Phase 1: Atlas Integration Fixes - Deployment Results

Date: October 19, 2025
Branch: phase1-atlas-logging-and-fixes
PR: #211 - https://github.com/dfultonthebar/Sports-Bar-TV-Controller/pull/211

✅ Successfully Completed

1. Processor ID Error - FIXED

- **Issue:** "Processor ID is required" error when editing processors
- **Root Cause:** Missing `id` field in PUT request body
- **Fix Applied:** Added `editingProcessor.id` to request body in `AtlasProgrammingInterface.tsx`
- **Status:** ✅ **VERIFIED WORKING** - Edit form opens without error, processor can be edited successfully

2. TCP Port Correction - FIXED

- **Issue:** Application using port 23 instead of correct port 5321
- **Fix Applied:** Updated all references to use port 5321
- `atlasClient.ts`: Default port 23 → 5321
- `atlas-hardware-query.ts`: Default port 23 → 5321
- `control/route.ts`: Fallback port 23 → 5321
- `schema.prisma`: Default tcpPort 23 → 5321
- **Status:** ✅ **DEPLOYED** - Port 5321 now showing in UI

3. Comprehensive Logging System - IMPLEMENTED

- **New File:** `src/lib/atlas-logger.ts`
- **Features:**
- Dual output: Console + File (`/log/atlas-communication.log`)
- Structured logging with timestamps and log levels
- Categorized logs: CONNECTION, COMMAND, RESPONSE, HARDWARE_QUERY
- **Integration:** Logging added to atlasClient.ts, atlas-hardware-query.ts, control API
- **Status:** ✅ **DEPLOYED** - Log directory created, will populate on first Atlas operation

🎯 Verification Results

Web Interface Testing

- ✅ Accessed http://24.123.87.42:3000/audio-control
- ✅ Atlas System tab loads successfully
- ✅ Processor shows as **online** with correct IP:Port (192.168.5.101:5321)
- ✅ Edit processor form opens without "Processor ID is required" error
- ✅ All form fields populated correctly
- ✅ Update button functional

Deployment Status

- ✅ Code deployed to remote server
- ✅ Branch: phase1-atlas-logging-and-fixes checked out
- ✅ Dependencies installed
- ✅ Prisma schema updated
- ✅ Database migrated (tcpPort default changed to 5321)
- ✅ PM2 application restarted successfully
- ✅ Log directory created at ~/Sports-Bar-TV-Controller/log/

Current System State

- **Processor Status:** Online
- **IP Address:** 192.168.5.101
- **TCP Port:** 5321 (correct)
- **Authentication:** Configured
- **Inputs:** 14
- **Outputs:** 10

📋 Next Steps

Immediate Testing Needed

1. **Test Zone Controls:**
   - Navigate to Zone Control tab
   - Test volume adjustment
   - Test mute/unmute
   - Test source selection
   - Verify commands are sent to hardware

2. **Verify Logging:**
   - Perform zone control operations
   - Check log file: `tail -f ~/Sports-Bar-TV-Controller/log/atlas-communication.log`
   - Verify TCP communication is logged
   - Check PM2 logs: `pm2 logs sports-bar-tv`

3. **Test Hardware Query:**
   - Click "Configuration" button
   - Verify real hardware data is displayed (not mock data)
   - Check that actual zone names and source names from Atlas are shown

Future Enhancements

1. Implement log rotation to prevent log file growth
2. Add UDP port 3131 support for metering information
3. Implement keep-alive messages (every 5 minutes as per spec)
4. Add connection retry logic with exponential backoff
5. Implement subscription management for real-time updates

📁 Files Modified

Code Changes

- `src/lib/atlas-logger.ts` - NEW (comprehensive logging utility)
- `src/lib/atlasClient.ts` - Port correction + logging integration
- `src/lib/atlas-hardware-query.ts` - Port correction + logging integration
- `src/app/api/audio-processor/control/route.ts` - Port correction + logging
- `src/components/AtlasProgrammingInterface.tsx` - Fixed processor ID bug
- `prisma/schema.prisma` - Updated default tcpPort to 5321

Deployment Files

- `/home/ubuntu/Sports-Bar-TV-Controller/log/` - Log directory created
- Database schema updated with new tcpPort default

🔗 References

- **PR:** https://github.com/dfultonthebar/Sports-Bar-TV-Controller/pull/211
- **Atlas PDF:** /home/ubuntu/Uploads/ATS006993-B-AZM4-AZM8-3rd-Party-Control (2).pdf
- **System Documentation:** system_documentation.md
- **Web Interface:** http://24.123.87.42:3000/audio-control

⚠️ Important Notes

1. **Log File:** Will be created on first Atlas TCP operation (zone control, hardware query, etc.)
2. **Database Migration:** Existing processors may need tcpPort updated manually if created before this change
3. **Testing Required:** Zone controls need to be tested to verify actual hardware communication
4. **PR Status:** DO NOT MERGE until full testing is complete

🎉 Summary

Phase 1 objectives have been successfully completed:
- ✅ Processor ID error resolved
- ✅ Correct TCP port (5321) implemented
- ✅ Comprehensive logging system deployed
- ✅ Application restarted and running
- ✅ Web interface accessible and functional

The application is now ready for zone control testing and hardware communication verification.

Deployment completed: October 19, 2025 04:58 AM UTC
Deployed by: Abacus AI Assistant
Next review: After zone control testing