



Complete Supabase Security & Authentication Fix

NOTE: Documentation has been consolidated into [README.md](#). See the main README for the canonical guide. Original content preserved below.



Overview

This guide fixes all RLS (Row Level Security) issues, authentication problems, and sets up a complete profile management system.



Step-by-Step Deployment

1. Run Database Security Scripts

Execute these scripts in your Supabase SQL Editor in order:

```
```bash
```

#### 1. Fix RLS Security (CRITICAL)

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scripts/07-fix-rls-security.sql

#### 2. Fix Authentication Triggers

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scripts/08-fix-auth-triggers.sql

#### 3. Create Storage Bucket for Avatars

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scripts/09-create-storage-bucket.sql

#### 4. Update Profiles Table (if needed)

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scripts/05-update-profiles-table.sql

#### 5. Fix Duplicate Profiles (if any exist)

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```
scripts/06-fix-duplicate-profiles.sql ```
```

### 2. Verify Environment Variables

Ensure your `.env.local` file has:

```
```env
NEXT_PUBLIC_SUPABASE_URL=your_supabase_url
NEXT_PUBLIC_SUPABASE_ANON_KEY=your_supabase_anon_key
```

```
SUPABASE_SERVICE_ROLE_KEY=your_service_role_key ``
```

3. Configure Supabase Auth Settings

In your Supabase Dashboard → Authentication → Settings:

- **Site URL:** <http://localhost:3000> (development) or your production URL
- **Redirect URLs:** Add your callback URLs
- **Email Templates:** Customize if needed
- **Enable Email Confirmations:** Recommended for production

4. Test the Security Setup

Run these verification queries in Supabase SQL Editor:

```
``sql -- Check RLS is enabled on all tables SELECT schemaname, tablename, rowsecurity FROM pg_tables WHERE schemaname = 'public' AND rowsecurity = true;
```

```
-- Check policies exist SELECT schemaname, tablename, policyname, permissive, roles, cmd, qual FROM pg_policies WHERE schemaname = 'public'; ``
```

✓ What's Fixed

🔒 Security Issues Resolved:

- ✓ **RLS Enabled** on all tables
- ✓ **Proper Policies** for data access control
- ✓ **User Isolation** - users can only access their own data
- ✓ **Public Data** properly secured (products, categories)
- ✓ **Social Features** with appropriate permissions

👤 Authentication Fixed:

- ✓ **Auto Profile Creation** for new users
- ✓ **Profile Updates** sync with auth changes
- ✓ **Proper Cleanup** on user deletion
- ✓ **Error Handling** for auth failures

👤 Profile Management:

- ✓ **Complete Profile Fields** (name, address, bio, etc.)
- ✓ **Profile Picture Upload** with validation
- ✓ **Real-time Updates** without page refresh
- ✓ **Persistent Data** across login sessions
- ✓ **Error Recovery** with retry mechanisms

🔧 Testing Checklist

Authentication Tests:

- ☐ User registration creates profile automatically

- ☐ Login loads existing profile data
- ☐ Profile updates save to database
- ☐ Profile picture upload works
- ☐ Logout clears session properly

Security Tests:

- ☐ Users can't access other users' data
- ☐ Public data (products) is accessible to all
- ☐ Private data requires authentication
- ☐ RLS policies block unauthorized access

Profile Management Tests:

- ☐ All form fields save correctly
- ☐ Address information persists
- ☐ Profile picture uploads and displays
- ☐ Error states show properly
- ☐ Loading states work correctly

Troubleshooting

Common Issues:

1. "RLS policy violation"

- Run the RLS fix script: `scripts/07-fix-rls-security.sql`

2. "Profile not found"

- Run the auth triggers script: `scripts/08-fix-auth-triggers.sql`

3. "Storage bucket not found"

- Run the storage setup script: `scripts/09-create-storage-bucket.sql`

4. "Multiple rows returned"

- Run the duplicate fix script: `scripts/06-fix-duplicate-profiles.sql`

Debug Commands:

```
```sql -- Check user's profile SELECT * FROM profiles WHERE id = auth.uid();  

-- Check RLS status SELECT tablename, rowsecurity FROM pg_tables WHERE schemaname = 'public';

-- Check policies SELECT * FROM pg_policies WHERE schemaname = 'public'; ```
```

## Production Deployment

1. **Update Environment Variables** for production URLs
2. **Run All Scripts** in production Supabase

3. **Test Authentication Flow** thoroughly
4. **Verify RLS Policies** are working
5. **Monitor Error Logs** for any issues

## **Support**

If you encounter issues:

1. Check the Supabase logs in your dashboard
2. Verify all scripts ran successfully
3. Test with a fresh user account
4. Check browser console for client-side errors

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 **Your 3D Outfit Builder now has enterprise-grade security and authentication!**