Time Attendance
+ SIP Door Phone Solution

AddPac

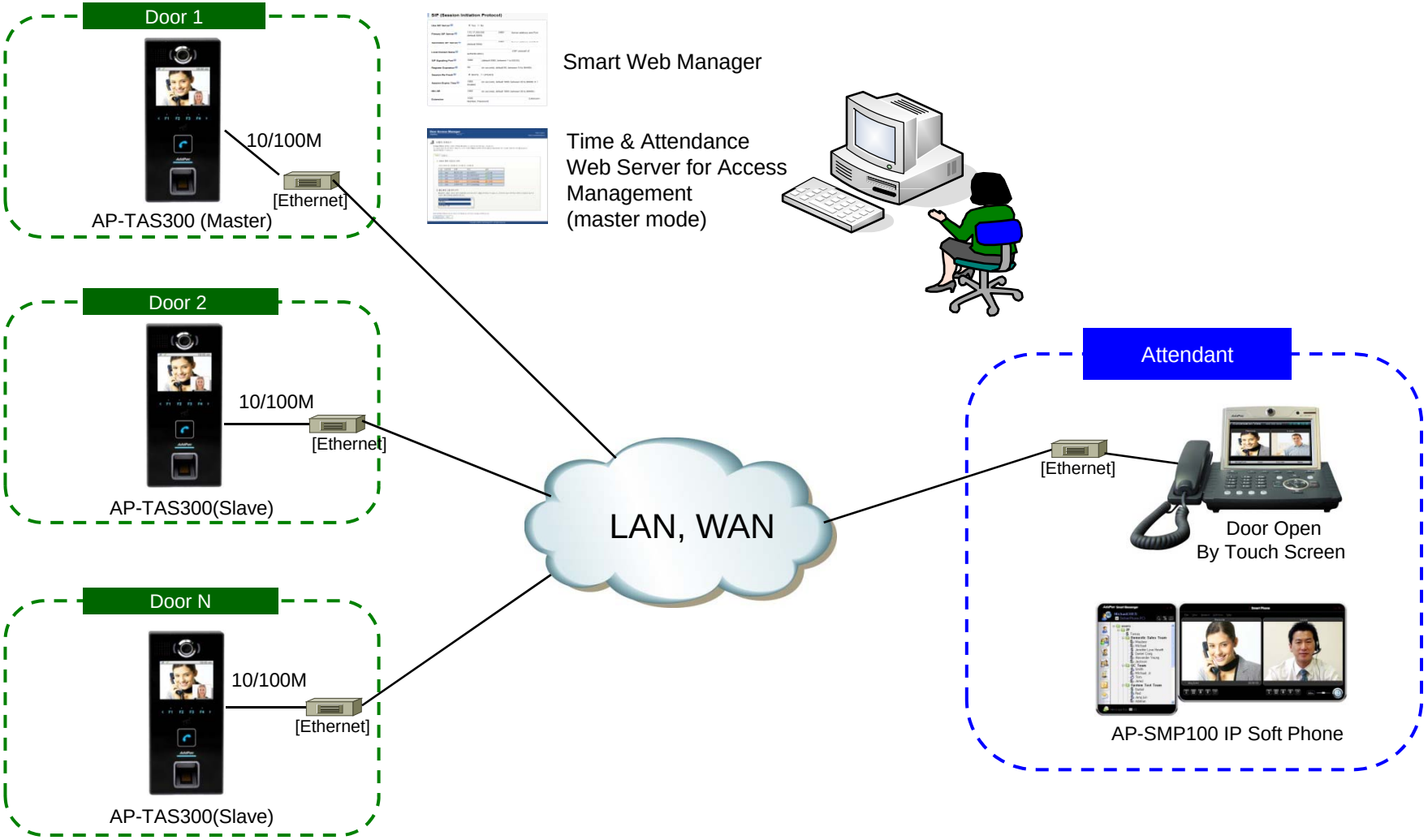
AddPac Technology

2014, Sales and Marketing

Contents

- Time Attendance + IP Door Phone Service Diagram
- Time Attendance + IP Door Phone Solution
  - AP-TAS300 (Fingerprint, RF card, SIP Video Call)
  - AP-TAS200 (Fingerprint, RF card, SIP Voice Call)
- Time Attendance Signal Call Flow Diagram
- Time Attendance Embedded Web Manager
- Backend Solution (other documents)
  - AP-VP280, AP-VP120 IP Video Phone
  - AP-VIC100 IP Video Intercom
  - AP-SMP100 IP Soft Video Phone
  - Video Only Door Control S/W for Desktop

Time Attendance + IP door phone service diagram



Time Attendance + SIP Door Phones

Time & Attendance
SIP Door Phone Comparison Table

Model Service Features	AP-TAS300 	AP-TAS200 
Time & Attendance	Support	Support
SIP Door Phone	SIP Video Door Phone	SIP Voice Door Phone
Duplex (Voice)	Full Duplex	Full Duplex
Key Pad	One(1) Call Button	One(1) Call Button
LCD	3.5 inch LCD	3.5 inch LCD
RF Card	Support	Support
Fingerprint	Support	Support
Camera Sensor	SD(VGA)	N/A
Video Codec	SD, H.264/MPEG4	N/A
Voice Codec	G.711,G722(option)	G.711, G.722(option)
Signaling	SIP	SIP
MIC & Speaker Phone	Support	Support
LAN Port	1	1
PoE(Option)	Support	Support

Time Attendance
SIP Video Door Phone
AP-TAS300

Main Features

AP-TAS300 Time Attendance SIP Video Door Phone

- Smart Time & Attendance IP Video Door Phone Solution
- High Performance SIP Video Door Phone Solution
- Video Camera, Video Call Button, TFT Color LCD, Internal MIC & Speaker
- High Quality 3.5 Inch LCD, 320 x 240 Video Resolution
- Fingerprint Recognition Support
- RF Card Support
- SIP VoIP Signaling Stack Embedded
- High-performance Video/Voice Codec Support
  - H.264/MPEG4, G.711, etc
- One(1) 10/100Mbps Fast Ethernet
- PoE(Power over Ethernet) Support
- High Quality Speaker Phone Features
- Powerful Acoustic Echo Canceller Chip Embedded
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Advanced Voice QoS Mechanism

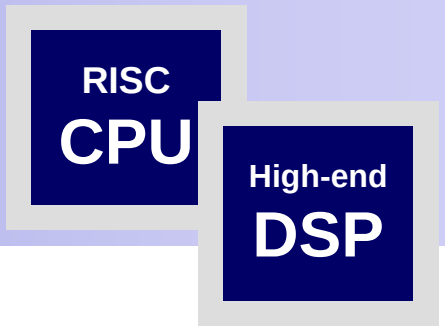
Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
  - Internal MIC
  - Internal Speaker
- Video Camera Interface
- TFT Color LCD Interface
  - 3.5 Inch LCD, 320 x 240 Video Resolution
- Network Interface
  - One(1) 10/100Mbps Fast Ethernet
- Fingerprint Recognition Interface
- RF Card Interface
- Alarm & Relay Out Interface (door open, etc)
- RS232/RS485 Interface
- External RCA Audio Line Out and MIC In (back side)
- STILL Chassis
- Power Supply
  - Power over Ethernet (Option)
  - External Power Supply

Hardware Specification

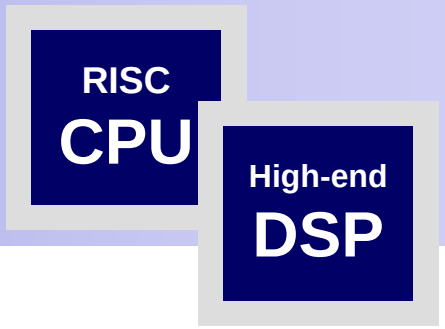
AP-TAS300 Time Attendance SIP Video Door Phone



- Acoustic Echo Canceller
  - Full-duplex operation during double-talk situations
  - One channel AEC, one channel LEC up to 256ms shared
  - Cancels echoes with up to 10dB echo return
  - Advanced noise reduction(up to 20dB)
- Speaker
  - Impedance : 8 +-15%ohm at 1kHz, 1.0 Vrms
  - Sound Pressure : 90 +- 3dB at 0.1W/10 CM
    at 800Hz, 1.0kHz, 1.2kHz, 1.5kHz
  - Resonance Level : 550Hz +- 20%Hz at Fo Hz, 1.0Vrms
  - Frequency Range : Fo Hz ~20kHz
  - Input Power : Normal : 1.0 W, Max : 2.0W
- Audio Amplifier
  - 1-W BTL Output(5V, 0.11 % THD+N)
  - Uncompensated Gains of 2 to 20 (BTL Mode)
  - Thermal and Shot-circuit Protection
  - High Supply Ripple Rejection Ratio
- PoE(Power over Ethernet)
  - IEEE802.3af compliant
  - Input voltage range 36V to 57V
  - Short-circuit Protection

Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone



- LCD Controller
  - One-Chip Solution for amorphous TFT-LCD
  - Support resolution up to 240xRGBx320
  - Built-in 172800 bytes internal RAM
  - 6,8,16, and 18-bit RGB Interface
  - Resize Function (x ½, x ¼)
  - On-Chip Power Management System

- Camera
  - High Sensitivity for low-light operation
  - Output support for Raw RGB, RGB, and YCrCb format
  - Image Size : VGA, QVGA, and any size scaling down from CIF to 40x30
  - Support AEC, AGC,AWB, ABF, ABLC
  - Saturation Level, Edge Enhancement Level, De-noise level Auto adjust

Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone

RISC CPU

High-end DSP

- RF Card Sensor
  - Protocol Supported
    - ISO14443A/B all bit rates
    - > 106,212,424 and 848 kbps
    - Compatible to MiFare Classic
    - ISO15693 all modes
    - > 1.65/6.6 & 26.5 kbps
    - > Uplink 1 & 2 sub-carrier
  - Receiver
    - Rx Sensitivity down to 1mVrms
    - Rx Automatic Gain Control
    - Accept external baseband signal from external circuitry for frame level processing
    - Integrated signal strength indicator (SSI)
    - On-Chip Framing handler for supported standard
  - Transmitter
    - Typical proximity operating distance up to 100mm.
    - Software configurable modulation index
    - Maximum driving current up to 200 mA/PIN @ 5V
    - Accept external baseband signal for RF modulation
    - Wide Transmitter driver supply range from 2.7~7.0V

Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone

RISC CPU

High-end DSP

- Fingerprint Recognition
  - Sensor Type : Capacitive
  - Resolution(dpi) : 508
  - Sensing Area(mm) : 12.8 x18.0
  - Image Size(pixel) : 256 x 360
  - CPU : 400MHz DSP
  - Flash Memory : 4MB
  - ERR : < 0.1%
  - Enrollment Time : 800msec
  - 1:1 Verification Time : 800msec
  - 1:1000 Identification Time : 970msec
  - Template Size : 256~384bytes (configurable, 384bytes default)
  - Template Capacity : 9,000
  - Encryption : 256bit AES

Fingerprint Recognition

Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone

RISC CPU

High-end DSP

Front Side

- Internal Speaker
- Video Camera
- LED Side Light
- TFT LCD Display
- Time & Attendance Menu
- Function & Direction Key
- RF Card Sensor
- SIP Video Call Button
- Status LED
- STILL Chassis
- Fingerprint Recognition
- Internal MIC Input

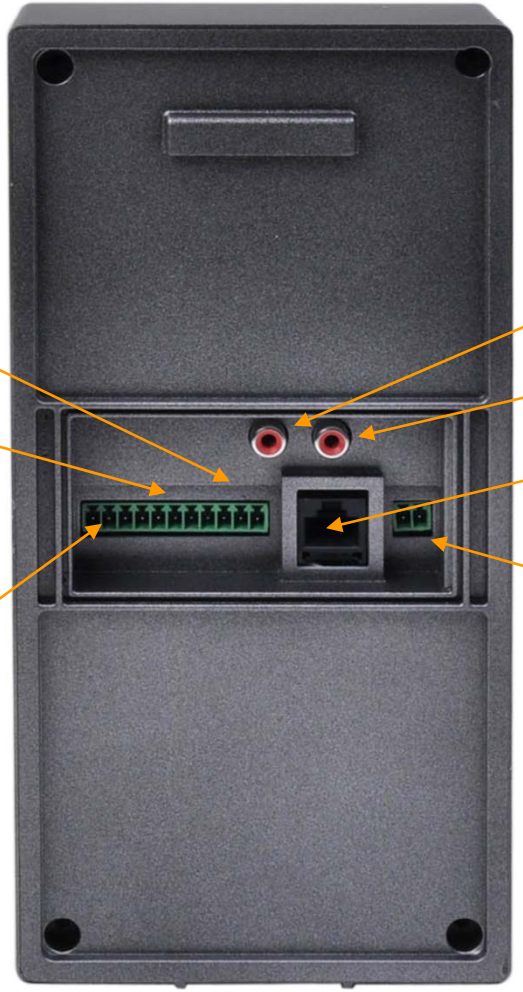
Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone

RISC CPU

High-end DSP

Back Side



RS485

RS232

2 Alarm,2 Relay Out

Option : Line Out

Option : MIC In

LAN Port

Power Input : Terminal Block
12V 1A

Hardware Specification

AP-TAS300 Time Attendance SIP Video Door Phone

RISC CPU

High-end DSP

Power Supply

Terminal Block

12V 1A Power Adaptor

Example

Time Attendance
SIP Voice Door Phone
AP-TAS200

Main Features

AP-TAS200 Time Attendance SIP Voice Door Phone

- Smart Time & Attendance IP Voice Door Phone Solution
- High Performance SIP Voice Door Phone Solution
- Voice Call Button, TFT Color LCD, Internal MIC & Speaker
- High Quality 3.5 Inch LCD, 320 x 240 Video Resolution
- Fingerprint Recognition Support
- RF Card Support
- SIP VoIP Signaling Stack Embedded
- High-performance Video/Voice Codec Support
  - H.264/MPEG4, G.711, etc
- One(1) 10/100Mbps Fast Ethernet
- PoE(Power over Ethernet) Support
- High Quality Speaker Phone Features
- Powerful Acoustic Echo Canceller Chip Embedded
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Advanced Voice QoS Mechanism

Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone

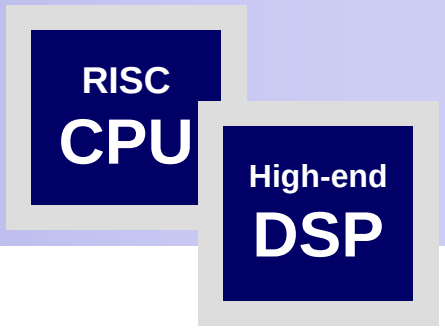
RISC CPU

High-end DSP

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
  - Internal MIC
  - Internal Speaker
- TFT Color LCD Interface
  - 3.5 Inch LCD, 320 x 240 Video Resolution
- Network Interface
  - One(1) 10/100Mbps Fast Ethernet
- Fingerprint Recognition Interface
- RF Card Interface
- Alarm & Relay Out Interface (door open, etc)
- RS232/RS485 Interface
- External RCA Audio Line Out and MIC In (back side)
- STILL Chassis
- Power Supply
  - Power over Ethernet (Option)
  - External Power Supply

Hardware Specification

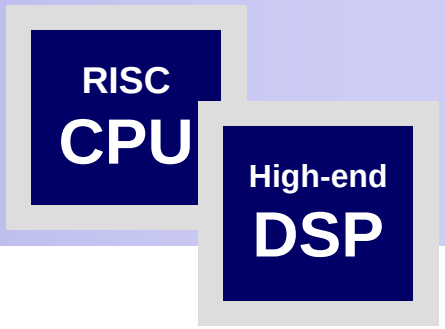
AP-TAS200 Time Attendance SIP Voice Door Phone



- Acoustic Echo Canceller
  - Full-duplex operation during double-talk situations
  - One channel AEC, one channel LEC up to 256ms shared
  - Cancels echoes with up to 10dB echo return
  - Advanced noise reduction(up to 20dB)
- Speaker
  - Impedance : 8 +-15%ohm at 1kHz, 1.0 Vrms
  - Sound Pressure : 90 +- 3dB at 0.1W/10 CM
    at 800Hz, 1.0kHz, 1.2kHz, 1.5kHz
  - Resonance Level : 550Hz +- 20%Hz at Fo Hz, 1.0Vrms
  - Frequency Range : Fo Hz ~20kHz
  - Input Power : Normal : 1.0 W, Max : 2.0W
- Audio Amplifier
  - 1-W BTL Output(5V, 0.11 % THD+N)
  - Uncompensated Gains of 2 to 20 (BTL Mode)
  - Thermal and Shot-circuit Protection
  - High Supply Ripple Rejection Ratio
- PoE(Power over Ethernet)
  - IEEE802.3af compliant
  - Input voltage range 36V to 57V
  - Short-circuit Protection

Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone



- LCD Controller
  - One-Chip Solution for amorphous TFT-LCD
  - Support resolution up to 240xRGBx320
  - Built-in 172800 bytes internal RAM
  - 6,8,16, and 18-bit RGB Interface
  - Resize Function (x ½, x ¼)
  - On-Chip Power Management System

Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone

RISC CPU

High-end DSP

- RF Card Sensor
  - Protocol Supported
    - ISO14443A/B all bit rates
    - > 106,212,424 and 848 kbps
    - Compatible to MiFare Classic
    - ISO15693 all modes
    - > 1.65/6.6 & 26.5 kbps
    - > Uplink 1 & 2 sub-carrier
  - Receiver
    - Rx Sensitivity down to 1mVrms
    - Rx Automatic Gain Control
    - Accept external baseband signal from external circuitry for frame level processing
    - Integrated signal strength indicator (SSI)
    - On-Chip Framing handler for supported standard
  - Transmitter
    - Typical proximity operating distance up to 100mm.
    - Software configurable modulation index
    - Maximum driving current up to 200 mA/PIN @ 5V
    - Accept external baseband signal for RF modulation
    - Wide Transmitter driver supply range from 2.7~7.0V

Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone

RISC CPU

High-end DSP

- Fingerprint Recognition
  - Sensor Type : Capacitive
  - Resolution(dpi) : 508
  - Sensing Area(mm) : 12.8 x18.0
  - Image Size(pixel) : 256 x 360
  - CPU : 400MHz DSP
  - Flash Memory : 4MB
  - ERR : < 0.1%
  - Enrollment Time : 800msec
  - 1:1 Verification Time : 800msec
  - 1:1000 Identification Time : 970msec
  - Template Size : 256~384bytes (configurable, 384bytes default)
  - Template Capacity : 9,000
  - Encryption : 256bit AES

Fingerprint Recognition

Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone

RISC CPU

High-end DSP

Front Side

Internal Speaker

TFT LCD Display

Time & Attendance Menu

Function & Direction Key

RF Card Sensor

SIP Voice Call Button

Status LED

STILL Chassis

Fingerprint Recognition

Internal MIC Input

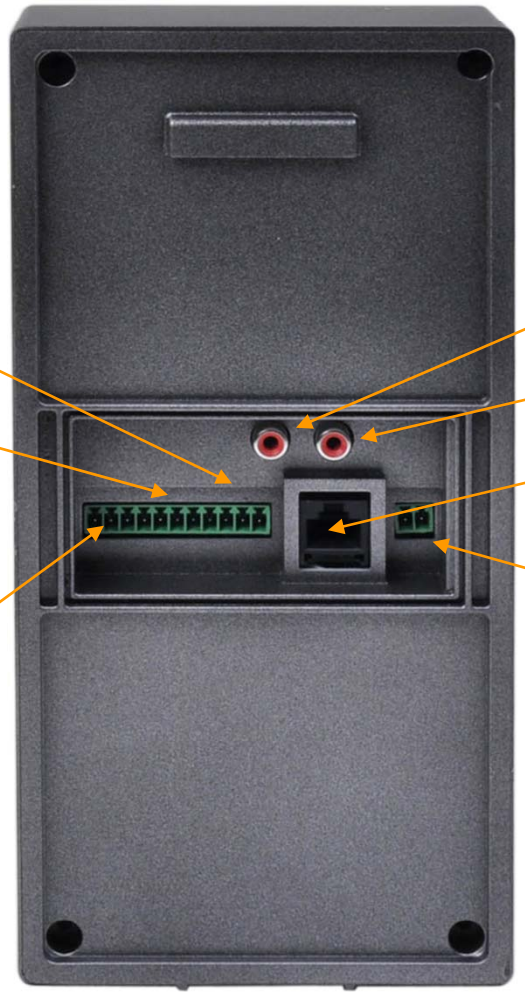
Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone

RISC CPU

High-end DSP

Back Side



RS485

RS232

2 Alarm,2 Relay Out

Option : Line Out

Option : MIC In

LAN Port

Power Input : Terminal Block
12V 1A

Hardware Specification

AP-TAS200 Time Attendance SIP Voice Door Phone

RISC CPU

High-end DSP

Power Supply

Terminal Block

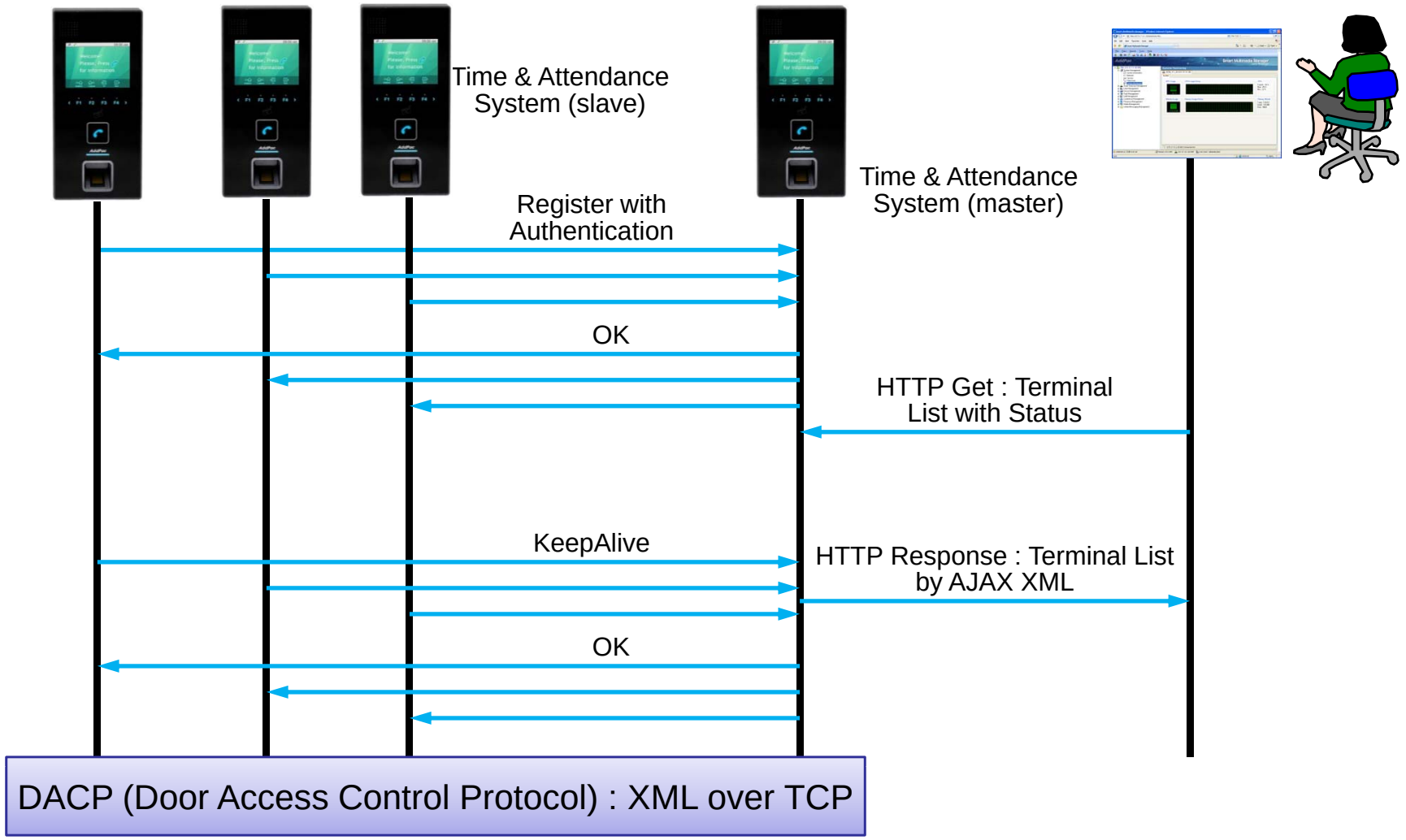
12V 1A Power Adaptor

Example

Time Attendance System Message Flow

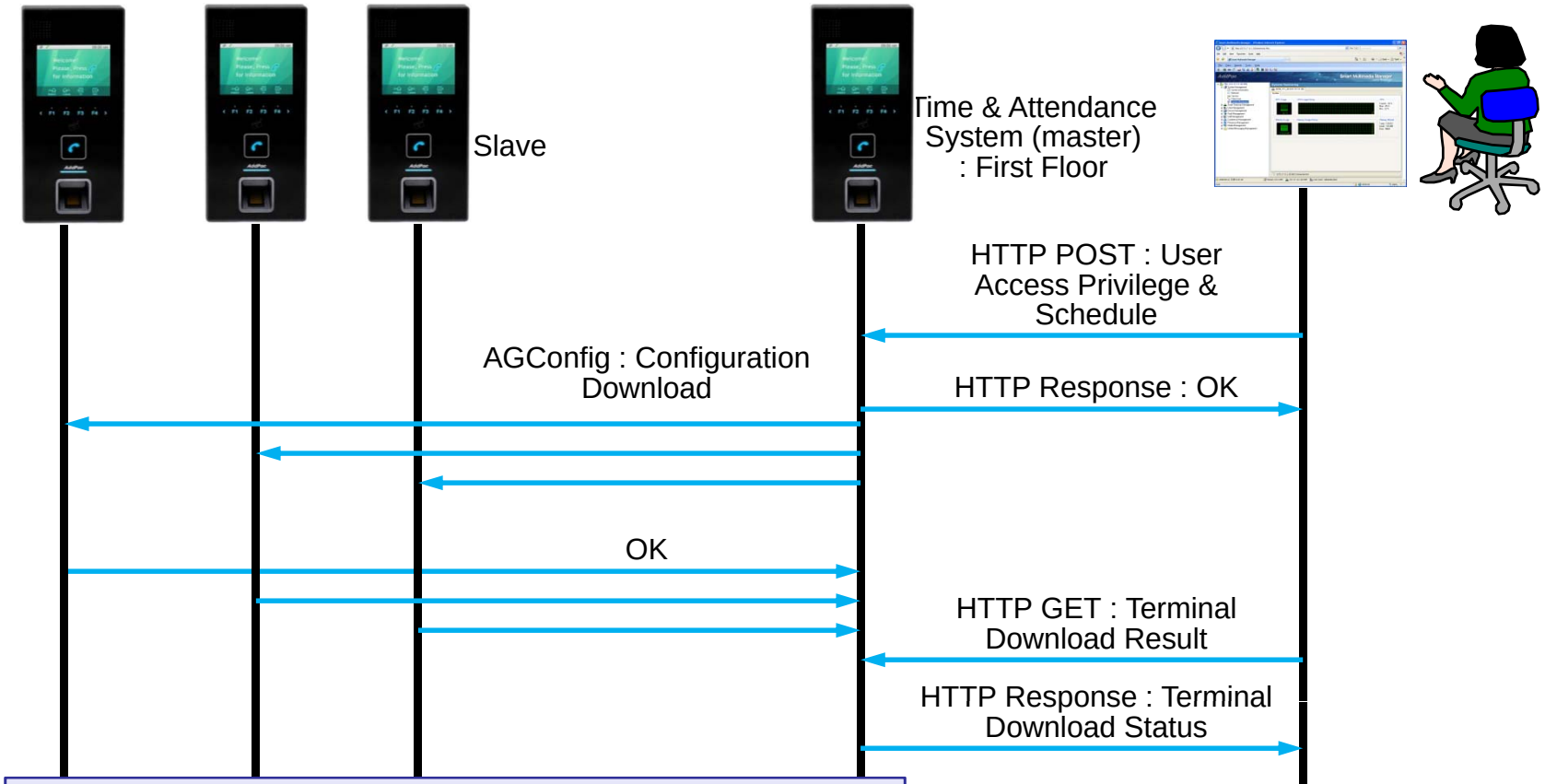
Time & Attendance System Message Flow

Registration and KeepAlive



Time & Attendance System Message Flow

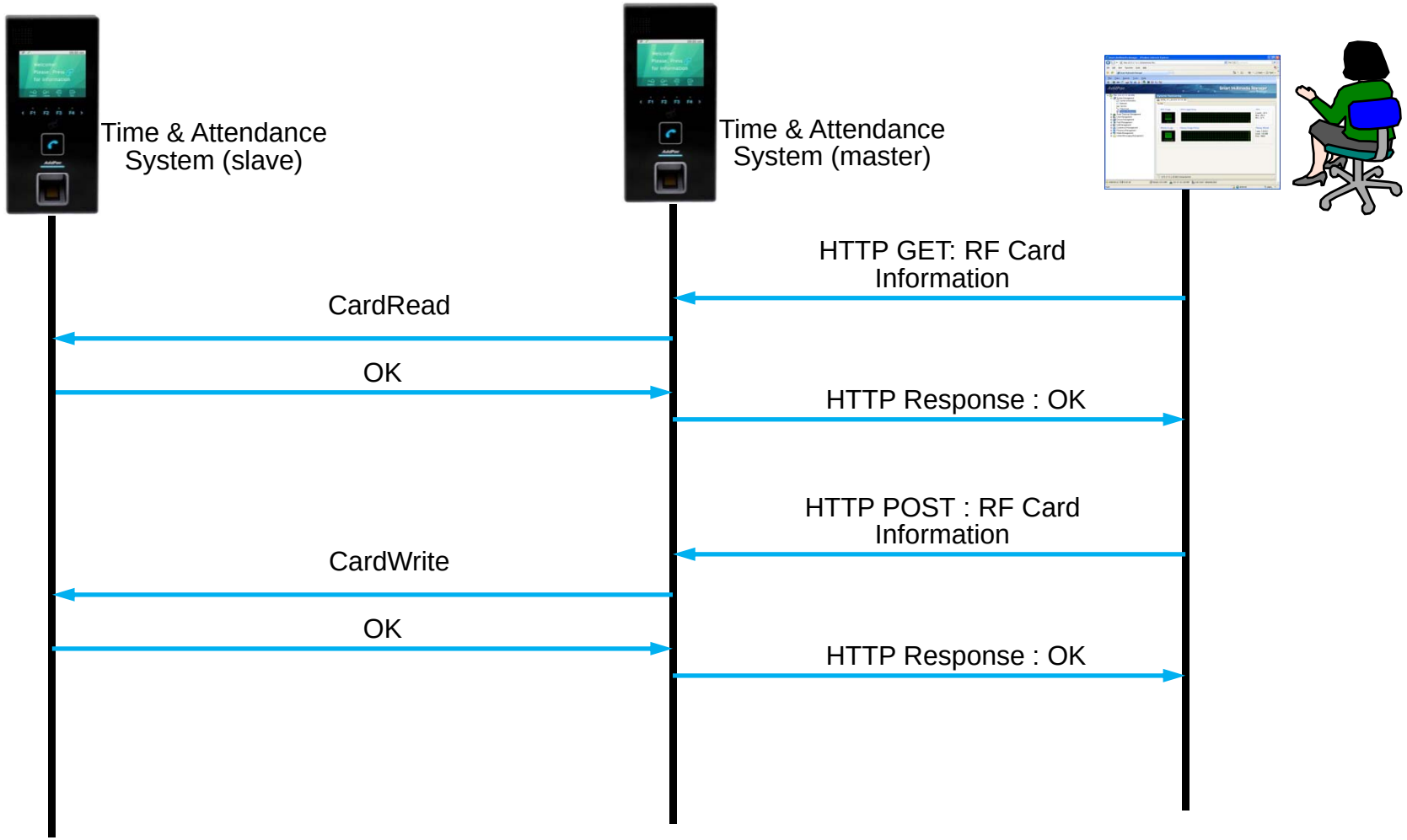
Access Privilege and Schedule Download



DACP Handle Full or Partial Configuration Download for Supporting Efficient and Large Scale Network

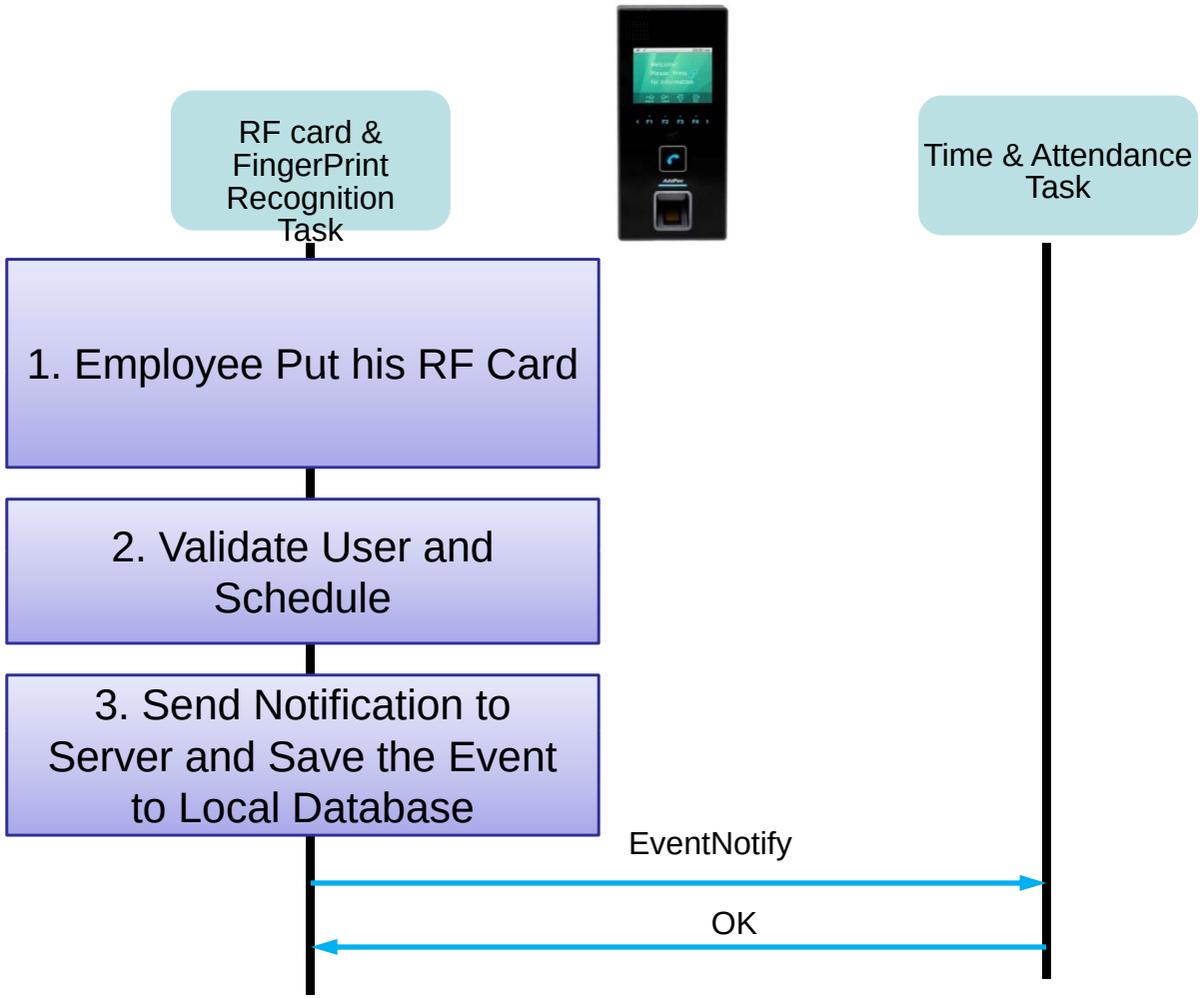
Time & Attendance System Message Flow

RF Card Read/Write and Registration



Time & Attendance System Message Flow

Door Open by RF Card



Time & Attendance System Message Flow

Door Open by Other Terminal

Time & Attendance
System (master)

AP-IP230
IP Phone

1. Visitor Call to Attendant or a User

INVITE

200 OK

2. Talk to Visitor and Push Door Open Softkey

INFO (Door Open)

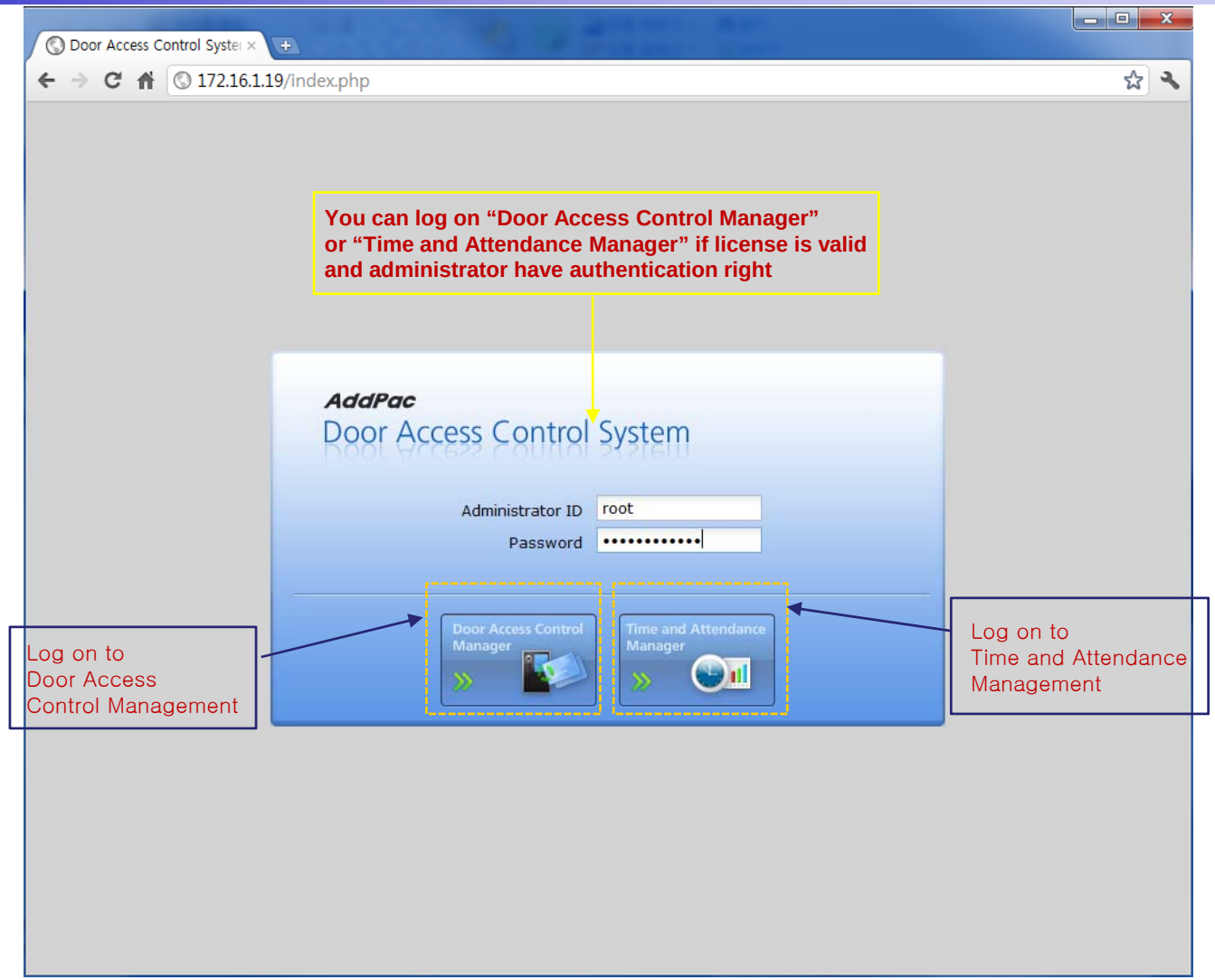
200 OK

3. Send Notification to Server and Save the Event to Local Database

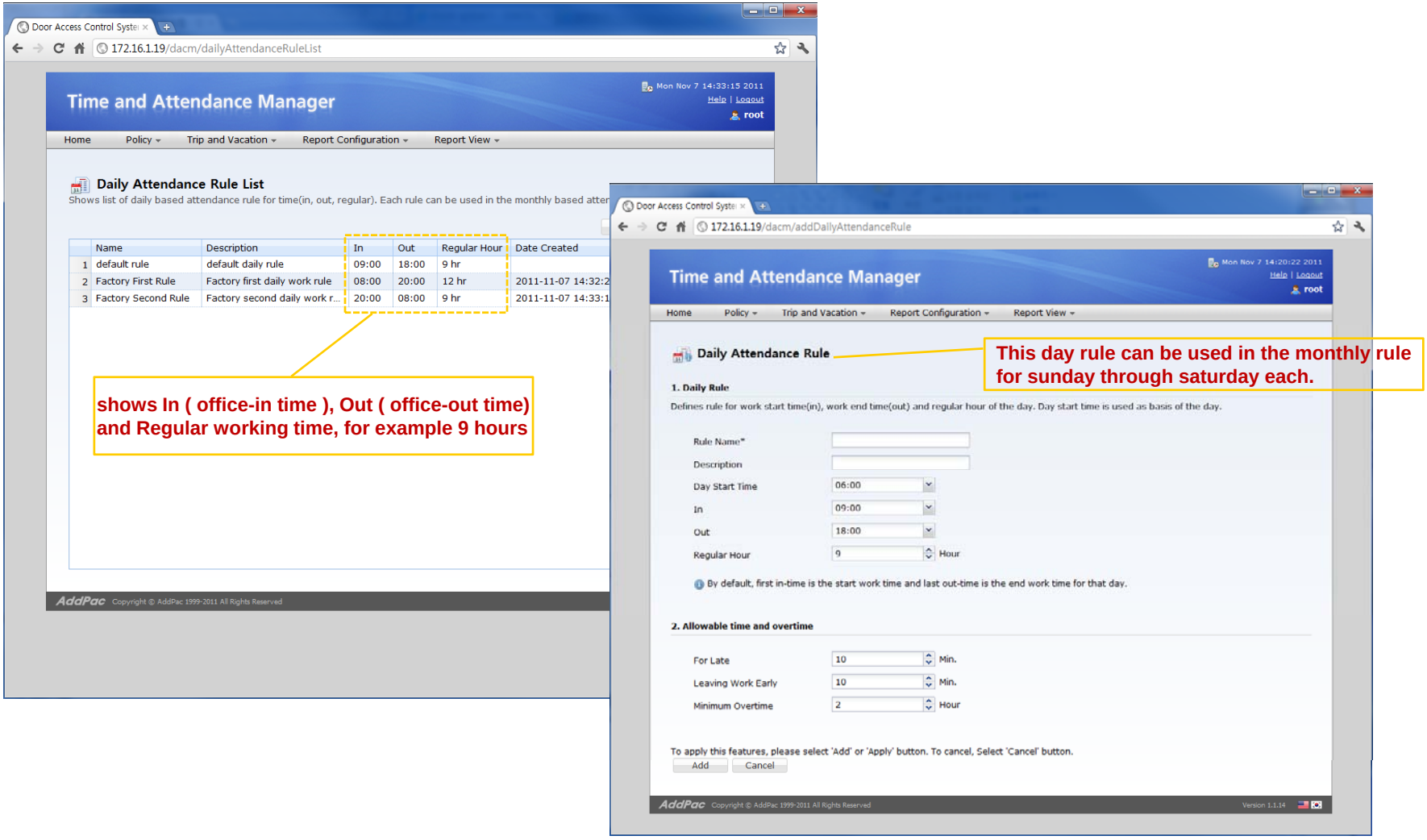
Time Attendance Embedded Web Manager Software

DACS (Door Access Control System)

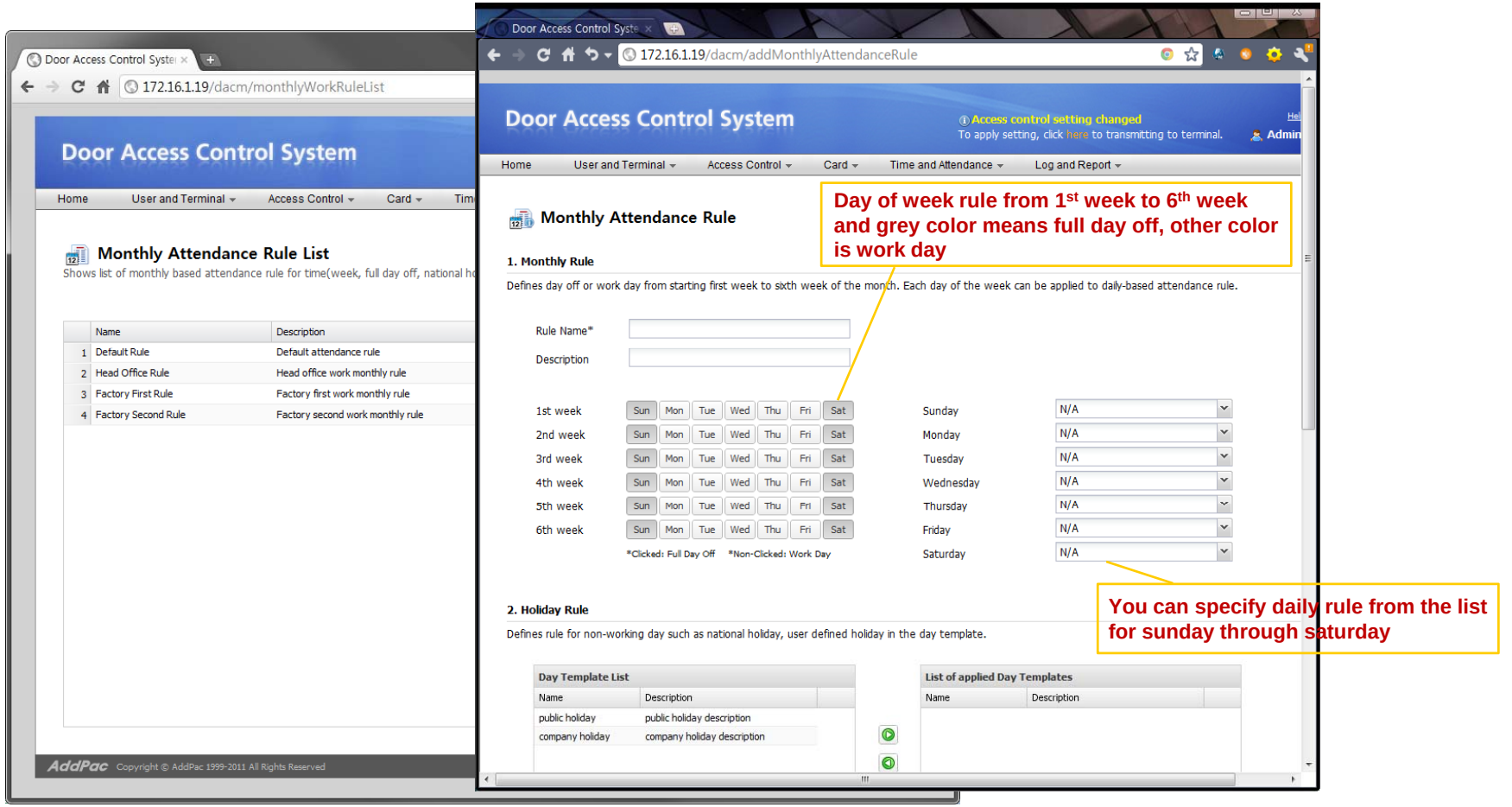
Login page



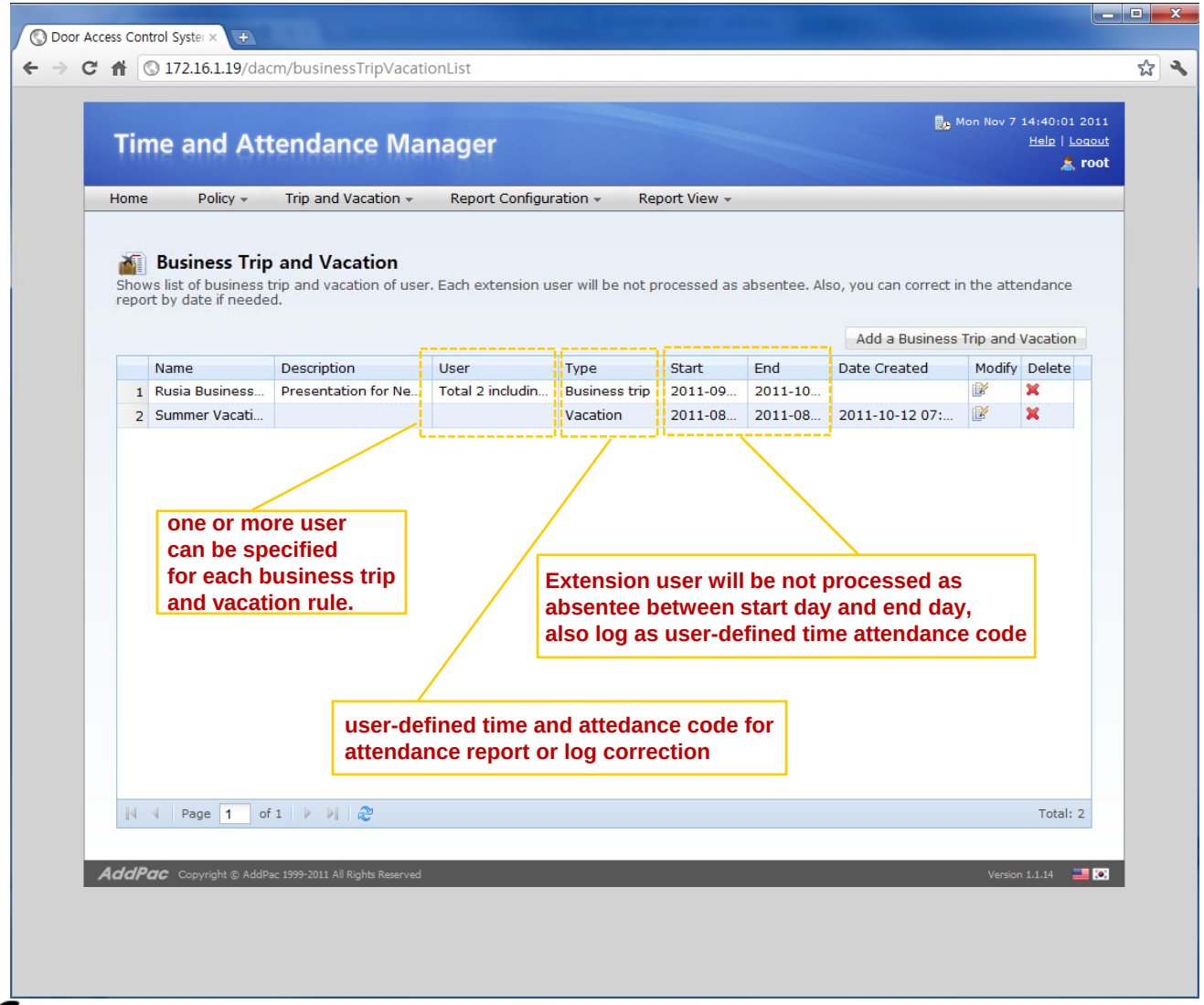
TAAM (Time and Attendance Manager)
Daily Attendance Rules



TAAM (Time and Attendance Manager)
Monthly Attendance Rules

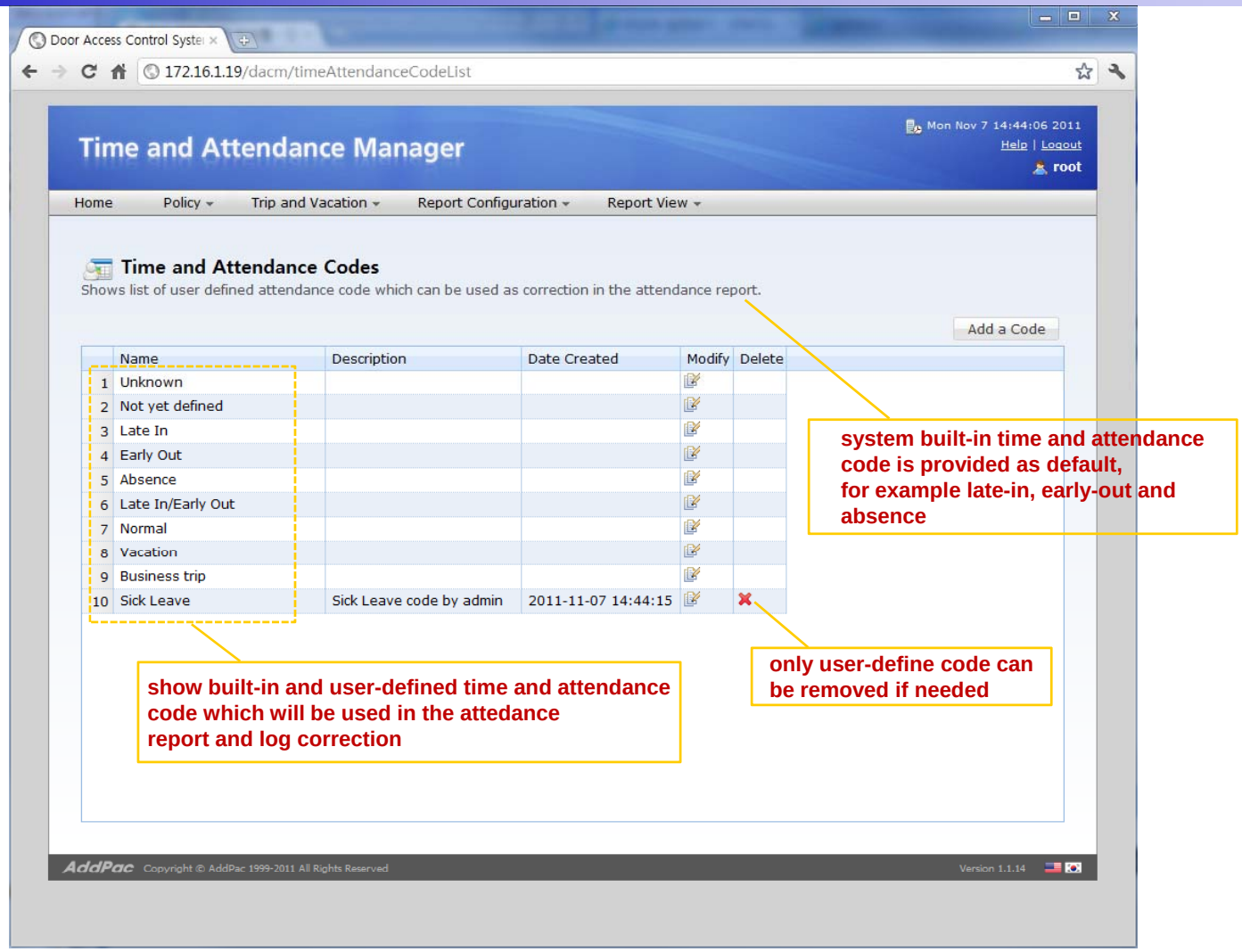


TAAM (Time and Attendance Manager)
Business Trip and Vacation



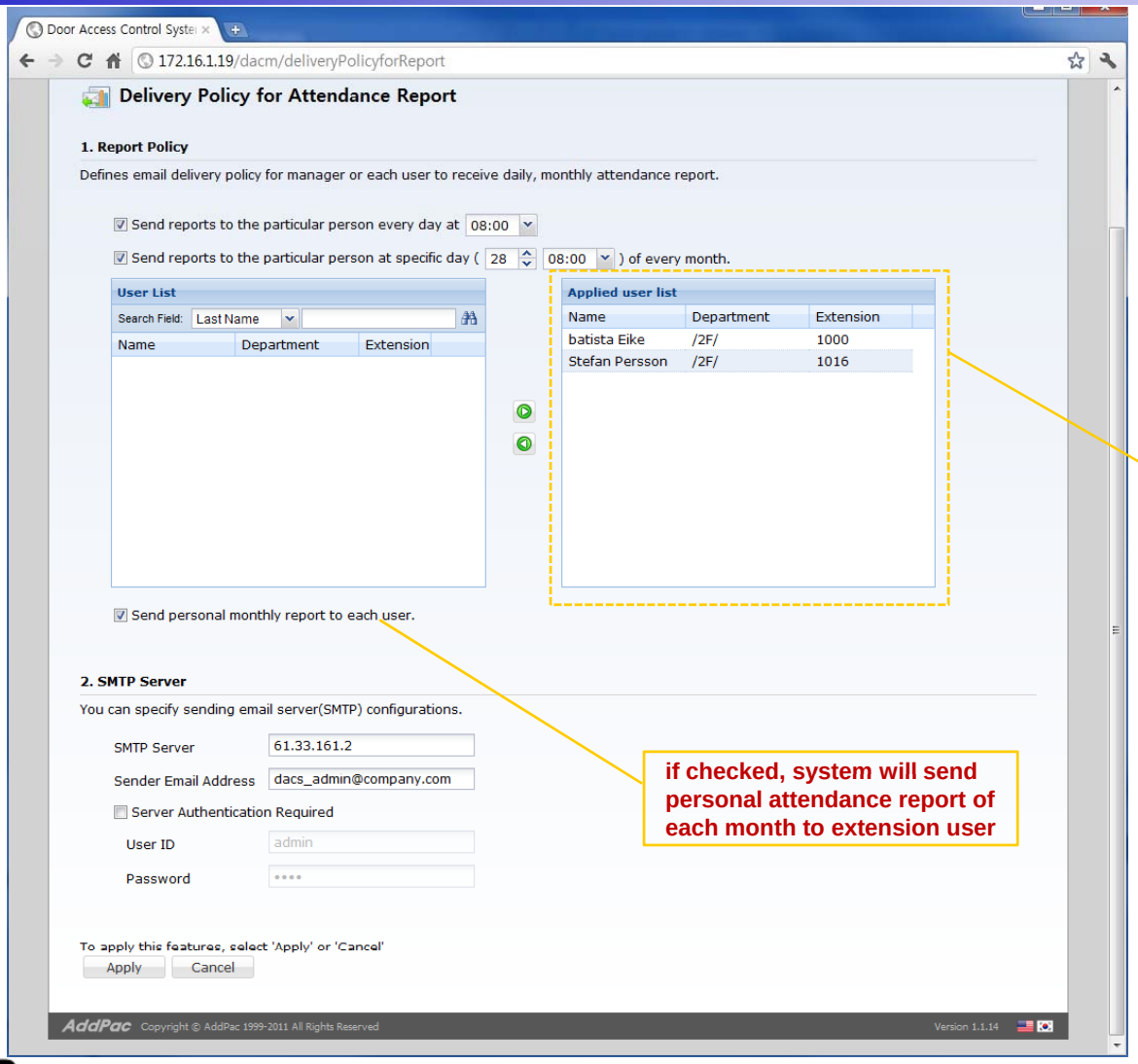
TAAM (Time and Attendance Manager)

Time and Attendance Codes



TAAM (Time and Attendance Manager)

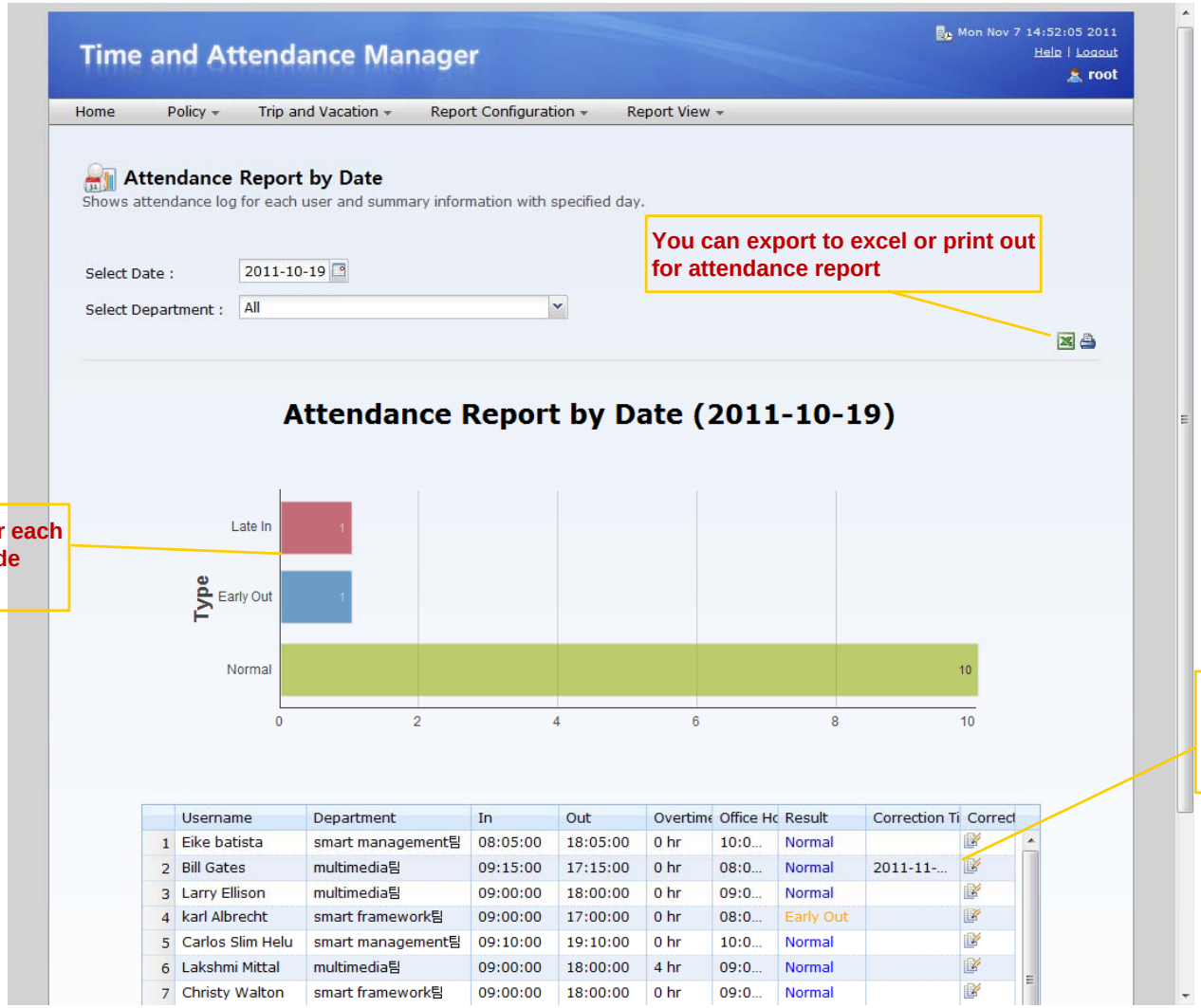
Delivery Policy for Attendance Report



manager level users (extension) list who want to receive daily and monthly attendance report

if checked, system will send personal attendance report of each month to extension user

TAAM (Time and Attendance Manager)
Attendance Report by Date



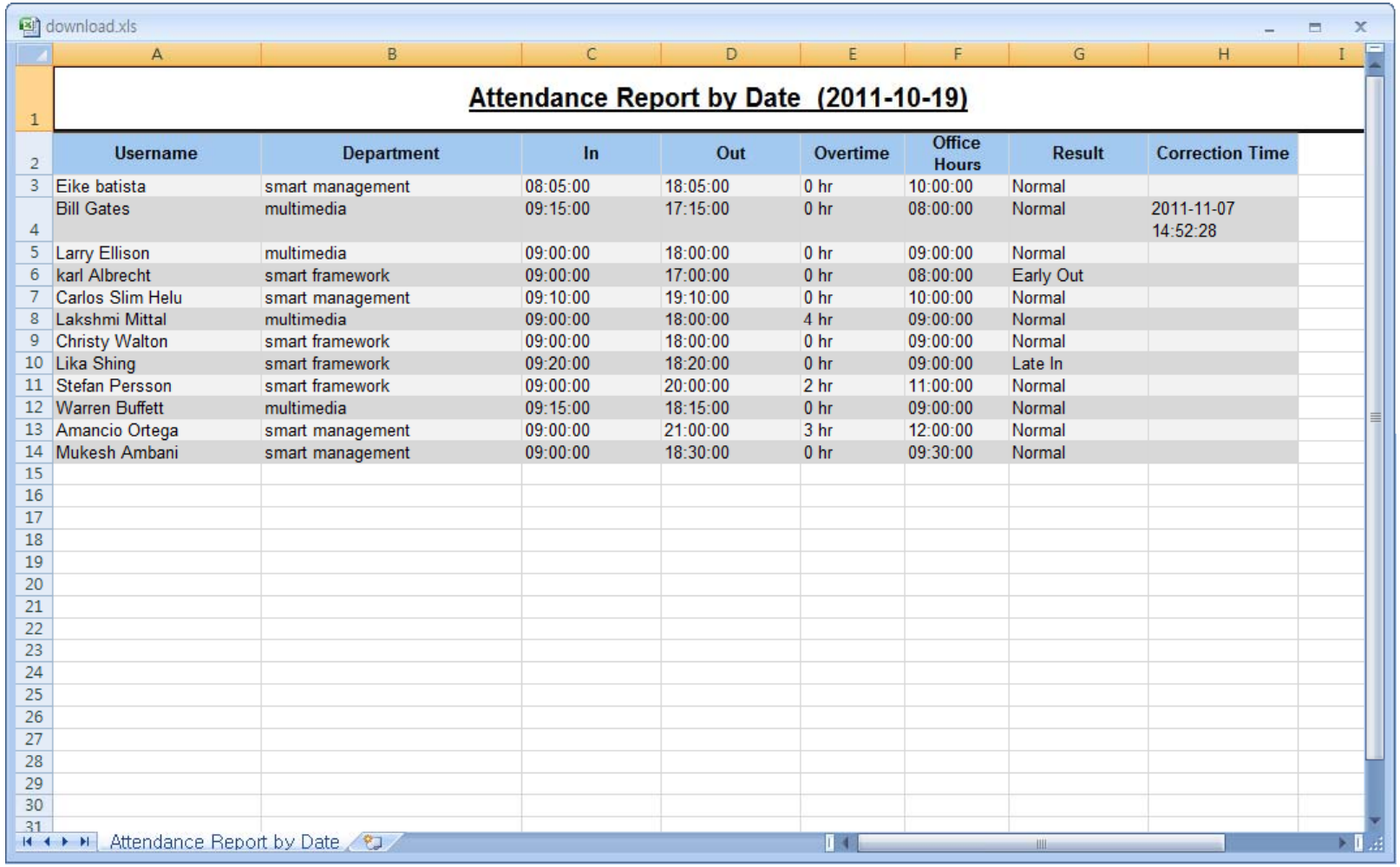
You can export to excel or print out for attendance report

attendance summary for each time and attendance code with specified date

administrator may adjust or correct attendance log which system have processed if necessary

TAAM (Time and Attendance Manager)

Attendance Report Excel Export



download.xls

Attendance Report by Date (2011-10-19)

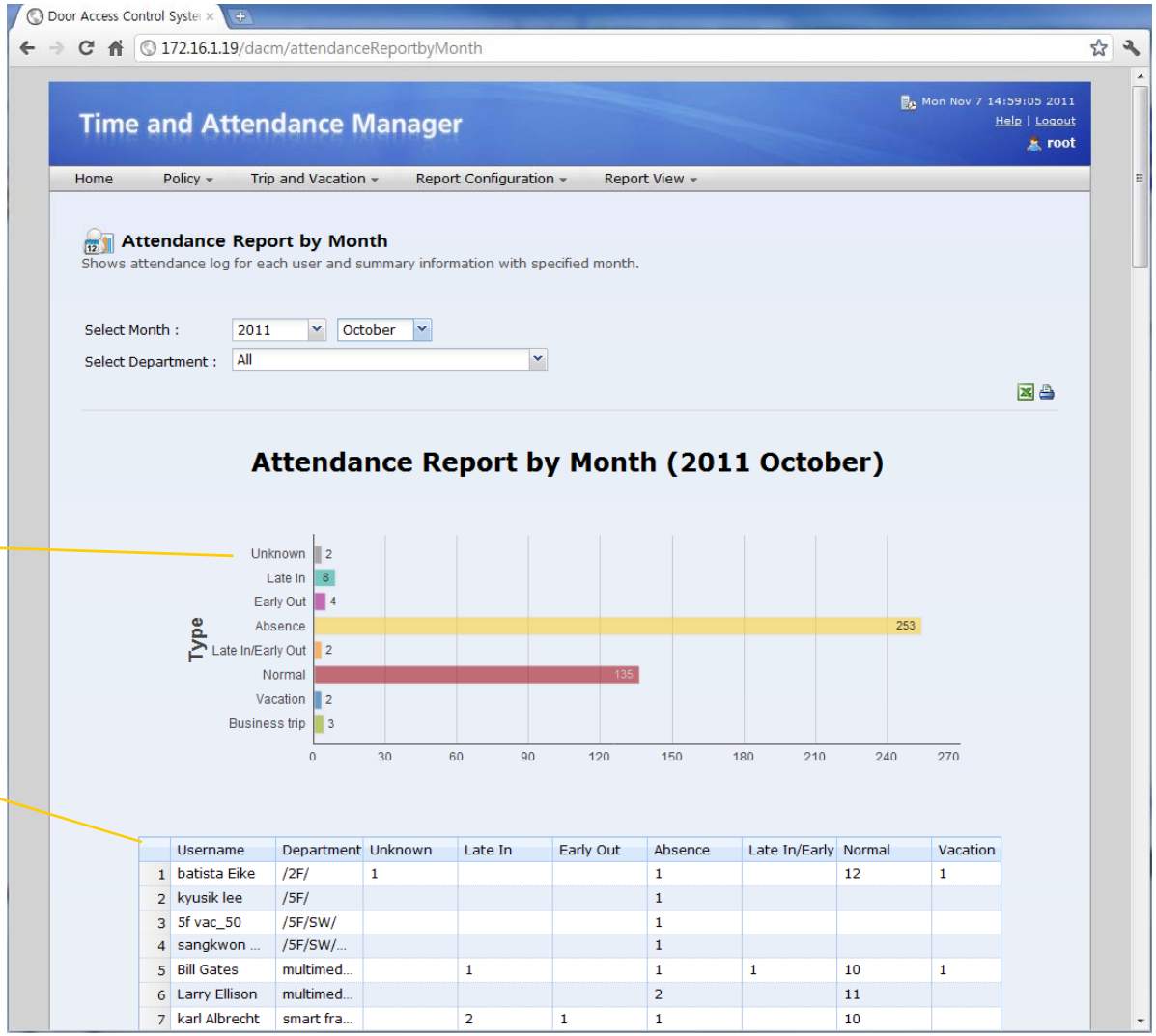
Username	Department	In	Out	Overtime	Office Hours	Result	Correction Time
Eike batista	smart management	08:05:00	18:05:00	0 hr	10:00:00	Normal	
Bill Gates	multimedia	09:15:00	17:15:00	0 hr	08:00:00	Normal	2011-11-07 14:52:28
Larry Ellison	multimedia	09:00:00	18:00:00	0 hr	09:00:00	Normal	
karl Albrecht	smart framework	09:00:00	17:00:00	0 hr	08:00:00	Early Out	
Carlos Slim Helu	smart management	09:10:00	19:10:00	0 hr	10:00:00	Normal	
Lakshmi Mittal	multimedia	09:00:00	18:00:00	4 hr	09:00:00	Normal	
Christy Walton	smart framework	09:00:00	18:00:00	0 hr	09:00:00	Normal	
Lika Shing	smart framework	09:20:00	18:20:00	0 hr	09:00:00	Late In	
Stefan Persson	smart framework	09:00:00	20:00:00	2 hr	11:00:00	Normal	
Warren Buffett	multimedia	09:15:00	18:15:00	0 hr	09:00:00	Normal	
Amancio Ortega	smart management	09:00:00	21:00:00	3 hr	12:00:00	Normal	
Mukesh Ambani	smart management	09:00:00	18:30:00	0 hr	09:30:00	Normal	

Attendance Report by Date

TAAM (Time and Attendance Manager)
Attendance Report by Month

attendance summary for each time and attendance code with specified month

attendance summary for each extension user

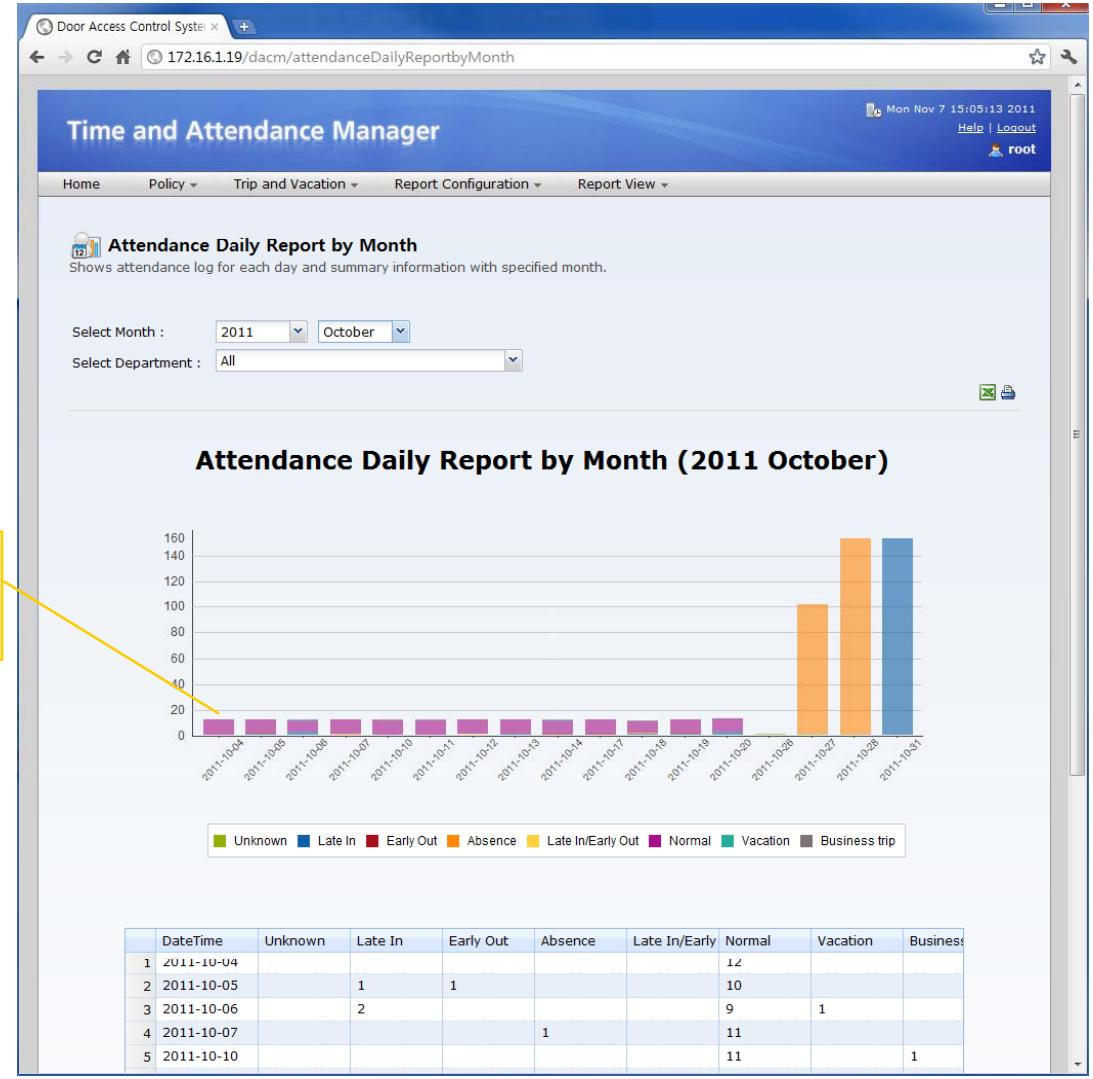


	Username	Department	Unknown	Late In	Early Out	Absence	Late In/Early	Normal	Vacation
1	batista Eike	/2F/	1			1		12	1
2	kyusik lee	/5F/				1			
3	5f vac_50	/5F/SW/				1			
4	sangkwon ...	/5F/SW/...				1			
5	Bill Gates	multimed...		1		1	1	10	1
6	Larry Ellison	multimed...				2		11	
7	karl Albrecht	smart fra...		2	1	1		10	

TAAM (Time and Attendance Manager)

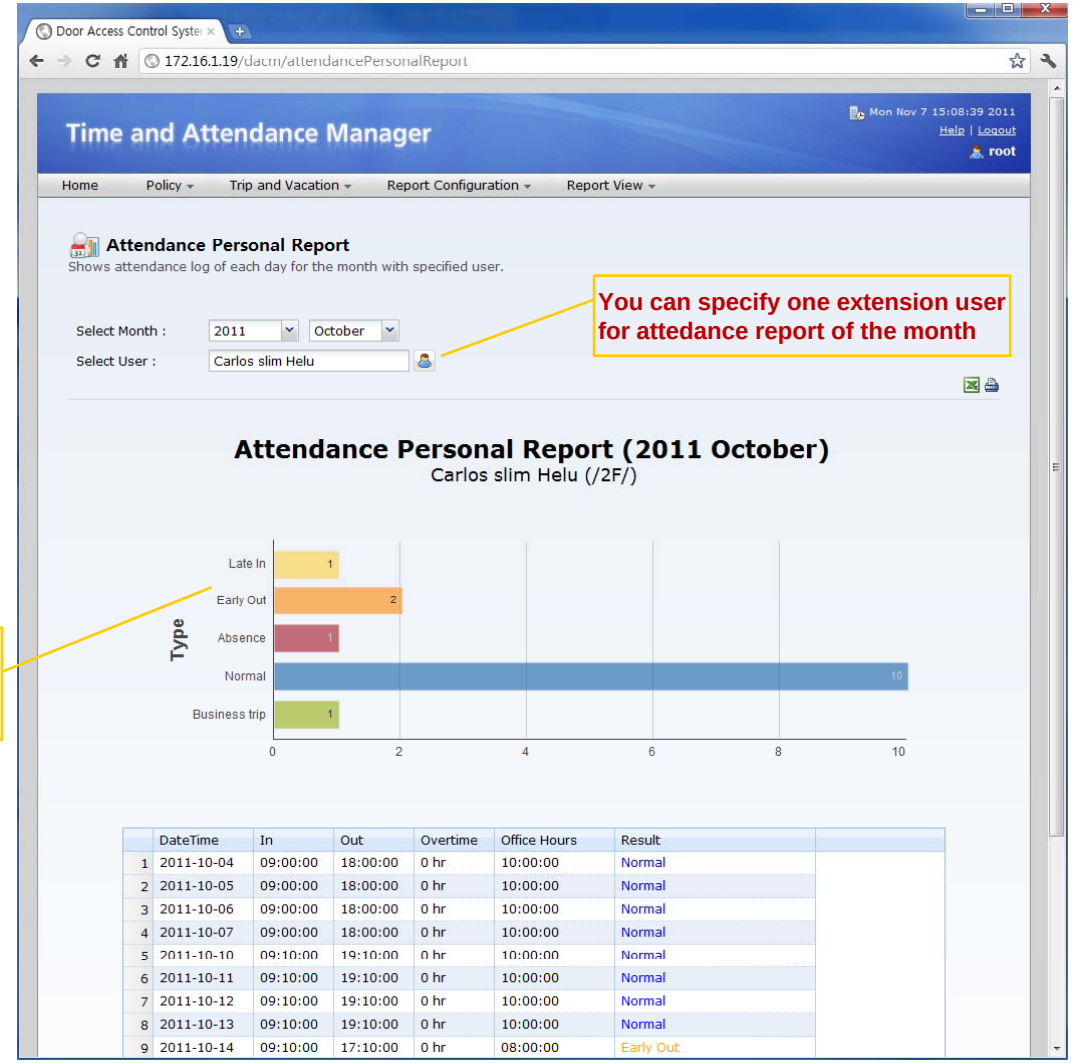
Attendance Daily Report by Month

clustered column of attendance summary with time span from first to end of the month



TAAM (Time and Attendance Manager)

Attendance Personal Report



You can specify one extension user for attedance report of the month

attendance summary for time and attendance code of a extension user

Thank you!

AddPac Technology Co., Ltd.
Sales and Marketing

Phone +82.2.568.3848 (KOREA)
FAX +82.2.568.3847 (KOREA)
E-mail : sales@addpac.com