



Blue Iris for HS4

HomeSeer 4 Plugin - User Guide

Version 4.0.1.0

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1. Overview

Blue Iris for HS4 integrates Blue Iris video surveillance software with HomeSeer 4. The plugin connects to up to 3 Blue Iris servers simultaneously, creating HomeSeer devices for each camera, camera group, and system control. This enables home automation based on camera status, motion detection, AI alerts, recording state, and more.

Each Blue Iris server connection is fully independent with its own credentials, polling interval, and device tree. Devices are organized by floor (Location2) so multiple servers can be easily distinguished in the HomeSeer interface.

2. Prerequisites

HomeSeer Requirements

- HomeSeer 4 (HS4) version 4.2 or later
- HomeSeer PluginSDK 1.5.0

Blue Iris Requirements

- Blue Iris 5 (version 5.x recommended)
- A user account with admin privileges for API access

IMPORTANT: The Blue Iris web server must be enabled with JSON API support. In Blue Iris, go to Options > Web Server and ensure the server is enabled. The plugin communicates via HTTP JSON API on the configured port (default: 81).

Enabling the Blue Iris Web Server

1. Open Blue Iris and go to Options (the gear icon).
2. Click on the "Web Server" tab.
3. Check "Enable" to turn on the web server.
4. Note the port number (default is 81). You will need this for the plugin settings.
5. Ensure "Use secure session keys and login page" is enabled for security.
6. Click OK to save.

The plugin uses the JSON API endpoint at `http://<server-ip>:<port>/json`. Make sure this URL is accessible from your HomeSeer server. You can test by opening it in a web browser -you should see a JSON response.

3. Installation

Install the plugin through the HomeSeer plugin updater:

1. In HomeSeer, go to the Plugins menu and select "Manage".
2. Click "Additional Plugins" and search for "Blue Iris".
3. Install the plugin and enable it.

Alternatively, for manual installation, place the HSPI_BlueIrisForHS4.exe file in your HomeSeer installation directory and restart HomeSeer.

4. Configuration

The plugin settings are accessed through the HomeSeer web interface under Plugins > Blue Iris for HS4. There are up to 4 settings pages:

Server 1 / Server 2 / Server 3 Pages

Each server page contains the following settings:

- **Enable This Server** - Toggle to activate/deactivate this server connection.
- **Server Name** - A friendly name for this server (used in log messages).
- **Server IP Address** - The IP address of the Blue Iris machine.
- **Port** - The web server port configured in Blue Iris (default: 81).
- **Username** - Blue Iris user account with admin privileges.
- **Password** - Password for the Blue Iris user account.
- **Poll Interval** - How often to poll for status updates (5, 10, 15, 30, 45, 60, or 90 seconds).
- **Floor (Location2)** - The Location2 value for all devices from this server. Use different values per server to organize devices.
- **Remove All Devices & Rescan** - Toggle to delete all devices for this server and rediscover from Blue Iris.

General Page

- **Debug Mode** - Enable verbose logging of all API requests and responses. Useful for troubleshooting.

5. Devices

The plugin automatically creates HomeSeer devices and features for each Blue Iris server. Devices are organized by Location and Location2 (Floor).

System Device (Blue Iris Controls)

One system device is created per server with the following features:

- **Profile** - Read/set the active Blue Iris profile (0-7). Profile names from Blue Iris are displayed.
- **Signal** - Read/set the traffic signal: Red (0), Green (1), Yellow (2).
- **Lock** - Read/set the lock state: Run (0), Temp (1), Hold (2).
- **BI Version** - Displays the Blue Iris software version (read-only).

Camera Devices (Cameras)

One device is created per camera with the following features:

- **Status** - Offline, Online, Recording, Triggered, or No Signal (read-only).
- **Enable** - Enable or disable the camera.
- **Pause** - Pause or resume the camera.
- **Trigger** - Manually trigger the camera. Also set to 1 when alerts are detected.
- **Motion** - Current motion state (read-only, updated each poll).
- **Manual Record** - Start or stop manual recording.
- **PTZ** - Send PTZ commands: Left, Right, Up, Down, Home, Zoom In, Zoom Out.
- **PTZ Preset** - Go to PTZ presets 1-8.
- **FPS** - Current frames per second (read-only).
- **Clip Count** - Number of recorded clips (read-only).
- **AI Detection** - Latest AI detection: None, Person, Vehicle, License Plate, Other (read-only).

Camera Group Devices (Camera Groups)

Groups in Blue Iris get a device with a subset of features:

- **Enable** - Enable or disable the group.
- **Motion** - Motion state (read-only).
- **Trigger** - Manually trigger the group.
- **Manual Record** - Start or stop manual recording for the group.

6. Multi-Server Setup

The plugin supports up to 3 simultaneous Blue Iris server connections. Each server operates independently with its own polling timer, session, and device tree.

Setting Up Multiple Servers

1. Go to the Server 1 settings page and configure your first Blue Iris server.
2. Set a unique Floor name (e.g., "Blue Iris - Main House").
3. Enable the server and verify it connects (check the log).
4. Go to the Server 2 settings page and configure your second server.
5. Set a different Floor name (e.g., "Blue Iris - Workshop").
6. Enable the server.

Device Isolation

Each server's devices are fully isolated using address prefixes (BI1:, BI2:, BI3:). Control events are automatically routed to the correct server. The "Remove All Devices & Rescan" toggle on each server page only affects that server's devices.

Network Considerations

Each server connection uses its own HTTP client with an 8-second timeout. If one server is on a slow or unreliable network (e.g., over a VPN), it will not affect polling of other servers. The plugin includes connection retry logic (3 attempts with 5-second delays) and will automatically retry camera discovery on each poll cycle if the initial discovery failed.

7. Using with Events & Automation

All device features can be used in HomeSeer events for automation. Examples:

- Trigger an event when a camera detects motion (Motion feature changes to 1).
- Turn on lights when AI detects a person (AI Detection feature changes to 1).
- Send a notification when a camera goes offline (Status feature changes to 0).
- Set the Blue Iris profile based on HomeSeer security mode (Profile feature).
- Trigger a camera recording from a door sensor event (Trigger feature).
- Change the signal to Red when HomeSeer goes into Away mode (Signal feature).

8. Upgrading from Single-Server

If you are upgrading from a previous version of the plugin that only supported a single server, the plugin will automatically migrate your settings and devices:

- Settings from the old [BlueIrisForHS4] INI section are copied to [Server1].
- Server 1 is automatically enabled with your existing configuration.
- Device addresses are migrated from "BI:" prefix to "BI1:" prefix.

No manual action is required. Your existing devices and automations will continue to work.

9. Troubleshooting

"Not connected" or "Network is unreachable"

- Verify the Blue Iris web server is enabled (Options > Web Server > Enable).
- Check that the IP address and port are correct in the plugin settings.
- Test the connection by opening `http://<ip>:<port>/json` in a browser.
- Ensure no firewall is blocking the connection between HomeSeer and Blue Iris.
- For remote servers over VPN, verify the VPN tunnel is active and routing is correct.

"Failed to log in - check credentials"

- Verify the username and password are correct.
- The user account must have admin privileges in Blue Iris.
- Check that "Use secure session keys" is enabled in Blue Iris web server settings.

Devices not appearing

- Check the log for "Discovered X cameras" messages.
- If discovery failed, the plugin will retry on each poll cycle.
- Use "Remove All Devices & Rescan" to force a fresh discovery.
- Cycle views (cameras starting with @) are automatically excluded.

Slow or unresponsive

- Increase the poll interval for servers on slow networks (30-90 seconds).
- Enable Debug Mode to see API request/response timing in the log.
- Each server polls independently -a slow server will not block others.

Debug Mode

Enable Debug Mode on the General settings page to log all API requests and responses. This is useful for diagnosing connection issues, slow responses, or unexpected behavior. Disable it after troubleshooting to reduce log volume.