











Matrix Video Surveillance Solution

EXPECT MORE.

Matrix SATATYA: Three Dimensional Benefits



Proficient	Persistent	Preventive
 <p>Reduction in solution cost of bandwidth, storage & manpower</p>	 <p>Better reliability against downtime & breakdowns</p>	 <p>Enhanced security of physical assets from theft, snooping etc.</p>
 <p>Improved productivity, process compliance and employee discipline</p>	 <p>Greater visibility & control</p>	 <p>Improved safety of human assets from accidents, hazards and injuries</p>
 <p>Ease of management</p>		 <p>Proactive solution with early detection and instant notification</p>

SATATYA SAMAS: Video Surveillance for Multi-location Enterprise

Product Range: Video Management Software (SAMAS)



CATEGORY	SATATYA SAMAS PLATFORM		
	GE	ME	LE
Inbuilt Cameras	20	50	200
Maximum Camera Supported	100	250	100000
Inbuilt Simultaneous Users	2	5	5
Maximum Simultaneous Users	1000	1000	1000
Maximum Number of Cameras per Server	255	255	255
Devices per Management Server	10000	10000	10000
SAMAS MODULES			
1. Intelligent Video Analytics	2. Multi display	3. Parking Management	4. Access Control Integration



Scalable: 1,00,000 Cameras, 10,000 Devices, 1,000 Recording Servers

Distributed Architecture: Simultaneous Local & Central Monitoring
with no License required for Recording Server



Flexibility: Cam-wise User Login Roles & Rights, Both IP & Analog
Camera Support and Direct Camera Connection Support

Interoperability: Supports all ONVIF and RTSP compliant cameras.
Web API for third party Integration.

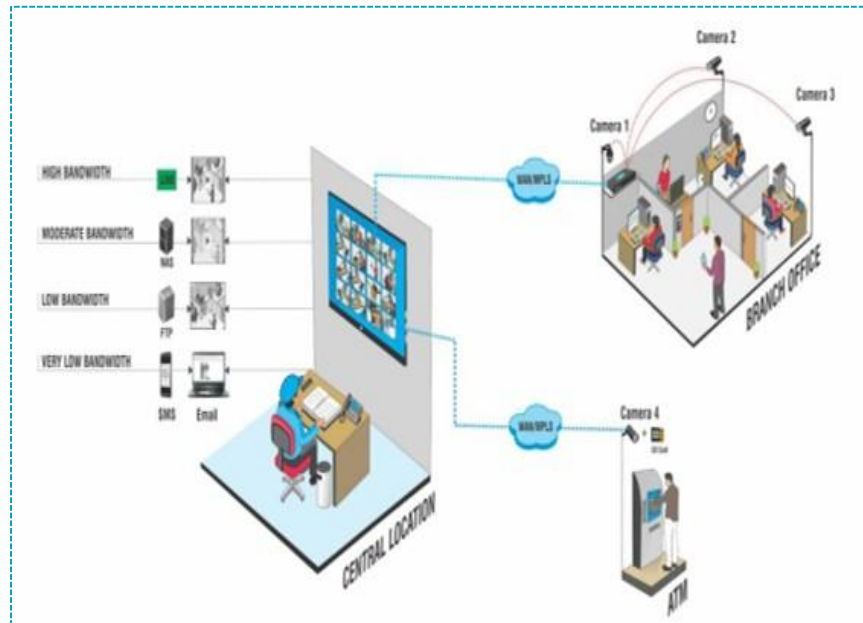


SATATYA SAMAS USP

Centralized Visibility

Greater Visibility across Multiple Locations, Easy Centralized Management and Monitoring

Edge Recording with Notification at Central Location



Centralized Control



Greater Control over Functioning of Multiple Cameras Spread Across Multiple Locations

Health Status Report, User-based Roles and Rights, Summary Report

The screenshot displays the MATRIX SAMAS Smart Client interface. The top navigation bar includes 'Live View', 'Playback', 'Investigator', 'Alarms', 'Emaps', and 'System Monitor'. The main content area is divided into several sections:

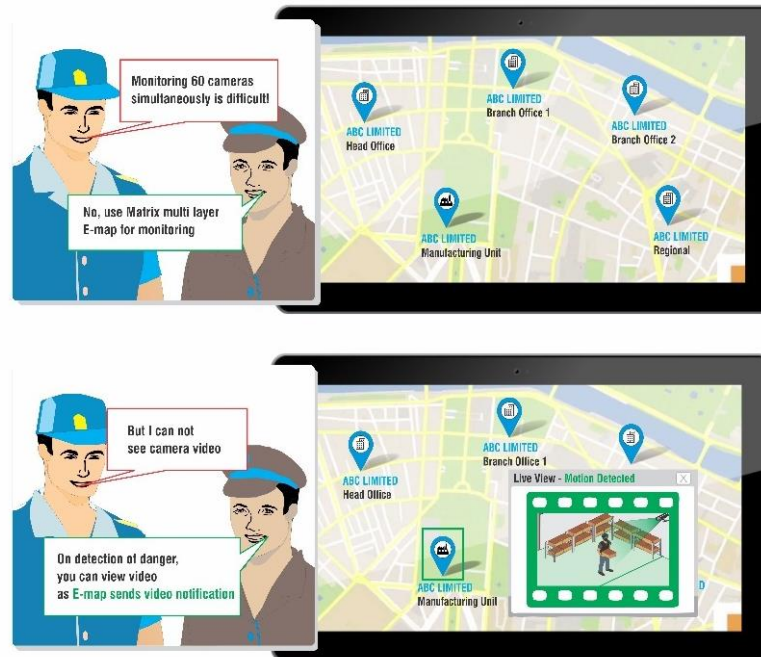
- Storage: Recording**: A pie chart showing storage usage for recording. Recording Drive Type: Local, Recording Rate: 1.19 MBps. Free Space: 56.20 GB (3%), Video Space: 1681.80 GB (94%), Locked Space: 68.98 GB (3%), Other Space: 44.99 GB (0%). Estimated Storage Time: 15 Days 9 Hours 16 Minutes.
- Storage: BAK**: A pie chart showing storage usage for backup. Backup Drive Type: Local, Recording Rate: 0.00 MBps. Free Space: 59.29 GB (58%), Video Space: 0.00 GB (0%), Locked Space: 0.00 GB (0%), Other Space: 41.29 GB (42%).
- Table of Camera Status**: A table with columns for Device, Camera Status, Stream S..., Cont. Rec, Motion Rec, Event Rec, Manual Rec, Backup St..., and Retenti. The table lists various cameras and their recording status.
- Server Information**: Server Name: Matrix Head Office, Status: Connected, Cameras: 56, Enabled Cameras: 52, Cameras Recording: 15, Last Update: 13/Dec/2016 18:52:25.
- Resource Usage**: CPU Usage: 4%, Memory Usage: 36%, Server Availability: 99.99%.

The interface also features a sidebar with navigation options like 'Management Server', 'Recording Server', 'Event Report', 'Event Log', and 'Online Users'. The bottom status bar indicates 'Updating in 54 seconds

Ease of Monitoring

Easy Centralized Monitoring, Easy Viewing of Multiple Cameras on a Single Screen

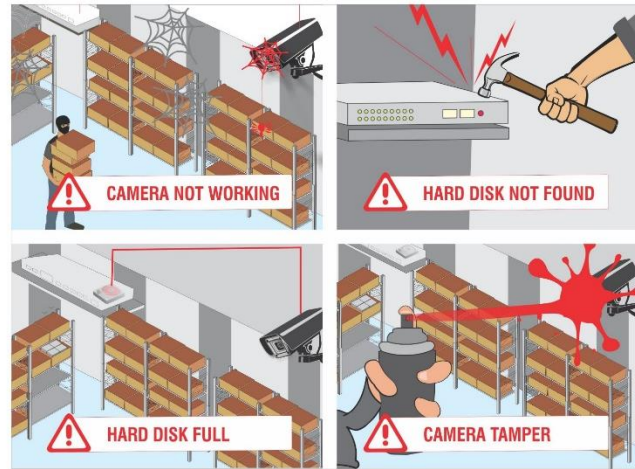
E-map, Multi-display, Daily Highlights



Instant Notifications

Proactive Solution, Reactive Security, Notifies the Right Person at the Right Time

Video Pop-up, Email with Snapshot, SMS, Audio Alarms, Buzzers, etc.



Other Solutions



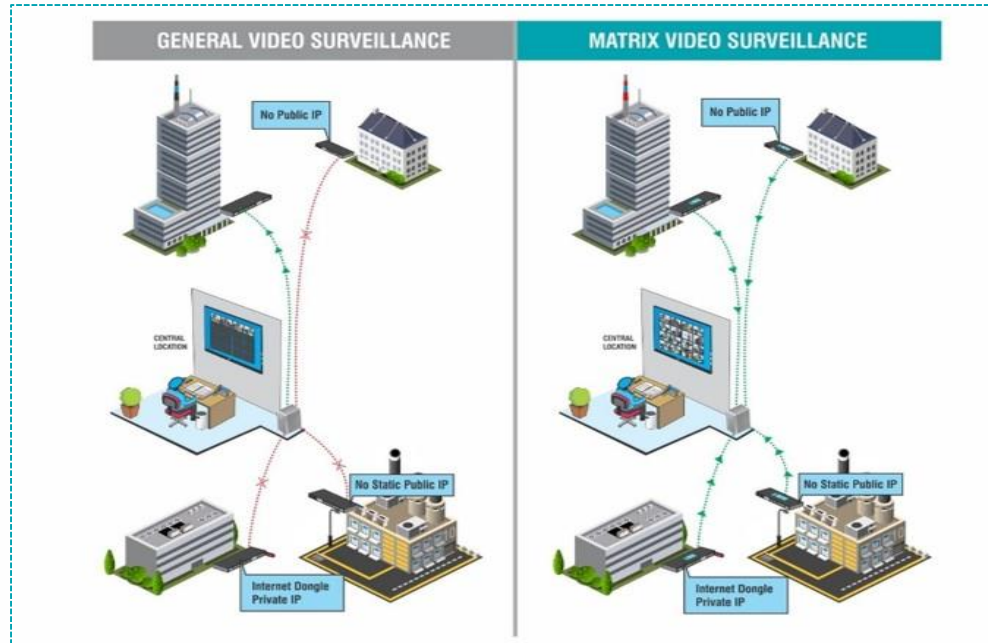
Matrix Solutions



Optimized Bandwidth

Reduce Recurring Cost of Bandwidth, No Public IP Required

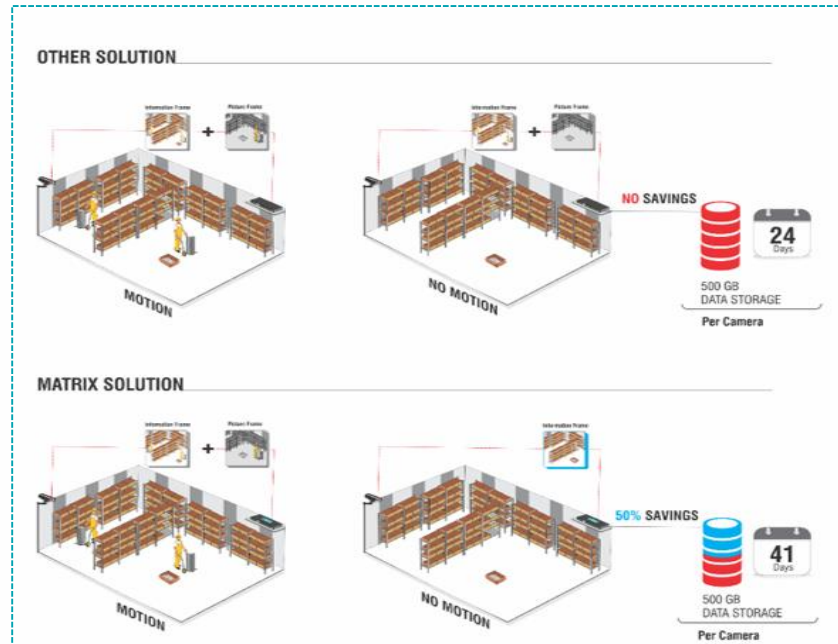
Device Initiation, Adaptive Recording, Configurable Bit-rate



Optimized Storage

Reduce Storage Requirement by up to 50%, Get Higher Storage Days

Adaptive Recording, Camera-wise Recording Retention, Two Level Data Compression & Archiving



Integrated Security

Synchronous Functioning, Prevent Unauthorized Access, Quick Search of Records, Bookmark Evidence Clips

Integration with Access Control, Fire alarms and other Sensors

STORE SNAPSHOT ON FTP/NAS



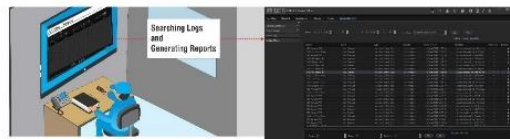
START RECORDING ON NAS



ACCESS GRANTED FROM SECURITY



GENERATE REPORTS OF 'ACCESS DENIED'



Process Automation

Synchronous Functioning, Automate System, Eliminate Manipulation, Quick Search of Records

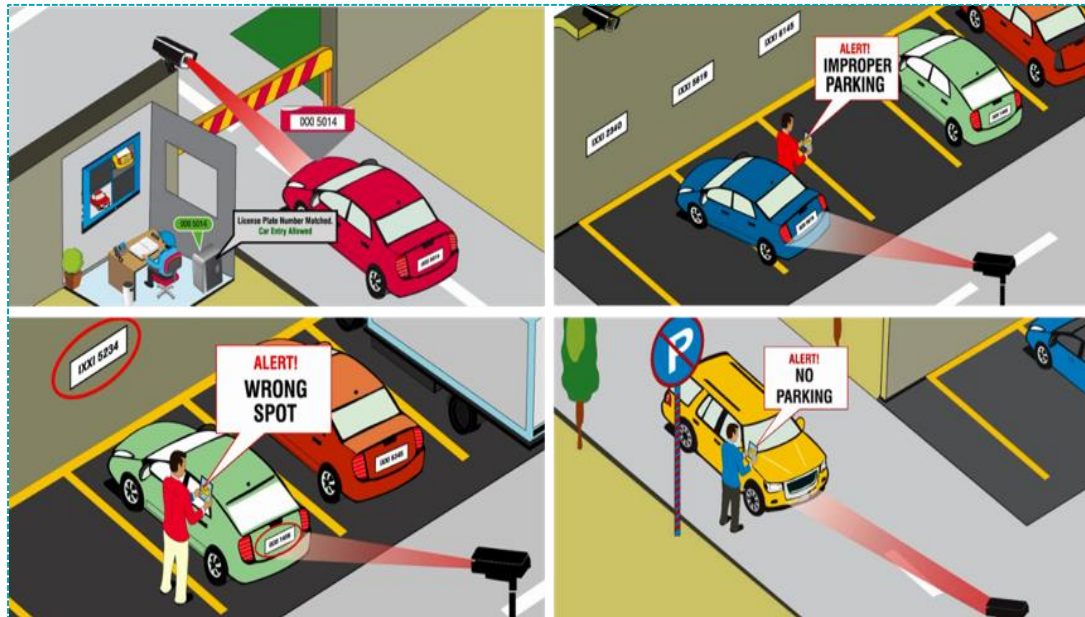
Integration with Weigh Bridge, POS, Dispatch System, Visitor Management, etc.



Parking Management

Parking Space Optimization, Automate Parking

License Plate Recognition with Blacklist and Whitelist, Vehicle Counting, Unauthorized Parking, Improper Parking, Wrong Way Parking and Prohibited Parking



Crowd Management

Occupancy Control, Easy Crowd Management, Employee Safety, Avoid Tail-gating

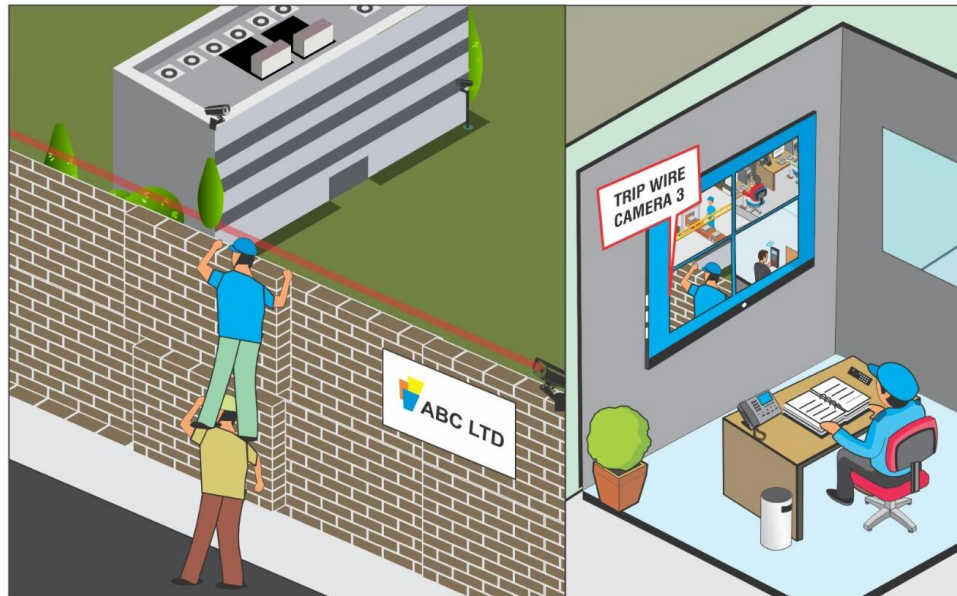
Face Detection, People Counting, Tail-gating Detection and Loitering



Perimeter Security

24x7 Security of Outdoor Properties, Secure Premises, Asset Protection

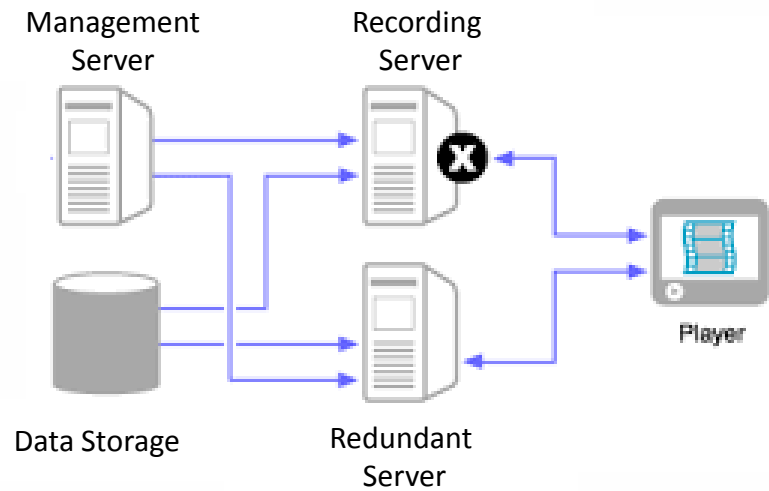
Intrusion Detection, Trip Wire, Missing Object Detection and Tail-gating



Data Security

Safeguard Data Against Breakdowns, Safeguard Evidence

Redundant Server, Evidence Lock, Clip Export and SSL Communication



Video Recorders

Video Recorders



Recording Resolution: Up to 5MP

Throughput: 48Mbps to 354Mbps(Depending on the number of channels)



Storage Capability: 6TB-24TB(Depending on the number of channels)

Interoperability: Supports all ONVIF or RTSP compliant cameras



Product Range: Video Recorders

NVR Standard

NVR8S
NVR64S

NVR8S Rear



NVR8S Front



NVR Premium

NVR24P
NVR64P

NVR64P Rear



NVR64P Front



HVR Standard

HVR0408S
HVR0824S
HVR1624S

HVR1624S Rear



HVR1624S Front



HVR Premium

HVR0408P
HVR0824P
HVR1624P

HVR1624P Rear



HVR1624P Front

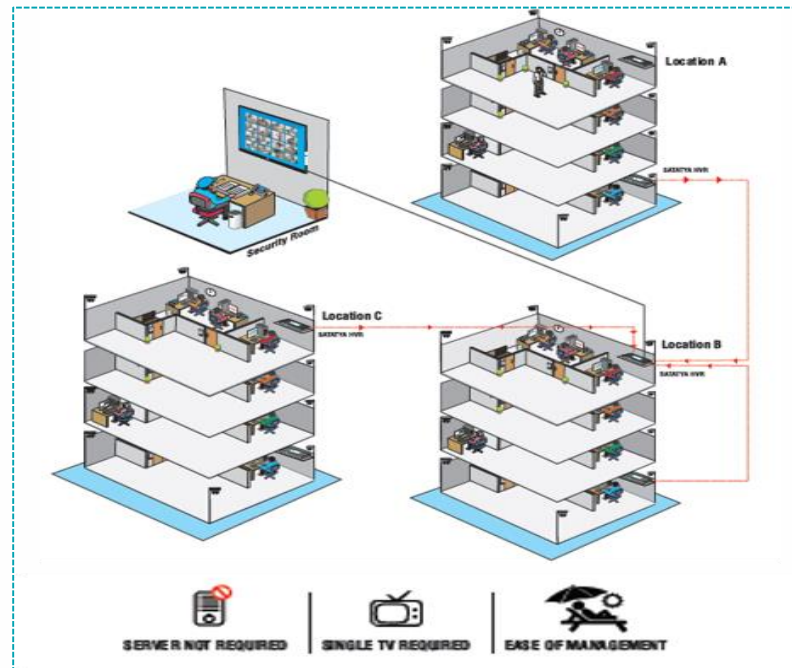


Video Recorder USP

Centralized Monitoring

Easy Centralized Monitoring of Multiple Cameras, Ease of Management

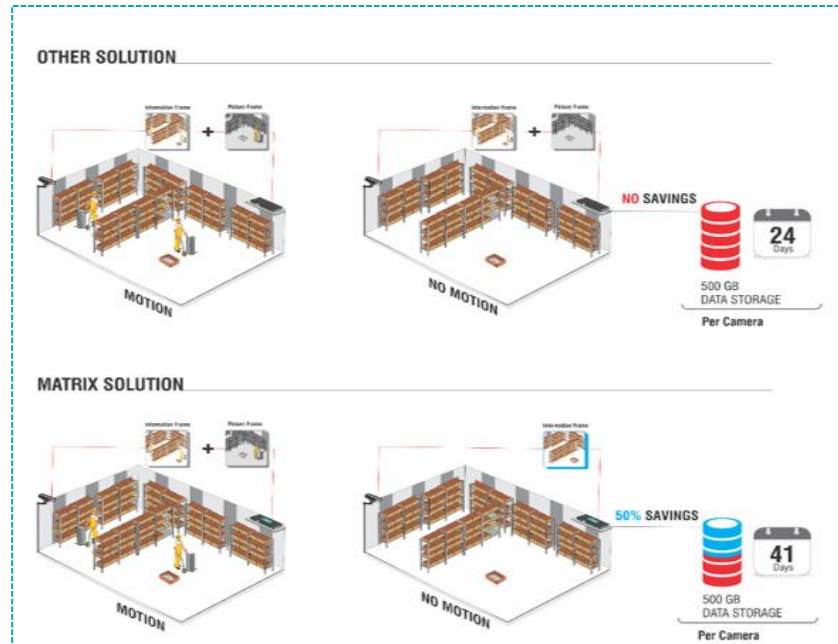
Cascading, Sequencing and Camera Grouping, E-map



Optimized Storage

Reduce Storage Requirement by up to 50%, Get Higher Storage Days

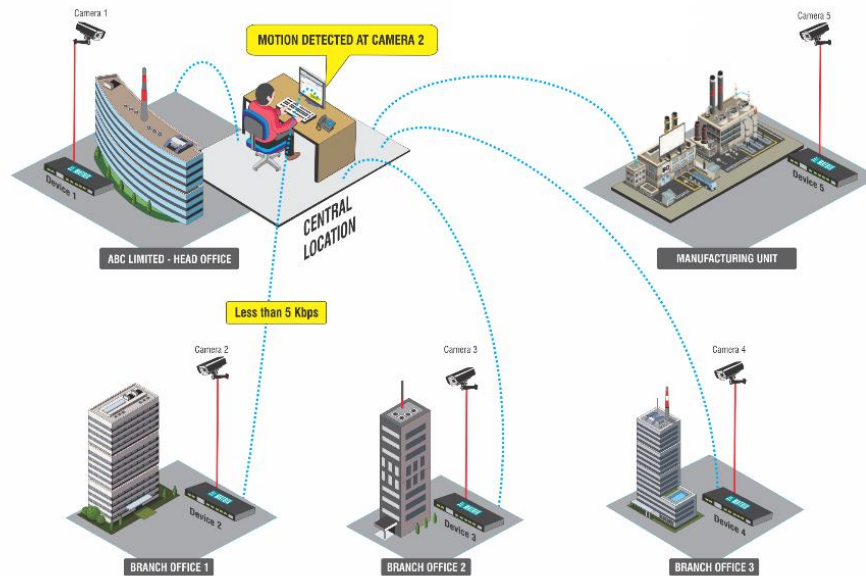
Adaptive Recording, Camera-wise Recording Retention



Centralized Control

Greater Control of Multiple Cameras Spread Across Multiple Locations

TCP Based Notifications, Device Monitor, User-based Roles and Rights



Instant Notifications

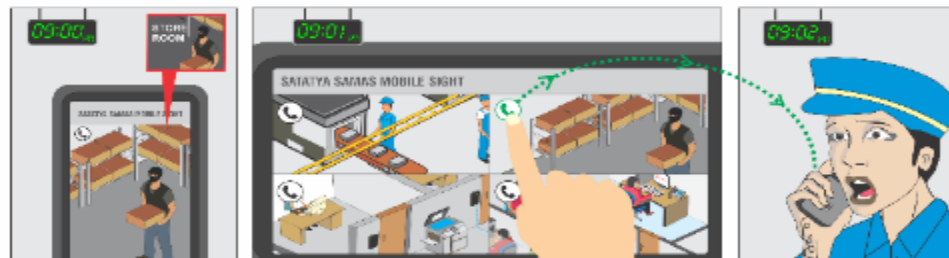
Proactive Solution, Reactive Security, Notifies the Right Person at the Right Time

Calling from Mobile App, Email with Snapshot, SMS, Audio Alarms, Buzzers, etc.

Other Video Surveillance Solution



Matrix Video Surveillance Solution



Integrated Solution

Eliminate Unauthorized Access, Quick Search of Records

Integration with Access Control

STORE SNAPSHOT ON FTP/NAS



START RECORDING ON NAS



ACCESS GRANTED FROM SECURITY



GENERATE REPORTS OF 'ACCESS DENIED'



Product Range: Cameras

Dome



1.3 MP



2 MP Varifocal

PTZ



2 MP

Bullet



1.3 MP



2 MP Varifocal





Summary



PROBLEMS	FEATURES	BENEFITS
Lack of Visibility	Edge Recording with Notification at Central Location	Centralized Visibility
Lack of Control	TCP based notifications, Health status monitoring, User-based Roles & Rights	Centralized Control
Complex Monitoring	Cascading, Sequencing & Camera Grouping Daily Highlights, Multi display, E-map	Easy Centralized Monitoring
High Storage & Bandwidth	Adaptive recording, camera-wise recording retention, two level data compression, Multi Streaming, CBR/VBR, No Public IP, Cascading	Optimized Bandwidth & Storage
Disparate Solution	Integration with Access Control, Weigh Bridge, POS, Parking/Visitor Management, Dispatch System	Data Security
Passive Security	Face detection, Motion & No Motion Detection, Trip-wire, Missing Object, Intrusion, Loitering, Calling from Mobile, SMS, Email with Snapshot, Video Pop-up, alarm & Buzzer	Proactive Solution
Inefficiency & Underutilization	Crowd Management, Parking Management	Improved Productivity
Loss of Data	Redundancy, SSL Communication	Data Security

Customer List

Customer List

Customers	Logo
DOMESTIC	
Indian Railways	
Indian Airforce	
Taj Group	
Godrej	

Customers	Logo
INTERNATIONAL	
Qatar Engineering & Construction Company(Oil & Gas EPC and Maintenance Contractor)	
NICO International	
Bahrain Stock Exchange	
Kingston	

Case Study: BTI Payments

Requirement

- Centralized Management with Limited Bandwidth of 32Kbps at Remote Locations
- Reduction in the cost of public IP, because of installation of devices and cameras at 200+ remote locations across India

Solution

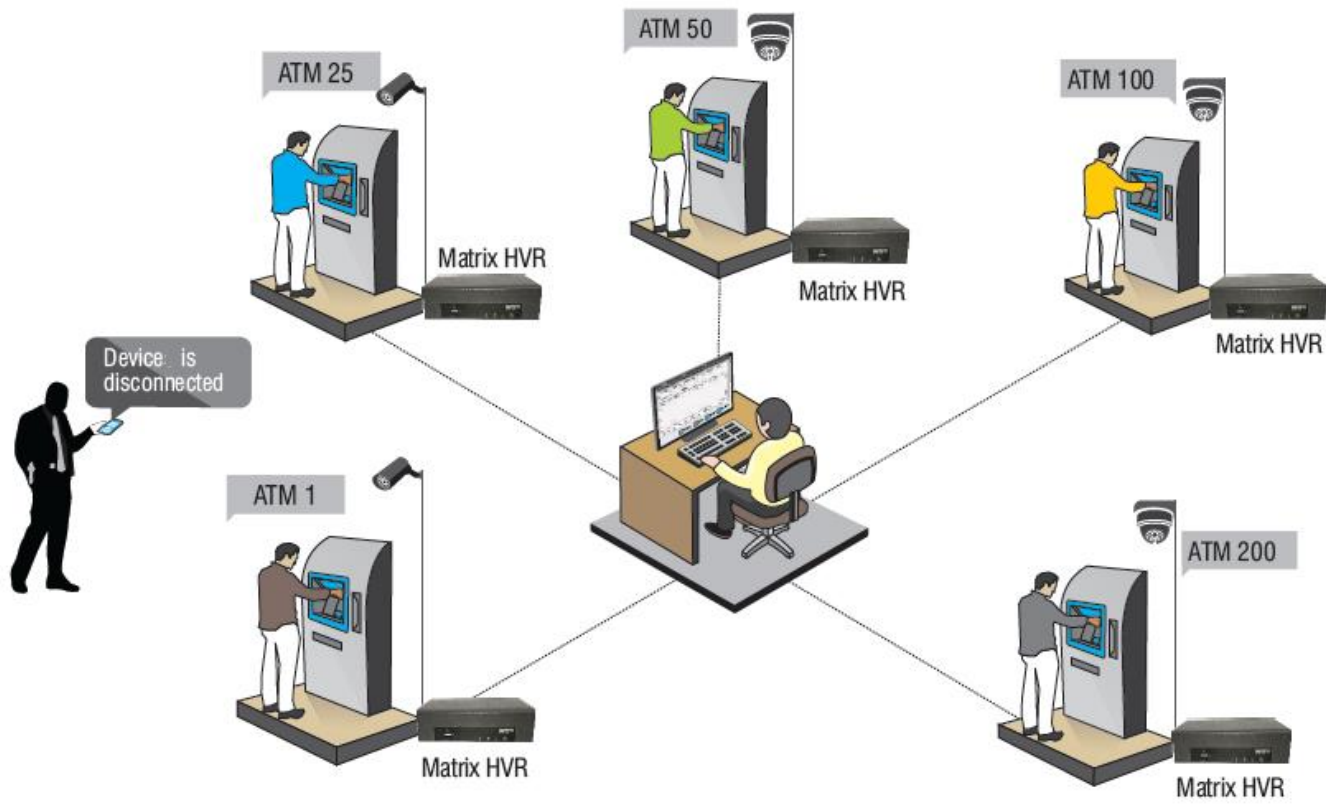
❖ **TCP Based Notifications**

❖ **Edge Recording**

❖ **Device Initiation**

Description

- TCP Based Notification was installed to obtain Notifications on a Central Server
 - This Device Monitor takes < 5kbps Bandwidth to Communicate
 - Alerts on Device/Camera Disc, Motion/Sensor Alerts
 - Alerts on Hard disk Error, Recording Stop
- Pre and Post event based clips sent at central location on occurrence of any event with Edge Recording
- Device initiation eliminated the need for static public IP at each location thereby saving on the recurring cost of Public IP(AED 3000x200 = AED600000 per year)





Thank You

EXPECT MORE.