Feature at a Glance

Intelligent Invoice Conversion for the SAP Business Network NP-32948

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THE BEST RUN SAP

Introducing:
Intelligent invoice Conversion for the SAP Business Network

Feature Description

Intelligent Invoice conversion is a new functionality being provided for invoice automation to suppliers on the SAP Business network using Invoice conversion templates that brings intelligence into the invoice conversion process that includes machine learning which reads simple invoice data automatically and also an intuitive document user interface that suppliers can use to build and review annotation rules for extracting complex invoice data, all built into a guided self service onboarding.

In its initial version, suppliers can *upload* PDF and scanned paper invoices in their SAP Business Network account that is then converted into SAP Business Network invoices using these Invoice conversion templates and sent to their buyer.

Key Benefits

- **Self service onboarding** : Self service guided onboarding provided in the supplier's test account.
- **Efficient document extraction** : Invoice data is extracted using machine learning and manually setup annotation rules
- **Invoice enrichment** : PO based invoices are enriched with PO data similar to the Online PO flip in addition to extracted supplier invoice data.
- **Business rule validations** : Invoices are validated against the buyer's business transaction rules
- **Submission methods** : Suppliers can configure their upload their invoices to be saved as drafts for review and submitted manually or auto-submitted for a touchless automation.
- **Buyer customization support :** Buyers customization fields are available for annotation to create buyer specific templates.
- **Invoice status visibility** : Suppliers have complete visibility into the conversion process and status

Audience:

Supplier

Enablement Model:

Automatically On

Applicable Solutions:

SAP Business Network

Prerequisites, Restrictions, Cautions

Prerequisites

- Currently available only to *Enterprise suppliers*
- Suppliers must have a trading relationship with buyers on the SAP Business Network to send invoices using this solution.
- Suppliers must have a Test account associated with their Production account.
- Suppliers need to complete the onboarding & testing process in their Test account before they process production invoices.
- Supplier Administrator must be enabled with specific permissions for access to the onboarding of intelligent invoice conversion.

Restrictions *

- The sample file can be in PDF format or images formats (PNG, JPEG or TIFF) of scanned paper invoices.
- Both purchase order-based invoices and non-purchase order invoices are supported.
- Invoices that reference multiple purchase orders are not supported.
- Standard invoices are supported.
- Credit memos, line item credit memos, and debit memos are not supported.
- Material invoices are supported with a restricted set of fields, but service invoices are not supported.

Cautions

- It is important for the supplier to understand restrictions and supported functionality and ensure they test invoice conversion templates thoroughly in their test account before publishing them to process their production invoices.

* There are additional restrictions that can be found in the online SAP help documentation

User Story

As a Supplier on the SAP Business network, I need to process my PDF and scanned paper invoices and send them to my buyer in an easy automated process that helps them reconcile the invoices efficiently and pay me for these invoices faster.

As part of this process :

- **As a Supplier administrator**, I use the guided onboarding in my test account to setup invoice conversion templates that represent the invoice layout and invoice fields
- I will upload few sample invoices to review the basic data extracted automatically using machine learning and additionally setup extraction rules using the Document user interface for more complex invoice data.
- As part of the testing of these templates, I upload test invoices to ensure extracted data is correct and by default, I get to review the data as a draft invoice that I can manually submit. I can also try the auto submission configuration to verify the touchless automation of the uploaded invoices and send them to my test buyer.
- Once I have confirmed that these templates are tested successfully, I publish them to be available in production.
- I can use the Invoice conversion templates summary page to view, edit and delete these Invoice conversion templates.
- **As a Supplier user**, I log into my test or production account and upload my PDF or scanned paper invoices.
- I review the conversion status of these invoices in the *PDF conversion tiles* available on my workbench.
- Finally I verify the status of my invoice in the *Invoices tile* of my workbench to see that it was sent successfully to my buyer.
- If there were any failures and my invoice was made available as a draft, I will review and correct any data and resubmit my invoice.

Feature Details

Process Steps

- Supplier Administrator logs into their account and go to **PDF invoices** onboarding and reads about the solution from the **Learn More** link
- Clicking on the **Setup template** button takes them to the guided Invoice conversion template setup page.
- Here they can select the **default template** which is used as a base template that can be used to process invoices across buyers.
- Optionally they can use the **custom template**, where they can provide a template name and description to identify the template and select a buyer who has invoice customization fields. This template is buyer specific and will be used to process invoices specifically uploaded for this buyer.
- Rest of the steps are similar which starts with the **Upload sample files** step, where they upload upto 5 sample files (at least 2 is recommended)
- In the **Activate template** step, they click on the **Review and annotate** action available under the **Action** column for each of their sample files uploaded which takes them to the Document user interface where annotation rules can be setup ie. the assignment of data in the sample file to be extracted, to the available field that it can be mapped to in the SAP Business network invoice.
- Here the uploaded sample file is shown on the left pane and the set of fields available out of the box for extraction are shown in the right pane.
- The automatically extracted fields are highlighted and shown with the extracted data that can be reviewed.
- Additionally for data that was not extracted automatically and needed in the invoice, a bounded box can be drawn around the field label that needs to be captured. An **Assign field** tool will show the drop down of available fields to map this to. Provide the value of this data and click **Apply**. Continue this for all the fields in the sample file that have to be extracted.
- Once done, save the annotations using the **Save** button and do the same for all the sample files.
- Toggle the **Associate with template** toggle to associate the annotated sample file to the template and click **Activate template** button to activate the template.
- Use the testing flow to upload test invoices and verify the conversion status of the invoice and review the extracted data in Draft and manually submit the same.
- Finally publish the template to production using the **Publish to production** button
- Supplier user can upload invoices in their production account from **Documents** > **Upload PDF Invoice**, select the buyer and submit the invoice to this buyer.
- They can review the status of conversion and the document status using the **PDF conversion** and **Invoice** tiles in their workbench.,

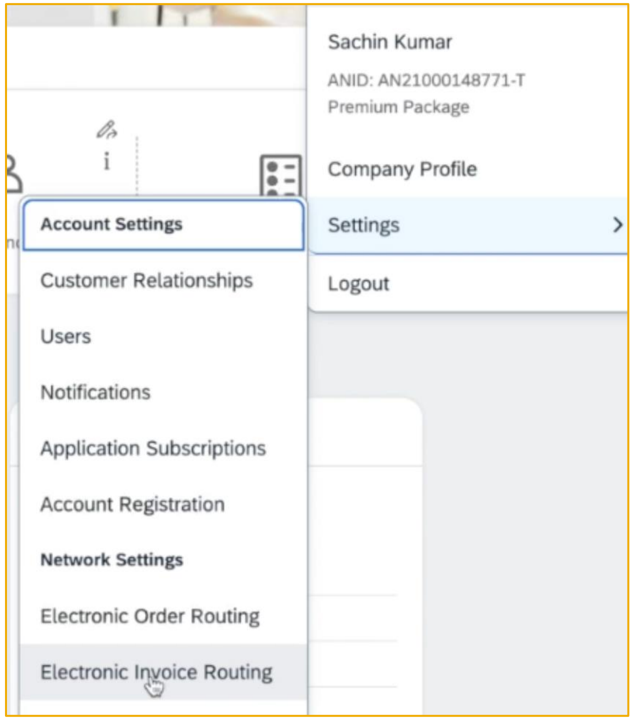
Additional details

- Enterprise suppliers using the existing partner supported PDF invoice solution, can try this new self service solution in their test account.

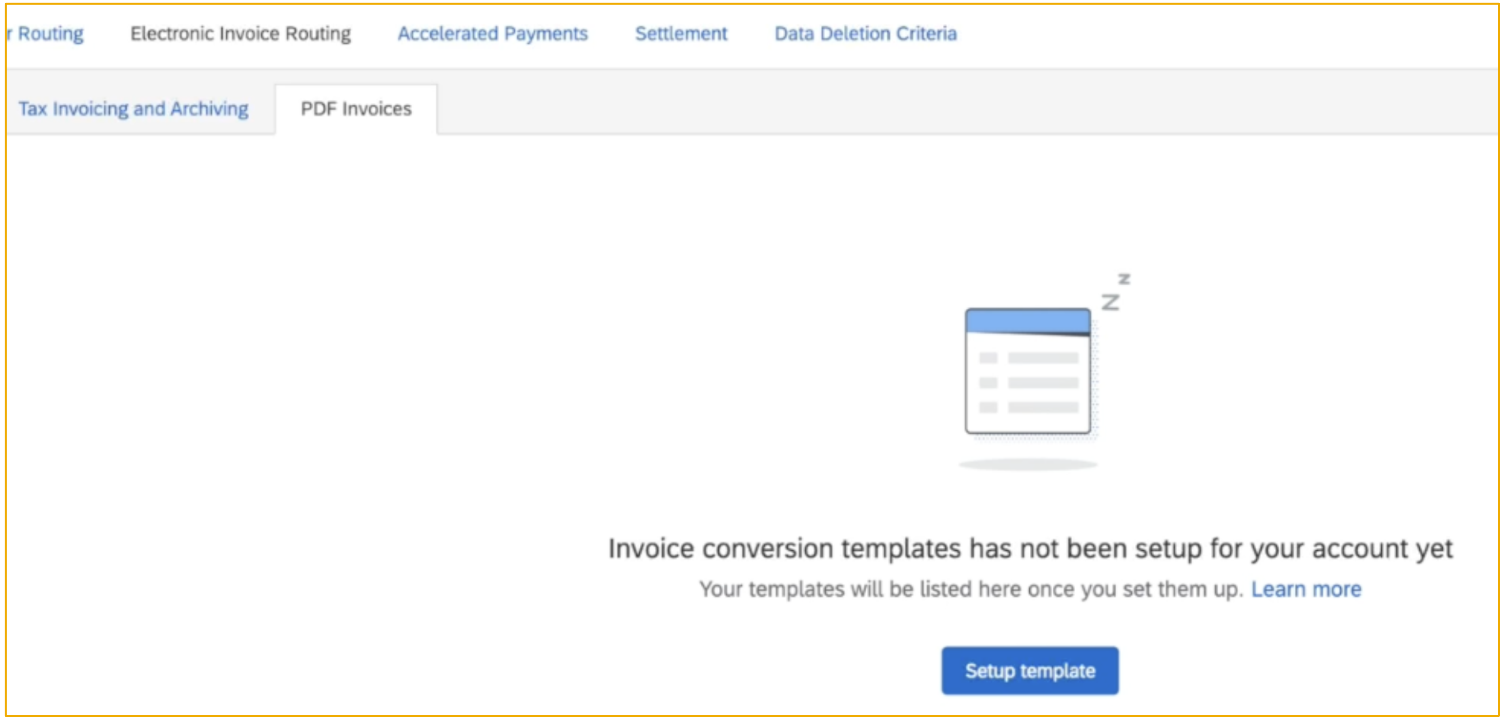
Feature Details – Onboarding steps

Process Steps – Login and Start onboarding

- ***Step 1*** : Supplier Administrator with required permission logs into the **Test account** and navigates to **Settings**->**Electronic Invoice Routing** and clicks on the **PDF invoices** tab



- ***Step 2*** : **Supplier Administrator** is taken to the Invoice conversion template setup page.
- Click on **Learn More** to review the Online help documentation that covers Concepts, Pre-requisites, Restrictions and Detailed steps for Onboarding, invoice processing and configuration along with workflows.
- **Click on Setup template** to create your first Invoice conversion template.

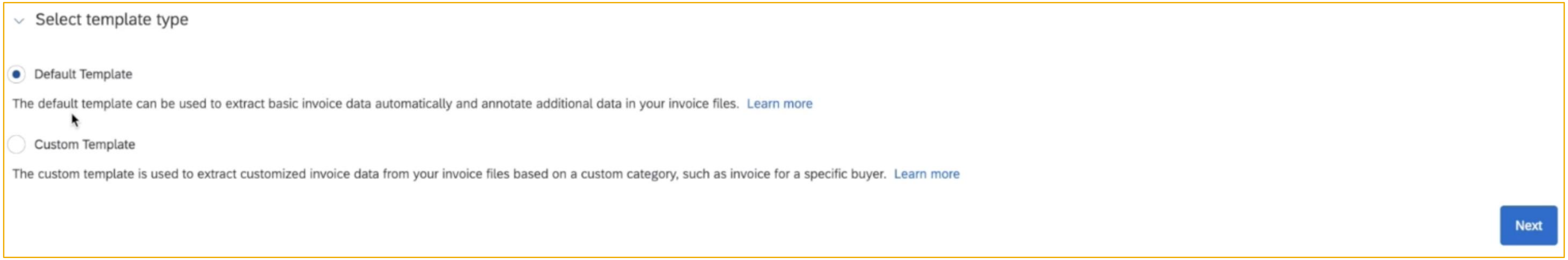


- ***Step 3*** :Click **Yes** on the **Before you start popup** which is to ensure you have gone through the feature details in the Online Help**.**

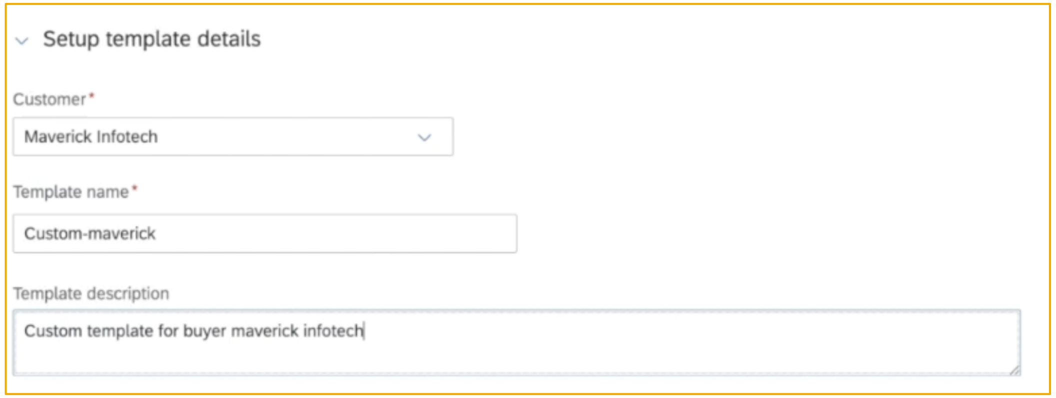
Feature Details – Onboarding steps

Process Steps – Select type of template

- ***Step 4:*** This will open the guided Invoice conversion template setup page where the *Default* and *Custom* template options are available.
- Here select the **Default template** which is used as a base template of standard fields that can be used to process invoices across all buyers.



- After a Default template is created, if you want to create a **Custom template** for each of the buyers who have customization fields, you can do so by selecting the buyer from the **Customer** drop down.
- The only additional setup for the Custom template is that you need to provide a **Template name** and **description** to identify the template.

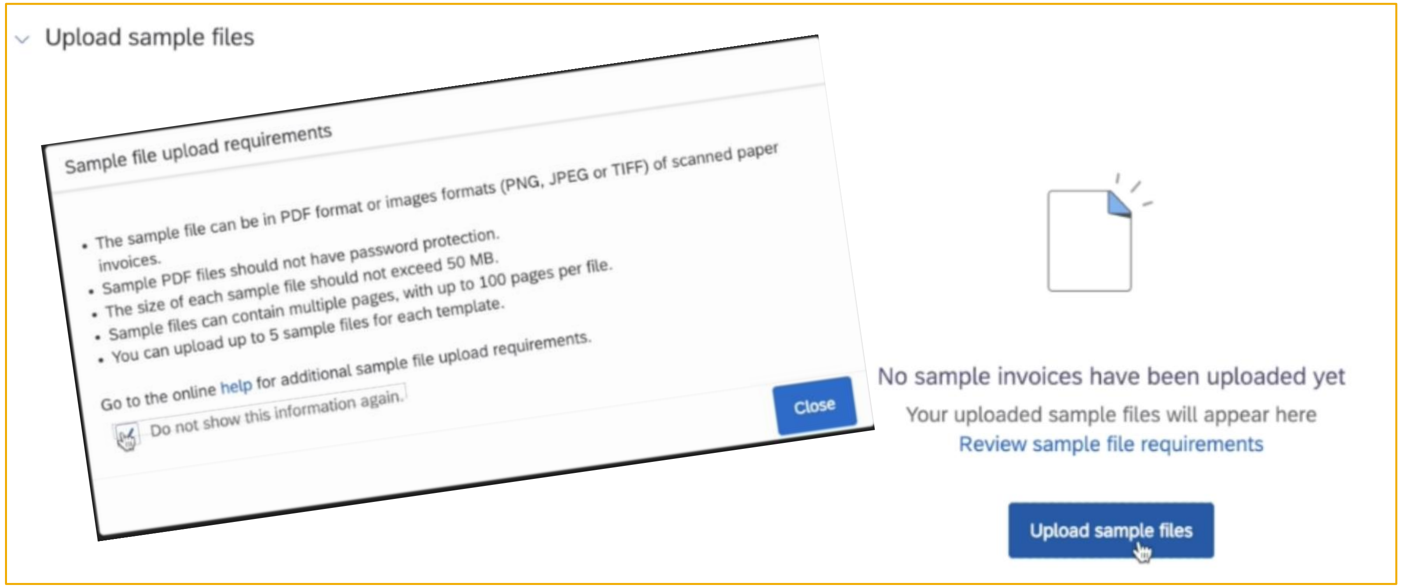


- ***Step 5:*** Click on **Next** to go to the next step.

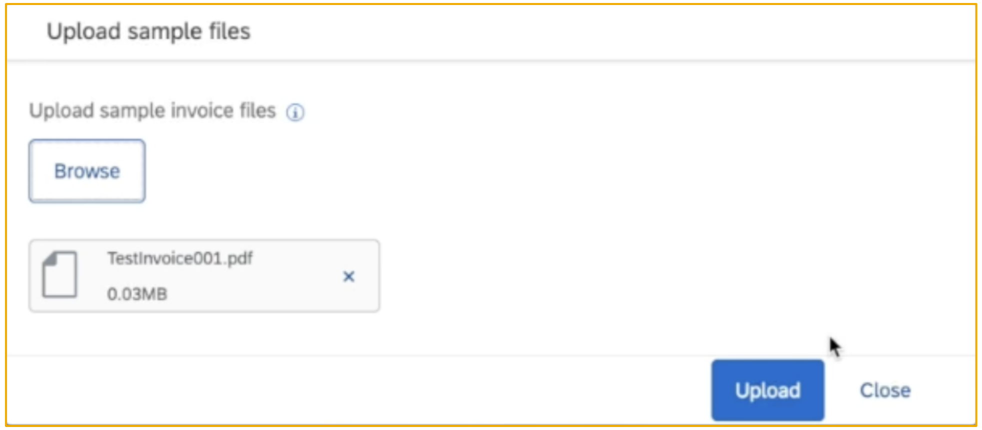
Feature Details – Onboarding steps

Process Steps – Upload Sample files

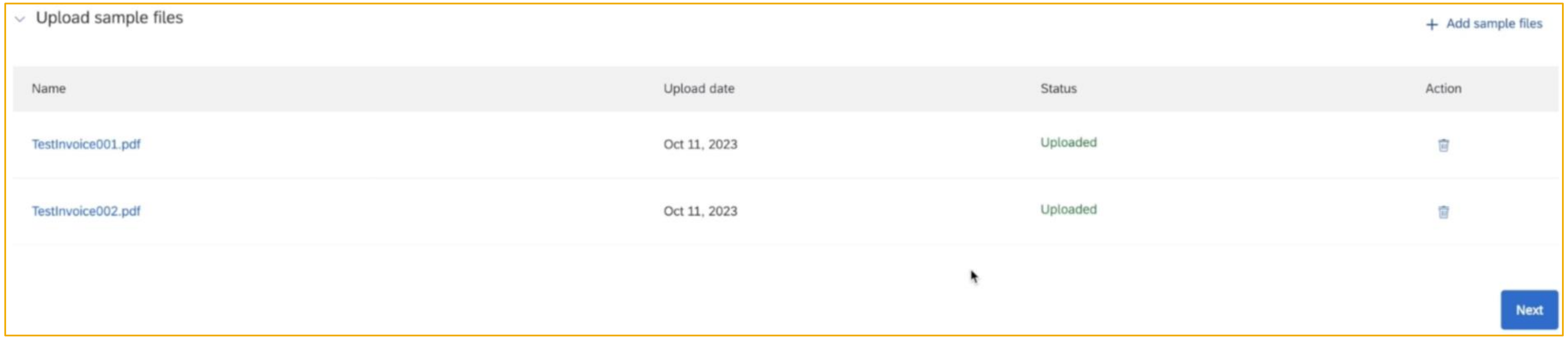
- ***Step 6:*** Click on **Upload sample files** button to upload the files that represent the layout and fields of the PDF or scanned invoices that will be processed in the Test and production account.
- Click on **Review sample file requirements** for sample file restrictions and additional details provided in the online **help** link



- ***Step 7***. **Browse** and select the sample files using your file browser
- Click on **Upload** for each of the selected files.



- ***Step 8***. Verify that the **status** of the files is **Uploaded**

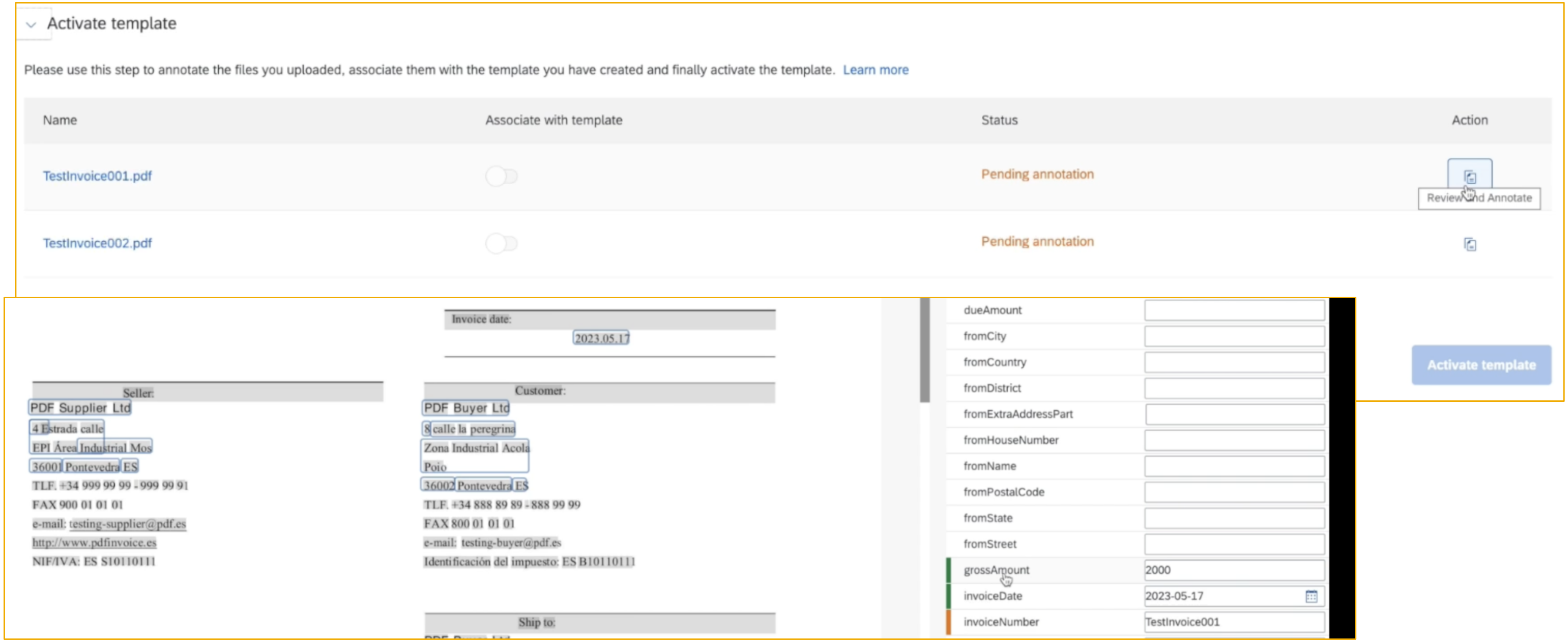


- ***Step 9:*** Click on **Next**.

Feature Details – Onboarding steps

Process Steps – Activate Template

- ***Step 10:*** In this step, for each of the listed files with **Status** as **Pending annotation**, use the **Review and Annotate action** to open the **Document user interface** in a separate browser, where you will review and edit or create annotations of data from your PDF or scanned invoice

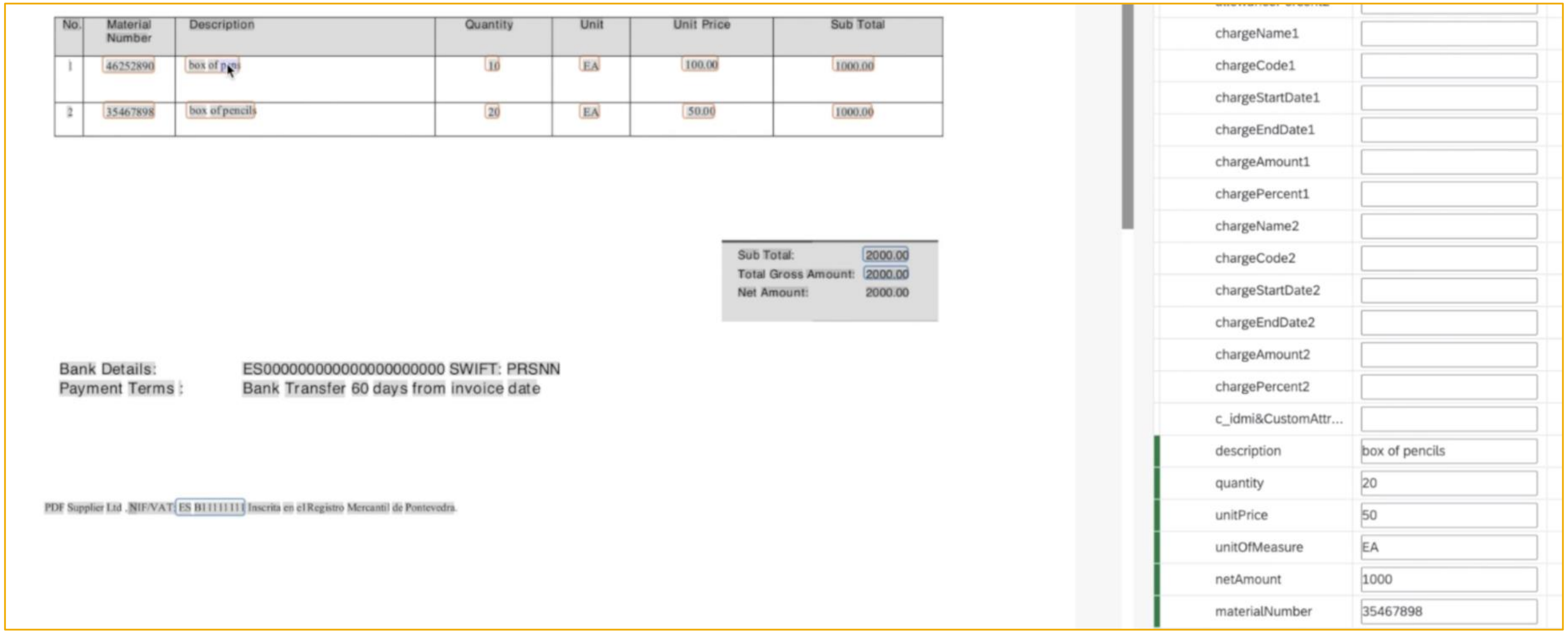


- ***Step 11:*** Review the **basic header data** that was **automatically extracted** in the right hand pane of the Document user interface and verify corresponding data in the PDF invoice on the left hand pane.

Feature Details – Onboarding steps

Process Steps – Activate Template (Contd.)

- ***Step 12:*** Similarly you can expand the **Line items** to also see and review the **automatically extracted Line item data** for each line item

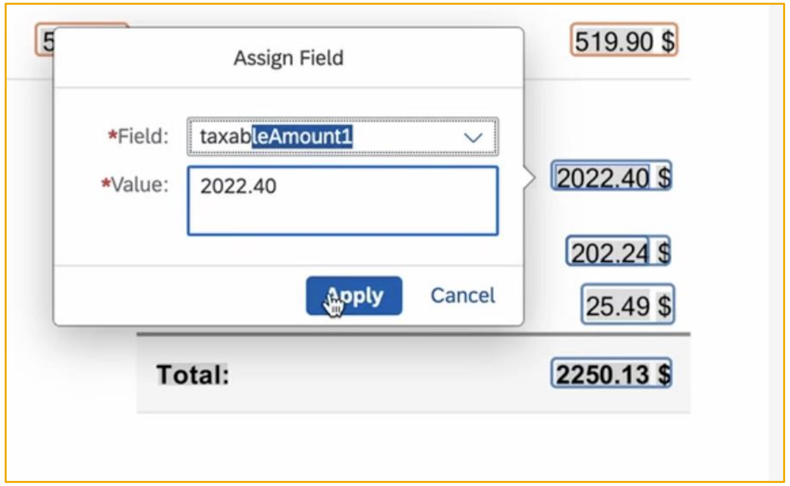


- ***Step 13:*** The automatically extracted data/annotations are automatically saved. Though the recommendation is to save the manually annotated data by clicking on **Save button** at regular intervals, this can be done automatically by checking the **Autosave checkbox** which will automatically save your manually created annotations.

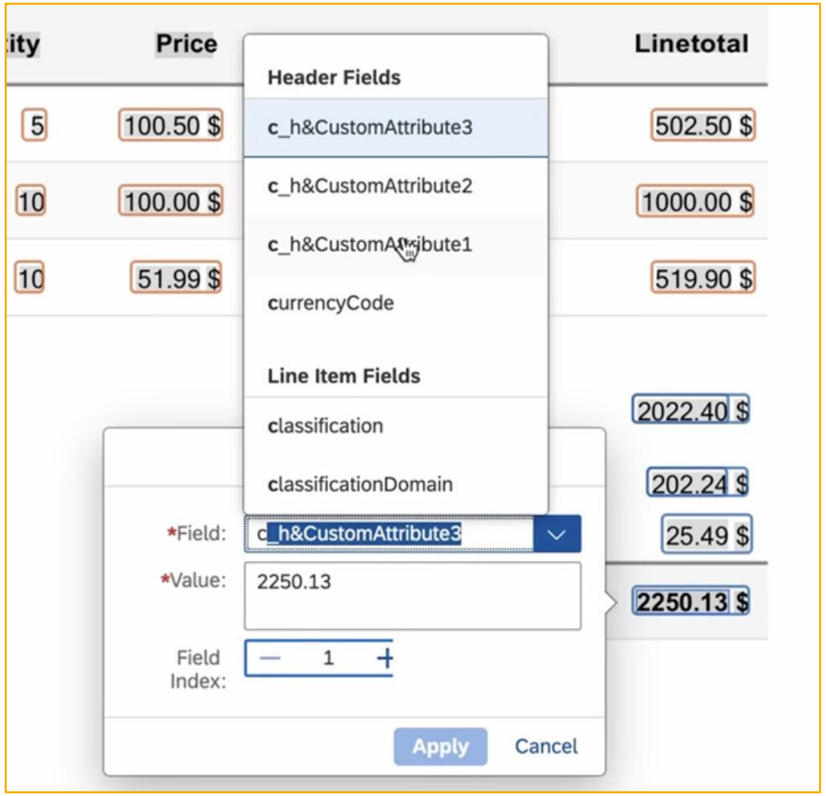
Feature Details – Onboarding steps

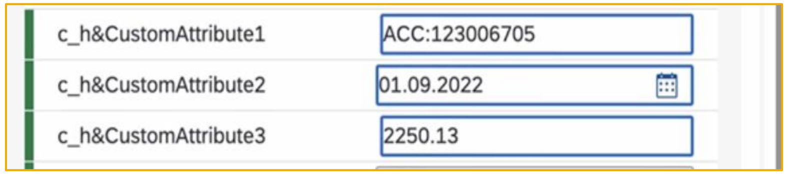
Process Steps – Activate Template (Contd.)

- ***Step 14:*** Now you start the exercise of manually mapping /annotating the rest of the data you want extracted. For this you use the **Assign Field** tool by clicking the mouse on the data you are interested in and verify the bounded box has captured the value as you want. Review the data in the **Value** textbox. Then in the **Field** drop down, where all the available fields are shown, select the field you want to map this to, after extraction.



- ***Step 15:*** For a custom field in a custom template, this will mean you map/annotate the custom buyer invoice field in a similar manner and review the mapped data in the right hand pane.





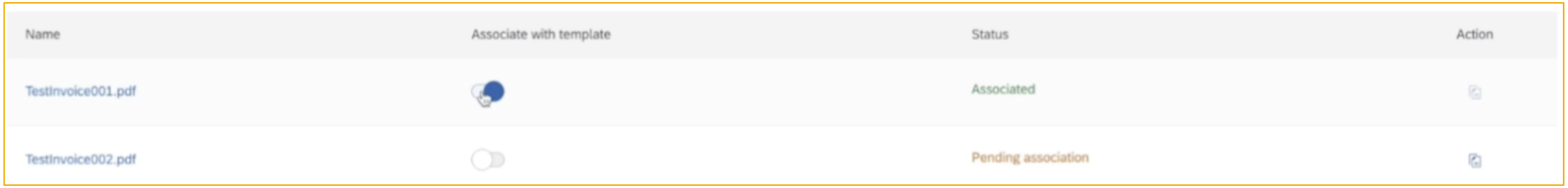
- ***Step 16:*** Click on **Apply** after each field assignment.

- ***Step 17:*** Repeat this for each of the fields you want extracted

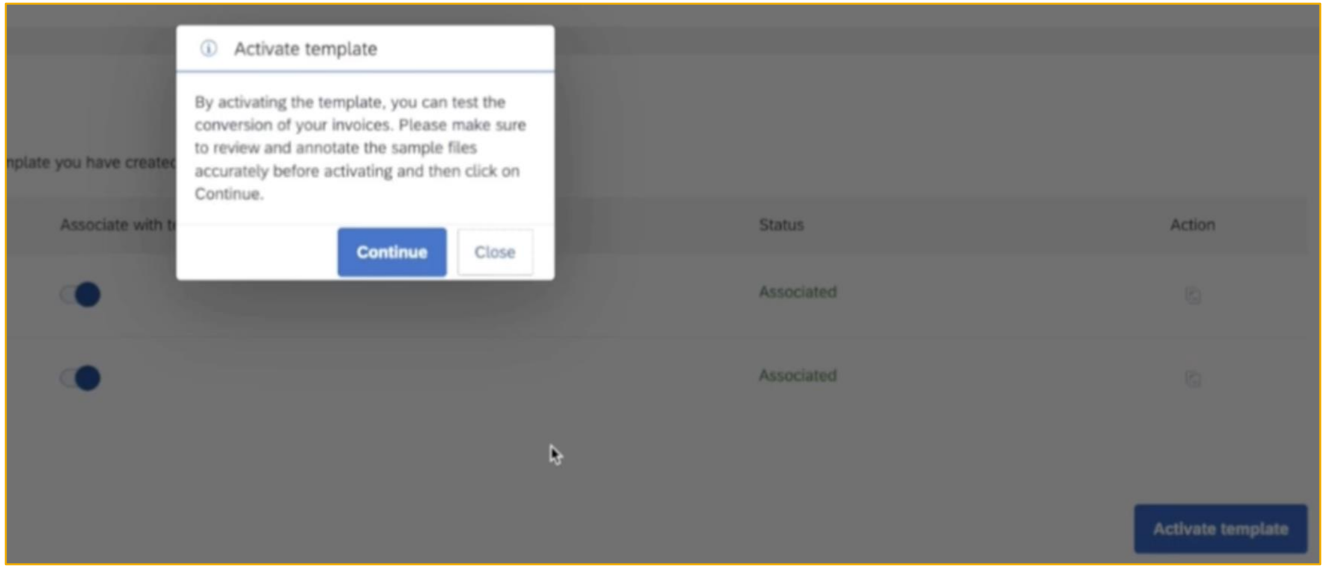
Feature Details – Onboarding steps

Process Steps – Activate Template (Contd.)

- ***Step 18:*** Close the **Document user interface** page and return to the Onboarding page where the files that were annotated will show with the **Status** as **Pending association**. **Toggle** on **Associate with template** which will update the status to **Associated**.
- This associates the annotated files to this Template.



- The template will be in **Draft Status** till now.
- ***Step 19***: Once ALL the files are **Associated**, Click on the **Activate button** to activate this template.

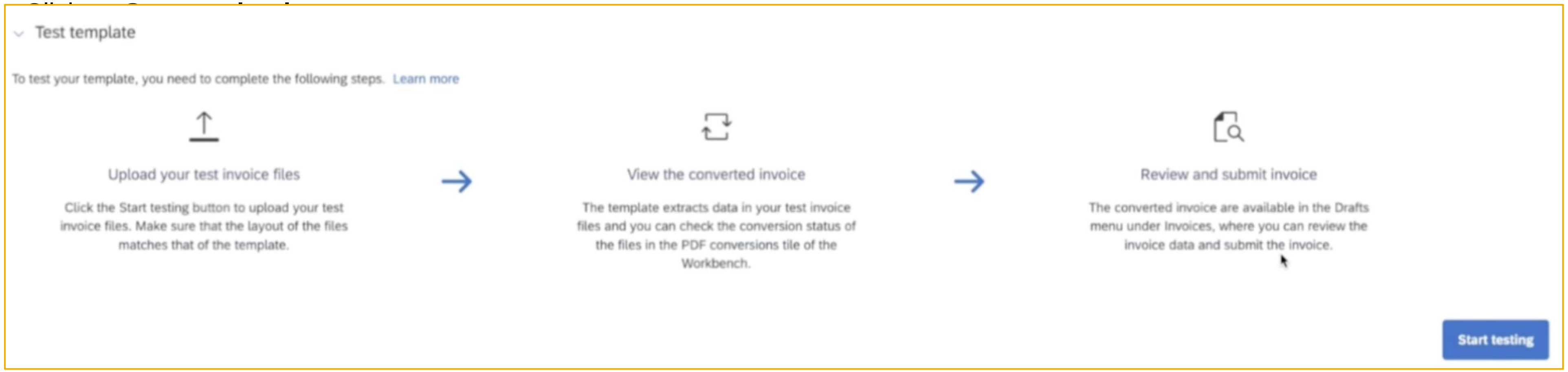


- ***Step 20:*** Click **Continue** on the popup which will then take you also to the next step

Feature Details – Onboarding steps

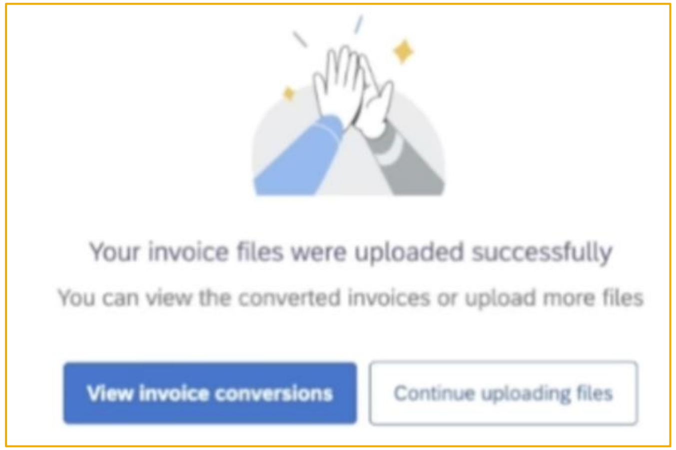
Process Steps – Testing

- ***Step 21:*** The **Status** of the template will be in **Ready to test** which means you are ready to test the template and so keep your test invoices ready. The workflow guides the supplier to required steps for this.



- ***Step 22***: The upload invoice user interface is shown , with the drop down of buyers who have a relationship with this supplier.
- **Select the buyer** you are uploading an invoice for and click on **Browse** to select the test invoices.
- The pre requisites and restrictions for the invoice file that can be uploaded is provided in a popup (and a link to the online help). You can **Close** this after going through.
- Now click on **Upload** (you can select upto 10 files at a time).

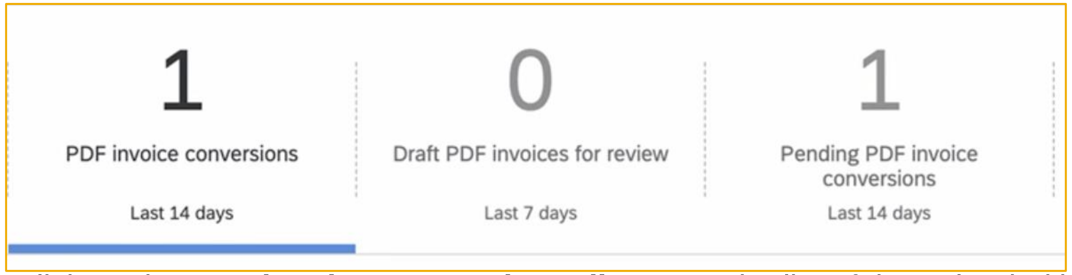
- ***Step 23***: From here you can upload another set of invoices using the **Continue uploading files** or click on **View invoice conversions** to go to the supplier **workbench**



Feature Details – Onboarding steps

Process Steps – View converted invoices

- ***Step 24:*** Once you are on the **workbench**, you can use the following tiles to see the listing of your Invoices (PDF and Scanned invoices).



- Click on the **PDF invoice conversions tile** to see the list of the uploaded invoices which will initially have **Status** as **Conversion Pending**

Source File Name	Customer	Submission Method	Status	Reference	Submission Date ↓
InvoiceWithoutPO.pdf	Maverick Infotech	Online	Conversion Pending		Oct 11, 2023

- ***Step 25***: Once the conversion is completed in a few seconds, the **Status** will change to **Converted**. The **Reference** column will show the following :
  - By default the invoices after conversion will be in **Manual submission** mode which means the converted invoice data will be left as **a Draft invoice** for your review. The reference document number will then refer to the Draft invoice.
  - There is also a configuration to change to **Automatic submission** in which case the invoice will be automatically submitted and in this case the reference document number will refer to the **invoice**.

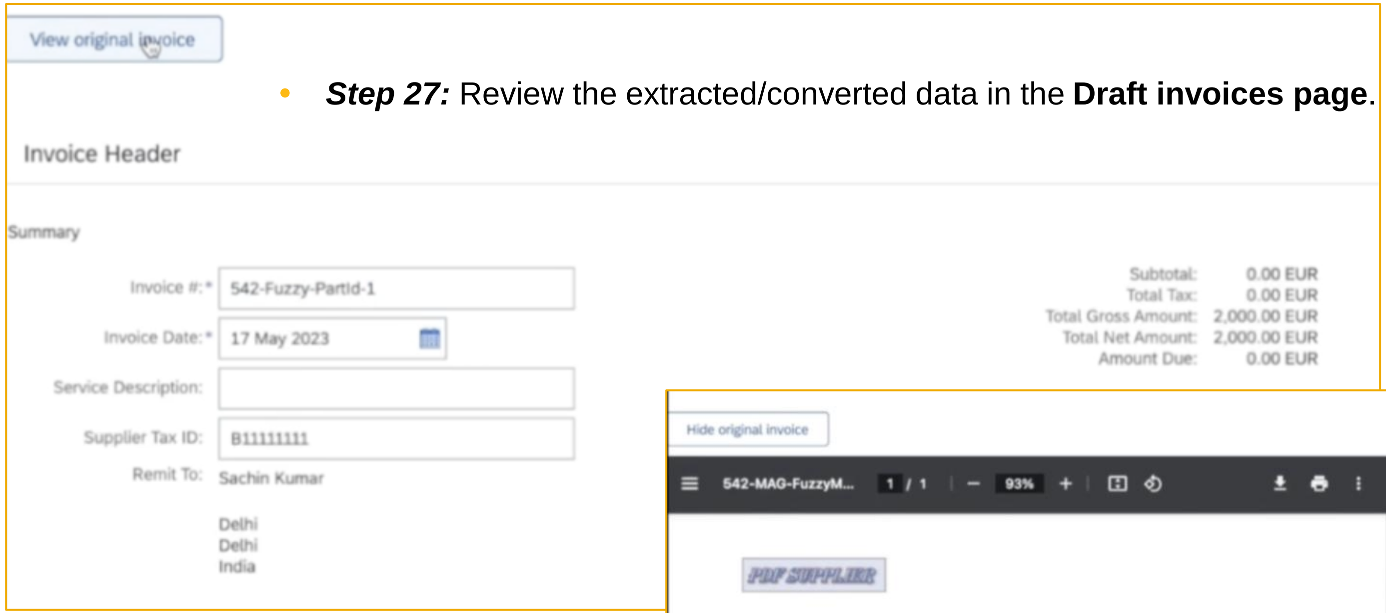
Status	Reference
Converted	542-Fuzzy-PartId-1

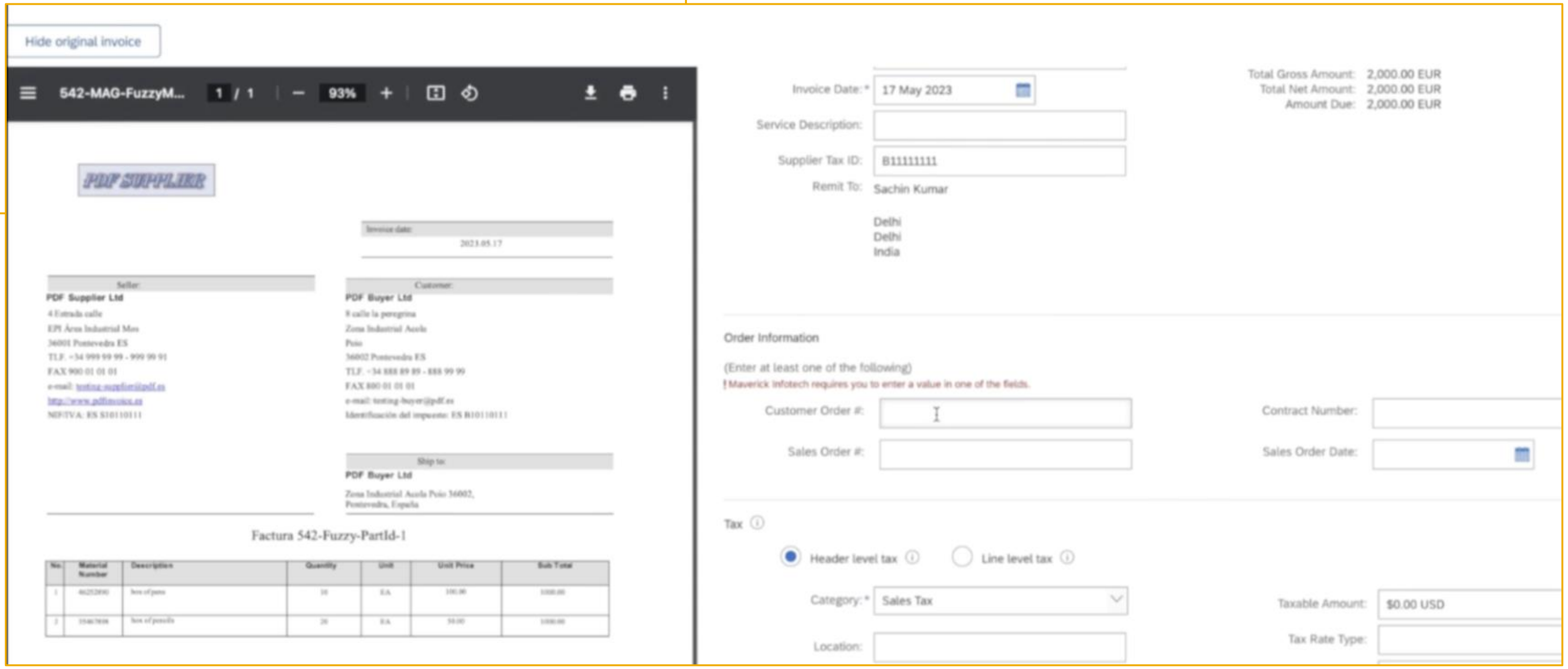
- ***Step 26***: Click on the **Reference** document number and if this is a **manual draft invoice**, it will take you to the **Draft invoice page**. You can also use the **Draft PDF invoices for review tile** to list the Draft invoices and use the **View Draft** action to go to the Draft invoice page.
- If this is an **auto submitted invoice**, then clicking on the **Reference** document, will take you to the **Invoice page** which you can also access using the **Invoice tile**

Feature Details – Onboarding steps

Process Steps – Review Draft /Manual submission invoices

- ***Step 27:*** Review the extracted/converted data in the **Draft invoices page**.



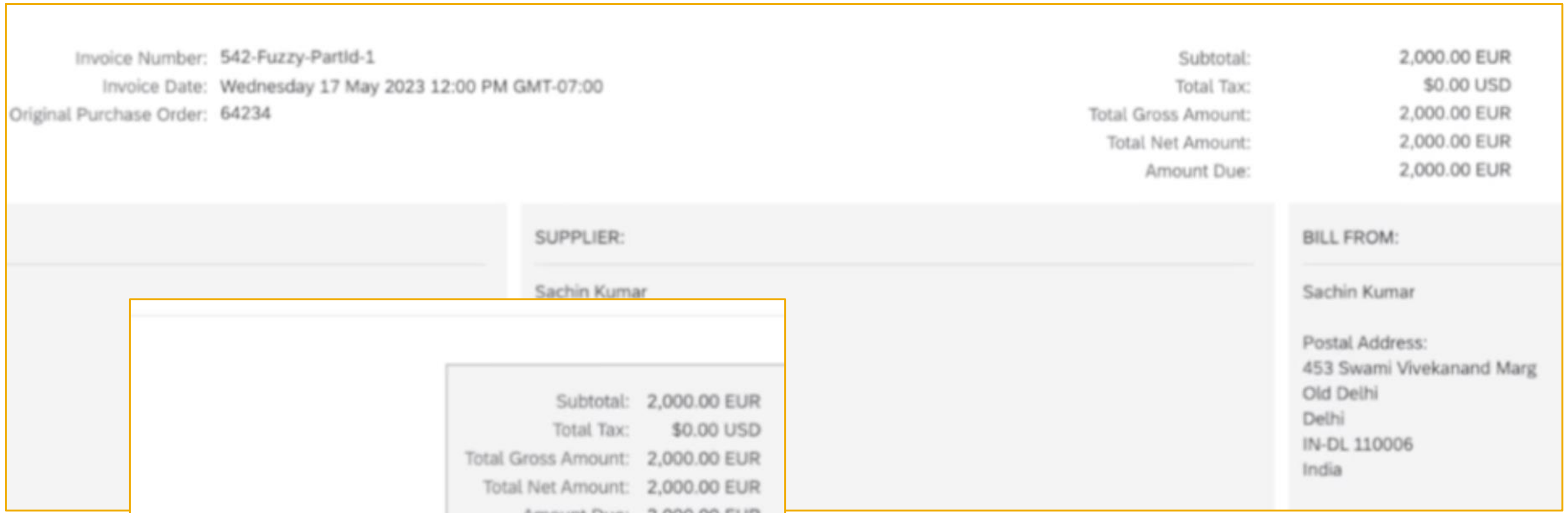


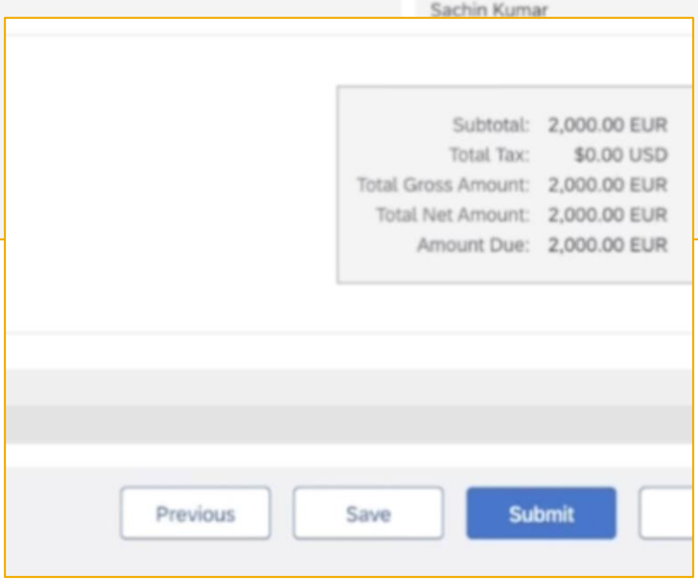
- ***Step 28***: Clicking on **View original invoice** will open a side by side viewer allowing you to see the original PDF or scanned invoice you uploaded and the draft invoice to make it easier to review the data.
- Any validation errors from the buyer's business rules will also be shown

Feature Details – Onboarding steps

Process Steps – Review Draft /Manual submission invoices contd.

- ***Step 29:*** Click on **Next** to go to the review page to ensure all the data is fine. This is especially true if you click on **Update** and there were any amount fields recalculated





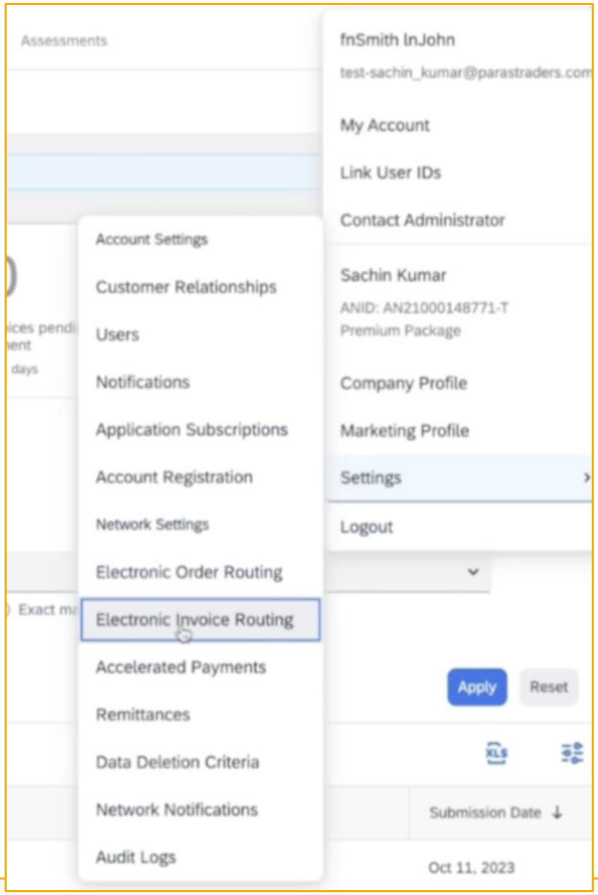
- ***Step 30***: Click on **Submit** to manually submit the invoice to your buyer.
- You will continue to **test with some more test invoices** to ensure that the Invoice data extracted by this template is good and additionally also test if the invoice reaches the Test buyer account that you uploaded the invoices for.

These are the same steps that you will use in your production account to review and submit your invoices after uploading them.

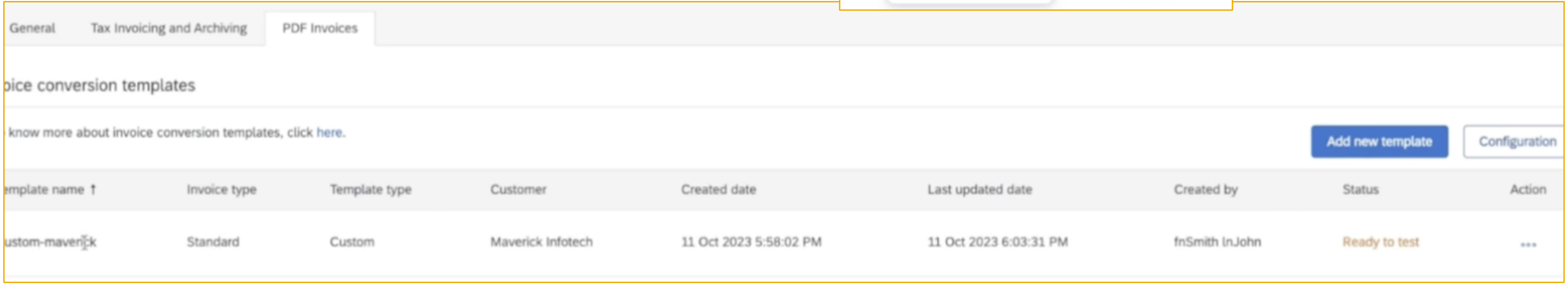
Feature Details – Onboarding steps

Process Steps – Invoice conversion template management

- ***Step 31:*** You can manage your templates in the **Invoice conversion templates page** by going to **Settings**->**Electronic Invoice Routing** and clicking on the **PDF invoices** tab.



- ***Step 32***: The template details of your templates like **Name**, **Type**, **Customer** (if a custom template) and timestamps will be listed in this page and as you can see the **Status** is still in **Ready to test** which means you are currently testing the template.

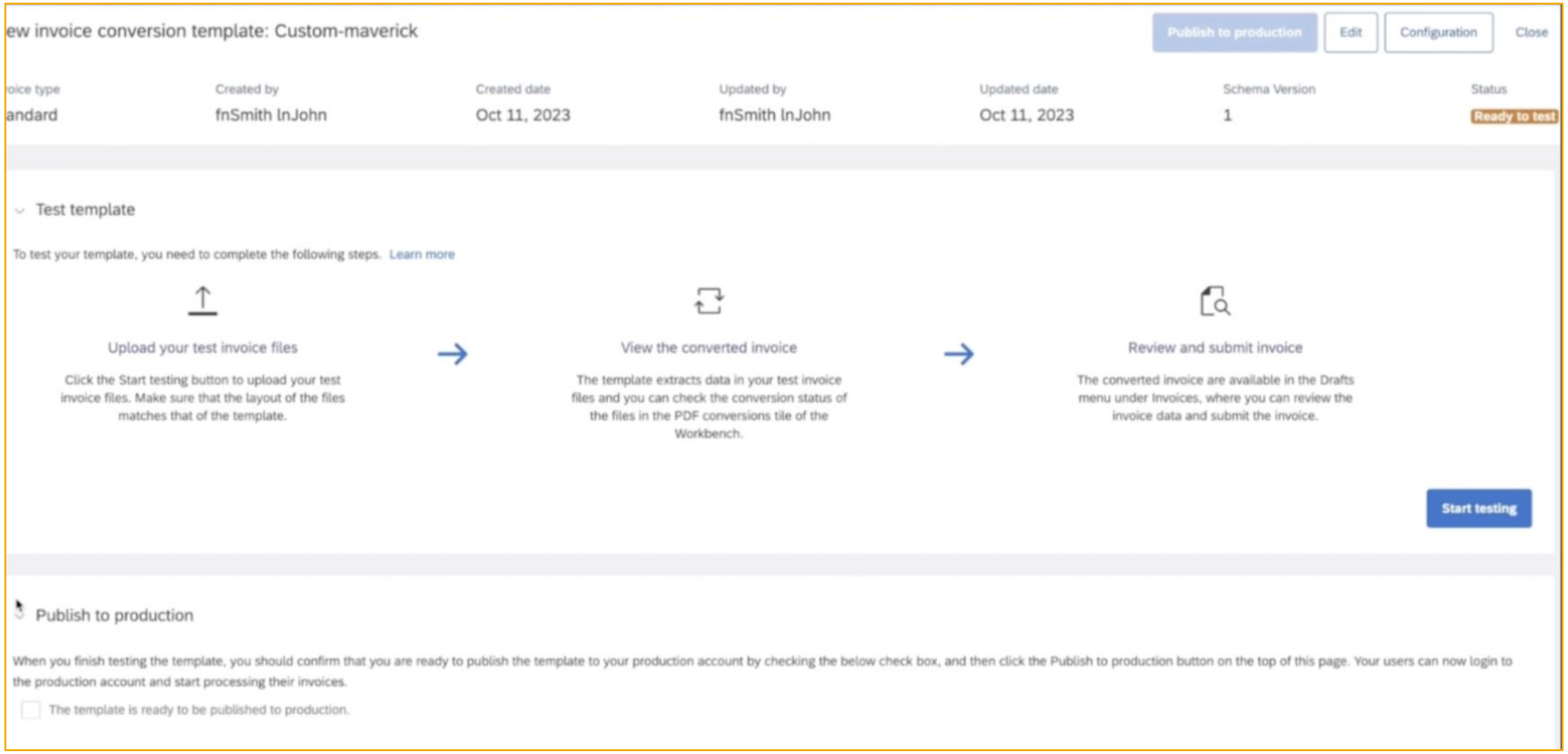


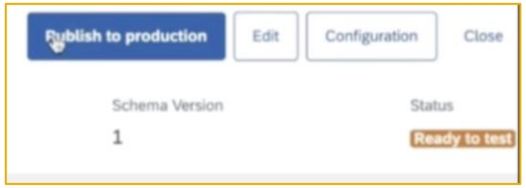
Feature Details – Onboarding steps

Process Steps – Invoice conversion template management

- ***Step 33:*** Under the **Action** column you can do the following actions – **View/edit** or **Delete.**
- Click on **View/edit** to open the template details page in read only/view mode.
- Once you are on this page, you can click on **Edit button** to open the template in edit mode to be able to modify the uploaded files or annotations etc.

- ***Step 34***: Once you are ready to use this template in production, you can go to the last step of **Publish to production** and **enable the checkbox** to confirm that the **template is ready to be published to production**



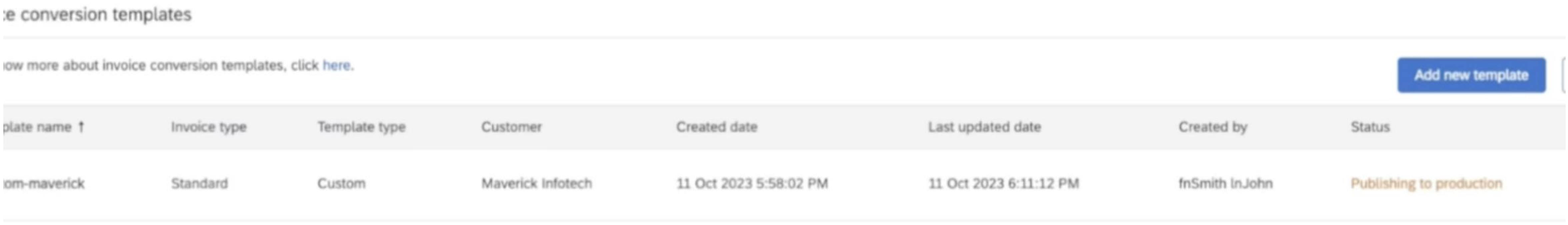


- The **Publish to production button** on the top of the page will be enabled
- ***Step 35:*** Click on the **Publish to production button** to start the process of making this template available in production.
- This may take a few minutes.

Feature Details – Onboarding steps

Process Steps – Publishing your template to production

- ***Step 36***: The **Status** of the template will be **Publishing to production** while the template is being published. Once completed, the **Status** will be **Published to Production**.



- Once completed, the **Status** will be **Published to Production**.
- Ensure that at least the **Default template** is published to production followed by any customer specific **Custom templates**.
- Now your users can start uploading their invoices in their production account and the corresponding template will be used to process the conversion of these invoices

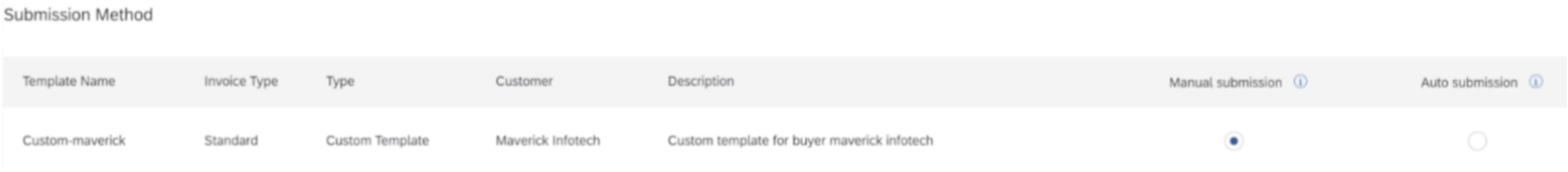
This completes the onboarding process for Intelligent Invoice conversion in your Test account and sets up your production account for processing your production PDF and scanned invoices.

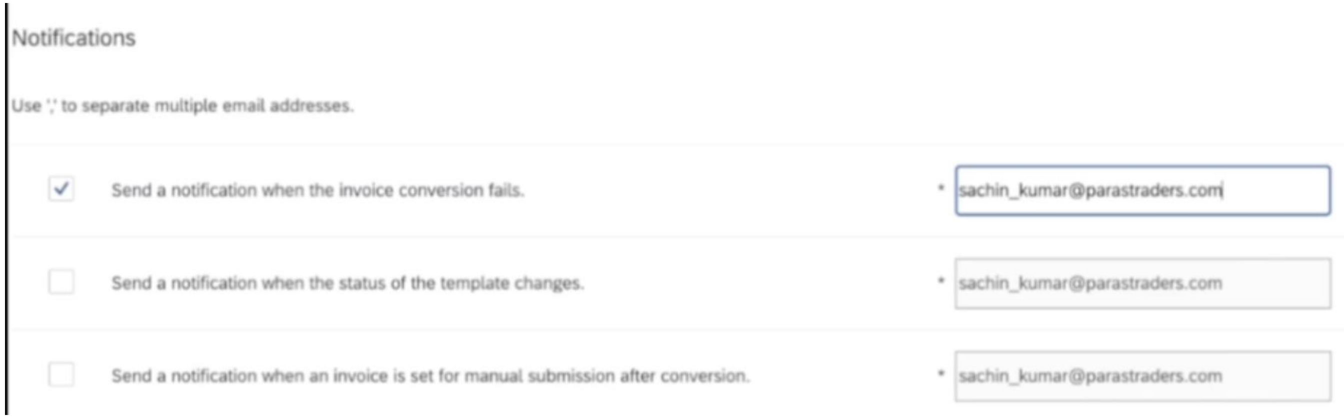
Feature Details – Onboarding steps

Process Steps – Invoice conversion template Configuration

- There are two options available for configuring the invoice conversion templates and for this you can click on the **Configuration settings icon** on the **Invoice conversion templates page** under the **PDF invoices tab** or the **Configuration button** in the **Template details page.**

- **Submission Method** configuration defaults to **Manual Submission** and puts invoices in Draft for the user to review and manually submit.
- ***Step 37***: The **Submission Method** can be updated in the **Configuration page** by selecting the **radio button** for **Auto submission** so





- ***Step 38***: Configuration for sending **Notifications** are also supported where you can provide the email addresses (comma separated) who should receive these different types of notifications

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