# Internal Deployment Procedure v2.1

## Overview

This document describes the step-by-step procedure for deploying the SmartHome Cam v2.1 backend and firmware updates. It is intended for engineering and operations teams.

## Prerequisites

* Access to the staging and production servers.
* Latest version of deployment scripts from Git repository.
* Admin credentials for cloud services and database.
* Backup of all user data and configuration files.

## Deployment Steps

1. **Pre-deployment Checks**
   * Verify staging server stability.
   * Ensure automated tests pass on CI/CD pipeline.
   * Confirm backups are completed.
2. **Backend Deployment**
   * Pull latest code from main branch.
   * Run migration scripts for PostgreSQL database.
   * Deploy microservices using Docker containers.
   * Verify service health using monitoring dashboard.
3. **Firmware Update Deployment**
   * Package firmware version 2.1.4.
   * Test deployment on staging devices (5–10 units).
   * Schedule production rollout gradually to avoid mass failures.
4. **Post-deployment Verification**
   * Check server logs for errors.
   * Validate API endpoints.
   * Confirm notifications are functioning correctly.
5. **Rollback Procedure**
   * Restore database from backup if necessary.
   * Redeploy previous version of microservices.
   * Revert firmware on affected devices.

## Notes

* All deployment actions must be logged in the internal wiki.
* Any anomalies must be reported immediately to the Operations Manager.