

# Scheduler & Wolfpack Integration Enhancement

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## Overview

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Enhanced the TV scheduler system to integrate directly with Wolfpack (Matrix) output configuration, allowing you to designate specific TVs for automatic daily turn-on/off directly from the Matrix Control interface.



## New Features

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### 1. Daily Turn-On/Off Configuration in Matrix Control

**Location:** Matrix Control → Outputs Section

Each Wolfpack output now has two new toggle options:

-  **Daily Turn On** - Mark this TV for automatic morning power-on
-  **Daily Turn Off** - Mark this TV for automatic nightly power-off

**How to Configure:**

1. Go to Matrix Control page
2. Click "Outputs" tab
3. For each TV output, you'll see checkboxes for:
  - Daily Turn On
  - Daily Turn Off
4. Check the appropriate boxes based on your needs
5. Save configuration

**Database Changes:**

- Added `dailyTurnOn` boolean field to `MatrixOutput` model
- Added `dailyTurnOff` boolean field to `MatrixOutput` model

### 2. Enhanced Scheduler Interface

**New API Endpoint:** `/api/matrix/outputs-schedule`




This endpoint provides:

- List of outputs configured for daily turn-on
- List of outputs configured for daily turn-off
- List of available outputs (not assigned to daily operations)

**Scheduler Page Enhancements:**

#### Output Schedule Info Panel

When creating/editing a schedule, you now see:

-  **Configured for Daily Turn-On:** Shows which TVs are set to turn on automatically
-  **Configured for Daily Turn-Off:** Shows which TVs are set to turn off automatically
-  **Available for Custom Schedules:** Shows how many TVs are available for other schedules

## Visual Indicators

In the output selection list, each TV shows:

- ☀ icon if configured for daily turn-on
- 🌙 icon if configured for daily turn-off

This makes it easy to see which TVs are already assigned to daily operations.

## Use Cases

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### Use Case 1: Basic Daily Operations

**Scenario:** Main bar area opens at 9 AM, closes at 2 AM

**Setup:**

1. In Matrix Control, mark main bar TV outputs with “Daily Turn On”
2. Mark same outputs with “Daily Turn Off”
3. In Scheduler:
  - Create “Morning Turn On” schedule for 8:55 AM
  - Create “Nightly Turn Off” schedule for 2:00 AM
  - Both schedules automatically include daily-configured outputs

### Use Case 2: Staggered Opening Times

**Scenario:** Main bar opens at 9 AM, side room opens at 11 AM

**Setup:**

1. In Matrix Control:
  - Mark main bar TVs with “Daily Turn On”
  - Leave side room TVs unmarked
2. In Scheduler:
  - Create “Main Bar Morning” schedule for 8:55 AM (uses daily-configured outputs)
  - Create “Side Room Opening” schedule for 10:55 AM (manually select side room outputs)

### Use Case 3: Special Event Rooms

**Scenario:** Party room only opens on weekends or by reservation

**Setup:**

1. In Matrix Control:
  - Don’t mark party room TVs for daily turn-on/off
2. In Scheduler:
  - Create weekend-only schedule for party room
  - Create on-demand schedules for special events

### Use Case 4: Game Day Automation

**Scenario:** Turn on additional TVs when home team games are detected

**Setup:**

1. In Matrix Control:
  - Mark essential TVs for daily turn-on
  - Leave game-day TVs unmarked
2. In Scheduler:
  - Create game-based schedule that:
    - Monitors home teams

- Auto-finds games
- Turns on additional TVs when games detected

## Migration Required

**⚠ Important:** After pulling these changes, you must run:

```
cd ~/Sports-Bar-TV-Controller
yarn prisma db push
```

Or manually add the fields to existing outputs:

```
cd ~/Sports-Bar-TV-Controller
sqlite3 prisma/dev.db
"ALTER TABLE MatrixOutput ADD COLUMN dailyTurnOn BOOLEAN DEFAULT 0;"
sqlite3 prisma/dev.db "ALTER TABLE MatrixOutput ADD COLUMN dailyTurnOff BOOLEAN
DEFAULT 0;"
```

## Files Modified

### Schema Changes

- ☒ prisma/schema.prisma - Added `dailyTurnOn` and `dailyTurnOff` fields to MatrixOutput

### Component Updates

- ☒ src/components/MatrixControl.tsx - Added daily turn-on/off toggles to output configuration
- ☒ src/app/scheduler/page.tsx - Enhanced with output schedule info display

### New API Endpoints

- ☒ src/app/api/matrix/outputs-schedule/route.ts - Get/update output scheduling settings

## Benefits

### 1. Centralized Configuration

- Configure daily turn-on/off right where you configure TV labels and settings
- No need to remember which TVs to select in scheduler each time

### 2. Flexible Scheduling

- Daily-configured TVs for routine operations
- Manually select additional TVs for special schedules
- Mix and match as needed

### 3. Visual Clarity

- See at a glance which TVs are assigned to daily operations
- Icons (☀🌙) make it easy to identify configured TVs
- Prevents accidentally creating conflicting schedules






### 4. Reduced Errors

- Less manual selection = fewer mistakes

- Clear separation between daily and special schedules
- Documentation built into the interface

## Example Workflow

### Initial Setup (One-Time)

1. **Go to** Matrix **Control**  Outputs
2. **For** each TV:
  - Main Bar TVs  ☒ Daily Turn **On**, ☒ Daily Turn Off
  - Dining Area TVs  ☒ Daily Turn **On**, ☒ Daily Turn Off
  - Party Room TVs  Leave unchecked
  - Game Day TVs  Leave unchecked
3. **Save** Configuration

### Create Daily Schedules

1. **Go to** Scheduler
2. Create "**Morning Setup**" schedule:
  - Type: Daily
  - Time: 8:55 AM
  - Power **On** TVs: ☒
  - Will see: 12 TVs configured **for** daily turn-on
3. Create "**Nightly Shutdown**" schedule:
  - Type: Daily
  - Time: 2:00 AM
  - Power Off TVs: ☒
  - Will see: 12 TVs configured **for** daily turn-off
4. **Save** both schedules

### Create Special Schedule

1. Create "**Game Day Extra TVs**" schedule:
  - Type: Game-based
  - Monitor Home Teams: ☒
  - Select additional game-day TVs manually
  - These won't conflict with daily schedules

## Testing

After setup, verify:

1. **Matrix Control:**
  - Open Outputs tab
  - Verify checkboxes saved correctly
  - Icons appear: 🌞 for turn-on, 🌙 for turn-off
2. **Scheduler:**
  - Create new schedule
  - Check "Output Schedule Info" panel appears
  - Verify daily-configured TVs listed correctly
  - Verify icons (🌞🌙) appear next to configured outputs

### 3. **Functionality:**

- Save a schedule with daily-configured outputs
- Execute schedule manually
- Verify correct TVs power on/off

## Future Enhancements

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Potential additions:

- Bulk selection: "Select all daily turn-on TVs"
  - Schedule templates based on daily configuration
  - Conflict detection for overlapping schedules
  - Auto-generate daily schedules when outputs configured
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**Date:** October 1, 2025

**Status:** ☒ Ready to use (after migration)

**Impact:** Enhanced scheduler flexibility and usability