AuraSmart Solutions - IoT Device Log Analysis Report

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**Company:** AuraSmart Solutions

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1. Executive Summary

This document provides a sample of log data generated by devices within the AuraSmart Solutions ecosystem. The purpose is for analysis, troubleshooting, and system monitoring. The logs cover devices such as the AuraSmart ClimateSensor T200, AuraGlow Lightbulb L150, and the AuraView Security Cam C3.

2. Log Format Specification

The standard text-based log format follows this structure: `[TIMESTAMP] [LEVEL] [DEVICE_ID] - Message`

- **TIMESTAMP:** ISO 8601 format (UTC).
- **LEVEL:** The severity of the event (INFO, WARN, ERROR).
- **DEVICE_ID:** The unique identifier for the device (e.g., AS-T200-7B4C).
- **Message:** A human-readable description of the event.

For the complete specification, see document SPEC-LOG-V2.1.

3. Sample Device Logs (Text Format)

```
[2023-10-27T10:00:15Z] [INFO] [AS-T200-7B4C] - Temperature set to 21.5°C. [2023-10-27T10:02:30Z] [INFO] [AS-L150-A91F] - Light turned on, brightness 80%. [2023-10-27T10:05:00Z] [WARN] [AS-T200-7B4C] - Battery level low: 15%. [2023-10-27T10:05:25Z] [INFO] [AS-L150-A91F] - Light turned off. [2023-10-27T10:11Z] [ERROR] [AS-C3-E5D8] - Failed to upload video clip. Code: 503. [2023-10-27T10:11:00Z] [INFO] [AS-C3-E5D8] - Retrying video clip upload... [2023-10-27T10:11:15Z] [INFO] [AS-C3-E5D8] - Video clip successfully uploaded. [2023-10-27T10:18:40Z] [ERROR] [AS-T200-7B4C] - Connection to hub lost. Code: 408.
```

4. Advanced Log Format (JSON)

For more complex events, logs are generated in a structured JSON format. This is common for AuraView camera events.

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**Example JSON Log:**
{
"timestamp": "2023-10-27T10:15:45Z",
"deviceID": "AS-C3-E5D8",
"ipAddress": "192.168.1.105",
"eventType": "motion_detected",
"payload": {
```

```
"zone": "front door",
 "confidence": 0.92,
 "snapshot_ref": "snap_f8d9b3c.jpg"
## 5. Common Error & Warning Codes
- **Code 401 (Unauthorized):** The device's API key is incorrect.
**Action:** Use the AuraSmart Partner Portal to generate a new API token.
- **Code 408 (Request Timeout):** The device failed to communicate with the central server.
**Action:** Check device and hub network connectivity. Refer to the Hub Connectivity Guide (doc #TS-HUB-04).
- **Code 503 (Service Unavailable):** The AuraSmart cloud is unreachable.
**Action:** Wait and retry. Check the official cloud status page at status.aurasmart.com.
- **Warn (Low Battery):** The device battery is below 20%.
**Action:** Plan to replace the battery. Use replacement part #BATT-CR2032-AS.
## 6. System Status Overview
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- **AS-T200-7B4C (ClimateSensor):** Experiencing connection issues (Code 408) and has a low battery. Requires immediate attention.
- **AS-L150-A91F (AuraGlow Light):** Operating normally.
- **AS-C3-E5D8 (AuraView Cam):** Recovered from a temporary upload failure (Code 503). Currently stable.

7. Support & Escalation Procedure

For non-critical issues (INFO, WARN), monitor the device via the AuraSmart dashboard. For recurring warnings, log a low-priority ticket. For critical issues (ERROR), file a high-priority ticket via the support portal at support.aurasmart.com or email support@aurasmart.com. For urgent system-wide outages, call the NOC hotline at 1-800-555-AURA (2872).

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