

FW 5.1.1 Build 5 Release Notes – Bug Fixes

The CHEKT Video Control Panel Firmware release notes include new features and bug fixes added since FW version 5.1.0 Build 2. This firmware update is designed to enhance current CHEKT Dealer and Monitoring Portal features, while others are designed to support new features and future portal development.

Notes for Dealers

Dealers should anticipate the firmware update process to take between 5 and 10 minutes, depending on the download bandwidth available on the site. If you notice the process is taking longer, we advise you to allow your video control panel at least one hour before attempting a power cycle or reboot.

Firmware Update Notes

ADDED Support

1. ADDED: Some SightLogix cameras respond with 500 codes during authentication. Added logic to proceed when 500 code is returned.
2. ADDED: Some camera brands do not provide the correct video source token when looking for Profile G video storage. Added logic to ignore finding matching video source token if only 1 video source exists.
3. ADDED: SetMemoryLimit (50MB) and SetGCPercent (10) to optimize memory management.
 - a. CHEKT Bridge shouldn't have more than 30MB of memory in a normal operation.
 - b. When exceeding 50MB (when uploading a large file to the cloud), the hardware try to unallocated the memory as soon as possible.
4. ADDED: Logic to upload 2-minutes playback video one at a time.
 - a. To prevent the memory outage issue and Bridge reboot caused by simultaneous uploading
 - b. (e.g. 40MB uploading from all 16 channels)
 - c. This is a new issue the video resolution was only 640x360 before FW 5.X, but now it is 1280x720 w/ FW v5.X. (4 times larger).
 - d. The Bridge will not retry uploading when upload fails.
5. ADDED: Logic to store timelapse video in memory only when enabled
6. ADDED: Logic to upload timelapse, video event one at a time to avoid high usage of memory when uploading multiple videos simultaneously.
7. ADDED: RequestBodyDump on the Accessory Event Triggers
 - a. To help Investigation Local Event API Trigger.
 - b. Now all Request body from Local Accessories are reported to the cloud.
8. ADDED: Support to download MP4 video from camera storage using Profile G.

BUG FIXES

1. FIXED: Can't mount MJPEG stream from some cameras (e.g. old Axis camera), when the camera does not give rtpmap attribute when the codec is one of the static payload type defined in IANA.
 - a. <https://www.iana.org/assignments/rtp-parameters/rtp-parameters.xhtml>

- b. e.g. omitting a=rtpmap:8 PCMA/8000
- 2. FIXED: Alarm Input LEDs not reflecting DIDO status on Factory Process.
- 3. FIXED: Bridge Network Reset Button Operation was disabled in build 5.0.0
- 4. FIXED: Input/Output Related operation does not work without cloud configuration.
- 5. FIXED: Network Discovery function was not finding all available cameras. (Uniview and other Brands.)
- 6. FIXED: Some SightLogix cameras were not creating alarm events from camera analytics.
- 7. FIXED: Some camera brand information was missing during discovery. Reported by Homaxi.
- 8. FIXED: Automation Rule for multiple camera playback was failing when any of the cameras were offline.
- 9. FIXED: Watchdog routine where unnecessary logs erased other critical logs in the kernel's log ring buffer.
- 10. FIXED: 500 Error happens on Bridge event API when calling multiple zones at the same time.

CHANGE Functions

- 1. CHANGED: Removed pre-mature cloud recording logic to save on Bridge memory.
- 2. CHANGED: SetMemoryLimit to 60MiB it is to avoid OOM killer to kill streamer.
- 3. CHANGED: Timelapse video resolution to 360p from 720p on RPi 1GB and 2GB models.
 - a. RPi 4GB+ models will keep generating 720p timelapse video.
 - b. CKB304 is always w/ 1GB memory
 - c. CKB308, CKB312, CKB416 are w/ both 2GB or 4GB memory (depending on availability of RPi when manufacturing)
- 4. CHANGED: Set max_bitrate for timelapse video
 - a. 1GB, 2GB models: 650Kbps (about 5MB per channel)
 - b. 4GB+ models: 2500Kbps (about 10MB per channel)
 - c. Applying this because some cameras use more than 32MB per channel to store timelapse video for 70 minutes.
 - d. On standard office internet connections. uploading 10 x channels timelapse video used to take 1 minute 15 seconds, now it takes less than 20 seconds.
- 5. CHANGED: Added logic to keep minimal memory usage: 3 triggers
 - a. Set memory limit (100MB)
 - b. Set GC percent (10%)
 - c. Run GC and free OS memory every 10 seconds
- 6. CHANGED: 2-minute playback to 720p@1fps w/o audio for H.264 and 360p@1fps w/o audio for H.265.
 - a. It was 720p@8fps w/ audio.
- 7. CHANGED: Watchdog to stop FW Heal routine 30 minutes after boot.