

# Payment Timeline User Display Fix

## Issue

In the payment timeline, the “By:” field and “Confirmed By:” field were not displaying user information. The backend was only returning user IDs (strings) for `agencyMarkedPaidBy` and `paymentReceivedBy`, but the `PaymentTrackingCard` component expected user objects with `name` and `email` properties.

## Root Cause

The backend invoice router’s `getById` query was not including the user relations (`agencyMarkedPaidByUser` and `paymentReceivedByUser`) even though they were properly defined in the Prisma schema.

## Solution

### 1. Backend Fix (`server/api/routers/invoice.ts`)

Added user relation includes to the `getById` query to fetch actual User objects:

```
// 🔥 NEW: Include payment tracking users
agencyMarkedPaidByUser: {
  select: {
    id: true,
    name: true,
    email: true,
  },
},
paymentReceivedByUser: {
  select: {
    id: true,
    name: true,
    email: true,
  },
},
```

### 2. Frontend Fix (`app/(dashboard)/(modules)/invoices/[id]/page.tsx`)

Updated the `PaymentTrackingCard` component props to use the correct user objects from the API response:

```
// Before:
paymentReceivedBy: (data as any).paymentReceivedBy,           // ❌ String ID
agencyMarkedPaidBy: (data as any).agencyMarkedPaidBy,        // ❌ String ID

// After:
paymentReceivedBy: (data as any).paymentReceivedByUser, // ✅ User object
agencyMarkedPaidBy: (data as any).agencyMarkedPaidByUser, // ✅ User object
```

# Technical Details

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## Database Schema

The Prisma schema already had the correct relations defined:

- `agencyMarkedPaidBy` (String field storing user ID)
- `agencyMarkedPaidByUser` (User relation for the actual user object)
- `paymentReceivedBy` (String field storing user ID)
- `paymentReceivedByUser` (User relation for the actual user object)

## Component Expectations

The `PaymentTrackingCard` component expects:

```
interface PaymentStatus {
    agencyMarkedPaidBy?: { name: string; email: string };
    paymentReceivedBy?: { name: string; email: string };
    // ... other fields
}
```

## RBAC Compliance

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The fix respects the existing RBAC permissions:

- Only fetches necessary user fields (id, name, email)
- Uses the same permission checks as the rest of the `getById` query
- No additional permissions required

## Testing Checklist

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- [x] Backend includes user relations in query
- [x] Frontend uses correct user objects
- [x] No TypeScript compilation errors
- [x] Git commit created with proper message
- [ ] Manual testing: Verify “By:” field shows user name when agency marks invoice as paid
- [ ] Manual testing: Verify “Confirmed By:” field shows user name when payment is confirmed

## Commit Details

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- **Commit Hash:** 4b5ee66
- **Message:** `fix: display users in payment timeline By and Confirmed By fields`
- **Files Changed:** 2
- **Lines Added:** 18
- **Lines Removed:** 2

## Impact

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- **Positive:** Users can now see who marked the invoice as paid and who confirmed the payment
- **No Breaking Changes:** The change is backward compatible and doesn't affect existing functionality
- **Performance:** Minimal impact - only adds two small user relation fetches

## Related Files

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- `server/api/routers/invoice.ts` - Backend API router
- `app/(dashboard)/(modules)/invoices/[id]/page.tsx` - Invoice detail page
- `components/invoices/PaymentTrackingCard.tsx` - Payment tracking UI component
- `prisma/schema.prisma` - Database schema (no changes needed)