Document recognition QR codes on customer paperwork

QR codes are automatically added to uploaded customer paperwork PDFs, enabling automatic matching back to the correct shipment during scanning.

Updated February 20, 2026

Screenshots needed:

1. A customer paperwork PDF *before* the QR code is added, showing the original document without any QR marking
2. The same customer paperwork PDF *after* upload, showing the QR code added to the top-left corner with the document content slightly resized
3. The document upload dialog on a shipment, highlighting the *Customer Paperwork* document type selection
4. The bulk document scanning flow successfully matching a scanned document back to a shipment using the QR code
5. A close-up of the QR code on the document, showing its position and size relative to the page content

Summary

- **What is this feature?**
  - Qargo now automatically adds a recognition QR code to customer paperwork (COP) when it is uploaded to a shipment. The QR code is embedded in the top-left corner of each page of the PDF, and the existing document content is resized slightly to make room.
  - This QR code enables Qargo's document scanning feature to automatically link scanned paperwork back to the correct shipment.
- **Why was it introduced?**
  - In pallet network operations, customer paperwork is typically printed, taken to the delivery point, signed by the receiver, and then scanned back into the system. Without a machine-readable identifier, matching the signed paperwork back to the right shipment is a manual and error-prone process, especially with high volumes.
  - This feature eliminates that manual step by embedding a QR code at the point of upload, so the signed copy can be automatically recognized when it is scanned back in.
- **How does it work?**
  - When a PDF document is uploaded with the document type ***Customer Paperwork***, the system checks whether a Qargo QR code is already present. If not, it resizes the document content and adds a QR code to the top-left corner of each page.
  - The modified document replaces the original in the system. When the signed copy is later scanned or uploaded, Qargo reads the QR code and automatically matches it to the correct shipment.

Terminology

Term	Definition
Customer Paperwork (COP)	Documents provided by the customer that need to be signed by the receiver upon delivery. Also referred to as Customer Own Paperwork.
Unsigned Customer Paperwork	The original customer paperwork before it has been signed by the receiver. This is the version that receives the QR code.
Signed Customer Paperwork	The customer paperwork after it has been signed by the receiver and scanned back into the system. A new document type introduced to differentiate it from unsigned paperwork.
QR code	A machine-readable square barcode embedded on the document that encodes a reference to the shipment. Used by Qargo's document scanning feature to automatically match documents.
Document scanning	The process of uploading physical documents (typically scanned copies) into Qargo, where the system attempts to automatically match them to the correct shipment.
Shipment	A shipment or delivery job in Qargo to which documents, including customer paperwork, are attached.
Pallet network	A logistics network (e.g., Palletforce, TPN, Palletline) through which palletized goods are distributed between terminals. Customer paperwork often flows between requesting and delivery terminals within these networks.

How the QR code is added

Automatic embedding on upload

When a PDF is uploaded with the document type ***Customer Paperwork***, the system performs two checks before adding a QR code:

1. **File format check:** the QR code is **only added to PDF documents**. Other file types (e.g., images) are uploaded without modification.
2. **Existing QR code check:** the system scans the document to determine whether a Qargo QR code is already present. If one is found, no additional QR code is added. This prevents duplicate markings on documents that have already been processed.

If both checks pass, the system resizes the document content slightly and adds a QR code to the top-left corner of each page.

Where the QR code is applied

The QR code is added during the upload process in the following contexts:

- **Qargo web app:** when uploading customer paperwork on a shipment detail page
- **Customer portal:** when customer paperwork is uploaded through the customer-facing portal
- **Pallet network integrations:** when unsigned customer paperwork is received via pallet network APIs (e.g., Palletforce, Palletline, TPN)

[Screenshot: Customer paperwork PDF with QR code in the top-left corner]

Signed vs. unsigned customer paperwork

A new document type, ***Signed Customer Paperwork***, has been introduced to distinguish between the two stages of the customer paperwork lifecycle:

Unsigned customer paperwork

This is the original document uploaded before delivery. It receives the QR code and is the version printed and taken to the receiver for signing. Unsigned paperwork is typically uploaded by the requesting or pickup terminal.

Signed customer paperwork

This is the version returned after the receiver has signed it. It is uploaded by the delivery terminal (or via the driver mobile app or bulk scanning flow). Signed paperwork does **not** receive a QR code, because it should already contain one from the unsigned version.

The system differentiates between signed and unsigned paperwork based on the upload context:

- For pallet networks that explicitly distinguish between the two types via their APIs (e.g., Palletforce), the classification is based on the API metadata.
- For networks that do not differentiate (e.g., Pallex), the system infers the type based on the terminal role: pickup terminals upload unsigned paperwork, and delivery terminals upload signed paperwork.

Using QR codes with document scanning

Scanning signed paperwork

Once signed customer paperwork is scanned or uploaded back into Qargo, the document scanning feature reads the QR code and automatically matches the document to the correct shipment.

This applies to:

- **Bulk document scanning:** multiple scanned documents can be processed at once, with each one matched automatically via its QR code
- **Single document upload:** when a signed document is uploaded to a specific shipment, the QR code confirms the match

[Screenshot: Bulk document scanning flow showing automatic QR code matching]

What happens if there is no QR code

If the signed paperwork does not contain a QR code (for example, if the original was not a PDF), the standard manual matching process applies. The document must be linked to the correct shipment manually during the scanning flow.

Limitations

- The QR code is only added to **PDF documents**. Other file formats (images, Word documents, etc.) are uploaded without a QR code.
- The QR code is added to **unsigned customer paperwork only**. Signed customer paperwork is not modified.
- For **pallet networks** that do not explicitly differentiate between signed and unsigned paperwork in their API, the system infers the **document type based on the terminal role**. In rare cases involving implant shipments, this inference may not be accurate.
- The document content is resized slightly to make space for the QR code. This may affect the layout of documents with very tight margins.

Troubleshooting

Issue	Solution
The uploaded customer paperwork does not have a QR code	The file must be a PDF. QR codes are only added to PDF documents. Other file types are uploaded without modification.
A QR code was added to signed customer paperwork	The document may have been uploaded with the wrong document type. Signed paperwork should be uploaded as ***Signed Customer Paperwork***, not *Customer Paperwork*.
The document scanning flow does not match the signed paperwork automatically	The QR code may be damaged, partially obscured, or missing (if the original was not a PDF). In this case, the manual matching option in the scanning flow can be used.
Two QR codes appear on the same document	This should not occur, because the system checks for an existing Qargo QR code before adding one. If it does happen, the document may have been processed through an older version. Re-uploading the original document will produce a clean result.
Upload is slightly slower than usual	Adding the QR code involves resizing the document and embedding the code, which adds a small amount of processing time (typically 1–4 seconds depending on the number of pages). This is expected behavior.
Customer paperwork from a pallet network integration does not have a QR code	The integration must be configured to process customer paperwork. QR codes are added automatically for supported pallet network integrations including Palletforce, Palletline, TPN, and others.