Jakin®ID

Enterprise-wide ID Management Solutions for Security and Workforce Management Applications

Technical training agenda

- Company Overview
- Product Overview
- ACTA3 Model and Legend
- Back Panel – Internal Structure and Connections
- ACTA3 Terminal GUI
- FingerPrint Enrollment
- ACTA3 Web UI
- Door Connection
- ACTA3 CMOS/ Video Camera
- Key Features and Benefits
- Accessories

ACTA3 ID Management
Technology Platform

WORKFORCE MANAGEMENT

PAYROLL ANALYSTS

SECURITY

Biometric Authentication Real time communication Enterprise-wide deployment

Company profile

Provides user-friendly RFID biometrics fingerprint Authentication IOT cloud-based ID management platform and solutions With 15 years of experience in providing RFID fingerprint biometrics IOT solutions or the enterprise ID management applications for security and work force management, our worldwide installations in Fortune 500 companies plus over 100 million users daily of our devices and IOT platform demonstrate our success in the field.

Started by a team of hi-tech professionals with wide range of experiences in semiconductors, RFID, software and cloud development, embedded devices and manufacturing in 2001.We are the only company started with the sole aim of developing IOT and cloud solutions using fingerprint biometrics and RFID cards

The Group has operational offices in the Canada, USA, EMEA, UK, Thailand (Bangkok), Singapore, Hong Kong, Taiwan, and Sri Lanka.

Made in Hong Kong
Origin : U.K
R&D: U.K and Hong Kong

Website: Products: www.actatek.com Solutions: www.jakinid.com

Key Award lists

Biometric Vertical Market Penetration Leadership Award by Frost Sullivan 2010

"5 Star Rating of Best Buy" - ACTA3 Combination Model
(SC Magazine,January.Issue,2010)

Best Of 2009" - ACTA3 Combination Model" (SC Magazine,January.Issue,2010)

Product Innovations award (Network Product Guide,2008)

High-tech Innovations Award 2006/2007 from American Electronics Association, USA

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ACTA3 All In One Device

- Video/ CMOS camera (optional)
- Full color LCD display
- T9 Keypad (PIN) /Smart Card (optional)
- IP 65 Case
- Finger print

LINUX DDNS CLOUD SNMP UPnP

ACTA3 Specifications

- 2.8‘ TFT 256k colour screen with slim and compact design
- Embedded software, no software installation necessary.
- State of the art embedded, encrypted Linux web server technology.
- Control, configure & administrate via web browser
- TLS encrypted communication between units & browser
- Real time system update & configuration
- 500 DPI optical scanner
- Auto-match support up to 20,000 users (1:N) FLI model
- Operates in Standalone or Network modes
- Robust and scalable for enterprise-wide deployment
- Instant notification by SMS, Email and on-screen (*require configuration and SMS service subscription)
- Design for IP 65 rated, weather & impact resistant casing (fluid ingress, dust, salt, fog protection)
- Built-in Video/CMOS camera (optional)
- Up to 500 photos (FIFO off-line storage)
- 1,000, 3,000 , 5,000 ,10,000, 15,000 or 50,000 users
- Up to 75,000 off-line event logs
- Five Modes of authentication : Fingerprint only / Smart Card only / Smart Card + Fingerprint / ID + Fingerprint, and ID + PIN.
- Multi-lingual interface (LCD & Web)
- Wiegand 26-bit output (*On demand basis)

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ACTA3 Model ID

Model Number Description

Model Number	Description
ACTA3-[Model]-[Option]-[Others]	Embedded TLS-Web Server With PIN/ Camera/ Smart Card/ Finger Print
ACTA3-50K-FLI-SM-C	

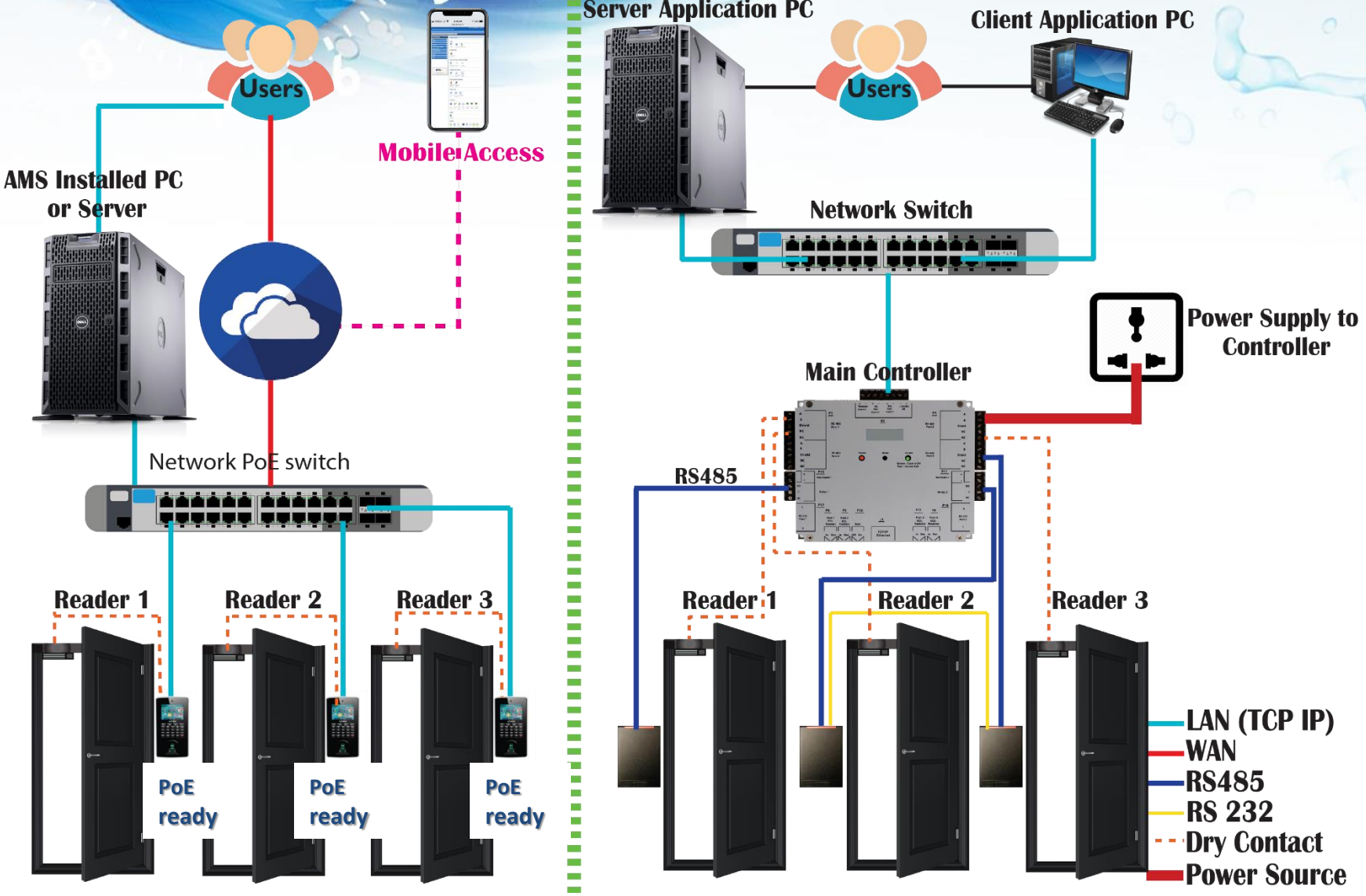
Legend

Model	Description
1K (Smart Card Finger Print)	Embedded TLS-Web Server up to 1000 users
10K	Embedded TLS-Web Server up to 10000 users
15K	Embedded TLS-Web Server up to 15000 users
30K	Embedded TLS-Web Server up to 30000 users
50K	Embedded TLS-Web Server up to 50000 users

Sample Model ID's

Model Number	Description
ACTA3-1K-PC	1000 User + PIN + Camera Model
ACTA3-3K-SM	1000 User + Smart Card Model (Mifare)
ACTA3-50K-FLI-SM-C	50000 User + Finger Print [FLI] + Smart Card [SM] + Camera Model

ACTA3 Vs Traditional Security Installations



ACTA3 Vs Traditional Security Installations

- IP Technology on Existing LAN-WAN HTTP/HTTPS Protocols.
- Industry Standard CAT5 and CAT6 Wiring.
- Installation near the Door Reduces Wiring and Improves Reliability.
- Neat, Elegant, Reliable and Easy to Maintain Installation.
- No need protection cover

- Non-Standard and Proprietary Networ -king and Protocols.
- Proprietary Non-Standard Multi Core, Long and an Expensive Wiring.
- Panel Installed in a Central/Sever Room Far from all the Doors
- Clumsy, Failure Prone Installation.
- Need Cover to protect the reader and Controllers.

ACTA3 Internal Structure and Connections

Part No :
ACTA3-1K-FLI-SM-C

01. DC OUT :- Used for 12V 1A power output e.g. external I/O board.

02. VIDEO :- Used for video output. The output can be connected to any television or monitors with AV input.

03. ALARM :- Used for alarm purpose, when the case of the unit is open, the alarm will be triggered. When it is triggered, the two pins will be short circuit.

04. DOOR SW :- Used as door switch1.

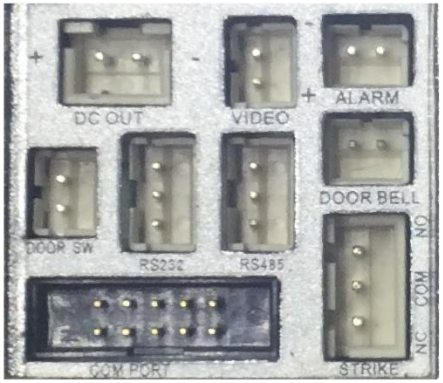
05. RS232 :- Used for debug or connecting external I/O board.

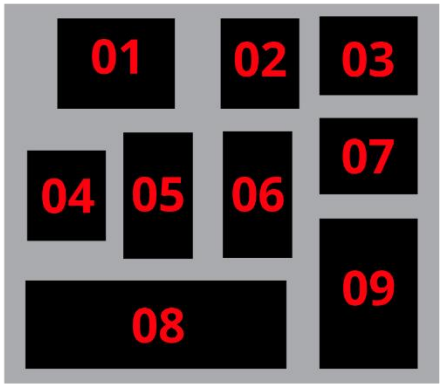
06. RS485 :- Reserver for Wiegand output 26bit (*on demand basis*)

07. DOOR BELL :- Working as a doorbell. If doorbell key on the front panel is pressed or it is enabled from the web page the two pins will be short circuit.

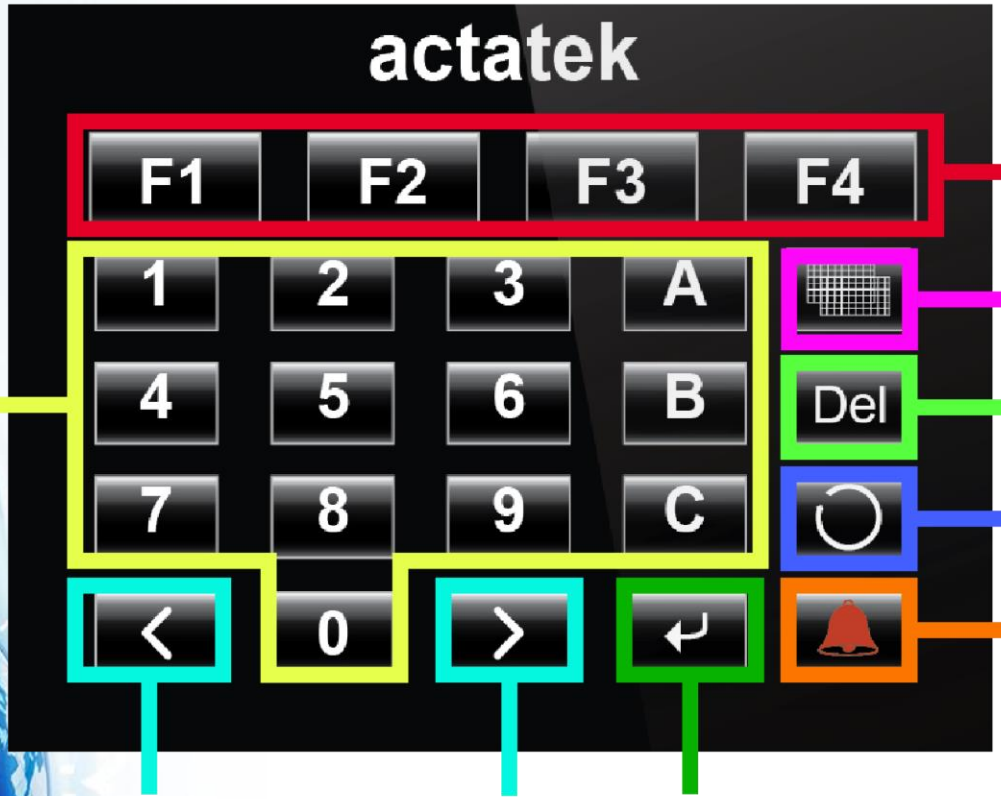
08. COM PORT :- Used to connect external barcode/magnetic trip reader.

09. STRIKE :- Used for door strike. NO (normal open) is open circuit normally, and will be short circuit when door is open. NC (normal close) is short circuit normally, and will be open circuit when door is open.





ACTA3 Keypad



Shortcut Keys for Event Triggers

Admin Log IN

T9 with A/B/C keys

Delete

Back/Home

Door Bell

Left Scroll to select Event Triggers

Right Scroll to select Event Triggers

Enter Key

ACTA3 Terminal GUI (Standby Mode)

Company Logo

Selectable 12/24 Hours Display

Network Status Icon

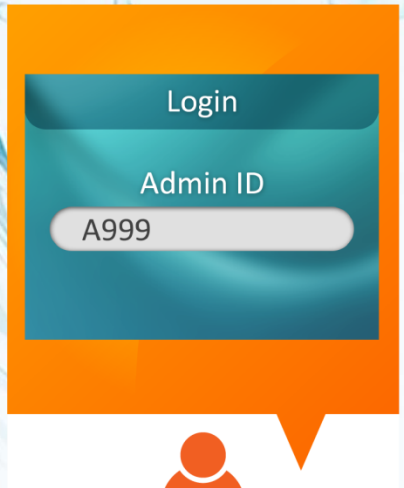
Event/Trigger Name

Display Full Date

Offline Mode

Part No ACTA3-1K-FLI-SM-C

Login

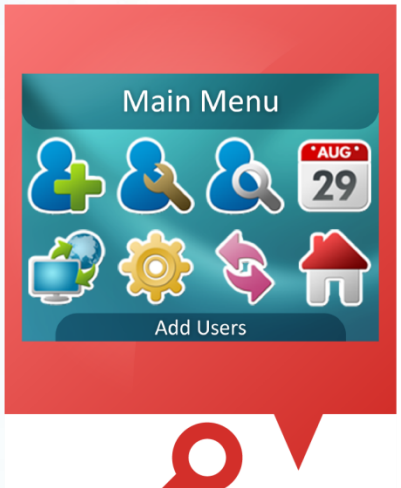


Login by pressing the Admin button

Hardcoded Super Admin user "A999" with default password "1"

1

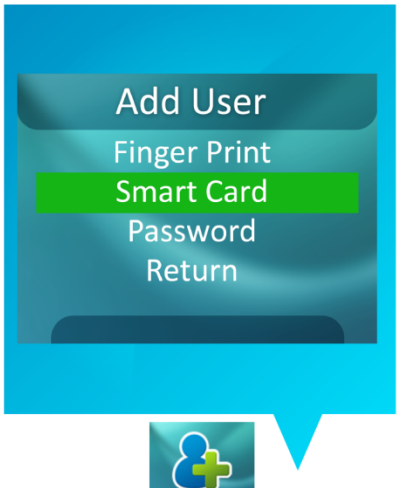
Main Menu



Main Menu of ACTAtek 3 Terminal

2

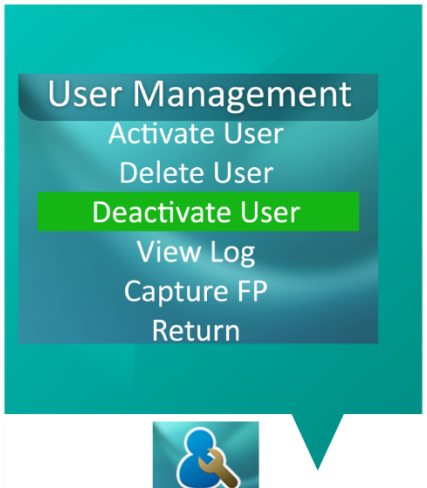
Add User



- **Fingerprint** – Require 3 templates to register
- **Smartcard** – Add smart card to the user
- **Password** – Add password to register
- **Return** – Back to Main Menu

3

User Management



- **Activate User** – to be able to access the terminal
- **Delete User** – delete user from the terminal
- **Deactivate User** – Temporarily disable the user to access terminal
- **View Log** – View TA events of User
- **Capture FP** - View quality of the Fingerprint of a user
- **Return** – back to main menu

4

Automatch

- **Automatch** – Enables/Disable 1:N of every user
- **Group Automatch** – Group the users 1:N enable to match faster
- **Return** – Back to Main Menu

5

IP Settings

- **DHCP** : Dynamic IP Enable/Disable
- **Subnet Mask** : e.g. 255.255.255.000 (default)
- **IP Address** : e.g. 192.168.1.100 (default)
- **Gateway**: e.g. 192.168.1.254 (default)
- **DNS:** e.g. 192.168.1.254 (default)
- **Return:** Back to Main Menu

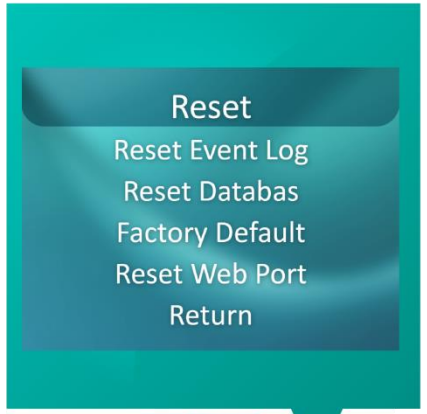
6

Terminal Setting

- **FP Quality -** Finge Print Quality Selection
- **No.of FP sample**– Number of finger Print Template
- **Restrict IP** – Access Restriction
- **Master/Client Setup**– Groping the devices
- **Unlock Door -** Remote Door Open
- **Reboot** - Restart the device.

7

Reset



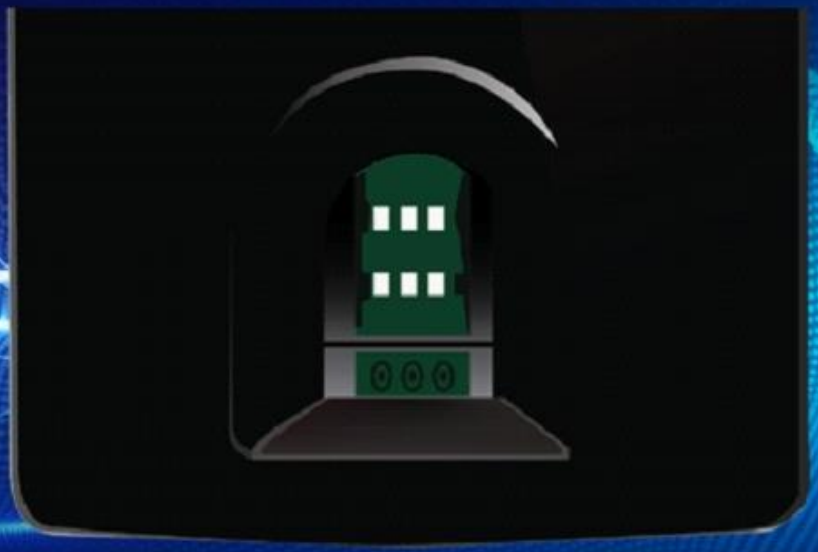
- **Reset Event Log** – Delete Event log from the terminal
- **Reset Database** – delete the terminal's Internal Database
- **Factory Default** – Fectory reset the terminal
- **Reset Web Port** – reset the terminal port number
- **Return** – back to main menu

8

Understanding ACTA3 FingerPrint Modules

FLI Module -Part No - ACTA3-20K-FLI-SM-C

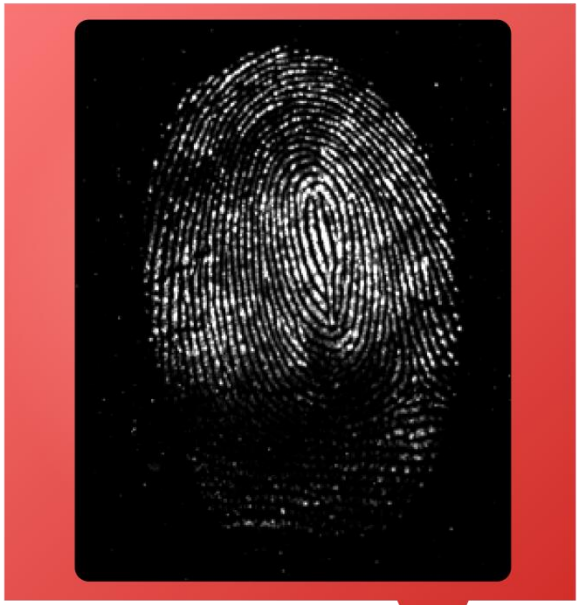
- Supports 1K to 20K Automatch Users (max.50K Users)
- 6 LED
- Optical Sensor (500DPI)



Identifying Good Image vs Bad Image

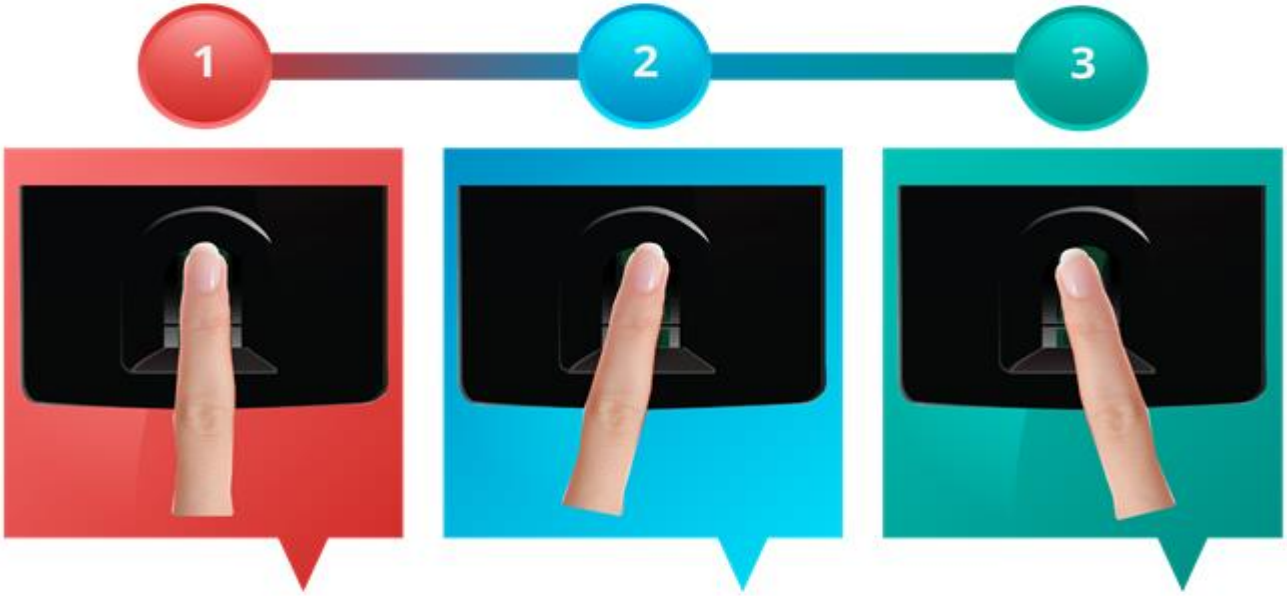
A good fingerprint image is one in which the core of the fingerprint is well-defined and easily recognizable. The core of a finger is defined as the "point located within the inner most recurring ridge", it is normally located in the MIDDLE of the fingerprint. It is therefore critical when enrolling that you place the finger on the scanner where the entire core can clearly be seen.

Good Image: The whole fingerprint core can be seen clearly.



Bad Image: An image where the crackles & displacement of the fingerprint core makes it unrecognizable.

Fingerprint positioning during enrollment



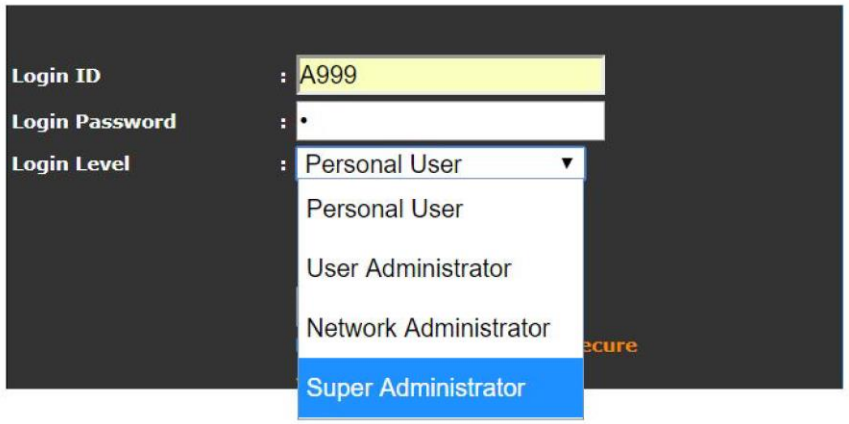
Step 1: Place the center of any one finger directly above the sensor right in the center, as Shown above.

Step 2: Place the center of the same finger (enrolled in Step 1), slightly aligned to the left.

Step 3: Place the center of the same finger, slightly aligned to the right.

After each placement, wait for the message "Please Remove Finger" on the LCD screen to appear, and then continue to finish the 2nd,and 3rd time FP template enrollment.

ACTA3 Web UI



Scan QR code to
Access Our Live Demo Unit

Default IP address:
192.168.1.100

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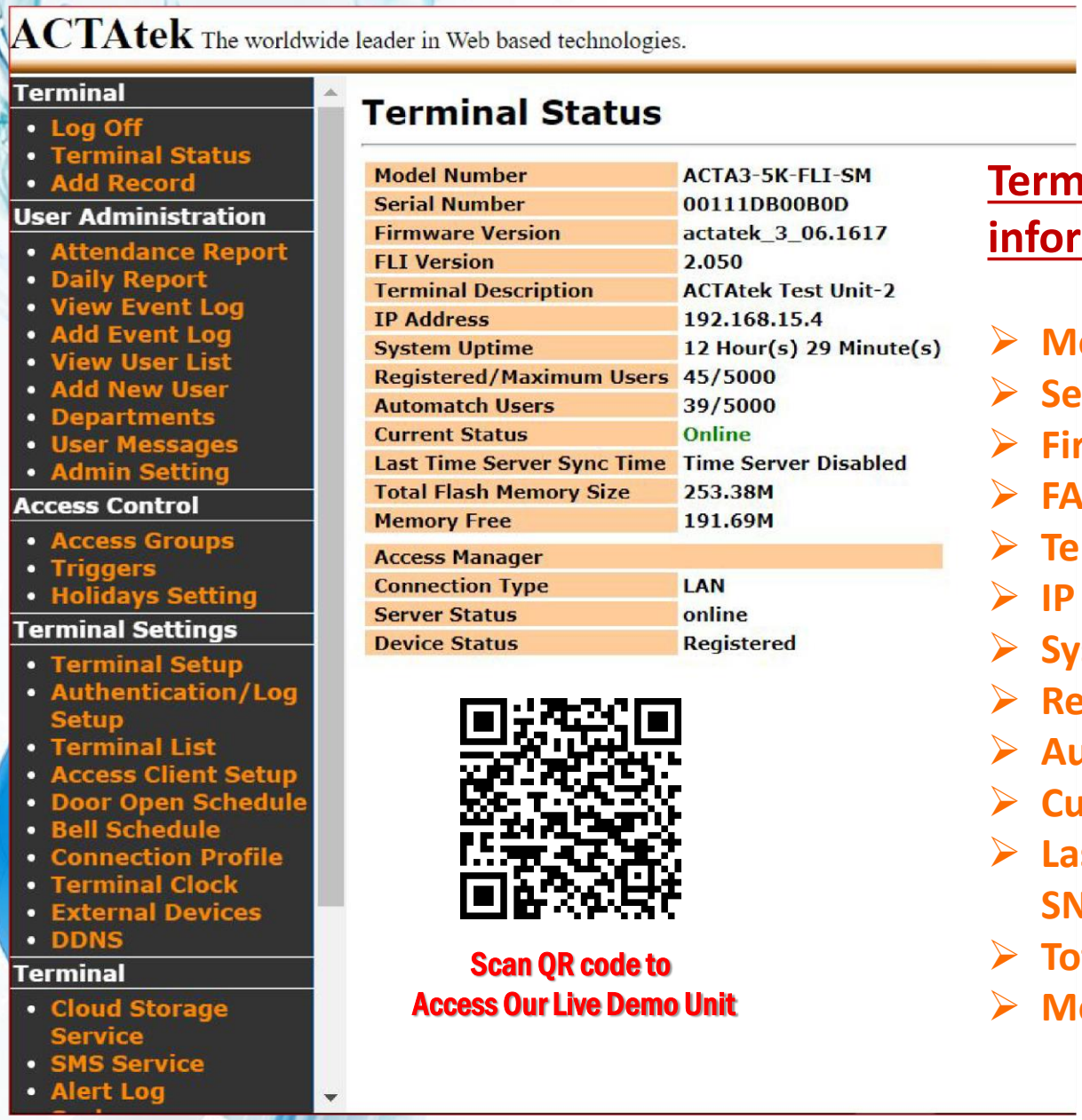
Login to the device

- **Browser Supported:** IE; Chrome; Firefox; Safari and any other browser available.
- **Default User ID** "A999" password "1"
- **Different User Login Level**: Personal; User Admin; Network Admin; Super Admin
- **TLS Encryption/Https** for the information when device is available on the internet

ACTA3 Web UI



Terminal Status provided with the information: -

- Model ID
- Serial Number
- Firmware Version
- FAM version
- Terminal Description/Name
- IP address
- System Uptime
- Registered User/Max user
- Automatch User
- Current Status
- Las Time Server sync time using SNTP
- Total Flash Memory
- Memory Free

ACTA3 Web UI

ACTAtek The worldwide leader in Web based technologies.

Terminal
- Log Off
- Terminal Status
- Add Record

User Administration
- Attendance Report
- Daily Report
- View Event Log
- Add Event Log
- View User List
- Add New User
- Departments
- User Messages
- Admin Setting

Access Control
- Access Groups
- Triggers
- Holidays Setting

Terminal Settings
- Terminal Setup
- Authentication/Log Setup
- Terminal List
- Access Client Setup
- Door Open Schedule
- Bell Schedule
- Connection Profile
- Terminal Clock
- External Devices
- DDNS

Terminal
- Cloud Storage Service
- SMS Service
- Alert Log
- Syslog
- Firmware Upgrade
- Download Report
- Capture Fingerprint
- Capture Picture
- Remote Door Open
- Reboot

Support
- Register

User Administration

1. Attendance Report - To view the attendance report of users in the system
2. Daily Report - To view the daily report of users in the system
3. View Event Log - To view the event log of the users in the system
4. Add Event Log - To add an event log in to the system
5. View User List - To view the list of users in the system
6. Add New User - To add a new user into the system
7. Departments - To view the list of departments or add a new department
8. User Messages - To send personalized messages to individual users during clock IN/OUT (Standalone mode)

Access Control

1. Access Groups - To view or modify existing access groups or add a new group
2. Triggers - To view or modify the trigger list.
3. Holidays Setting - To setup the systems for recognizing holidays for unique settings.

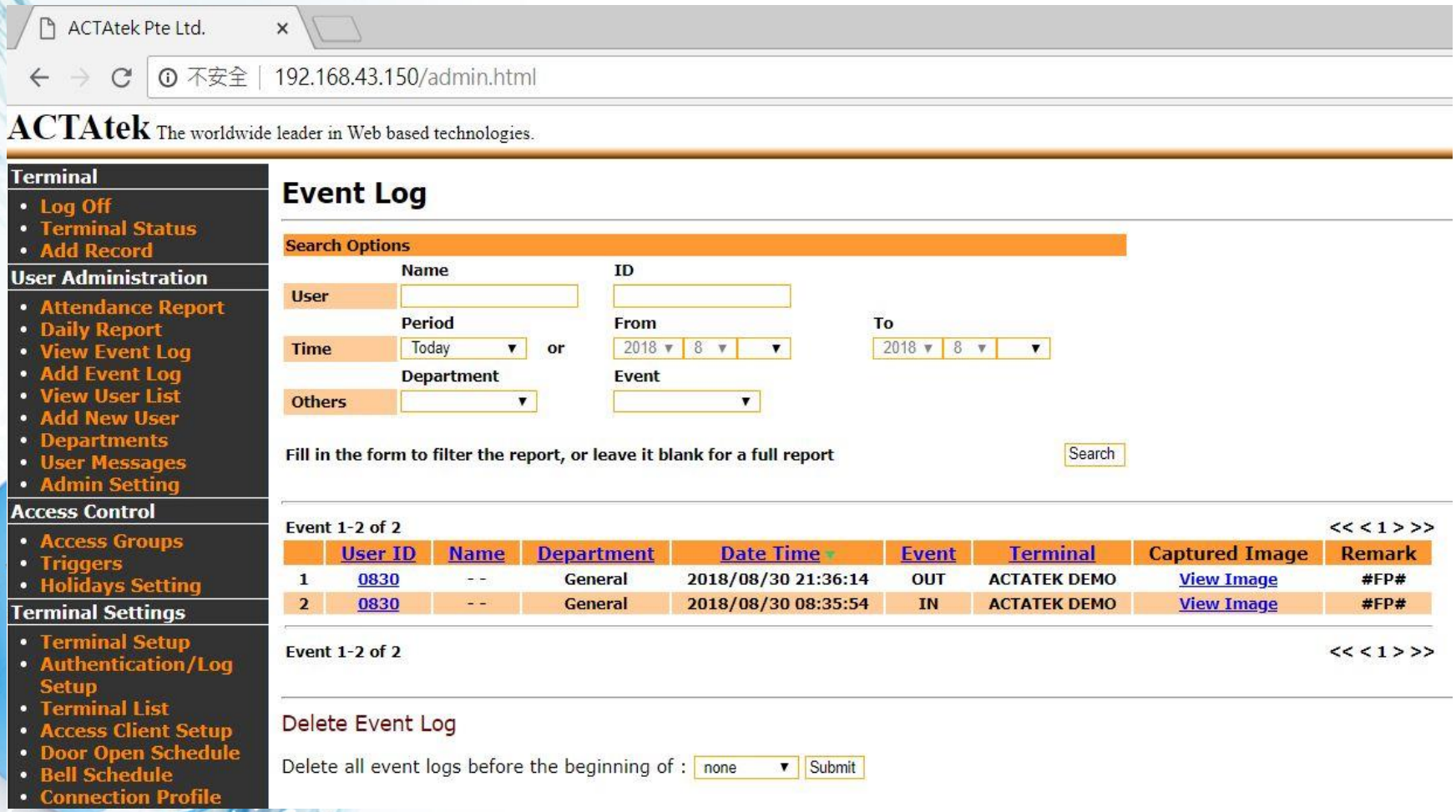
Terminal Settings

1. Terminal Setup - To view modify the terminal settings, e.g. IP / Gateway.
2. Authentication / Log Setup - To setup the behavior of authentication log.
3. Terminal List - To view the list of terminals connected.
4. Access Client Setup - To setup the ACTAtek to the Access Manager
5. Door Open Schedule - To view or modify the door opening schedule.
6. Bell Schedule - To view or modify the bell schedule period.
7. Connection Profile - Use for manual Agent configuration.
8. Terminal Clock - To view or modify the terminal clock settings
9. External Devices - To connect external devices to the ACTAtek3unit.

Tools

1. Cloud Storage Service – Google Spreadsheet integration
2. SMS Service -To setup the SMS service
3. Alert Log -To setup which action gives out alert log
4. Syslog -To enable the remote system log
5. Backup System Data - To backup the system data. (Standalone Mode)
6. Restore System Data -To restore the system data from a previous setting (Standalone mode)
7. Firmware Upgrade - To upgrade the firmware provided by ACTAtek Ltd.
8. Download Report -To download access log report in Excel or Txt format
9. Capture Fingerprint - To capture fingerprint images (for review purpose).
10. Remote Door Open - To open the door using the web interface.
11. Reboot - To reboot the unit remotely.

View Event Log



View Event Log with captured photo

ACTAtek Pte Ltd.

不安全 | 192.168.43.150/admin.html

ACTAtek The worldwide leader in Web based technologies.

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- Bell Schedule

Event Log

Search Options

	Name	ID			
User					
	Period		From		To
Time		or	2018 ▾ 8 ▾		2018 ▾ 8 ▾
	Department		Event		
Others					

Fill in the form to filter the report, or leave it blank for a full report

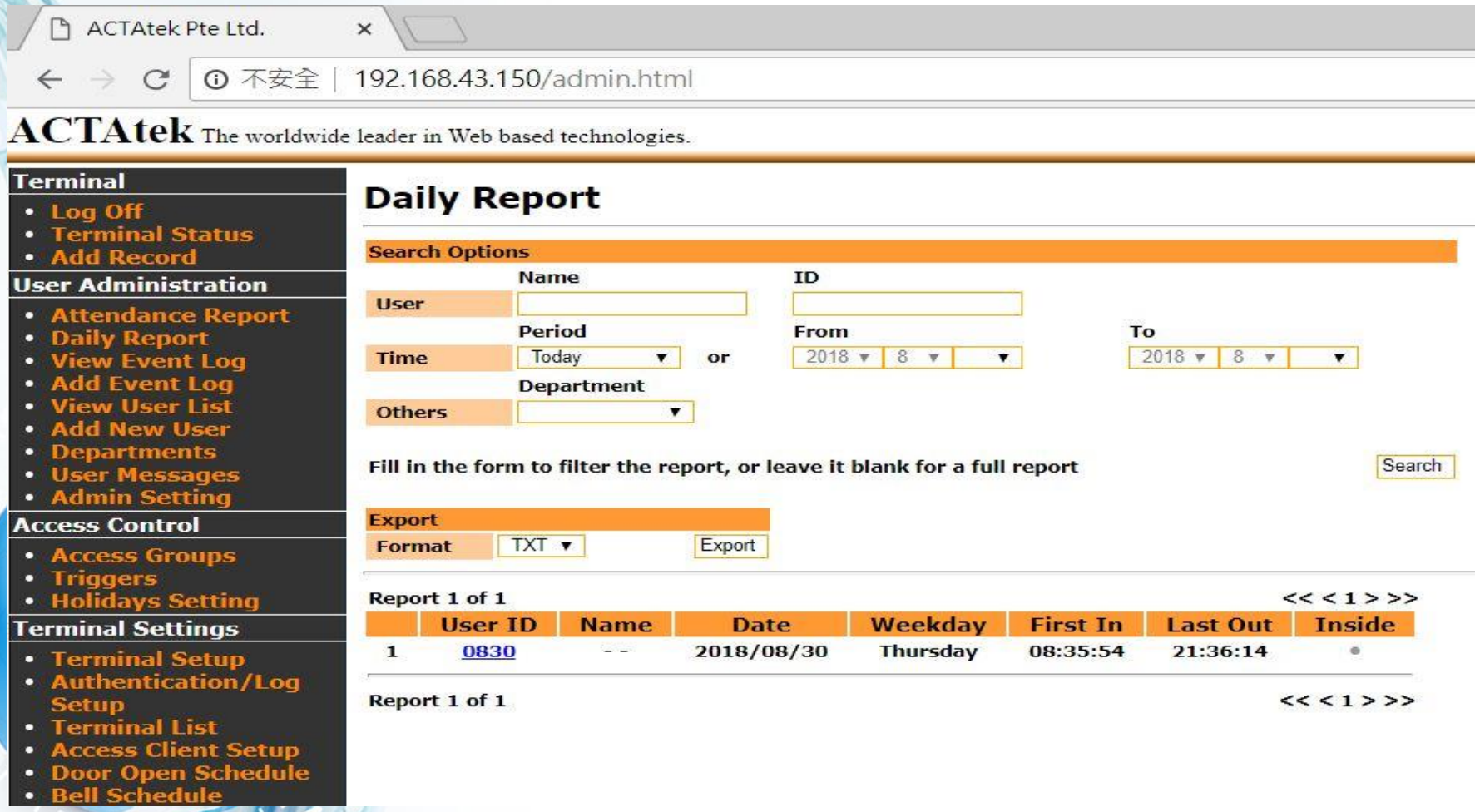
7632 - Google Chrome

about:blank

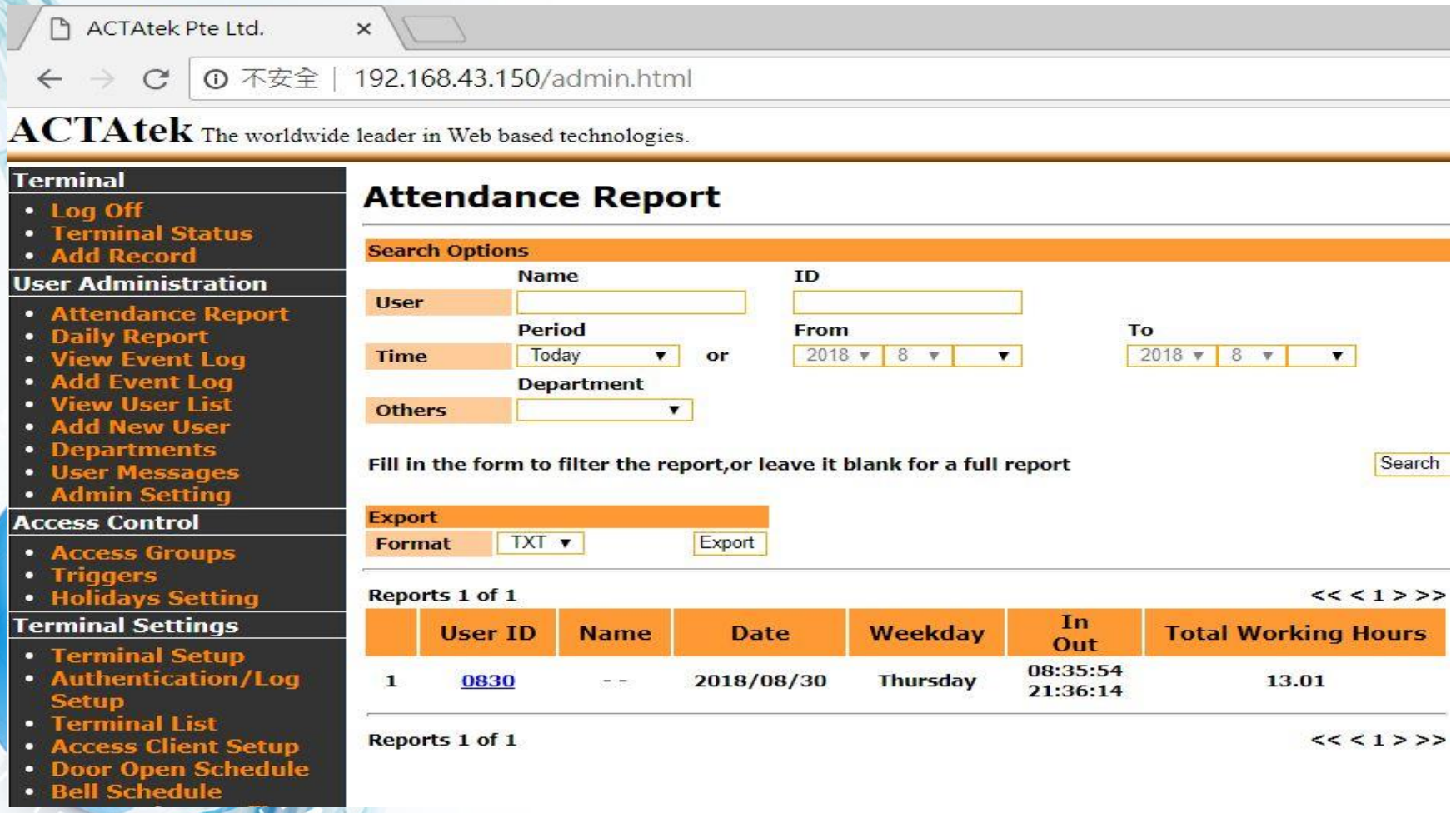
Event 1-35 of 10801 14 15 16 17 18 19 20 > >>

	User ID	Name	Department	Date Time			d Image	Remark
1	0830	- -	General	2018/08/30 21:18:40			Image	#FP#
2	0830	- -	General	2018/08/30 21:18:34			Image	#FP#
3	0830	- -	General	2018/08/30 21:17:02			Image	#FP#
4	0830	- -	General	2018/08/30 21:16:51			Image	#FP#
5	0830	- -	General	2018/08/30 21:02:12			Image	#FP#
6	7589	PETER YEONG KUM KEI	F & B ADM	2018/06/27 17:34:22			Image	#FP#
7	A999	- -	- -	2018/06/27 17:34:21				#RDOOR#
8	A999	- -	- -	2018/06/27 17:34:19	BOTTOM CASE IS ATTACHED	ACTATEK DEMO		#RDOOR#
9	7632	XUEYU ZHENG XUEYU	HSKG	2018/06/27 17:30:07	OUT	ACTATEK DEMO	View Image	#FP#

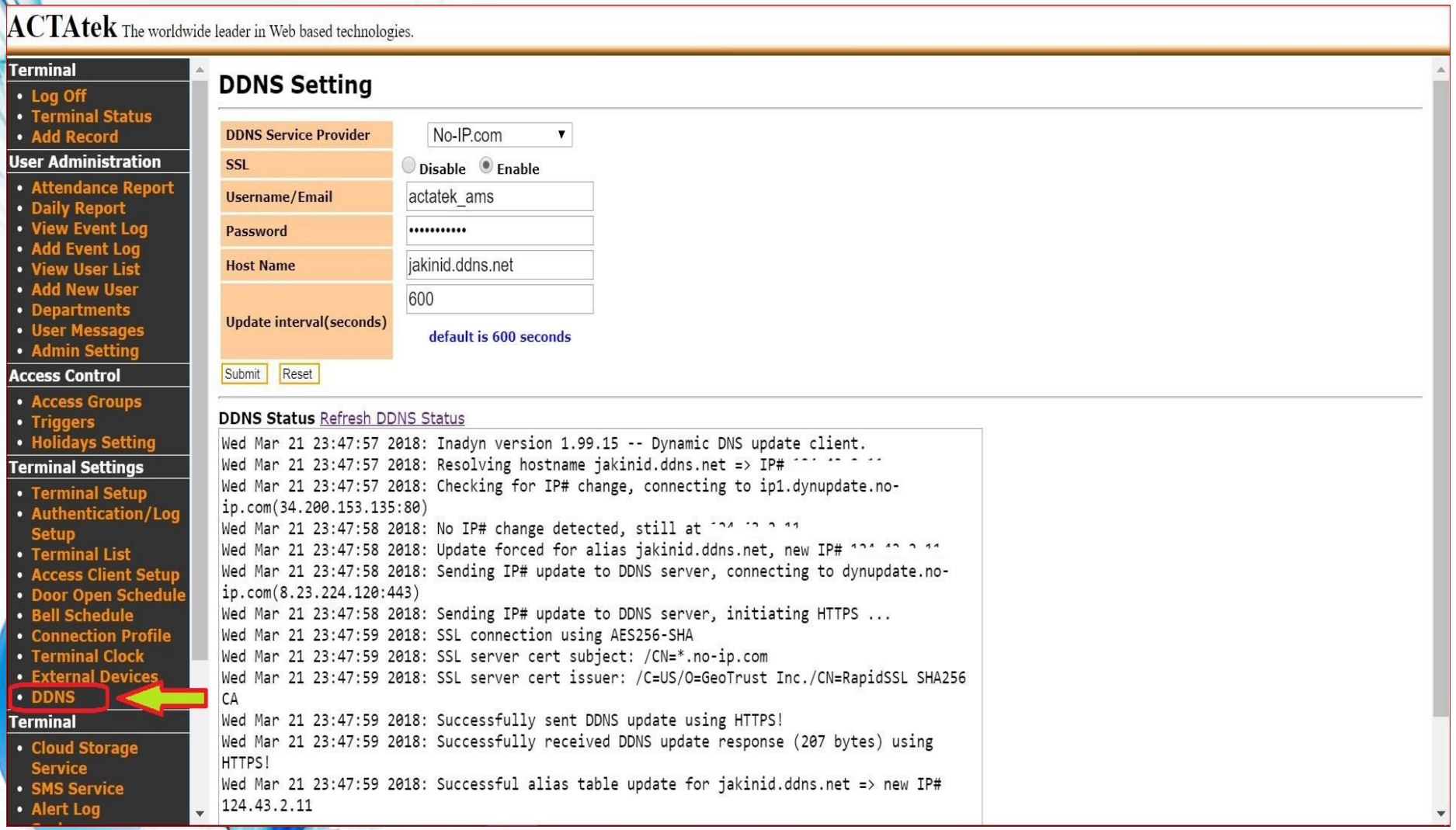
Daily Report



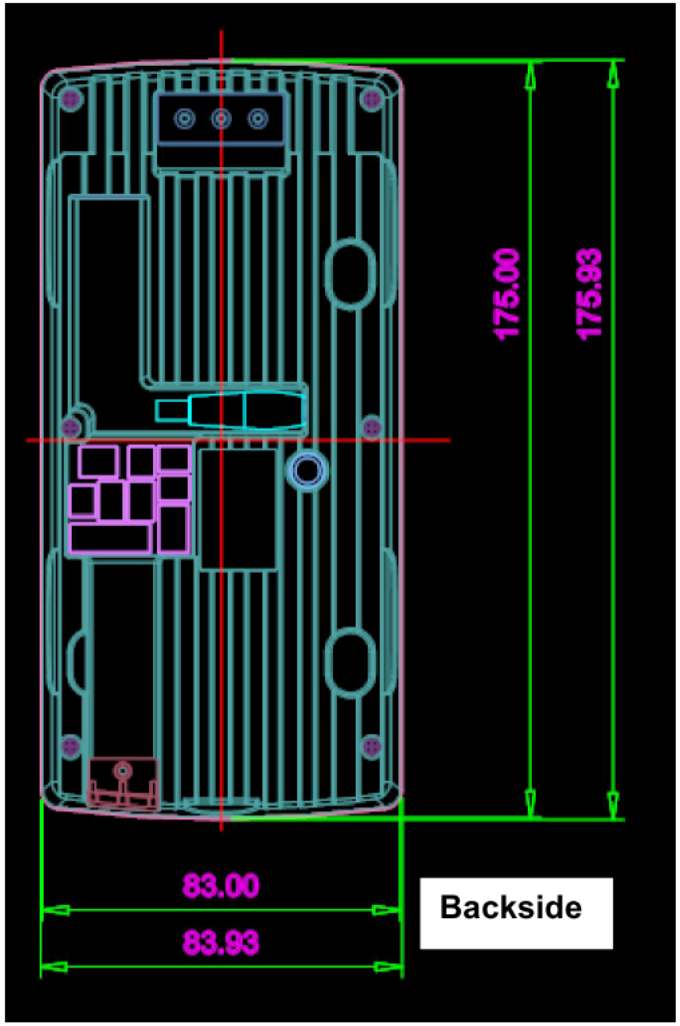
Attendance Report

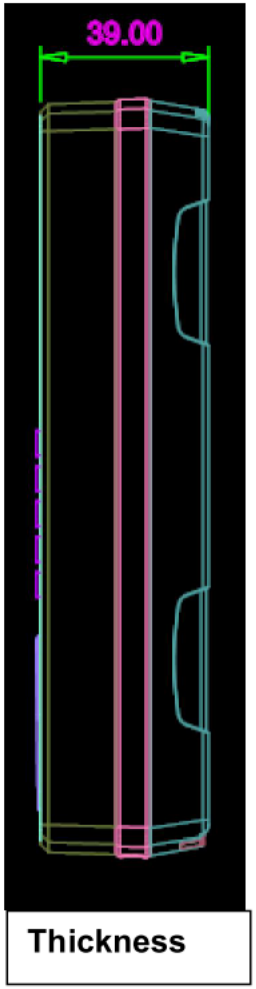


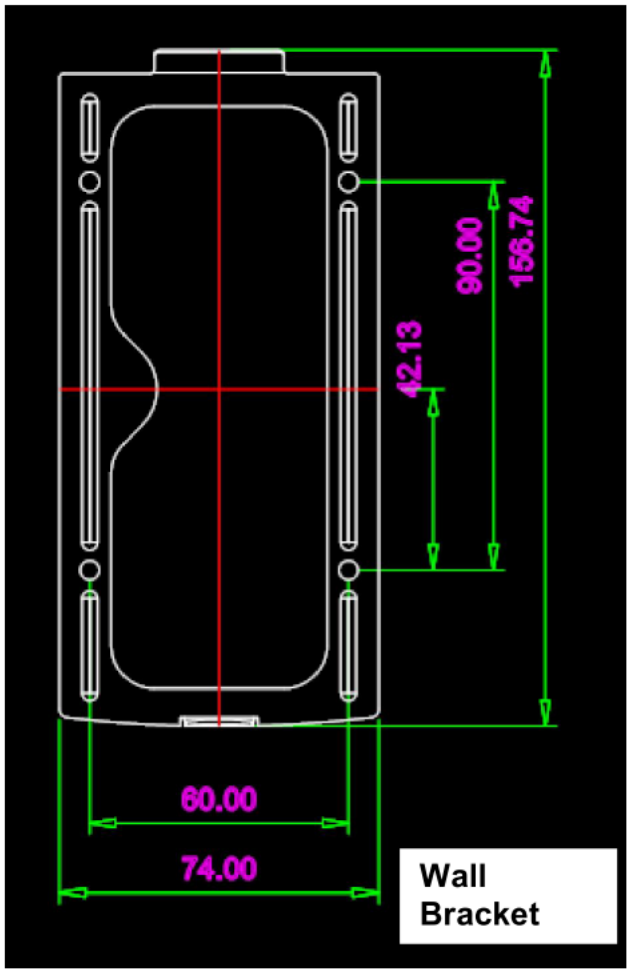
Built-in DDNS support



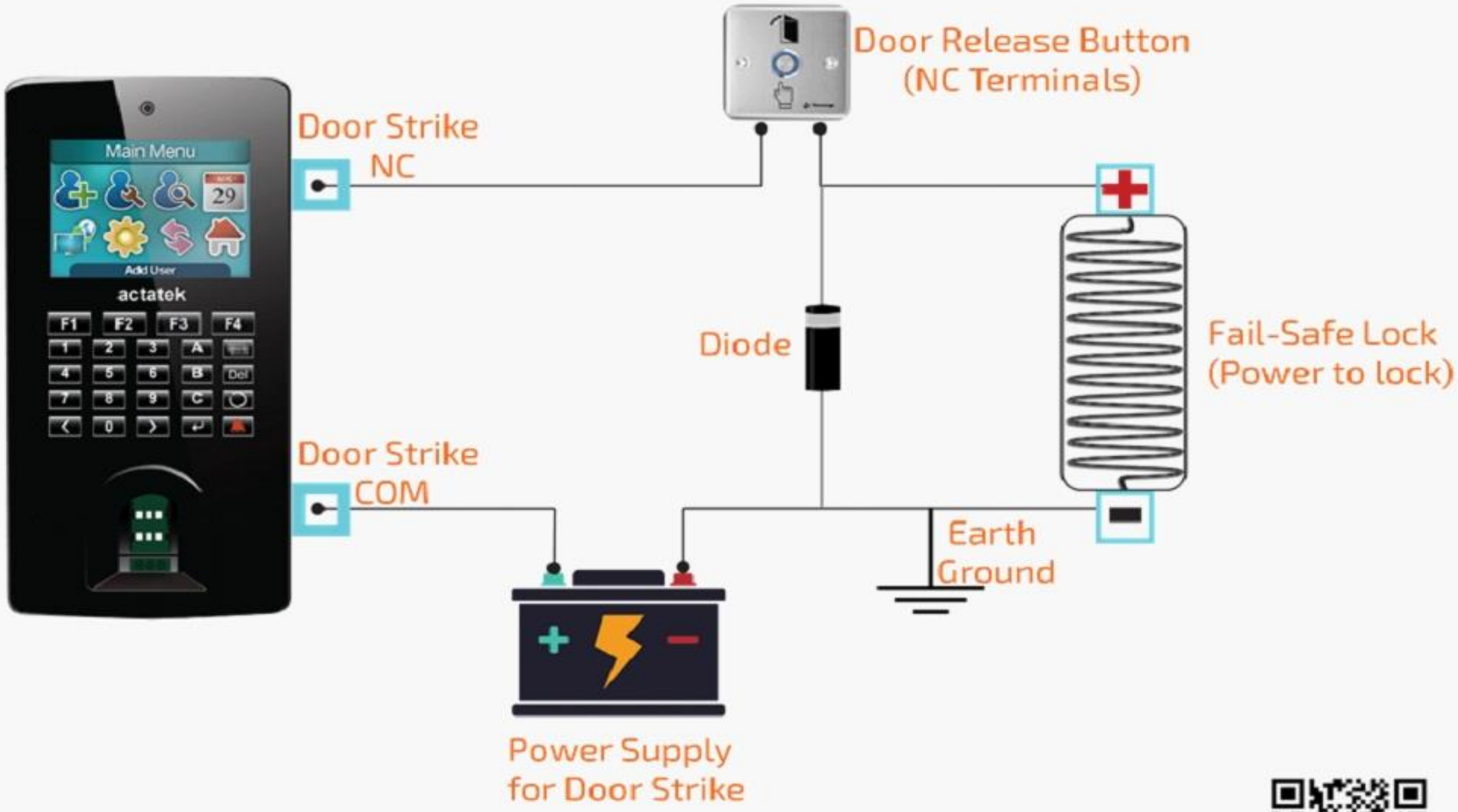
ACTA3 dimension





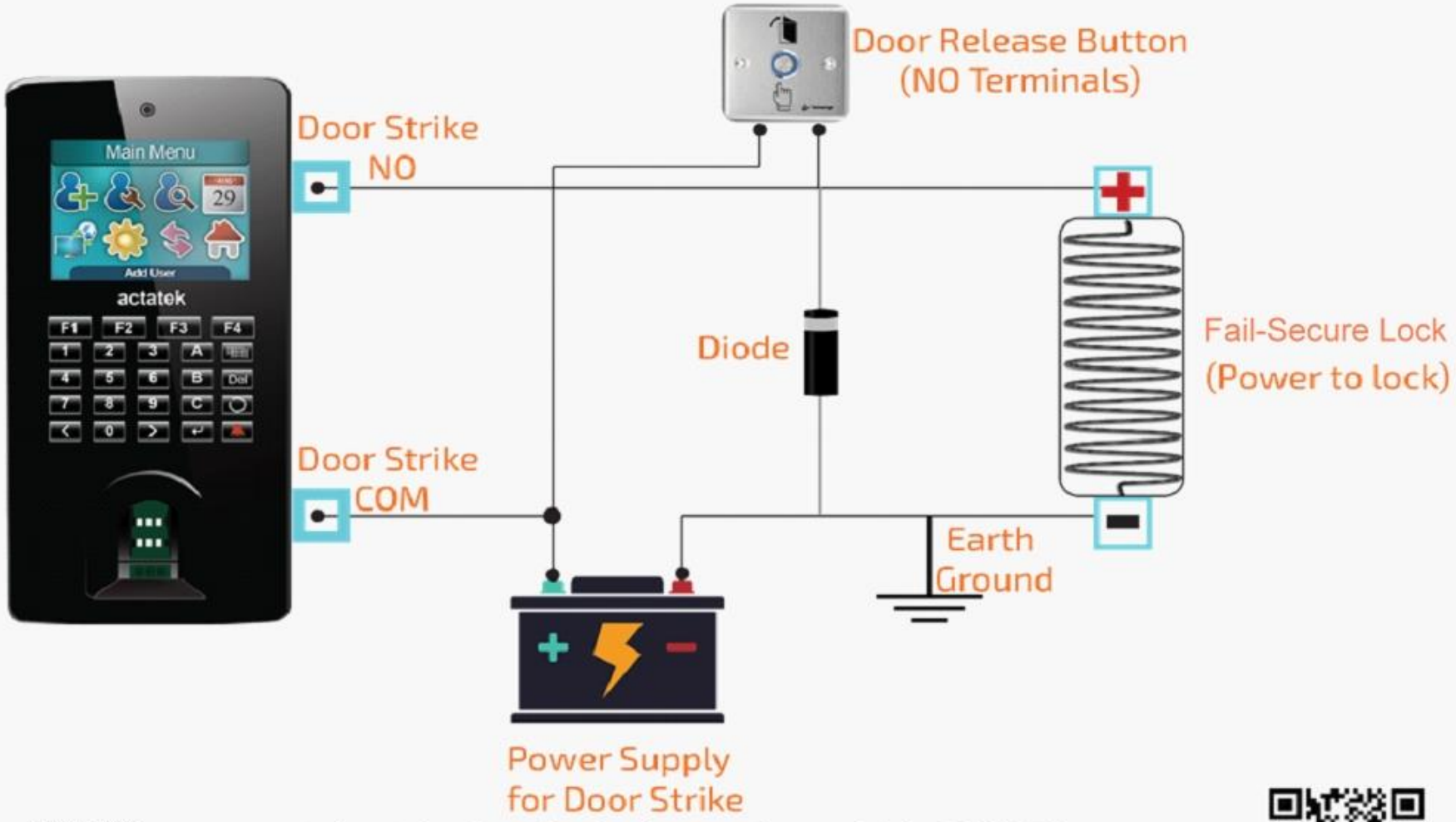


Connection Diagram for Fail-Safe Lock



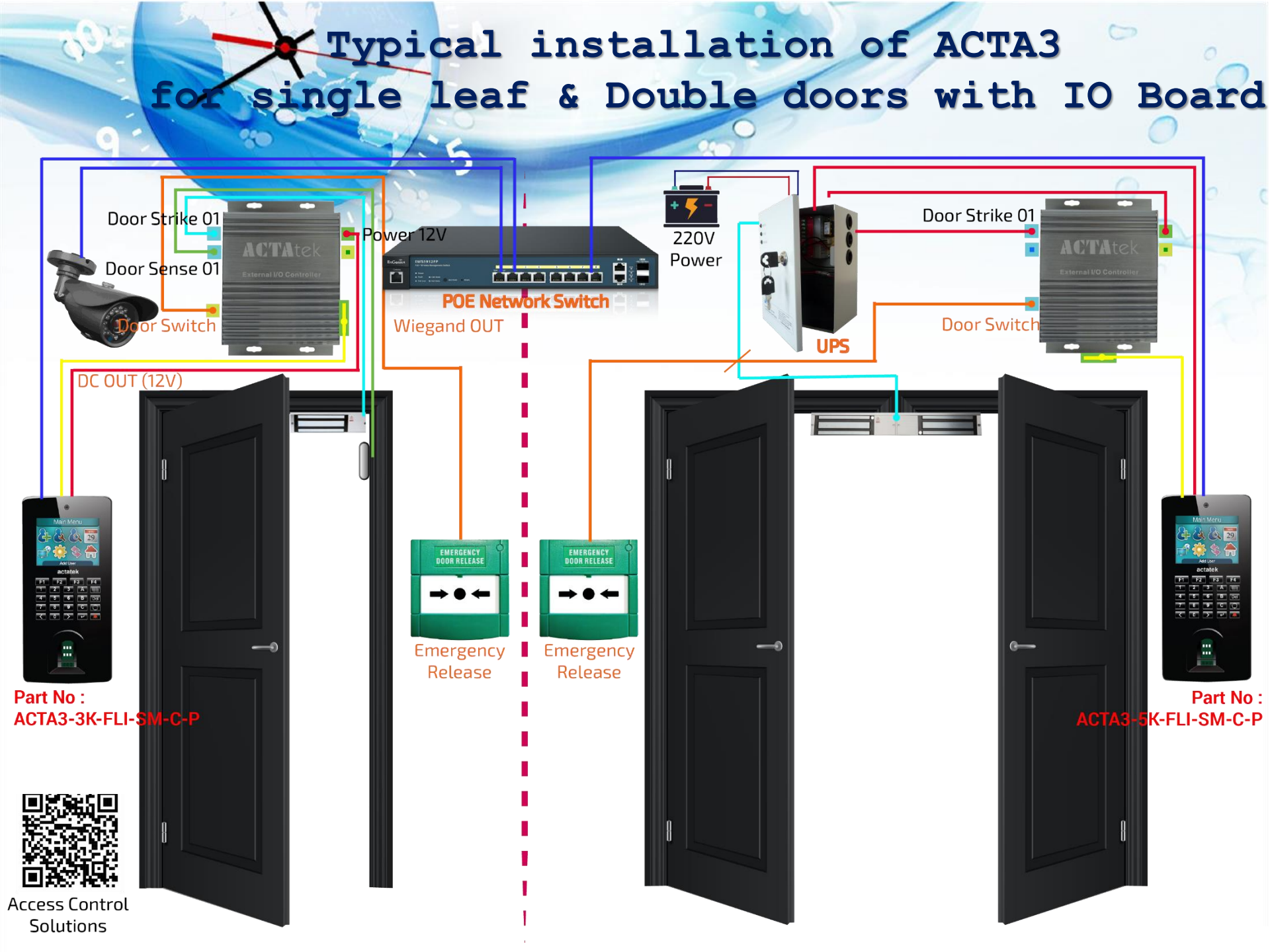
1. ACTA3 *support electric door lock that rating within 30V/5A*
2. *Independent power supply have to be provided for the electric door lock*
3. *Diode have to be installed to prevent back EMF*

Connection Diagram for Fail-Secure Lock

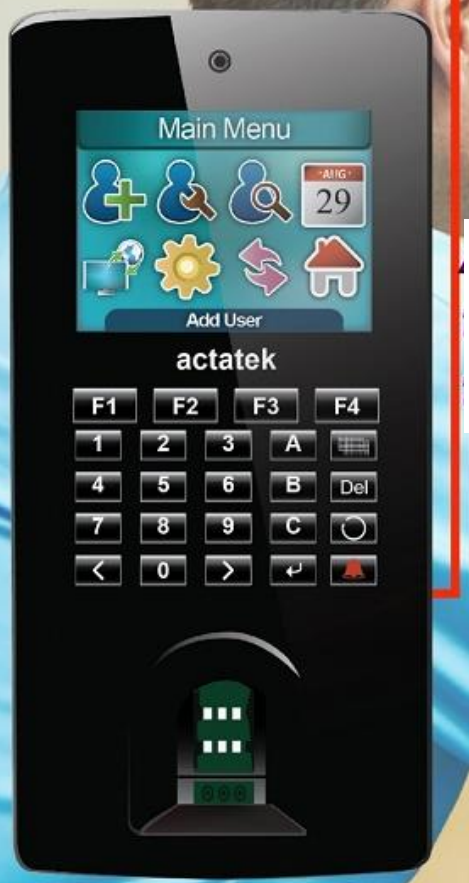


1. ACTA3 *support electric door lock that rating within 30V/5A*
2. *Independent power supply have to be provided for the electric door lock*
3. *Diode have to be installed to prevent back EMF*

Typical installation of ACTA3 for single leaf & Double doors with IO Board



ACTA3 Video Camera

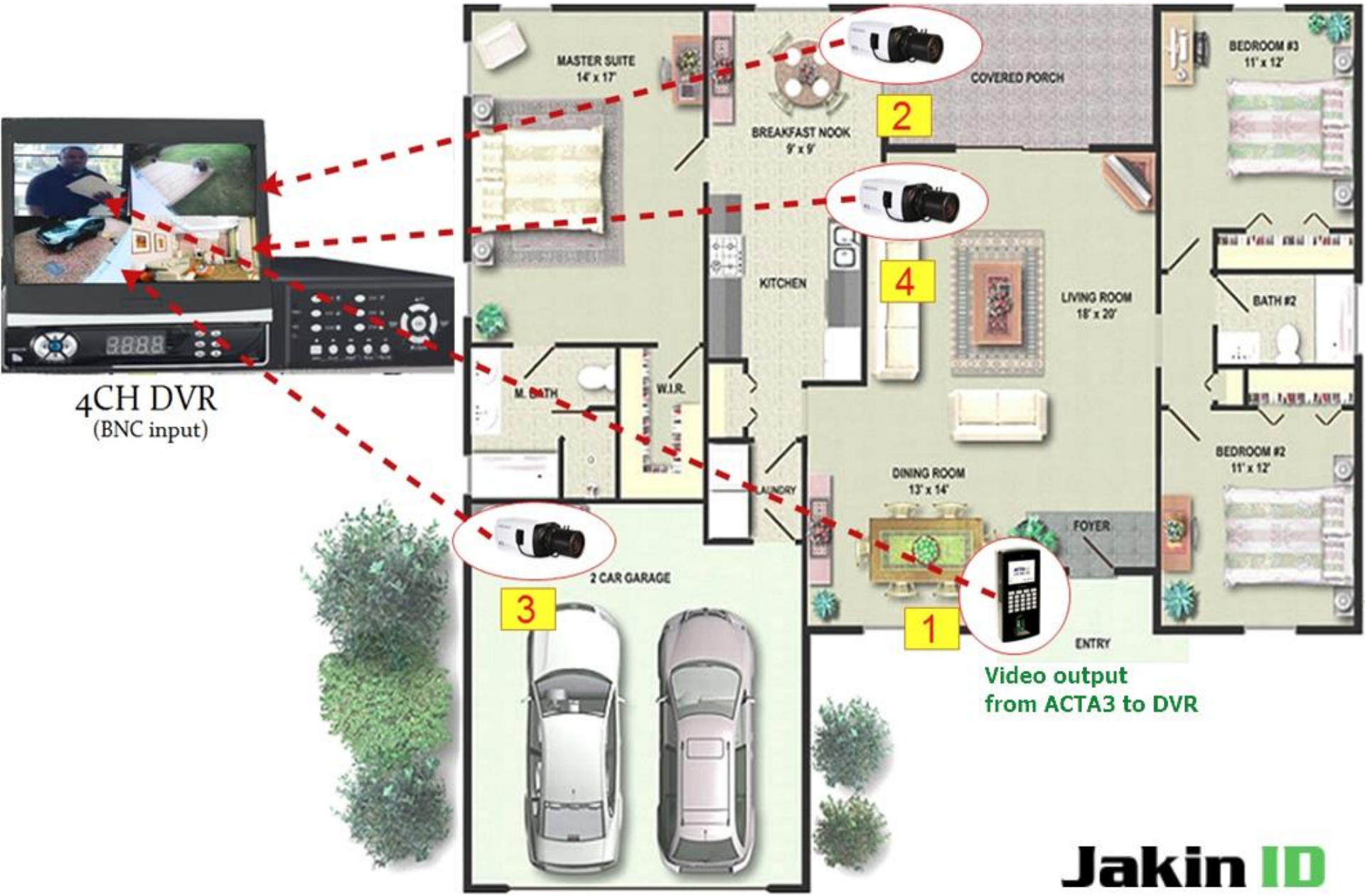


ACTA3 Video Camera support including snapshot taken & streaming video output is available for monitoring/security purpose e.g. connected to DVR/NVR

Parameters	Values	Unit
Type supported	VGA CMOS	Unit
NTSC (M) output	712x486 (0.3megapixel)	Pixel
PAL	704x576 (0.4megapixel)	Pixel
Maximum Frame Rate	60 (@27MHz in NTSC) 50 (@27MHz in PAL)	FPS
Built in CMOS Camera	320 x 240 (0.1megapixel)	Pixel
ACTAtek Part Number	ACTA3-1K-FLI-SHI-C	ACTA3

Jakin® ID

ACTA3 as Access Control system and as CCTV /DVR Video Surveillance system



Jakin ID

ACTA3's Ecosystem

Access Manager Suite

- Access Manager Varieties
  - Access Manager Suite – License Fee Applicable, single network
- Web based application for
  - Access Control
  - Time and Attendance
  - User Management
  - Terminals Management
  - Report Generation
- SOAP APIs
  - Third party application integration

ACTA3

-TCP/IP Network Interfaces

Access Manager installed for remote management

WEB-BASED

SERVER

Internet Cloud

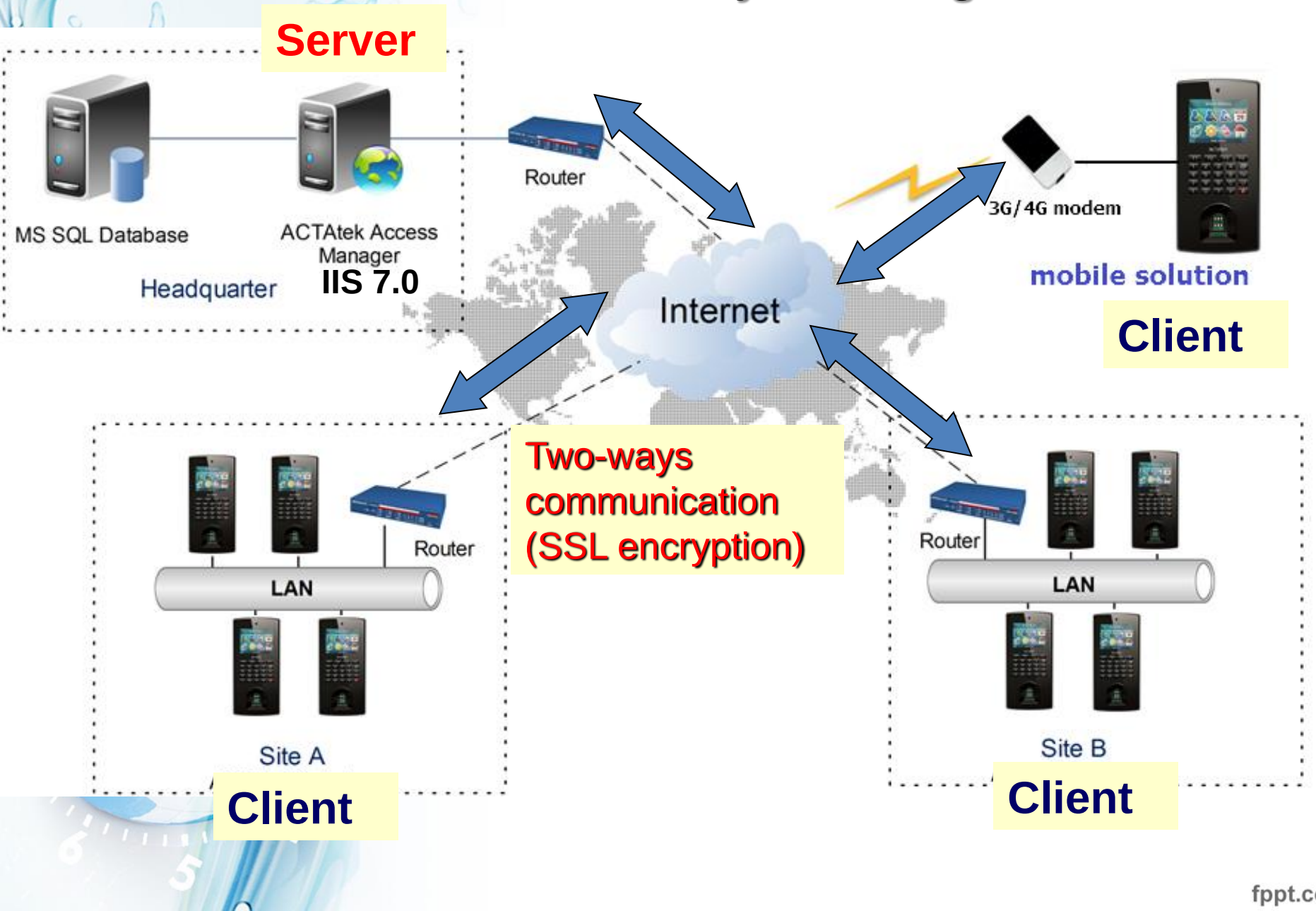
ACTA3

CLIENT

WEB-BASED

Remote Management Anywhere,Any Time

Overview of AMS system Diagram



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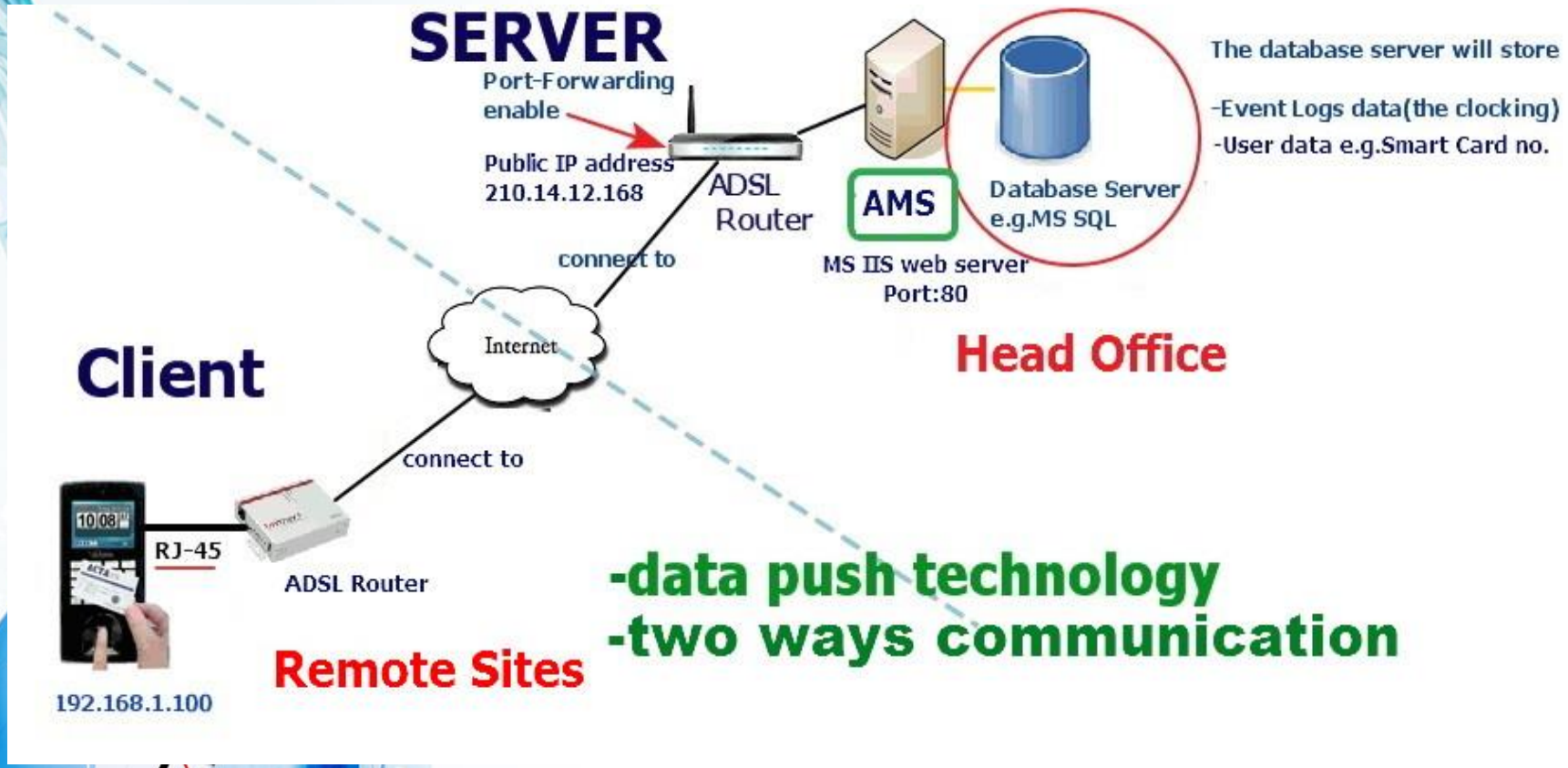
Overview of AMS system Diagram



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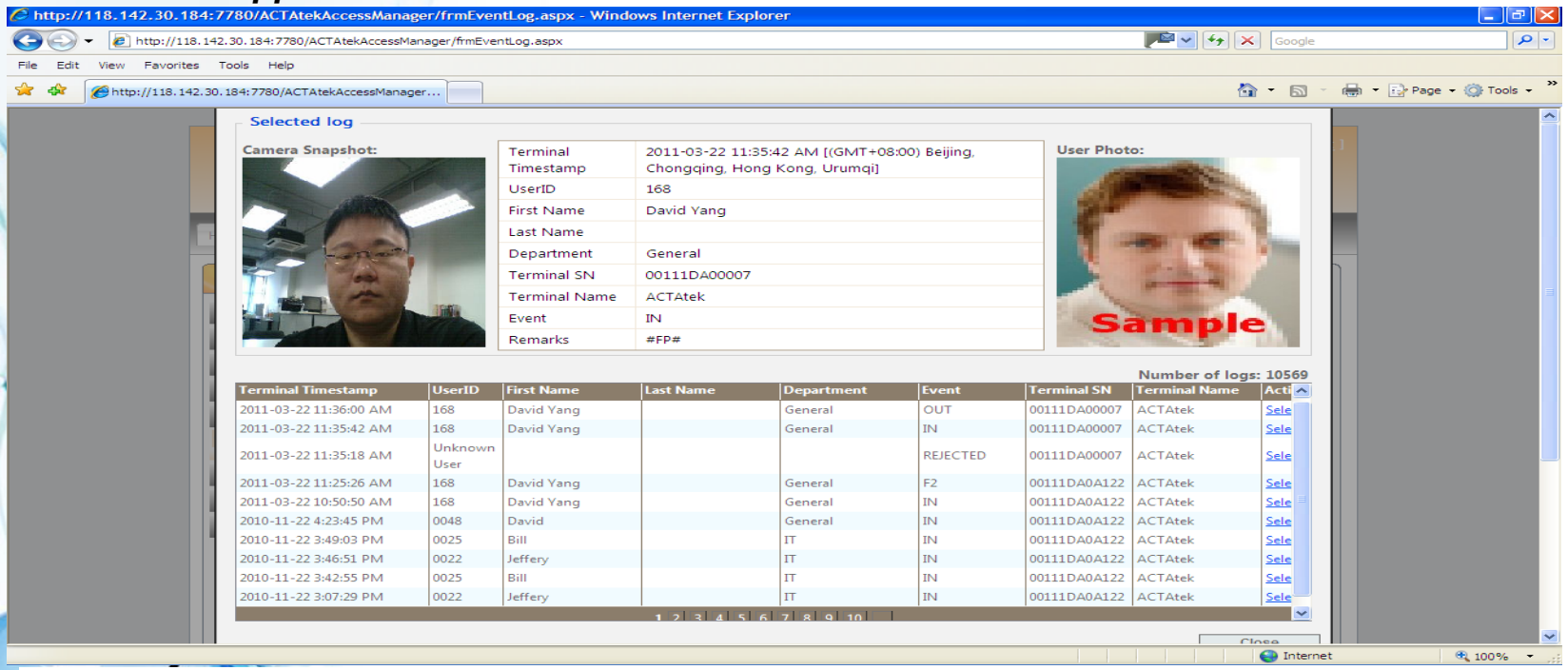
Access Manager Suite screenshot

-Client-server application



Absent Report 2010-11-01 - 2010-11-08

User ID	First Name	Last Name	2010-11-01 (Monday)	2010-11-02 (Tuesday)	2010-11-03 (Wednesday)	2010-11-04 (Thursday)	2010-11-05 (Friday)	2010-11-06 (Saturday)	2010-11-07 (Sunday)
007	GUO		Absent	Absent	Absent	Absent	Absent	Absent	Absent
014	AMK		Present	Present	Present	Present	Present	Present	Absent
015	Alvin		Present	Present	Present	Present	Absent	Absent	Absent
016	Patrick		Present	Present	Present	Present	Present	Present	Absent
017	Venc		Present	Present	Present	Present	Present	Present	Absent
018	Stanl		Present	Present	Present	Present	Present	Present	Absent
019	Doris		Present	Present	Present	Present	Present	Absent	Absent
020	Pricilla		Present	Present	Absent	Absent	Present	Absent	Absent
021	Victor		Present	Present	Present	Present	Present	Present	Absent

Reports including:

--Daily In/Out Report
--Detail Report
--Absent Report
--Late Report
--User Status Report
--Roll Call / Fire Report
--Auto In/Out Report

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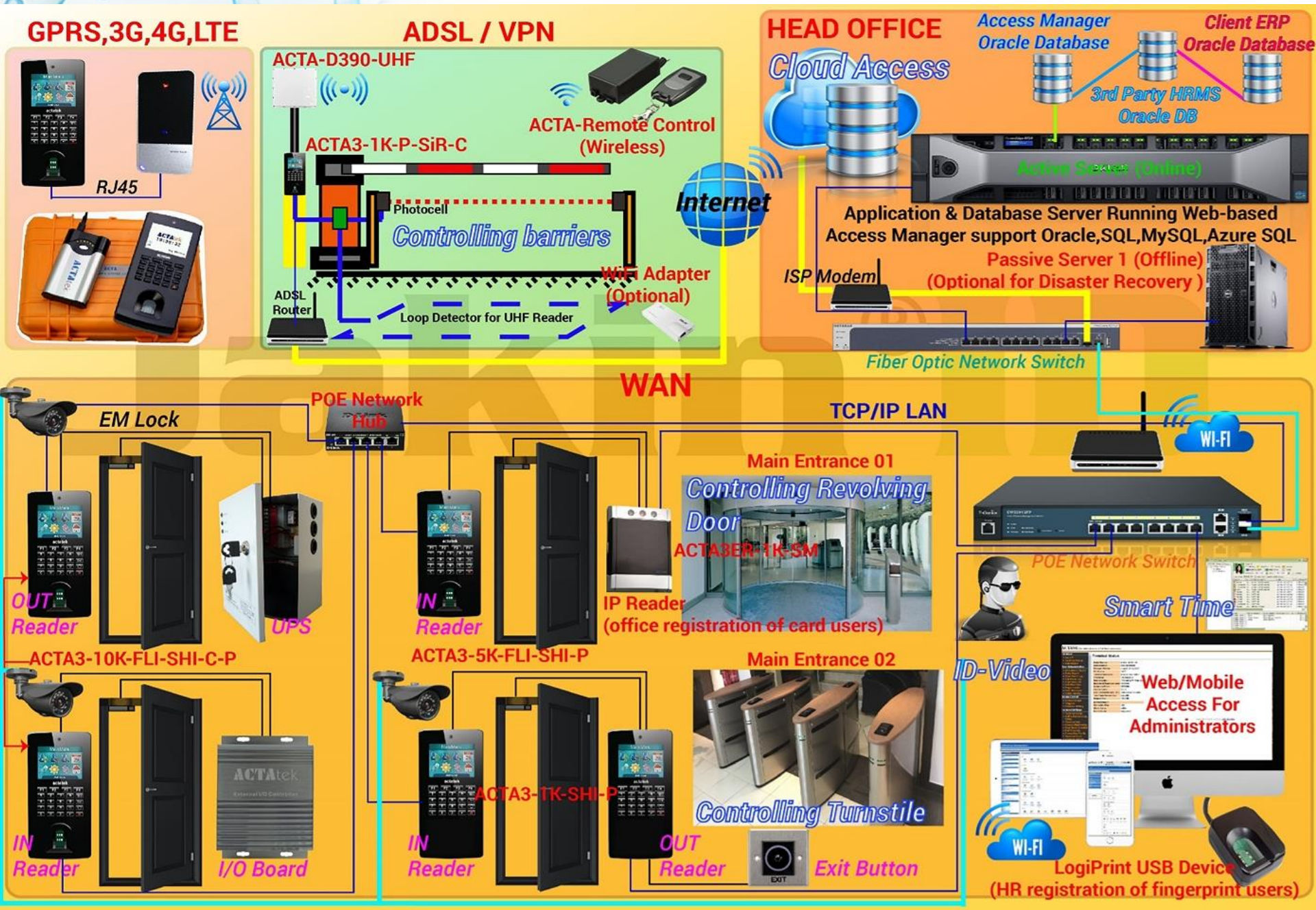
Deployment Architectures



Key Features

1. The IOT provider and enabler for Big Data analysis.

2. ACTA series of devices and Middle-ware enables:
Integrated cloud-ready fingerprint and RFID PSIM (Physical Security and Information Management) and Work Force Management.
* Full web-and cloud IOT and software architecture.
* All-in-one platform for Access Control, Video Surveillance, Time Attendant, HR and Payroll.
* All devices service, maintenance and manage over the web.
* An integrated platform for IOT and Big Data.

3. Fingerprint Template files are encrypted with AES (256bit), and standards compliant with ANSI/INCITS 378, ISO 19794-2 AND ILO SID.

4. Under Client (device), and Server architecture, the system can be extended to support unlimited devices, and user's data synchronize in real time via Internet cloud.

5. Offering free middle-ware, SOAP/API for simple integrations with third party software.
6.Data communication via 3G/4G modem, WiFi,VPN / Wiegand output with third party controller
7. IP65-fluid ingress, dust, salt, fog Protection.
8. Operation Tampere -20 C to 60C.

Benefits

- Eliminate 'Buddy-Punching': Use Biometric Verification for access as well as time & attendance
- Identify 'Phantom-Workers': Use CMOS Camera photos taken or videos recorded at DVR to compare for isolating access events by suspicious unregistered personnel
- Minimize 'Effort & Costs': Deploy Access-Control over existing IP networks, Simplify and Automate access reporting, time/attendance reports and integration into payroll systems
- Enhance 'Accessibility and Utilization': Obtain decision making information over Ethernet/Wireless, Internet/3G, anytime/anywhere on Laptop, Smartphone or Tablet-pc using a true real-time, multi-door, multi-location at one system .
- Complete Security, 'Anytime, Anywhere ': Ability to manage all sites from one interface ,and Report centrally, manage remotely

Accessories

3G GSM / WiFi Gateway Modem

Power Over Ethernet (PoE)

Mobile Battery

Fail Secure and Non-Fail Safe
Electric Door Strike

Fail-Safe Electromagnetic Lock

Contactless Push Button
[Normally Close and Normally Open circuit]

Break Glass [emergency door release]

ADA compliance mounting bracket

Uninterupted Power Supply [UPS]

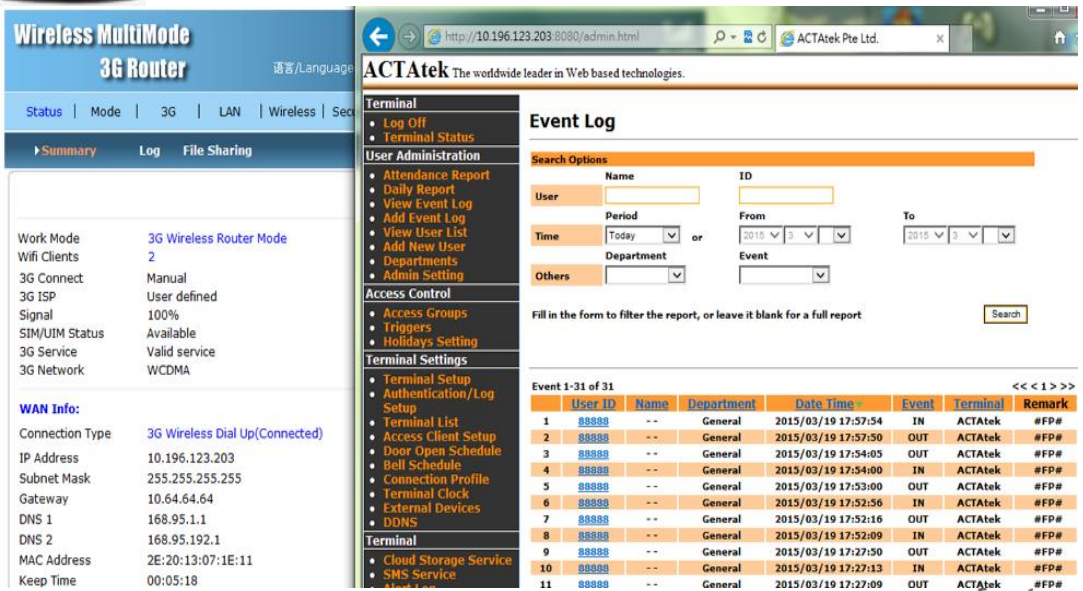
External I/O Box

Magnetic Strip / Barcode Readers

LogiPrint [USB Reader]

Mobile solution

- Mobile Kits
- 3G modem
- Unlock SIM free support
- Any ACTA3 model



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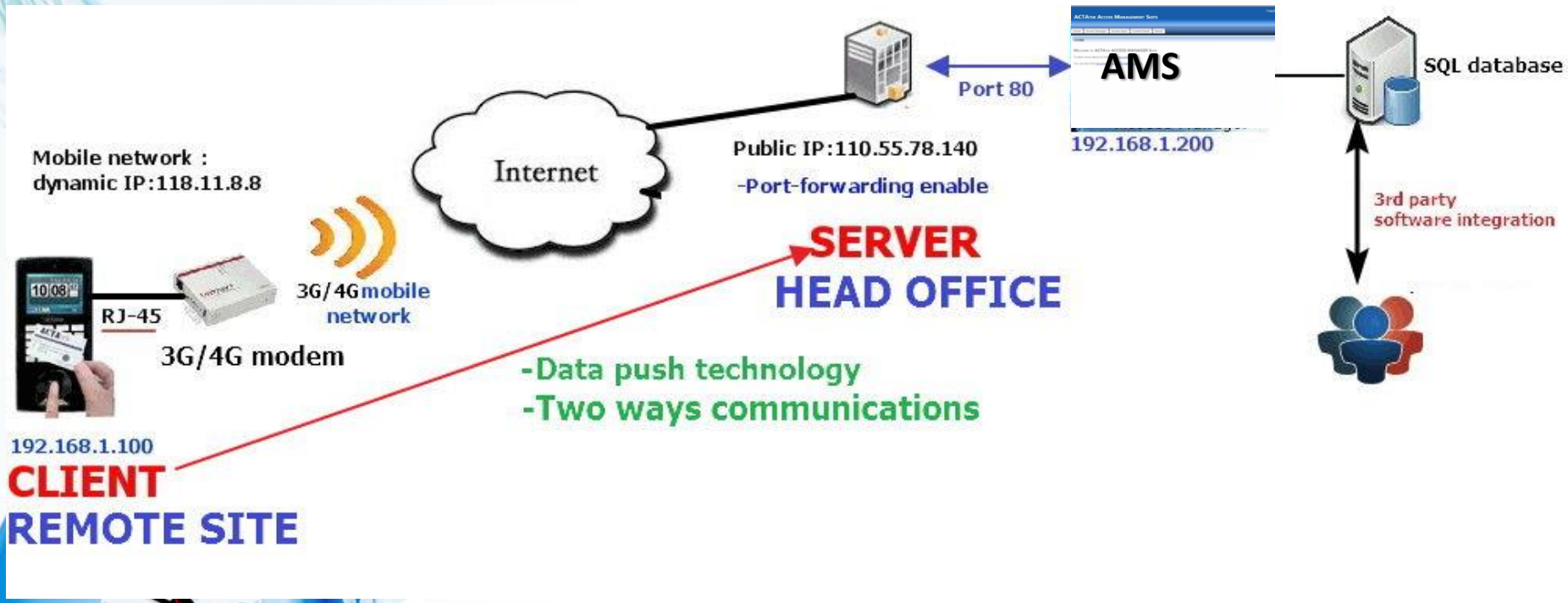
Mobile solution system diagram



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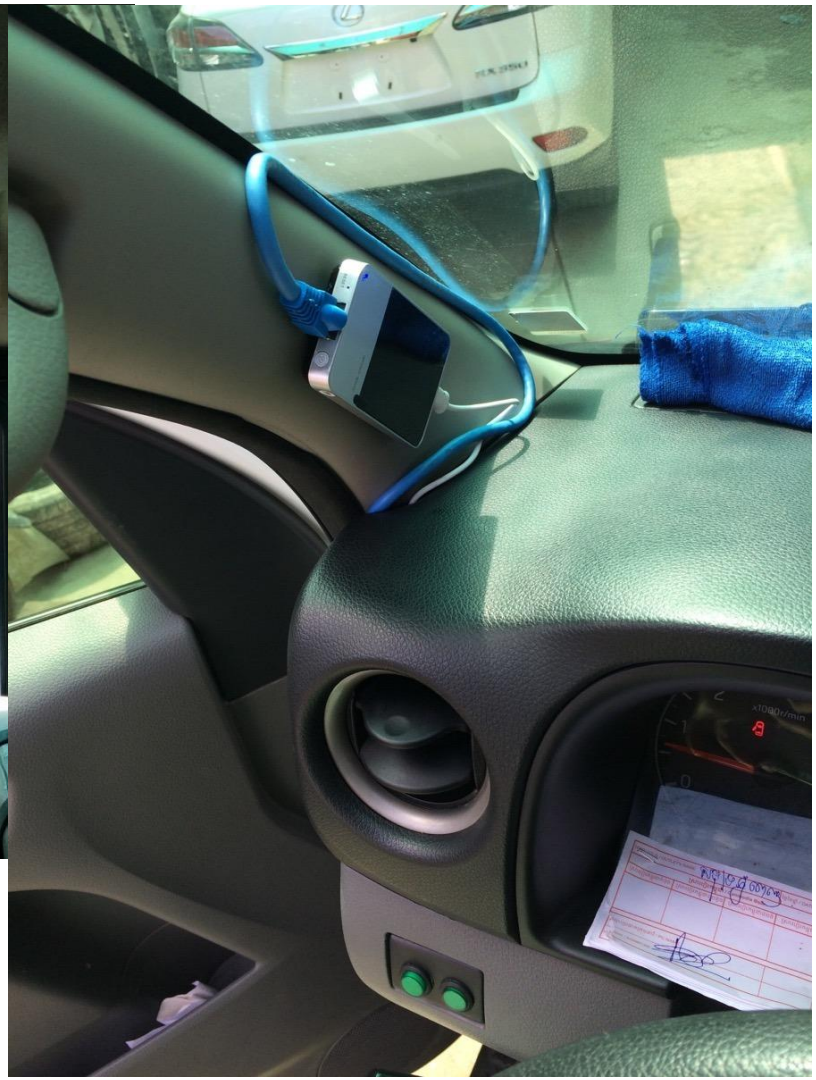
Mobile solution installation example



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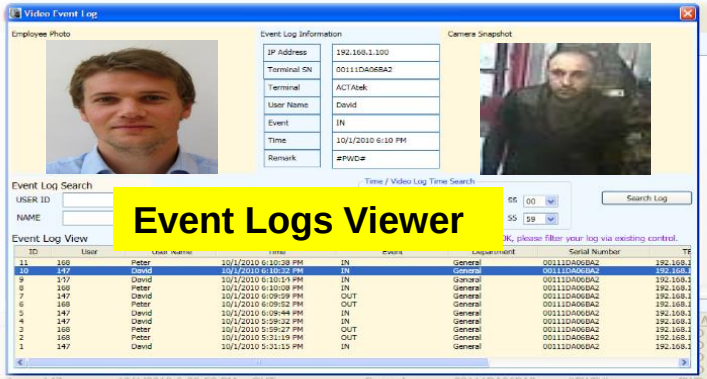
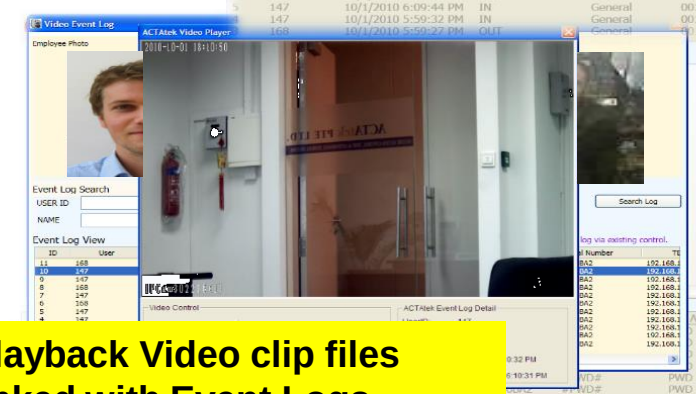
System Overview of ID-Video solution

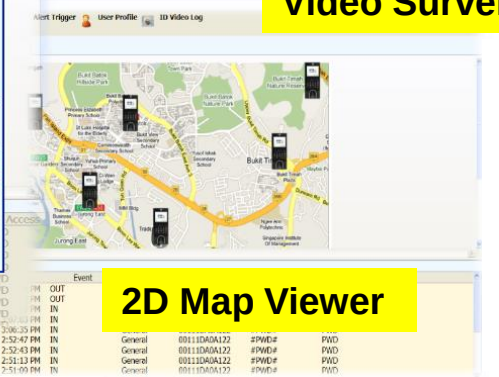


Event Logs Viewer

Video Surveillance

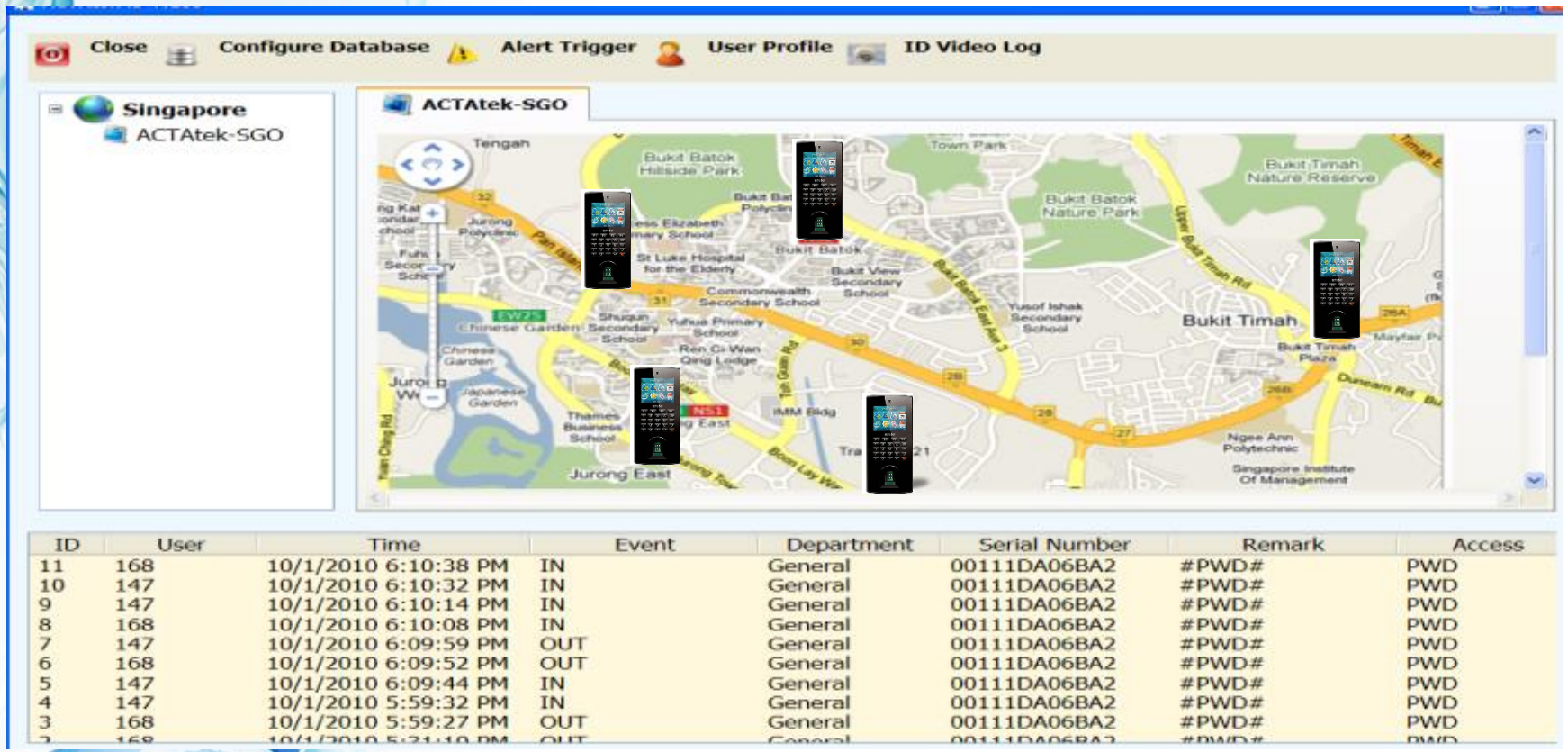


Playback Video clip files linked with Event Logs



2D Map Viewer

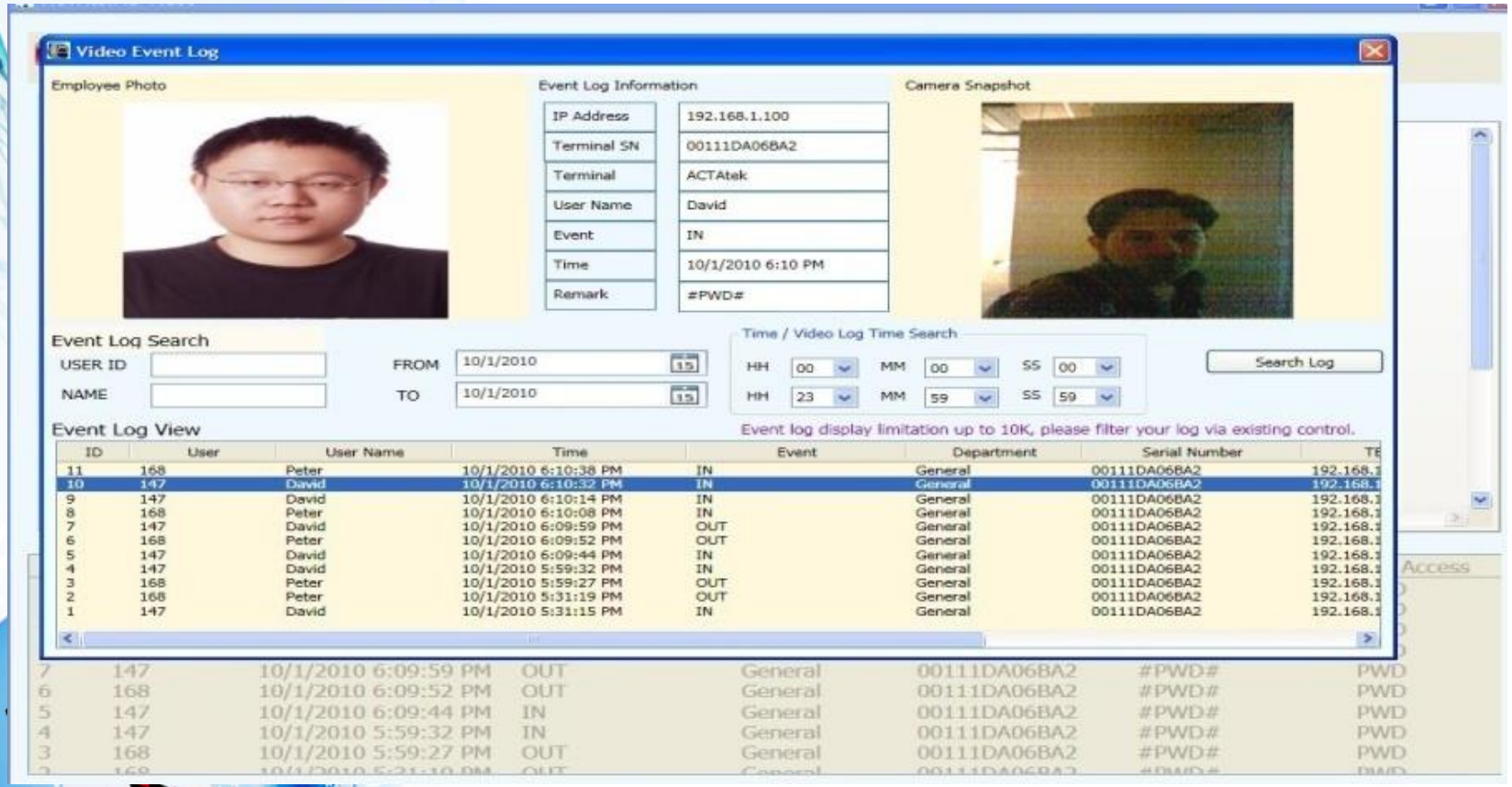
ACTAtek3 guard your doors



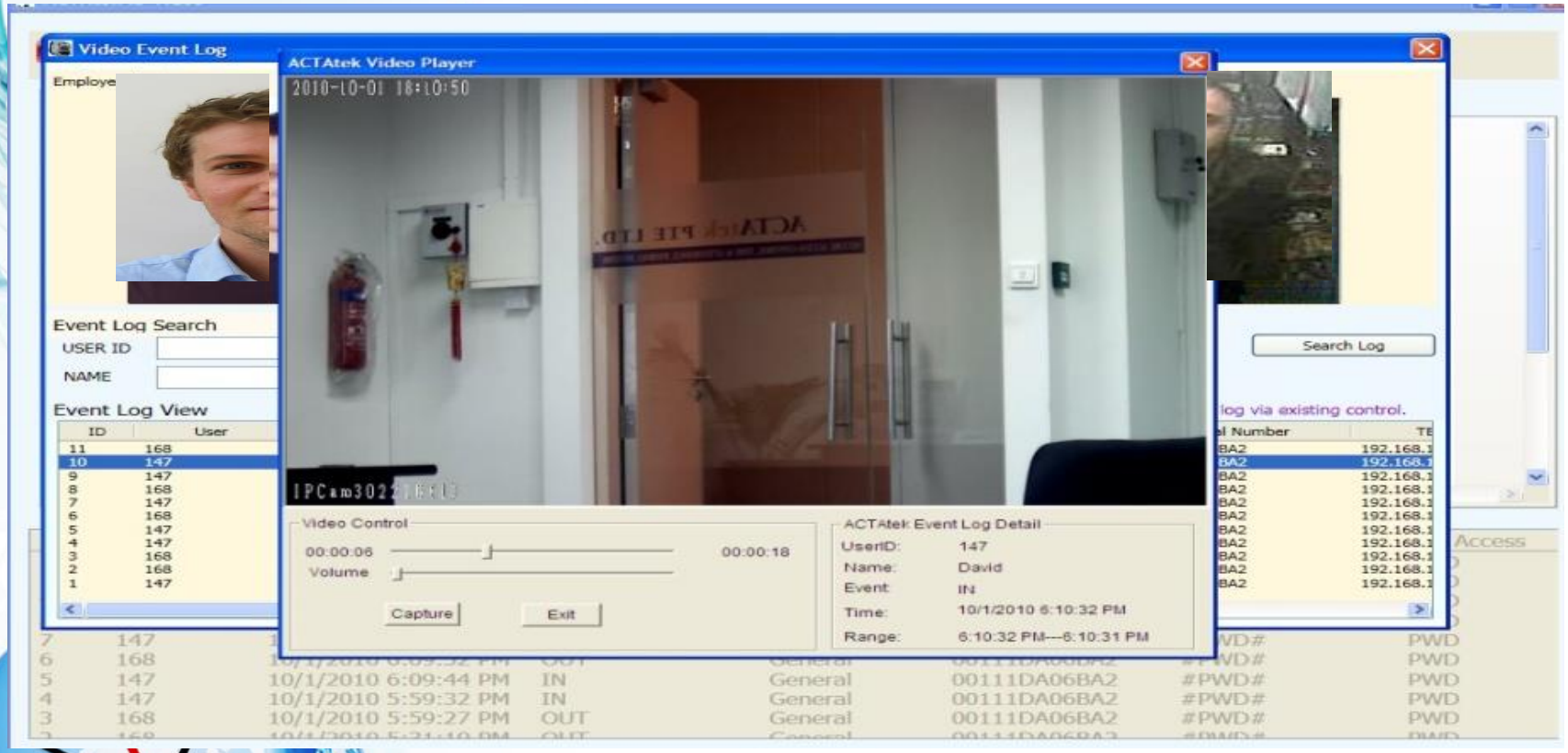
ID	User	Time	Event	Department	Serial Number	Remark	Access
11	168	10/1/2010 6:10:38 PM	IN	General	00111DA06BA2	#PWD#	PWD
10	147	10/1/2010 6:10:32 PM	IN	General	00111DA06BA2	#PWD#	PWD
9	147	10/1/2010 6:10:14 PM	IN	General	00111DA06BA2	#PWD#	PWD
8	168	10/1/2010 6:10:08 PM	IN	General	00111DA06BA2	#PWD#	PWD
7	147	10/1/2010 6:09:59 PM	OUT	General	00111DA06BA2	#PWD#	PWD
6	168	10/1/2010 6:09:52 PM	OUT	General	00111DA06BA2	#PWD#	PWD
5	147	10/1/2010 6:09:44 PM	IN	General	00111DA06BA2	#PWD#	PWD
4	147	10/1/2010 5:59:32 PM	IN	General	00111DA06BA2	#PWD#	PWD
3	168	10/1/2010 5:59:27 PM	OUT	General	00111DA06BA2	#PWD#	PWD

Key features:

- **Monitor and view real-time Event Logs under the 2-D Map.**
- **Administrator can pre-set the alerts event e.g. “DOOR IS OPEN”. When the pre-set alert event happened, a blinking red color icon with alert beep sound will display on the 2-D Map to inform administrators.**



- **Administrator also can view and compare the User Photos with the Snapshot Photos under ID Video Log.**



- **Administrator can easily monitor and view the Event Logs ,and also playback the recorded Video clips by defining the search timing. e.g. +/- 10 sec of Event Logs.**

Thank you