

# Migration Fix Summary - December 21, 2025

## Issue

**Error:** P3009 - Failed migration blocking deployment

**Migration:** 20251221011617\_add\_document\_classification\_validation

**Status:** FAILED during deployment

**Impact:** Blocking all new deployments

## Root Cause Analysis

### Primary Issue

The migration 20251221011617\_add\_document\_classification\_validation failed during deployment because:

- Previous Failed Migrations:** The database has failed migrations in its history:
  - draft\_add\_document\_processing - Failed trying to create DocumentType enum that already exists
  - 20251218162945\_update\_homes\_to\_active - Previously failed and rolled back
  - 20251221011617\_add\_document\_classification\_validation - Latest failure
- Prisma Behavior:** Prisma refuses to apply new migrations when there are failed migrations in the database history (Error P3009)
- Migration Chain Blocking:** Even though the migration SQL uses safe patterns (DO blocks, exception handling), it cannot execute until previous failed migrations are resolved

## Technical Details

### Error from Render Logs (Dec 20, 2025):

Error: P3018  
A migration failed to apply. New migrations cannot be applied before the error **is** recovered from.

Migration name: draft\_add\_document\_processing  
Database error code: 42710  
Database error: ERROR: type "DocumentType" already exists

### Migration File Analysis

The 20251221011617\_add\_document\_classification\_validation migration includes:

- Enum type updates (DocumentType, ValidationStatus, ReviewStatus)
- New columns for document classification
- Indexes for performance
- Foreign key relationships

The migration uses safe patterns:

- DO \$\$ BEGIN ... EXCEPTION blocks for idempotency

- IF NOT EXISTS checks
- Proper enum value mapping

However, it cannot execute because Prisma blocks it due to previous failures.

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## Solution Implemented

### Fix Details

Updated the `migrate:deploy` script in `package.json` to roll back ALL failed migrations before deploying:

#### Before:

```
"migrate:deploy": "npx prisma migrate resolve --rolled-back  
draft_add_document_processing || true && npx prisma migrate resolve --rolled-back  
20251218162945_update_homes_to_active || true && npx prisma migrate deploy"
```

#### After:

```
"migrate:deploy": "npx prisma migrate resolve --rolled-back  
draft_add_document_processing || true && npx prisma migrate resolve --rolled-back  
20251218162945_update_homes_to_active || true && npx prisma migrate resolve --rolled-  
back 20251221011617_add_document_classification_validation || true && npx prisma  
migrate deploy"
```

### Why This Works

1. **Rollback First:** Marks failed migrations as “rolled back” in the `_prisma_migrations` table
2. **Error Suppression:** `|| true` ensures the script continues even if migrations are already rolled back
3. **Clean Slate:** After rollbacks, `prisma migrate deploy` can apply migrations from a clean state
4. **Idempotent:** Can be run multiple times safely


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## Changes Made

### Files Modified

1. **package.json**
  - Updated `migrate:deploy` script
  - Added rollback for `20251221011617_add_document_classification_validation`




### Git Commit

- **Commit:** 6385e60
- **Branch:** main
- **Pushed:** Yes 

# Deployment

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## Automatic Deployment

-  Fix committed and pushed to GitHub
-  Render auto-deployment triggered
-  ETA: 5-10 minutes

## What Happens on Next Deploy

1. **Pre-deploy Phase:** `npm run migrate:deploy` executes
  2. **Rollback Migrations:** All three failed migrations marked as rolled back
  3. **Apply Migrations:** Prisma applies any pending migrations cleanly
  4. **Start Application:** Next.js app starts with updated schema
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## Verification Steps

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### 1. Check Render Deployment Logs

Look for these successful messages:




```
Migration draft_add_document_processing marked as rolled back.  
Migration 20251218162945_update_homes_to_active marked as rolled back.  
Migration 20251221011617_add_document_classification_validation marked as rolled back.  
  
Applying migration `20251221011617_add_document_classification_validation`  
✓ Migration applied successfully
```

### 2. Verify Database Schema

After deployment, check that Document table has new columns:

```
SELECT column_name, data_type  
FROM information_schema.columns  
WHERE table_name = 'Document'  
AND column_name IN (  
  'documentType',  
  'classificationConfidence',  
  'classificationReasoning',  
  'autoClassified',  
  'validationStatus',  
  'reviewStatus',  
  'reviewedById',  
  'reviewedAt'  
)  
ORDER BY column_name;
```

### 3. Test Application Features

-  Document upload works
  -  Document classification functions
  -  Phase 3 features operational
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## Technical Notes

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### Migration Strategy

This migration uses a **safe enum update strategy**:

1. Create new enum type `DocumentType_new`
2. Alter table to use new type with value mapping
3. Drop old enum and rename new one

This avoids issues with:

- Existing enum values in use
- Data migration during enum changes
- Transaction conflicts

### Future Prevention

To prevent similar issues:

1. **Test migrations locally** before deploying
  2. **Use idempotent SQL** (DO blocks, IF NOT EXISTS)
  3. **Monitor Prisma migration status** in production
  4. **Keep rollback scripts updated** as new migrations are added
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## Related Migrations

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### Phase 1A Migrations (Dec 20, 2025)








- `20251220025013_phase1a_enums` : Added enum types and values
- `20251220025039_phase1a_columns_and_tables` : Added columns and tables

### Phase 3 Part 1 Migration (Dec 21, 2025)

- `20251221011617_add_document_classification_validation` : Document classification and validation features
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## Status

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-  **Issue Identified**: Failed migration blocking deployment
  -  **Root Cause Found**: Previous failed migrations in database
  -  **Solution Implemented**: Updated rollback script
  -  **Fix Committed**: Commit `6385e60`
  -  **Fix Pushed**: To `main` branch
  -  **Deployment**: Auto-triggered on Render
  -  **Verification**: Pending deployment completion
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## Next Steps

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1. **Monitor Render Deployment**: Watch logs for successful migration
2. **Verify Schema**: Confirm new columns exist in Document table

3. **Test Features:** Validate Phase 3 document classification works
  4. **Update Documentation:** Document any additional issues discovered
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**Last Updated:** December 21, 2025

**Status:**  FIXED - Awaiting Deployment Verification