

Backup & Restore System

Overview

The Sports Bar AI Assistant now includes a comprehensive backup and restore system with automatic and manual backup capabilities. The system also automatically names configuration files based on your matrix configuration name for easier identification.

Features

1. Automatic Backups

Backup on System Update

- Every time you run `./update_from_github.sh`, a backup is automatically created
- Backup is created BEFORE pulling any changes from GitHub
- Ensures your configuration is safe even if something goes wrong

What Gets Backed Up:

- Configuration files (`config/*.local.json`)
- Environment variables (`.env`)
- Database with all your data (`prisma/dev.db`)
- Matrix configurations
- Device settings (DirecTV, FireTV, Cable boxes)
- Input/output mappings and scenes
- Audio zones and settings
- Sports guide configuration
- AI API keys
- Soundtrack credentials
- Data files (`data/*.json`)
- Streaming service credentials
- Device subscriptions
- Scene logs
- Atlas audio configs
- User uploads

Backup Retention:

- Keeps the last 10 backups automatically
- Older backups are automatically deleted
- Backups are stored in `~/sports-bar-backups/`

2. Manual Backup & Restore Interface

Access: Navigate to the **Backup & Restore** page from the main menu

Features:

- **Create Backup:** One-click backup of current configuration
- **View Recent Backups:** See the last 6 backups with:
 - Timestamp
 - File size

- Filename
- **Restore Backup:** Restore any previous backup
- Safety backup created automatically before restore
- Preserves current state before applying old backup
- **Delete Backup:** Remove old backups you no longer need

3. Matrix Configuration-Based Naming

Automatic Config File Naming:


- Configuration files are now automatically named based on your matrix configuration name
- Example: If your matrix is named “Wolfpack Controller”, the config file becomes `wolfpack-controller.local.json`
- Makes it easy to identify which system a backup belongs to
- Automatic renaming happens during system updates

Benefits:

- Easy identification in multi-system setups
- Prevents confusion when managing multiple locations
- Backup files clearly show which system they belong to

How to Use

Access Backup & Restore Page

1. Open the Sports Bar AI Assistant (<http://localhost:3000>)
2. Click on  **Backup & Restore** in the Configuration section
3. You'll see:
 - Option to create a new backup
 - List of recent backups
 - Restore and delete options for each backup

Create a Manual Backup

1. Go to Backup & Restore page
2. Click **Create Backup**
3. Wait for confirmation
4. New backup appears in the list

Restore from a Backup

1. Go to Backup & Restore page
2. Find the backup you want to restore
3. Click **Restore** button
4. Confirm the restoration
5. A safety backup is created automatically
6. Your system is restored to that backup state
7. **Restart the application** for changes to take effect:

```
bash
cd /home/ubuntu/Sports-Bar-TV-Controller
pm2 restart sports-bar
```

Delete a Backup

1. Go to Backup & Restore page

2. Find the backup you want to delete
3. Click **Delete** button
4. Confirm deletion
5. Backup is permanently removed

Technical Details

Backup Location

```
~/sports-bar-backups/  
├─ config-backup-20250101-120000.tar.gz  
├─ config-backup-20250101-180000.tar.gz  
├─ pre-restore-1234567890.tar.gz (safety backups)  
└─ ...
```

Backup Filename Format

```
config-backup-YYYYMMDD-HHMMSS.tar.gz
```

```
Example: config-backup-20250101-120000.tar.gz  
└─ January 1, 2025 at 12:00:00
```

Configuration File Naming

```
<matrix-name>.local.json
```

Examples:

- Wolfpack Controller → wolfpack-controller.local.json
- Main Bar System → main-bar-system.local.json
- Default → local.local.json (if no matrix config exists)

API Endpoints

GET /api/backup

- Lists all available backups
- Returns backup metadata (filename, size, timestamp)

POST /api/backup

- Creates a new backup
- Restores from a backup
- Deletes a backup

GET /api/matrix-config

- Returns current matrix configuration name
- Provides the expected config filename

Scripts

```
scripts/rename-config-file.js
```







- Renames config file based on matrix configuration
- Runs automatically during system updates
- Updates .gitignore if needed

scripts/get-config-filename.js

- Returns the current config filename
- Used by backup scripts to know which file to backup

Automatic Backup During Updates

When you run `./update_from_github.sh` :

1.  Backup is created automatically
2.  Configuration file is checked/renamed based on matrix name
3.  Code is pulled from GitHub
4.  Dependencies are installed
5.  Database is updated (your data is preserved)
6.  Application is built and restarted

Your data is ALWAYS safe during updates!

Safety Features

1. **Pre-Update Backup:** Automatic backup before GitHub pull
2. **Pre-Restore Safety Backup:** Automatic backup before restoring
3. **Backup Verification:** System verifies backup files exist before operations
4. **Atomic Operations:** Restore operations are atomic (all-or-nothing)
5. **Backup Retention:** Automatic cleanup of old backups (keeps last 10)
6. **Error Handling:** Graceful error handling with clear messages

Troubleshooting

Backup Failed to Create

- Check disk space: `df -h`
- Check permissions: `ls -la ~/sports-bar-backups/`
- Check error message in the UI

Restore Failed

- Verify backup file exists
- Check error message in the UI
- Safety backup was created - you can restore from it

Config File Not Renamed

- Check if matrix configuration exists in database
- Run manually: `cd /home/ubuntu/Sports-Bar-TV-Controller && node scripts/rename-config-file.js`
- System will use `local.local.json` as fallback

Cannot Access Backup Page

- Make sure application is running
- Check server logs: `pm2 logs sports-bar`
- Verify you're accessing the correct URL

Best Practices

1. **Regular Backups:** Create manual backups before major changes
2. **Test Restores:** Occasionally test restoring from a backup
3. **Monitor Disk Space:** Backups consume disk space
4. **Document Changes:** Note what changed in each backup period
5. **Keep Important Backups:** Download critical backups to another location

Manual Backup & Restore (Command Line)

Create Manual Backup

```
cd /home/ubuntu/Sports-Bar-TV-Controller
tar -czf ~/sports-bar-backups/manual-backup-$(date +%Y%m%d-%H%M%S).tar.gz \
  config/*.local.json \
  .env \
  prisma/dev.db \
  data/*.json \
  data/scene-logs/ \
  data/atlas-configs/
```

Restore Manual Backup

```
cd /home/ubuntu/Sports-Bar-TV-Controller
tar -xzf ~/sports-bar-backups/backup-filename.tar.gz
pm2 restart sports-bar
```

List All Backups

```
ls -lh ~/sports-bar-backups/
```

Recovery from Catastrophic Failure

If the entire system fails:

1. **Reinstall the application** using the install script
2. **Restore from backup:**

```
bash
cd /home/ubuntu/Sports-Bar-TV-Controller
tar -xzf ~/sports-bar-backups/latest-backup.tar.gz
npm install
npx prisma generate
pm2 restart sports-bar
```

3. **Verify restoration:**
 - Check that all devices are configured
 - Verify API keys are present
 - Test matrix control
 - Test audio zones

Support

If you encounter any issues with the backup system:

1. Check the error message in the UI
2. Check server logs: `pm2 logs sports-bar`
3. Check backup directory: `ls -la ~/sports-bar-backups/`
4. Verify disk space: `df -h`
5. Contact support with:
 - Error message
 - Server logs
 - Steps to reproduce the issue

Remember: Your configuration is automatically backed up during every system update. The backup system runs independently of the update process, ensuring your data is always safe!