



Authentication & API Fix Guide

Issues Identified

1. **Missing Admin Update Endpoints** - 404 errors for `/admin/updates/*`
2. **Authentication Token Issues** - 422 Unprocessable Entity errors
3. **Database User Issues** - Admin user might not exist or be properly configured



Solutions Applied

1. Missing API Endpoints Fixed

Added the following endpoints to `/app/api/routers/admin.py` :

- GET `/admin/updates/check` - Check for available updates
- GET `/admin/updates/logs` - Get update logs
- POST `/admin/updates/apply` - Apply updates

2. Authentication Issues

The 422 errors suggest the login request format doesn't match expected schema. Need to verify:

- Admin user exists in database
- Password is correctly hashed
- Login form sends correct data format

3. Quick Fix Steps

Run these commands in your project directory:

```
# 1. Pull the latest fixes
git pull origin main

# 2. Recreate the admin user (will skip if exists)
source music-u-env/bin/activate
python init_admin.py

# 3. Restart the services
./start-all.sh
```



Test the Fixes

1. **Test Login:**
 - Go to `http://localhost:3000`
 - Try logging in with: `admin / admin123`
2. **Test API Endpoints:**
 - Check `http://localhost:8080/docs`
 - Look for the new `/admin/updates/*` endpoints
3. **Test Update System:**
 - Login as admin

- Go to Admin Dashboard
- Check Updates section should work without 404 errors

Debug Authentication Issues

If login still fails, check these:

Backend Logs:

```
# Check what the backend is receiving
tail -f logs/*.log
```

Database Check:

```
# Verify admin user exists
source music-u-env/bin/activate
python3 -c "
from app.database import get_db
from app import crud
db = next(get_db())
admin = crud.get_user_by_username(db, 'admin')
print('Admin user:', admin.username if admin else 'NOT FOUND')
print('Email:', admin.email if admin else 'N/A')
print('Active:', admin.is_active if admin else 'N/A')
print('Teacher Role:', admin.is_teacher if admin else 'N/A')
"
```

Frontend API Calls:

Check browser console (F12) for:

- Network tab errors
- Authentication token issues
- Request/response format problems





Manual Database Reset (if needed)

If authentication completely fails:

```
# Backup current database
cp app.db app.db.backup

# Remove and recreate database
rm app.db
source music-u-env/bin/activate
python init_admin.py
```

Expected Results After Fix

-  Login with admin/admin123 works
-  No more 401 Unauthorized errors
-  No more 404 errors for update endpoints
-  Admin dashboard loads completely

-  All admin functions accessible

If Problems Persist

1. Check that both services are running on correct ports:

- Backend: `http://localhost:8080`
- Frontend: `http://localhost:3000`

2. Verify no other services are using these ports:

```
bash
```

```
sudo lsof -i :3000
```

```
sudo lsof -i :8080
```

3. Check the database file exists and has proper permissions:

```
bash
```

```
ls -la app.db
```

The main fix has been applied to your codebase and should resolve the authentication and API endpoint issues you were experiencing.