| 5. Select the X12 Interchange |  The screenshot shows the 'Interchange' selection screen. A flow diagram is visible at the top, showing the sequence: Communication (Channel Name: IDoc) -> Interchange (Type System: SAP S/4HANA On Premise IDoc) -> Mapping (MAG Name: SAP Mapping my Company IDoc MIG...) -> Interchange (Type System: ASC X12, highlighted with a red box) -> Communication (Channel Name: AS2) -> Receiver: B2B-SystemXX. Below the diagram, there are sections for 'Inbound Settings' and 'Custom Integration Flow'. |

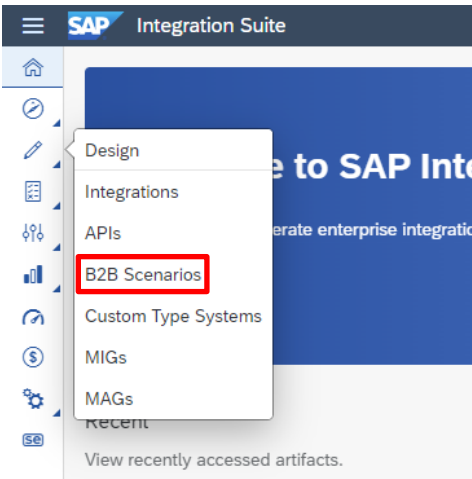
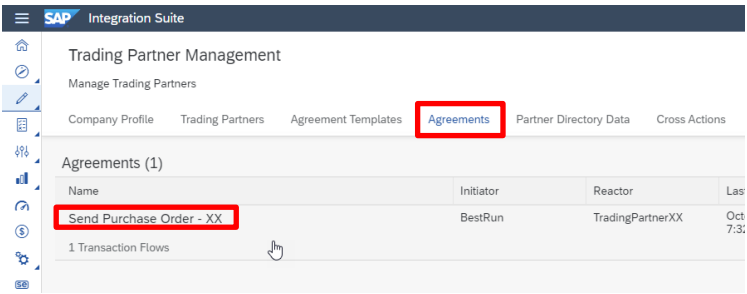
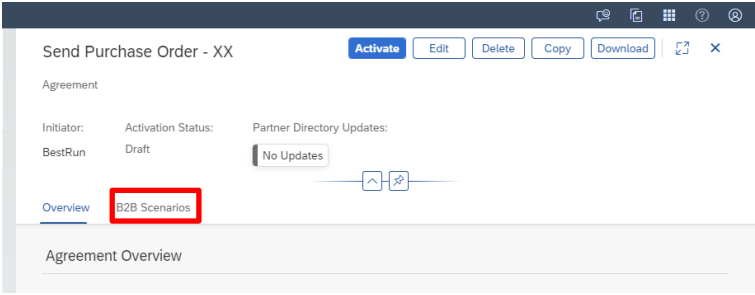
| Explanation | Screenshot |
|---|---|
| 6. Scroll down to the Separator Settings and check the box <i>Use Custom Separators</i> |  A screenshot of the 'Separator Settings' interface. At the top, there is a dropdown menu set to 'NR1'. Below it, the 'Custom Separators' section contains a checkbox labeled 'Use Custom Separators:' which is highlighted with a red square. To the right, under 'Validation Option', there is a checkbox labeled 'Enable Payload Validation'. Below these are five dropdown menus for 'Segment Terminator:', 'Composite Separator:', 'Data Element Separator:', and 'Repetition Separator:'. |
| 7. Change the custom separators. |  A screenshot of the 'Separator Settings' interface with the 'Use Custom Separators' checkbox checked. A red rectangle highlights the four dropdown menus below: 'Segment Terminator:' is set to 'Tilde(~)', 'Composite Separator:' is set to 'Colon(:)', 'Data Element Separator:' is set to 'Plus(+)', and 'Repetition Separator:' is set to 'Pipe()'. |
| 8. Save the changed Agreement and update the content in the Partner Directory Database |  A screenshot of the 'Partner Directory' interface. At the top, there is a header bar with buttons: 'Deactivate', 'Update' (highlighted with a red box), 'Edit', 'Copy', and 'Download'. Below this, the 'Partner Directory Updates' section shows '1 Update Pending'. At the bottom, there is a 'Partner Directory Data' section with a dropdown set to 'Outbound' and a status indicator 'Update Pending'. |
| 9. Now you can send a test message with your iflow you've copied in exercise 1.3. (go to the integration package you've created and deploy the iflow.) Then check your inbox how the output has changed or look in the B2B Monitoring where you also have access to the payload | |

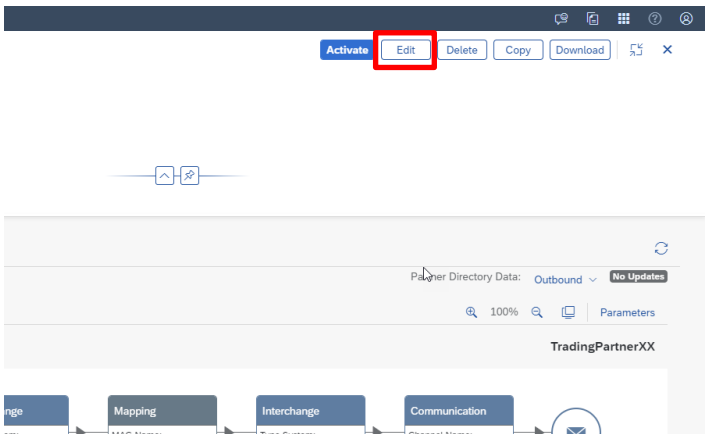
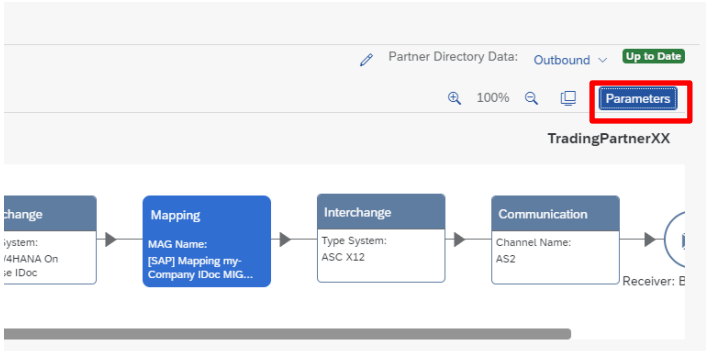
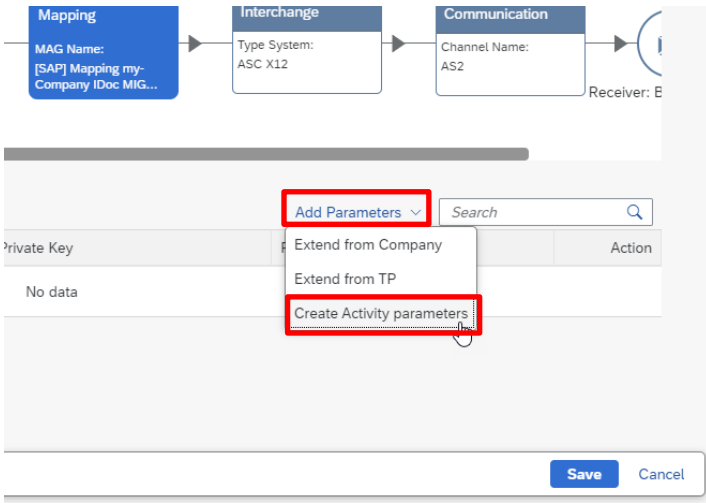
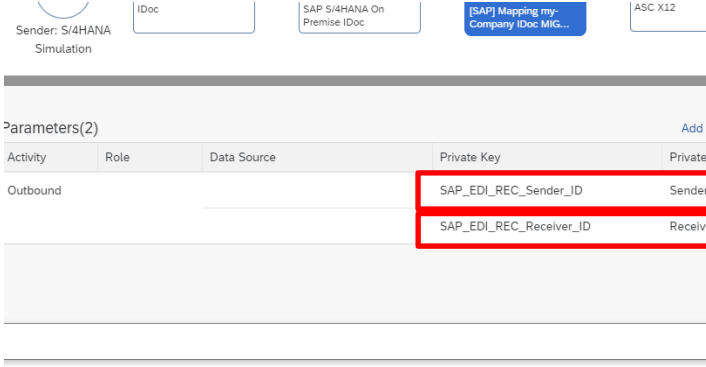
4 OPTIONAL: EXERCISE 4 - CHANGE ENVELOPE

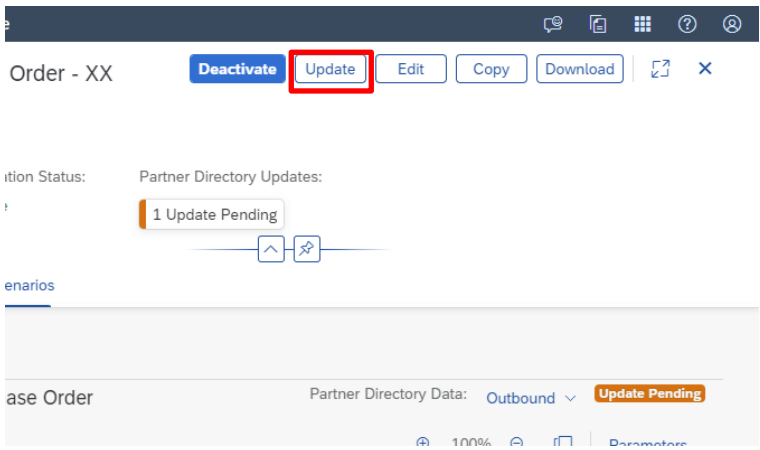
In this exercise you can see how to influence the envelope of an X12 message. Such an envelope contains the following elements (this envelope does not reflect the values in our payload and is only an example):

In this exercise we will change 6 and 8 which are the *Interchange Sender ID* and the *Interchange Receiver ID*.

This is done via the parameters on agreement level.

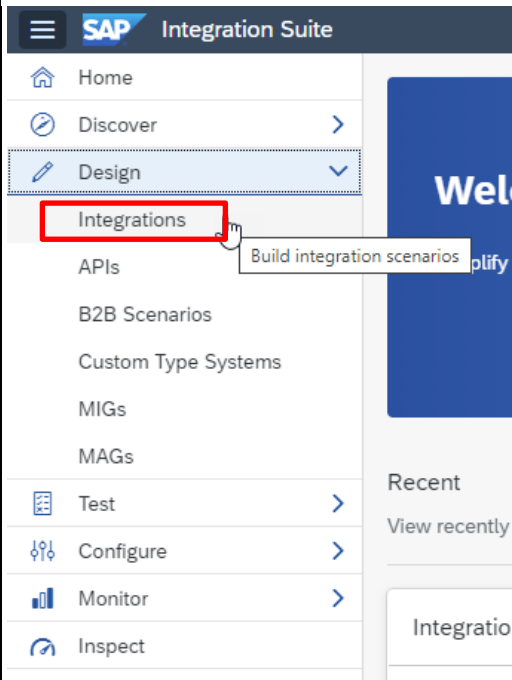
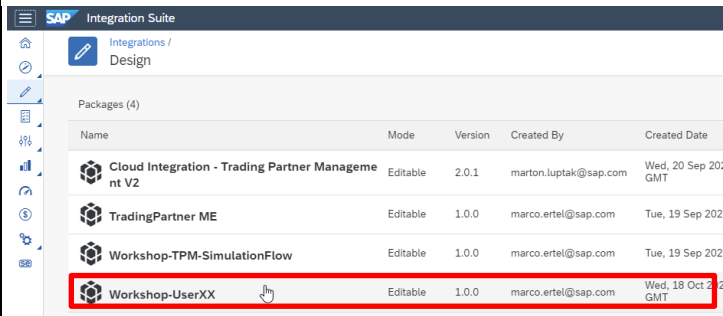
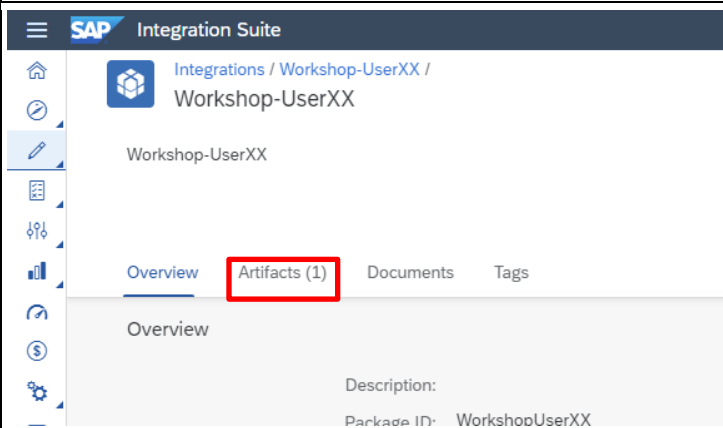
| Explanation | Screenshot |
|--|---|
| 1. Navigate to <i>Design</i> and select <i>B2B Scenarios</i> . |  A screenshot of the SAP Integration Suite interface. The 'Design' menu is open, showing options: Design, Integrations, APIs, B2B Scenarios (highlighted with a red box), Custom Type Systems, MIGs, and MAGs. |
| 2. Navigate to your agreement (TradingPartnerXX with XX your group number) and open it |  A screenshot of the SAP Integration Suite 'Agreements' page. The 'Agreements' tab is selected (highlighted with a red box). A table lists agreements, with 'Send Purchase Order - XX' highlighted (highlighted with a red box). The table has columns: Name, Initiator, Reactor, and Last Update. |
| 3. Switch to the Tab B2B Scenarios |  A screenshot of the SAP Integration Suite 'Send Purchase Order - XX' agreement page. The 'B2B Scenarios' tab is selected (highlighted with a red box). The page shows details for the agreement, including Initiator (BestRun), Activation Status (Draft), and Partner Directory Updates (No Updates). |

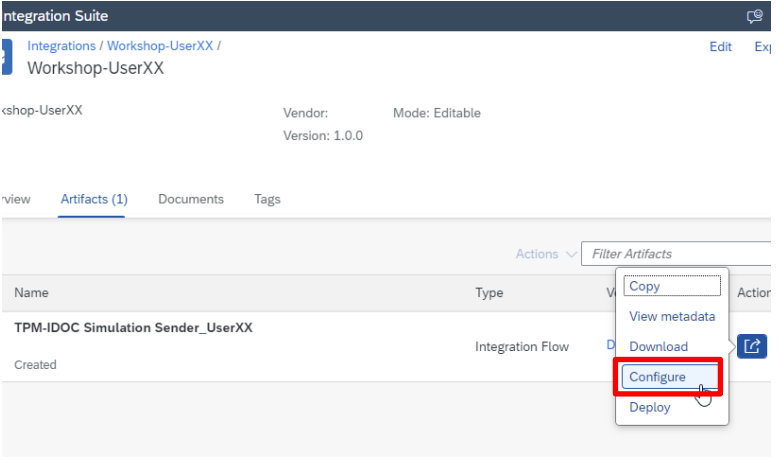
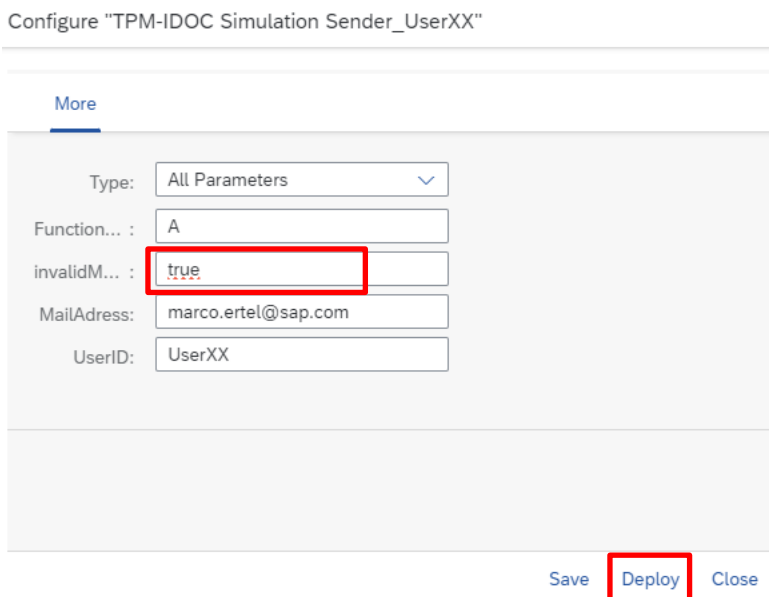
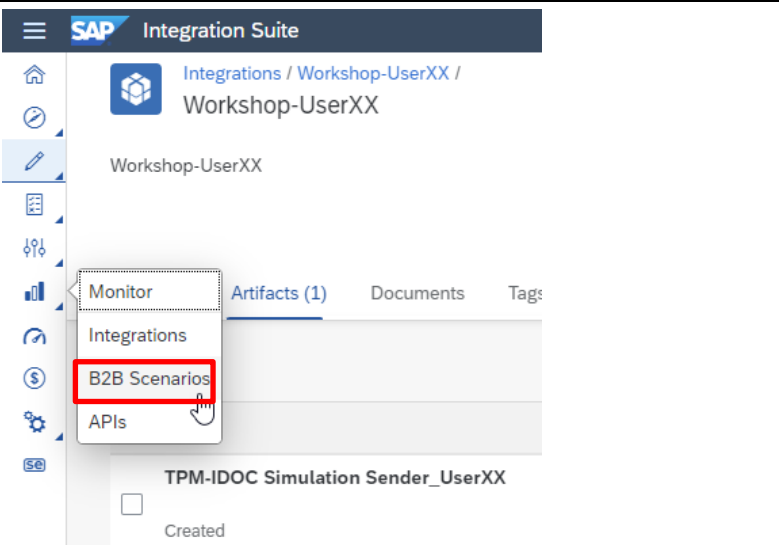
| Explanation | Screenshot |
|---|--|
| 4. Go into the edit mode |  |
| 5. Select the parameters |  |
| 6. Parameters can be inherited from the company profile, from the Trading Partner Profile or manually created. Click on <i>Add Parameters</i> followed by <i>Create Activity parameters</i> |  |
| 7. Add two parameters: SAP_EDI_REC_Sender_ID with value SenderIDXX (XX as your group number) SAP_EDI_REC_Receiver_ID with value ReceiverIDXX (XX as your group number) |  |

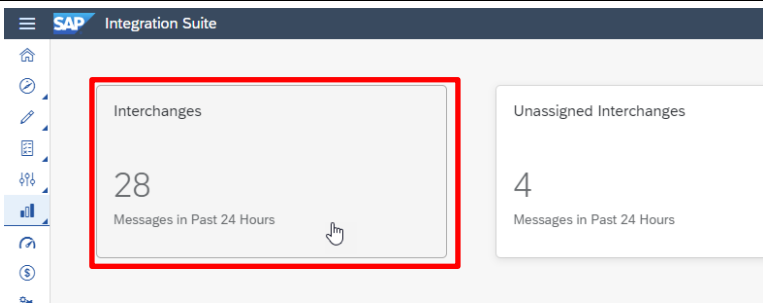
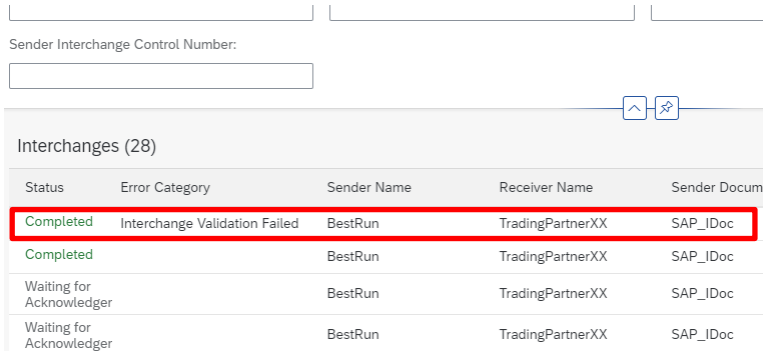
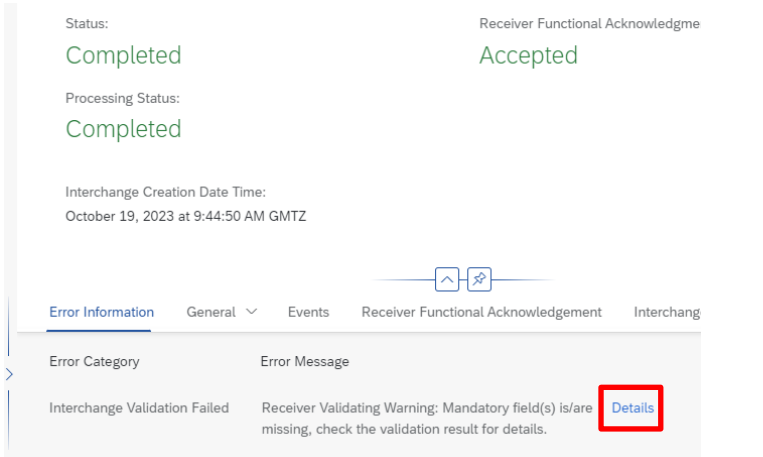
| Explanation | Screenshot |
|--|--|
| 8. Save the changed Agreement and update the content in the Partner Directory Database |  |
| 9. Now you can send a test message with your iflow you've copied in exercise 1.3. (go to the integration package you've created and deploy the iflow.) Then check your inbox how the output has changed or look in the B2B Monitoring where you also have access to the payload to see the different envelope values | |

5 OPTIONAL: EXERCISE 5 – VALIDATION

In this exercise an erroneous message will be sent to show the capabilities of the payload validation.

| Explanation | Screenshot | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---------|-----------------------|---------------------|------------|--------------|---|----------|-------|-----------------------|---------------------|-------------------|----------|-------|---------------------|-----------------|-----------------------------|----------|-------|---------------------|-----------------|-----------------|----------|-------|---------------------|--------------------|
| 1. Navigate to Integrations |  <p>The screenshot shows the SAP Integration Suite main menu. The 'Integrations' option is highlighted with a red box. A tooltip 'Build integration scenarios' is visible next to it. Other menu items include Home, Discover, Design, APIs, B2B Scenarios, Custom Type Systems, MIGs, MAGs, Test, Configure, Monitor, and Inspect.</p> | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Open your package (Workshop-UserXX with XX your group number) |  <p>The screenshot shows the 'Integrations / Design' view with a list of packages. The package 'Workshop-UserXX' is highlighted with a red box. The list includes the following data:</p> <table><thead><tr><th>Name</th><th>Mode</th><th>Version</th><th>Created By</th><th>Created Date</th></tr></thead><tbody><tr><td>Cloud Integration - Trading Partner Management V2</td><td>Editable</td><td>2.0.1</td><td>marton.luptak@sap.com</td><td>Wed, 20 Sep 20: GMT</td></tr><tr><td>TradingPartner ME</td><td>Editable</td><td>1.0.0</td><td>marco.ertel@sap.com</td><td>Tue, 19 Sep 202</td></tr><tr><td>Workshop-TPM-SimulationFlow</td><td>Editable</td><td>1.0.0</td><td>marco.ertel@sap.com</td><td>Tue, 19 Sep 202</td></tr><tr><td>Workshop-UserXX</td><td>Editable</td><td>1.0.0</td><td>marco.ertel@sap.com</td><td>Wed, 18 Oct 2: GMT</td></tr></tbody></table> | Name | Mode | Version | Created By | Created Date | Cloud Integration - Trading Partner Management V2 | Editable | 2.0.1 | marton.luptak@sap.com | Wed, 20 Sep 20: GMT | TradingPartner ME | Editable | 1.0.0 | marco.ertel@sap.com | Tue, 19 Sep 202 | Workshop-TPM-SimulationFlow | Editable | 1.0.0 | marco.ertel@sap.com | Tue, 19 Sep 202 | Workshop-UserXX | Editable | 1.0.0 | marco.ertel@sap.com | Wed, 18 Oct 2: GMT |
| Name | Mode | Version | Created By | Created Date | | | | | | | | | | | | | | | | | | | | | | |
| Cloud Integration - Trading Partner Management V2 | Editable | 2.0.1 | marton.luptak@sap.com | Wed, 20 Sep 20: GMT | | | | | | | | | | | | | | | | | | | | | | |
| TradingPartner ME | Editable | 1.0.0 | marco.ertel@sap.com | Tue, 19 Sep 202 | | | | | | | | | | | | | | | | | | | | | | |
| Workshop-TPM-SimulationFlow | Editable | 1.0.0 | marco.ertel@sap.com | Tue, 19 Sep 202 | | | | | | | | | | | | | | | | | | | | | | |
| Workshop-UserXX | Editable | 1.0.0 | marco.ertel@sap.com | Wed, 18 Oct 2: GMT | | | | | | | | | | | | | | | | | | | | | | |
| 3. Navigate to the Artifacts |  <p>The screenshot shows the 'Integrations / Workshop-UserXX / Workshop-UserXX' view. The 'Artifacts (1)' tab is highlighted with a red box. The view displays the package ID 'WorkshopUserXX' and a description field.</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

| Explanation | Screenshot |
|---|---|
| 4. Reconfigure your iflow |  <p>The screenshot shows the SAP Integration Suite interface. At the top, it says 'Integration Suite' and 'Integrations / Workshop-UserXX / Workshop-UserXX'. Below this, there's a table of artifacts. The first artifact is 'TPM-IDOC Simulation Sender_UserXX', which is an 'Integration Flow'. A context menu is open over this artifact, showing options: 'Copy', 'View metadata', 'Download', 'Configure' (highlighted with a red box), and 'Deploy'.</p> |
| 5. Change the field <i>invalidMessage</i> from <i>false</i> to <i>true</i> and <i>deploy</i> the iflow. |  <p>The screenshot shows the 'Configure "TPM-IDOC Simulation Sender_UserXX"' dialog. It has a 'More' tab selected. The 'Type' is set to 'All Parameters'. The 'Function...' field contains 'A'. The 'invalidM...' field (part of 'invalidMessage') is set to 'true' and is highlighted with a red box. The 'MailAddress' is 'marco.ertel@sap.com' and the 'UserID' is 'UserXX'. At the bottom right, there are 'Save', 'Deploy' (highlighted with a red box), and 'Close' buttons.</p> |
| 6. Open the B2B Monitor |  <p>The screenshot shows the SAP Integration Suite navigation menu. The 'B2B Scenarios' option is highlighted with a red box. Other options visible are 'Monitor', 'Integrations', and 'APIs'. The background shows the same artifact list as the previous screenshots.</p> |

| Explanation | Screenshot | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-------------|------------------|-----------------|---------------|-----------------|-----------|-------------------------------|---------|------------------|----------|-----------|--|---------|------------------|----------|--------------------------|--|---------|------------------|----------|--------------------------|--|---------|------------------|----------|
| 7. Click on Interchanges |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8. Open your Interchange |  <table><thead><tr><th>Status</th><th>Error Category</th><th>Sender Name</th><th>Receiver Name</th><th>Sender Document</th></tr></thead><tbody><tr><td>Completed</td><td>Interchange Validation Failed</td><td>BestRun</td><td>TradingPartnerXX</td><td>SAP_IDoc</td></tr><tr><td>Completed</td><td></td><td>BestRun</td><td>TradingPartnerXX</td><td>SAP_IDoc</td></tr><tr><td>Waiting for Acknowledger</td><td></td><td>BestRun</td><td>TradingPartnerXX</td><td>SAP_IDoc</td></tr><tr><td>Waiting for Acknowledger</td><td></td><td>BestRun</td><td>TradingPartnerXX</td><td>SAP_IDoc</td></tr></tbody></table> | Status | Error Category | Sender Name | Receiver Name | Sender Document | Completed | Interchange Validation Failed | BestRun | TradingPartnerXX | SAP_IDoc | Completed | | BestRun | TradingPartnerXX | SAP_IDoc | Waiting for Acknowledger | | BestRun | TradingPartnerXX | SAP_IDoc | Waiting for Acknowledger | | BestRun | TradingPartnerXX | SAP_IDoc |
| Status | Error Category | Sender Name | Receiver Name | Sender Document | | | | | | | | | | | | | | | | | | | | | | |
| Completed | Interchange Validation Failed | BestRun | TradingPartnerXX | SAP_IDoc | | | | | | | | | | | | | | | | | | | | | | |
| Completed | | BestRun | TradingPartnerXX | SAP_IDoc | | | | | | | | | | | | | | | | | | | | | | |
| Waiting for Acknowledger | | BestRun | TradingPartnerXX | SAP_IDoc | | | | | | | | | | | | | | | | | | | | | | |
| Waiting for Acknowledger | | BestRun | TradingPartnerXX | SAP_IDoc | | | | | | | | | | | | | | | | | | | | | | |
| 9. and look at the details of the error message |  <p>Status: Completed</p> <p>Processing Status: Completed</p> <p>Interchange Creation Date Time: October 19, 2023 at 9:44:50 AM GMTZ</p> <p>Receiver Functional Acknowledgment: Accepted</p> <p>Error Category: Interchange Validation Failed</p> <p>Error Message: Receiver Validating Warning: Mandatory field(s) is/are missing, check the validation result for details.</p> <p>Details</p> | | | | | | | | | | | | | | | | | | | | | | | | | |

Now you can find out, what error the source message contains. In real scenarios the next step would then to correct either the sending system or the mapping to get a correct message sent to your trading partner. Thanks a lot for your interest in how to handle B2B scenarios with the SAP Integration Suite! We hoped you like it. If you interested in more check the openSAP (<https://open.sap.com/>) page regularly as very soon a course specialized to B2B will be published there.