

Forest Surveillance & Anti-Poaching System

System integration for Environmental protection

At a glance

FutureSoft Solutions has partnered with a global technology leader to provide Indian state government with a holistic forest surveillance system. The implementation of advanced automation is aimed at preserving the state's wild life and environment as per international norms.

INNOVATIVE TECHNOLOGIES

IoT Devices & sensor

Outdoor Thermal Sensors with Clear vision PTZ cameras

Ariel vehicle: Drone

Compute & Storage: Modular Containerised DC and Monitoring Room

Wired and Wireless network equipment

Perimeter Intrusion Detection System (PIDS)

Radio Signals broadcasted: Emitter, Transmitter, Receiver, and Antenna

CHALLENGES

Vast forest and wildlife area and **inadequate resources** for effective monitoring & alert system in the uncovered periphery of the protected area.

- Establishment of a 24X7 surveillance and anti-poaching system
- Automated monitoring of the identified wildlife species movements
- Significant Improvement in the efficiency of response/rescue of any Wildlife Crime/ Animal respectively
- Strengthen prevention response mechanism against Wildlife & Forest Crime
- System driven analytical reports for improved operational level efficiency and accuracy

SOLUTIONS

A fully managed & end-to-end integrated software based system for a holistic Forest surveillance and Anti-Poaching System. Equipped with **innovative technologies**, It is deployed in a **hybrid model** aimed at **effective wildlife conservation** through monitoring and surveillance of wildlife animals at numerous locations. The technology enablement will establish:

- Identification of poaching or other wildlife crime-prone areas
- Inspection of infiltration, poaching, and illegal mining
- Live Feed of the tiger, panther, leopard or other reserves
- Point to Point secure wireless connectivity
- Alerting Cycle with details on actions taken given on Web application
- Approximate Geo Position of the alert at that moment
- Surveillance Dashboard showing the health of the installation
- Timely prevention response mechanism against Forest Crime
- Retrieval of fact-based information for effective decision making and prompt wildlife rescue

SOLUTION ARCHITECTURE



SERVERS & STORAGE



COMMAND & CONTROL



CONTAINER



DRONE

**RADIO
POINT TO POINT**

**THERMAL
PTZ
BULLET**



TOWER 1

**THERMAL
PTZ
BULLET**



TOWER 2

**THERMAL
PTZ
BULLET**



TOWER 3

TOWERS ARE EQUIPPED WITH VIRTUAL FENCING THROUGH PIDS SENSORS

