

I'll extract and analyze the contents of your uploaded project files to diagnose why the **Bill of Lading (BOL)** is not correctly being displayed on the second page after the invoice. I'll check:

1. **How the invoice and BOL are being generated and merged.**
2. **Whether the BOL is correctly retrieved and included.**
3. **Any potential formatting or pagination issues.**

Let me begin the analysis.

The extracted project contains a large number of files, including a `.git` directory. To efficiently diagnose the issue with the **Bill of Lading (BOL)** not appearing correctly, I'll look for the relevant PDF generation or merging code. I'll check for:

1. **Invoice and BOL PDF generation logic** – How they are created.
2. **Merging process** – Whether the BOL is appended correctly.
3. **Pagination handling** – If a page break is correctly inserted.

I'll now identify the key files related to invoice and BOL generation and review their contents.

I've identified key files related to the **invoice and BOL (Bill of Lading) processing**:

1. **Invoice PDF Generation & Merging Logic:**
 - o `server/pdf-service.ts` (Likely handles the merging of invoice and BOL)
 - o `client/src/components/dashboard/invoice-form.tsx`
 - o `client/src/components/dashboard/invoice-list.tsx`
 - o `client/src/components/dashboard/invoice-table.tsx`
2. **Generated PDF Files:**
 - o **Invoice PDFs:** Multiple `invoice-*.pdf` files in `/uploads/`
 - o **BOL PDFs:** Multiple `bol-*.pdf` files in `/uploads/`
 - o **Merged PDFs:** Found `merged-invoice-DC-001-*.pdf`, likely the final output.

Next, I'll examine `pdf-service.ts` to diagnose how the BOL is being added to the invoice and why it's not appearing correctly on the second page.

Initial Findings in `pdf-service.ts`

1. **Invoice Generation:**
 - o Uses `pdfkit` to create a **single-page invoice**.
 - o Writes invoice details like company info, invoice number, supplier info, and item table.
2. **Possible Issues with the BOL:**
 - o No direct mention of merging the **Bill of Lading (BOL)**.
 - o It looks like the invoice is created as a **standalone PDF**.
 - o If BOL should be on the second page, there **should be an explicit command** to append it.

Next Steps:

I'll now scan for any **BOL-related code** inside `pdf-service.ts` to check if it's even being added. If not, I'll check how the system **expects** the BOL to be attached.

Diagnosis of the BOL Issue

From the `pdf-service.ts` file, I found multiple references to the **Bill of Lading (BOL)**:

- There is an attempt to **add a new page for the BOL**.
- The system tries to **embed the BOL**, but **error messages** indicate potential failures.

Possible Issues:

1. **File Format Issue**
 - The code suggests the BOL must be in JPG, JPEG, or PNG format.
 - If the BOL is a PDF, it **may not be processed correctly**.
2. **Embedding Failure**
 - Multiple error messages like:

```
console.error('Error embedding PDF BOL:', error);
console.error('Error adding BOL to PDF:', error);
```
 - This suggests the BOL **isn't getting appended** successfully.
3. **Page Break Issue**
 - The code does attempt:

```
.text('Bill of Lading', { align: 'center' })
```

But it **may not be explicitly adding a page break** before inserting the BOL.

Next Steps:

1. **Check if the BOL files are PDFs or images** in the `/uploads/` directory.
2. **Review the actual BOL appending code** in `pdf-service.ts` to see how it's merging.
3. **Ensure a new page is added before inserting BOL**.

I'll first inspect the `/uploads/` directory for BOL file types.

Key Finding: BOL Files Are PDFs

- The BOL files in `/uploads/` have a **.pdf extension**.
- However, the `pdf-service.ts` code **expects images (JPG, JPEG, PNG)** for embedding.
- This mismatch is likely causing the **BOL to fail to append to the invoice**.

Solution:

1. **Fix the PDF Embedding Process**

- Modify the script to properly handle **PDF BOLs** instead of expecting images.
 - Use a library like `pdf-lib` or `pdfkit` to merge PDFs instead of embedding an image.
2. **Ensure a Page Break Before BOL**
 - Explicitly add a `.addPage()` before inserting the BOL.

Next Step:

I'll now examine how the `pdf-service.ts` currently attempts to add the BOL PDF to the invoice.

Issue Identified: PDF BOL Handling is Broken

The extracted code snippet shows that:

1. **The script recognizes that the BOL is a PDF** (`if (ext === '.pdf')`).
2. **It attempts to process it but throws an error**, preventing the BOL from being appended.
3. **The error messages confirm embedding is failing**, likely due to improper PDF merging.

Fix: Properly Merge BOL PDFs Instead of Treating Them as Images

Instead of attempting to **embed** the BOL PDF as an image, modify the code to **append it as a new page** using `pdf-lib` or `pdfkit`.

Correct Approach using `pdf-lib`

Modify the merging process like this:

```
import fs from 'fs';
import { PDFDocument } from 'pdf-lib';

async function mergeInvoiceAndBOL(invoicePath: string, bolPath: string,
outputPath: string) {
  try {
    const invoiceBytes = fs.readFileSync(invoicePath);
    const bolBytes = fs.readFileSync(bolPath);

    const invoicePdf = await PDFDocument.load(invoiceBytes);
    const bolPdf = await PDFDocument.load(bolBytes);

    const [bolPage] = await invoicePdf.copyPages(bolPdf, [0]); // Copy
first page of BOL
```

```
invoicePdf.addPage(bolPage); // Add BOL as a new page

const finalPdfBytes = await invoicePdf.save();
fs.writeFileSync(outputPath, finalPdfBytes);

console.log("Merged invoice and BOL successfully.");
} catch (error) {
  console.error("Error merging BOL with invoice:", error);
}
}

// Example Usage:
await mergeInvoiceAndBOL('uploads/invoice-DC-001.pdf', 'uploads/bol-DC-001.pdf', 'uploads/merged-invoice-DC-001.pdf');
```

Why This Fix Works:

- **Correctly loads the BOL as a PDF instead of an image.**
 - **Ensures the BOL is appended as a new page in the invoice.**
 - **Eliminates unnecessary error handling for unsupported image formats.**
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Next Steps

- **Implement this fix in `pdf-service.ts`.**
- **Test generating an invoice with an attached BOL.**
- **Confirm that the BOL appears on the second page.**

Would you like me to check anything else in your project before you apply this fix? 🚀