

Site Visit Report

Scope: Rack organization, network stabilization, CCTV troubleshooting and recommendations

Date: 22/01/2026

Location: Saifee Villa, Matheran.

Performed by: BlewMind Solutions

1. Rack Organization & Power Management

Observations:

- Network rack was unorganized, making troubleshooting difficult and time-consuming.
- Cables (PoE and non-PoE) were randomly terminated across switches with no logical segregation.
- Two cables were connected from the Deco unit without clear identification or purpose.
- Core devices (main router and media converter) were powered directly from mains supply, while internal switches were powered via UPS.
- Several LAN cable crimps were found loose, causing intermittent connectivity when cables were moved.
- **Inline LAN couplers were found in use.**

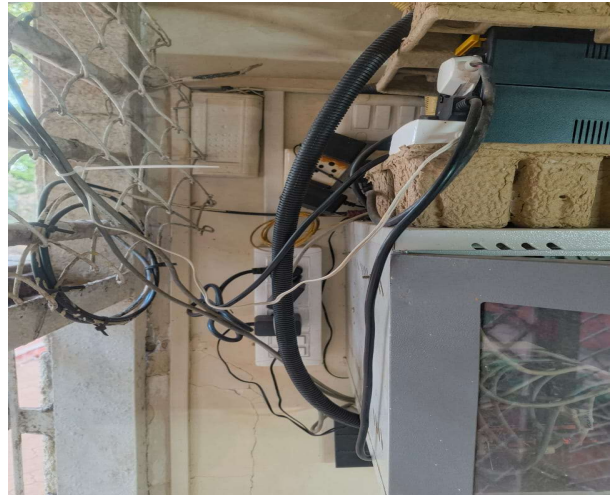
Actions Taken:

- Entire rack was reorganized and structured for clarity and maintainability.
- PoE and non-PoE cables were properly identified, planned, and terminated to appropriate switches.
- All network cables were neatly dressed to ensure clear visibility and avoid accidental disruption during troubleshooting.
- Power architecture was corrected: **all network devices are now powered through existing UPS power source**, ensuring uninterrupted operation during power outages.
- All cables were re-crimped for stable connectivity.
- **Inline couplers were removed and replaced with proper I/O connectors to ensure secure termination, signal stability and long-term reliability.**

To add one dedicated 8-port PoE switch to accommodate all PoE devices on a single switch, enabling:

- Centralized power management
- Simplified troubleshooting
- Cleaner network topology and future scalability

Before Rack Image



After Rack Dressing with Power Supply



2. CCTV System Troubleshooting & Stabilization

Actions Taken:

- Comprehensive troubleshooting of all cameras was carried out.
- Work included re-crimping on both ends, device cleaning, device configuration, connectivity validation and resetting unavailable passwords.

Key Findings:

- Existing camera cabling and enclosures are **not water-resistant**.
- Water ingress was observed inside LAN cables.
- Honeycomb formation was found inside camera junction box.
- Several IMOU cameras showed signs of rust.
- Cameras were configured on a **Wi-Fi network operating on a different IP series than the NVR**, resulting in frequent camera offline issues. 📺
- **Cameras and camera junction boxes were mounted using cable ties, which is not durable.**
- **The existing cable ties were found weakened due to prolonged weather exposure, posing a risk of camera movement, misalignment or damage.**

Recommendations:

- Upgrade to **waterproof junction boxes and waterproof camera mounting stands.**
- Replace existing outdoor cameras with **outdoor-rated bullet PoE cameras**, which:
 - Are better suited for external environments
 - Eliminate dependency on separate power supplies (LAN already available)

Camera maintenance activity



Honeycomb & Water found in Camera Boxes



3. Rear Side (Junction 2)

Recommendation:

- Relocate existing cable terminations to the location highlighted in the attached image.
- Install a **mini junction box** at this location to:
 - Consolidate all connections & devices into a single enclosure
 - Improve security, organization, and water resistance

Additional Work Suggested:

- Pull two additional LAN cables for:
 - Gurfah Mubarakah – TV
 - Gurfah Mubarakah – Bedroom
- Terminate these cables using existing I/O connectors on the faceplate.

Existing Setup





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Sample edited image of the suggested location with mini junction box



4. Documentation & Credentials

- A detailed **Excel sheet containing system credentials** has been prepared and shared.
- This documentation will significantly simplify future troubleshooting, upgrades and handovers.
- **Request:** Kindly complete the formal transfer of all credentials to the end user at the earliest to avoid dependency risks.

5. Conclusion

The purpose of this site visit was to assess the current network and surveillance infrastructure, address operational risks and implement structured improvements focused on reliability and maintainability.

All actions undertaken were based on on-site findings and aligned with standard industry practices. The work focused on organizing system architecture, correcting power and connectivity dependencies and eliminating conditions that could lead to instability, downtime or maintenance challenges.

This report is written without intent to discredit any individual or prior work. It reflects a professional responsibility to document the current system condition and the actions taken to improve its reliability and usability.

The measures implemented prioritize long-term stability over temporary fixes and are designed to simplify troubleshooting, enhance resilience, and support future expansion.

Thank you for the opportunity to carry out the site visit and system review and the cooperation extended during the site visit.

Submitted for record and reference,
Burhanuddin Modi.
BlewMind Solutions.