

Cursor Tools and MCP Servers for moOde Project

Current Setup

MCP Server Configured

File: .cursor/mcp.json

```
{  
  "mcpServers": {  
    "filesystem": {  
      "command": "npx",  
      "args": ["-y", "@modelcontextprotocol/server-filesystem", "/Users/andrevollmer/moodeaudio-cursor"]  
    }  
  }  
}
```

Status: ■ Filesystem MCP server enabled

Available MCP Tools

1. Filesystem MCP (■ Active)

Tools available:

- `mcp_filesystem_read_file` - Read files
- `mcp_filesystem_write_file` - Write files
- `mcp_filesystem_list_directory` - List directories
- `mcp_filesystem_search_files` - Search for files
- `mcp_filesystem_get_file_info` - Get file metadata
- `mcp_filesystem_create_directory` - Create directories
- `mcp_filesystem_move_file` - Move/rename files

Useful for:

- Reading configuration files
- Writing service files
- Searching for specific files
- Managing project structure

2. Browser MCP (■ Available)

Tools available:

- `mcp_cursor-ide-browser_browser_navigate` - Navigate to URLs
- `mcp_cursor-ide-browser_browser_snapshot` - Get page snapshot
- `mcp_cursor-ide-browser_browser_click` - Click elements
- `mcp_cursor-ide-browser_browser_type` - Type text
- `mcp_cursor-ide-browser_browser_take_screenshot` - Take screenshots

Useful for:

- Testing moOde Web UI (<http://192.168.10.2>)
- Automating browser tasks
- Taking screenshots of display
- Testing Room Correction Wizard
- Verifying Web UI functionality

Potential MCP Servers to Add

1. Terminal/SSH MCP

Purpose: Execute commands on Pi remotely

Could provide:

- SSH connection to Pi
- Remote command execution
- File transfer
- Service management

Useful for:

- Testing fixes on Pi without manual SSH
- Automating deployment
- Checking Pi status
- Running commands remotely

2. Database MCP

Purpose: Access moOde SQLite database

Could provide:

- Query moOde database
- Update configuration
- Read settings
- Check system state

Useful for:

- Reading moOde configuration
- Updating display settings
- Checking audio configuration
- Verifying system state

3. GitHub MCP

Purpose: Access GitHub repositories

Could provide:

- Read GitHub repos
- Check for updates
- Read documentation
- Access issues/PRs

Useful for:

- Reading moOde source code
- Checking for updates
- Reading driver documentation
- Accessing forum solutions

How to Use Current Tools

Filesystem MCP

Already available - I can use these tools to:

- Read files directly (faster than read_file)

- Write files directly
- Search for files
- List directories

Browser MCP

Already available - I can use these tools to:

- Navigate to moOde Web UI
- Test functionality
- Take screenshots
- Automate browser tasks

Example use case:

```
# I could navigate to http://192.168.10.2
# Take a screenshot
# Test if Web UI is working
# Automate Room Correction Wizard testing
```

Recommendations

High Priority

1. **Use Browser MCP** - Test moOde Web UI automatically
2. **Use Filesystem MCP** - Faster file operations

Medium Priority

3. **Add Terminal/SSH MCP** - Remote Pi access
4. **Add Database MCP** - moOde database access

Low Priority

5. **Add GitHub MCP** - Repository access (we have local clones)

Current Capabilities

What I can do NOW:

- ■ Read/write files via MCP (faster)
- ■ Navigate and test moOde Web UI via browser
- ■ Take screenshots of Web UI
- ■ Automate browser tasks
- ■ Search files efficiently

What would be useful:

- ■ SSH to Pi automatically
- ■ Query moOde database
- ■ Execute commands on Pi remotely

Next Steps

1. **Use Browser MCP** to test moOde Web UI
2. **Use Filesystem MCP** for faster file operations
3. **Consider adding** Terminal/SSH MCP for Pi access

4. **Consider adding** Database MCP for moOde config access