

# AP-TAS300 Time & Attendance IP Video Door Phone

High Performance Time & Attendance IP Video Door Phone Solution



**AddPac**

**AddPac Technology**

2014, Sales and Marketing

[www.addpac.com](http://www.addpac.com)

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- Hardware Specification
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# Product Overview

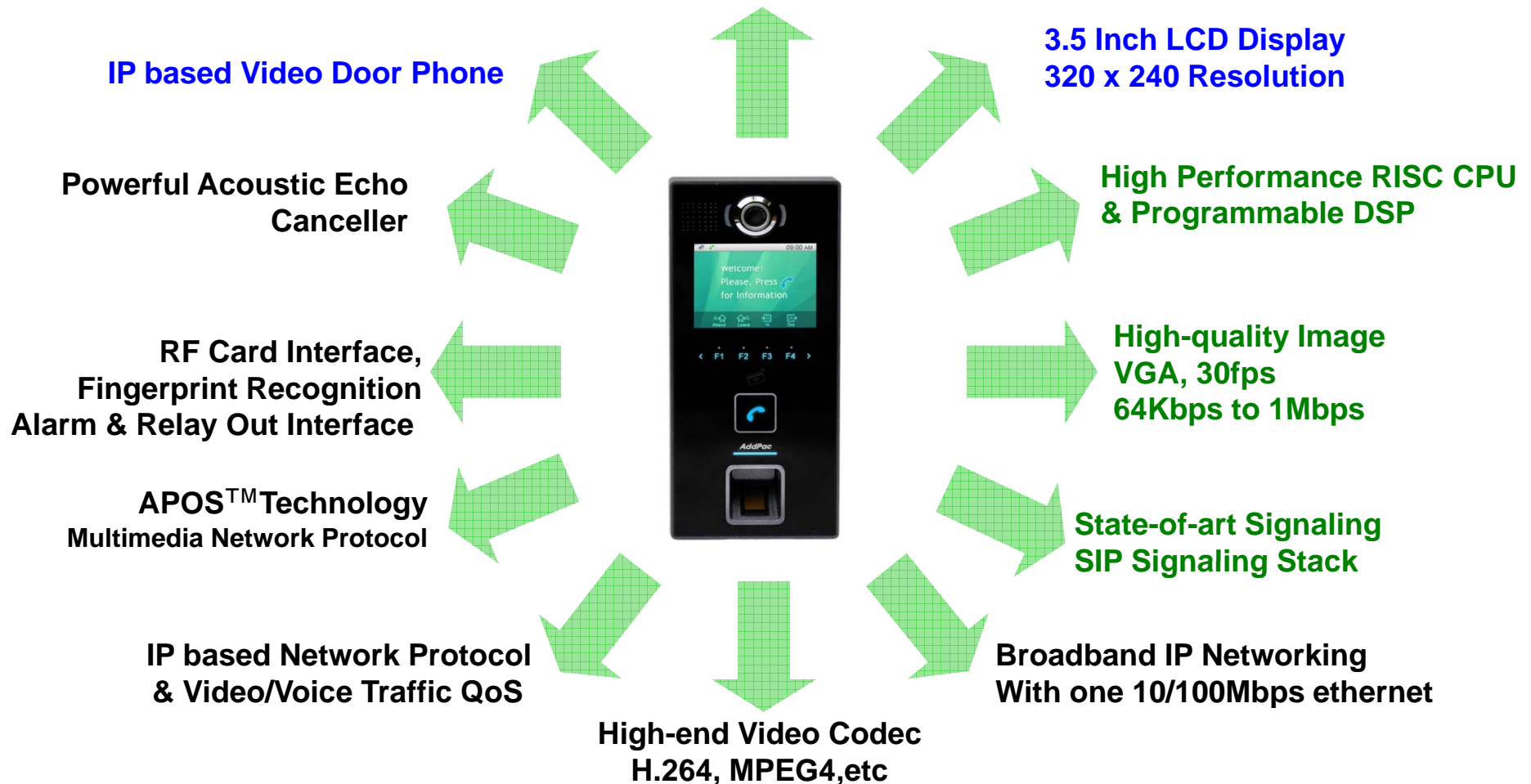
## AP-TAS300 Time & Attendance IP Video Door Phone

- 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

# Product Highlights

AP-TAS300 Time & Attendance IP Video Door Phone

## Smart Time & Attendance IP Video Door Phone

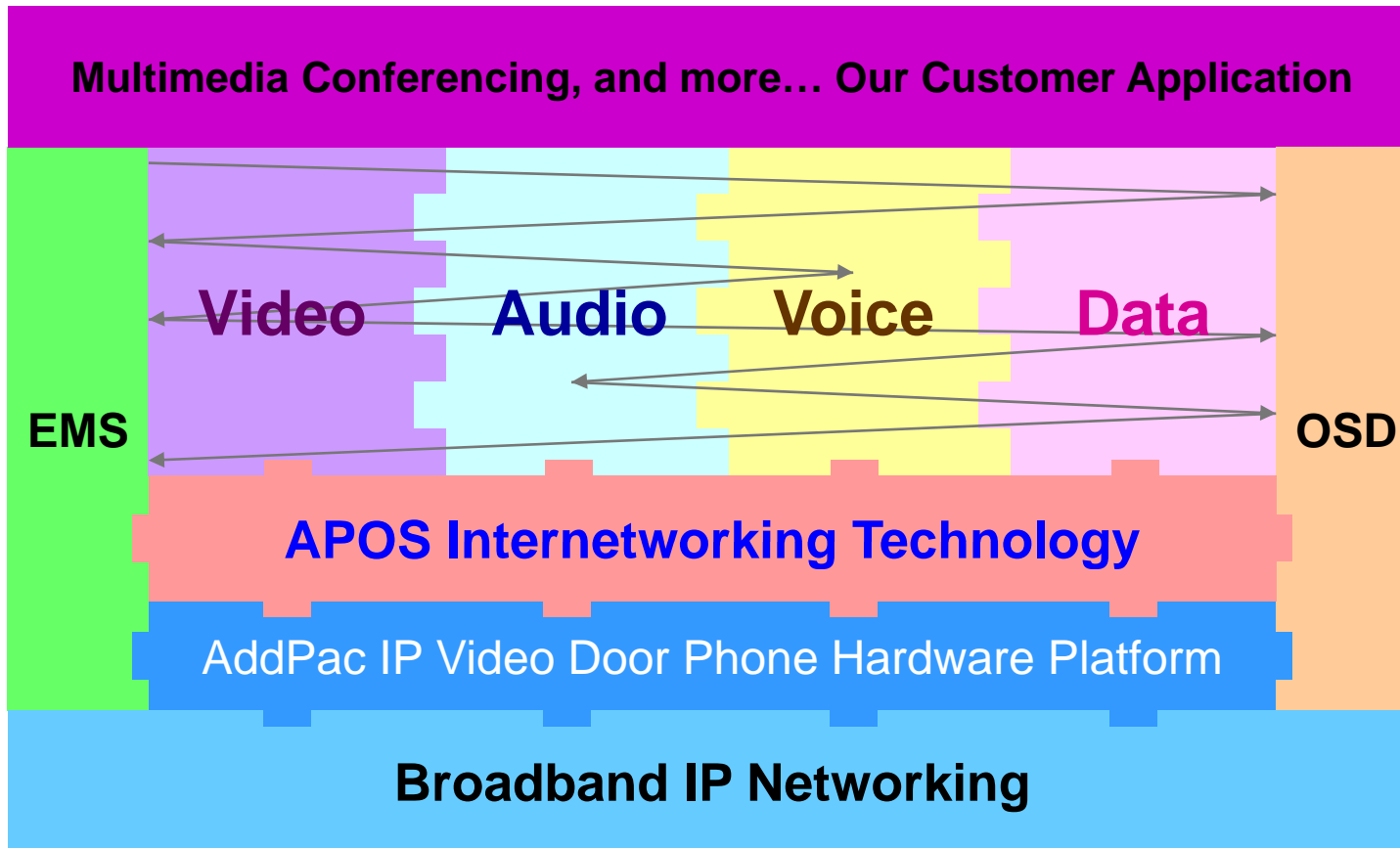


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# Multimedia Service

AP-TAS300 Time & Attendance IP Video Door Phone



- APOS : AddPac Internetworking Operating System
- OSD : On- Screen Display
- EMS : Element Management System

# Hardware Specification

## AP-TAS300 Time & Attendance IP Video Door Phone

RISC  
CPU

High-end  
DSP

- 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)
- Steel Chassis
- Power Supply
  - Power over Ethernet (Option)
  - External Power Supply



# Hardware Specification

AP-TAS300 Time & Attendance IP Video Door Phone

RISC  
CPU

High-end  
DSP

- **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 IP Video Door Phone

RISC  
CPU

High-end  
DSP

- **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

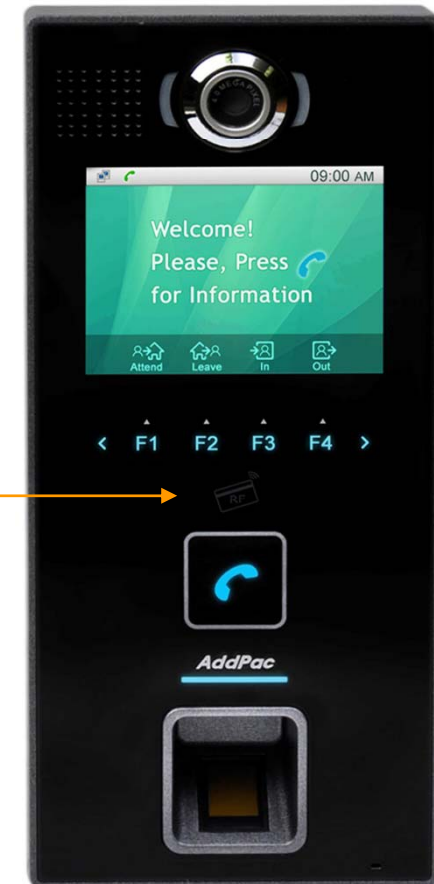
AP-TAS300 Time & Attendance IP Video Door Phone

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

RF Card Sensor



# Hardware Specification

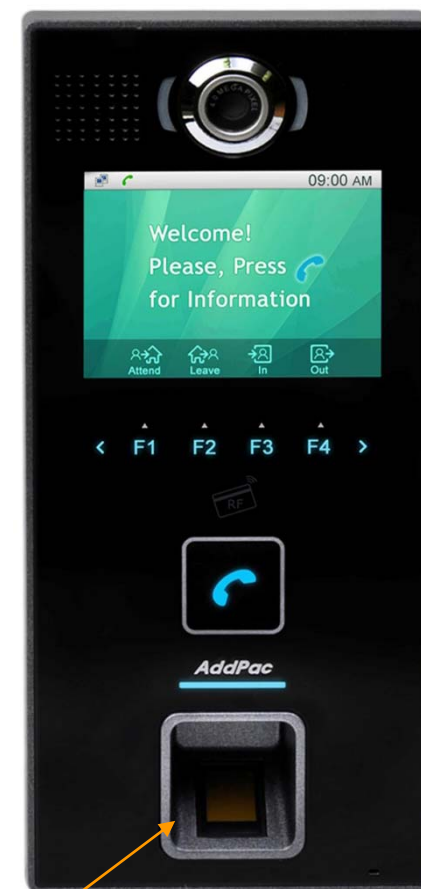
AP-TAS300 Time & Attendance IP Video Door Phone

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 IP Video Door Phone

RISC  
CPU

High-end  
DSP

Front Side

Internal Speaker

Video Camera

LED Side Light

RF Card Sensor

Status LED

Fingerprint  
Recognition

TFT LCD Display

Time & Attendance Menu

Function & Direction Key

SIP Video Call Button

Steel Chassis

Internal MIC Input

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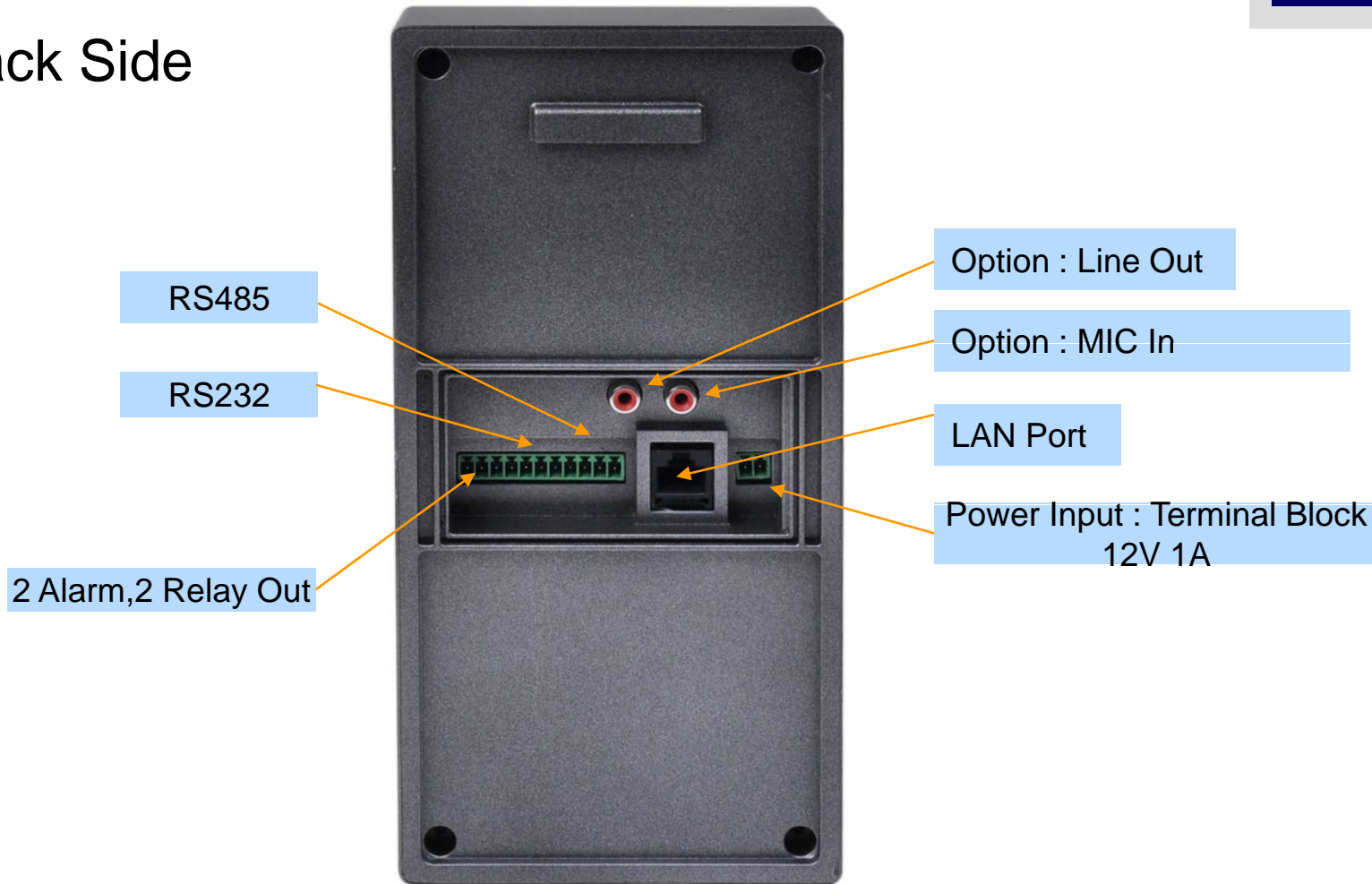
# Hardware Specification

AP-TAS300 Time & Attendance IP Video Door Phone

RISC  
CPU

High-end  
DSP

## Back Side



# Hardware Specification

AP-TAS300 Time & Attendance IP Video Door Phone

RISC  
CPU

High-end  
DSP

## Power Supply

Terminal Block



12V 1A Power Adaptor

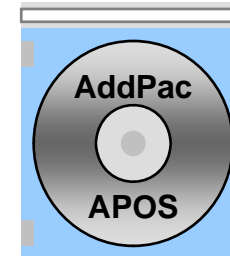
Example



# Software Service

AP-TAS300 Time & Attendance IP Video Door Phone

- **Built-in AddPac APOS Internetworking Software**
  - Scalability, Functionality, and Stability Features
  - Video Traffic QoS Control
- **Programmable Video, Audio, and Voice Services**
  - Video Codes, Audio, and Voice Codec
- **Firmware Upgradeable DSP Architecture**
- **OSD (On-screen Display) Function Support**
- **Industry Standard IP based Network Protocol Features**



# Video Service and Features

AP-TAS300 Time & Attendance IP Video Door Phone

- **High-performance Video Codec Support**
  - H.264, etc
- **Image Resolution Support**
  - Local Display : 160 x 120
  - Remote Display : 240 x 160
  - Video Encoding : VGA(640x480), QVGA(320x240)
- **Up to 30fps with VGA Resolution**
- **128Kbps to 1Mbps Operating Video Traffic Bandwidth**
- **Rate Control for Video Traffic QoS**
  - Ensuring Optimized Quality
  - Frame Rate with Limited Bandwidth
- **High-end Error Resilient Against Various Packet Error**

# Audio & Voice Service and Features

AP-TAS300 Time & Attendance IP Video Door Phone

- **Audio & Voice Networking Interface**
  - External Audio Line-Out Interface (RCA Connector)
  - External Audio MIC-In Interface (RCA Connector)
- **VoIP based Signaling Protocol Support**
  - SIP Signaling Protocol Stack
- **High-performance Audio & Voice Codec Support**
  - G.711, G.726 Audio Codec
- **Enhanced QoS Management Features for Voice Traffics**





# Smart Web Manager (Example)

# Smart Web Manager

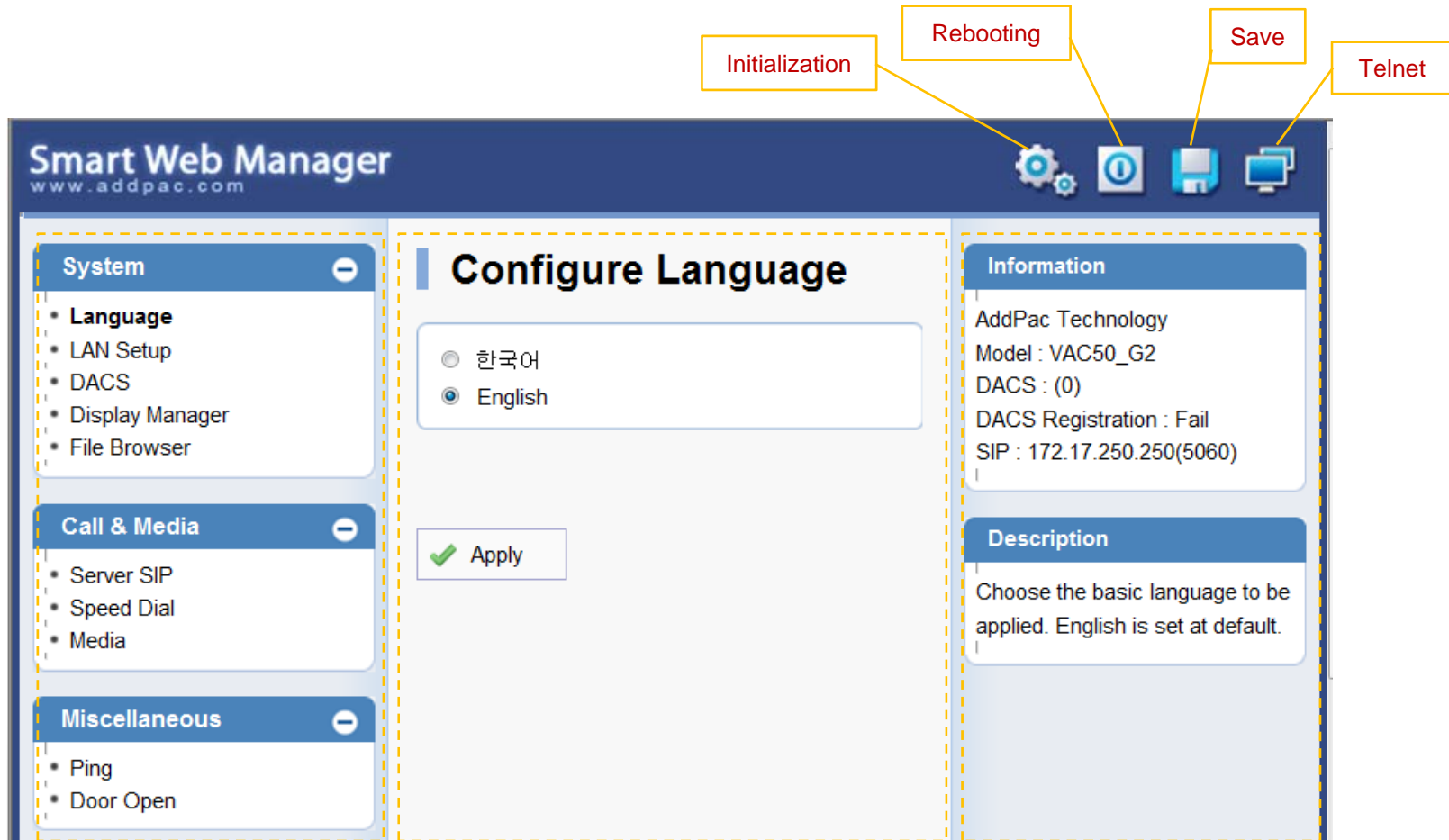
AP-TAS300 Time & Attendance IP Video Door Phone

- Main Screen
- System
  - Language
  - LAN Setup
  - DACS
  - Display
  - File Browser
- SIP Call & Media
  - SIP (Session Initiation Protocol)
  - Speed Dial
  - Media
- Miscellaneous
  - Door Control and Test
  - Network Test



# Smart Web Manager : Main Screen

AP-TAS300 Time & Attendance IP Video Door Phone



Menu Tree

Output Screen after  
Menu Select

System Information and  
Help Message

# Smart Web Manager : SIP configuration

AP-TAS300 Time & Attendance IP Video Door Phone

## SIP (Session Initiation Protocol)

SIP server check if exist.

SIP Basic Information Display

Telephone Line Number and Password Configuration  
Same Information is used when DACS is connected

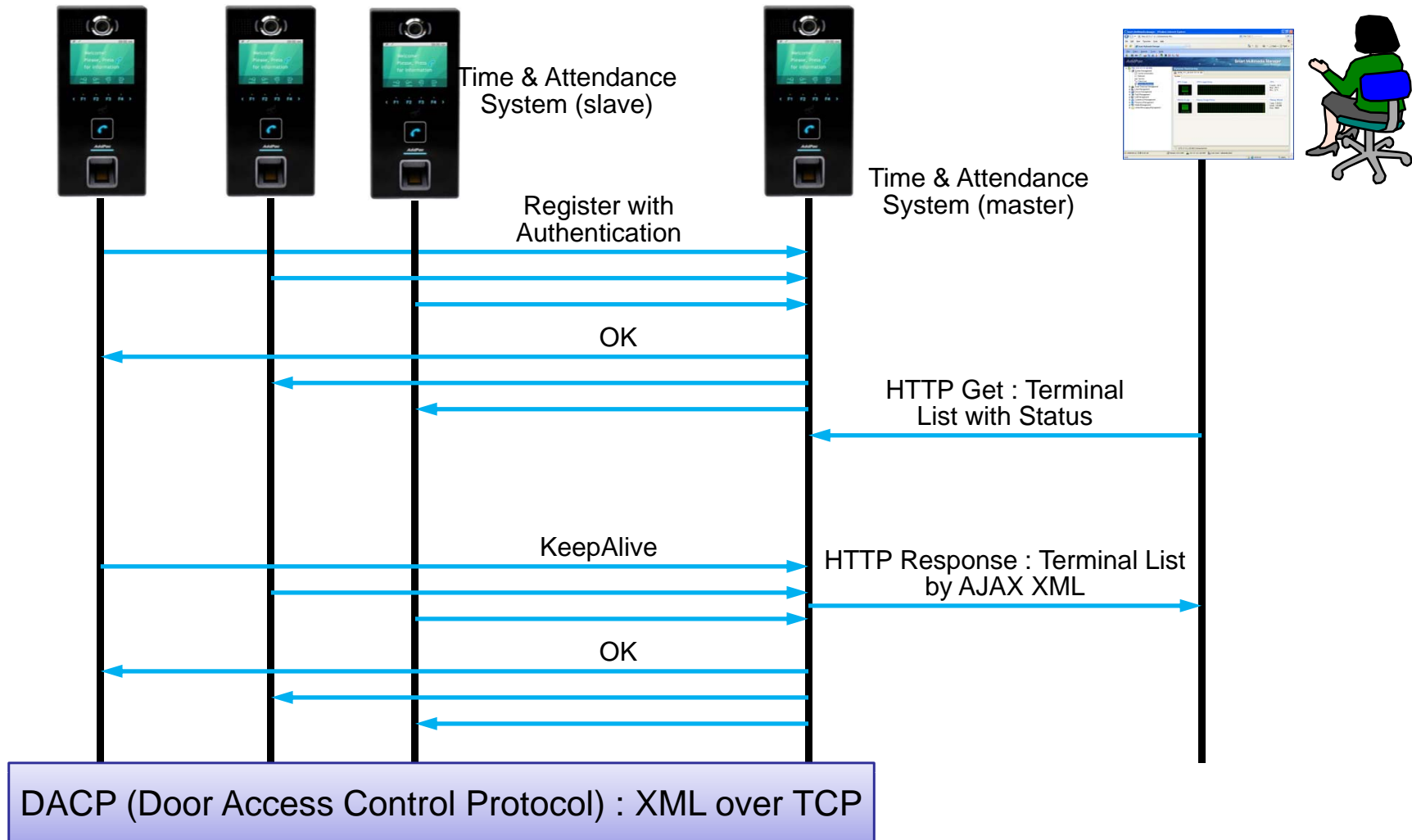
<b>Use SIP Server</b>	<input checked="" type="radio"/> Yes <input type="radio"/> No
<b>Primary SIP Server</b>	<input type="text" value="172.17.250.250"/> <input type="text" value="5060"/> Server address and Port (default 5060)
<b>Secondary SIP Server</b>	<input type="text"/> <input type="text" value="5060"/> Server address and Port (default 5060)
<b>Local Domain Name</b>	<input type="text"/> (SIP userpart of authentication)
<b>SIP Signaling Port</b>	<input type="text" value="5060"/> (default 5060, between 1 to 65535)
<b>Register Expiration</b>	<input type="text" value="60"/> (in seconds, default 60, between 10 to 86400)
<b>Session Re-Fresh</b>	<input checked="" type="radio"/> INVITE <input type="radio"/> UPDATE
<b>Session Expire Time</b>	<input type="text" value="1800"/> (in seconds, default 1800, between 30 to 86400, 0 = disable)
<b>Min-SE</b>	<input type="text" value="1800"/> (in seconds, default 1800, between 30 to 86400)
<b>Extension</b>	<input type="text" value="1020"/> <input type="text"/> Extension Number, Password



# Time & Attendance System Message Flow

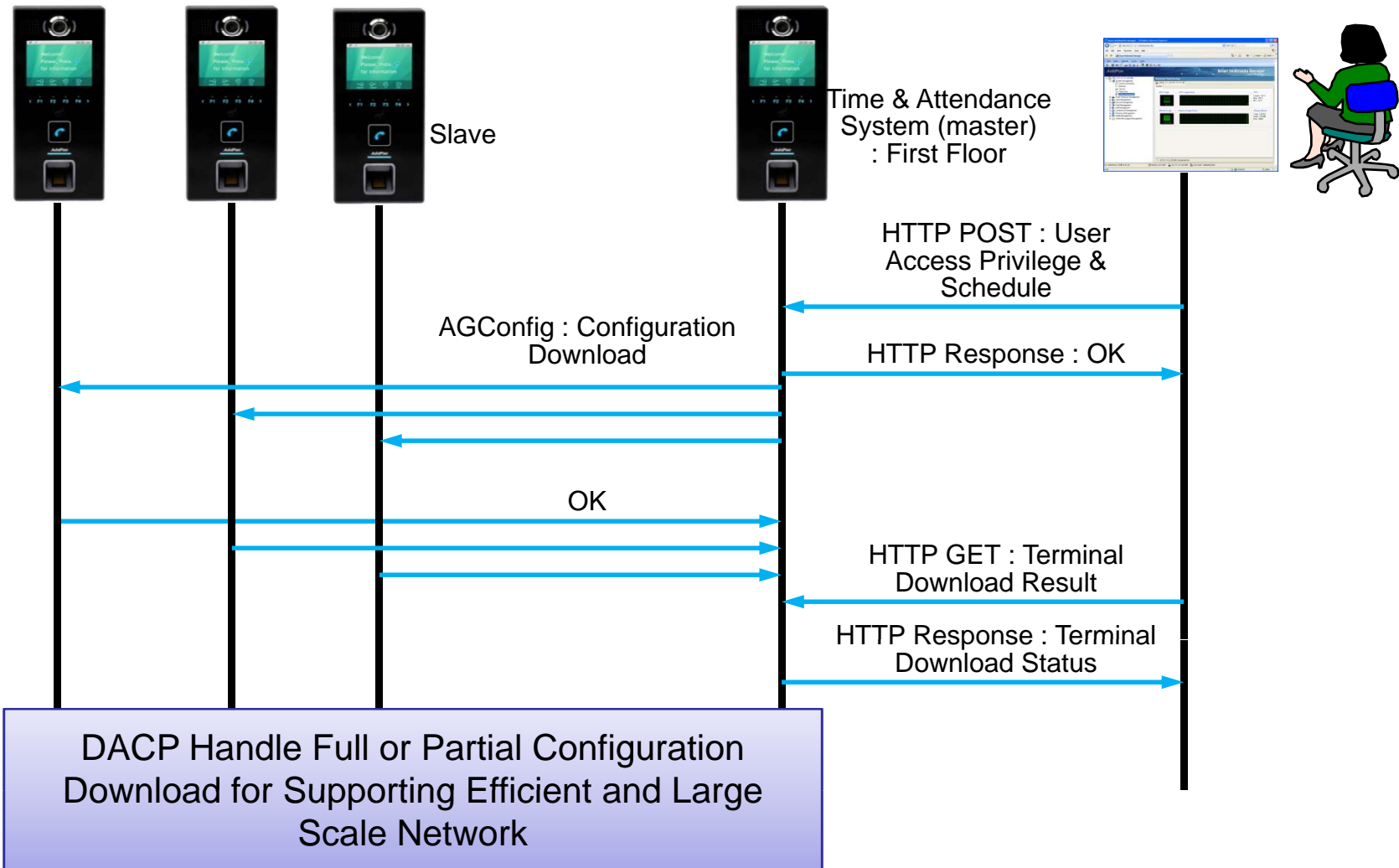
# Time & Attendance System Message Flow

## Registration and KeepAlive



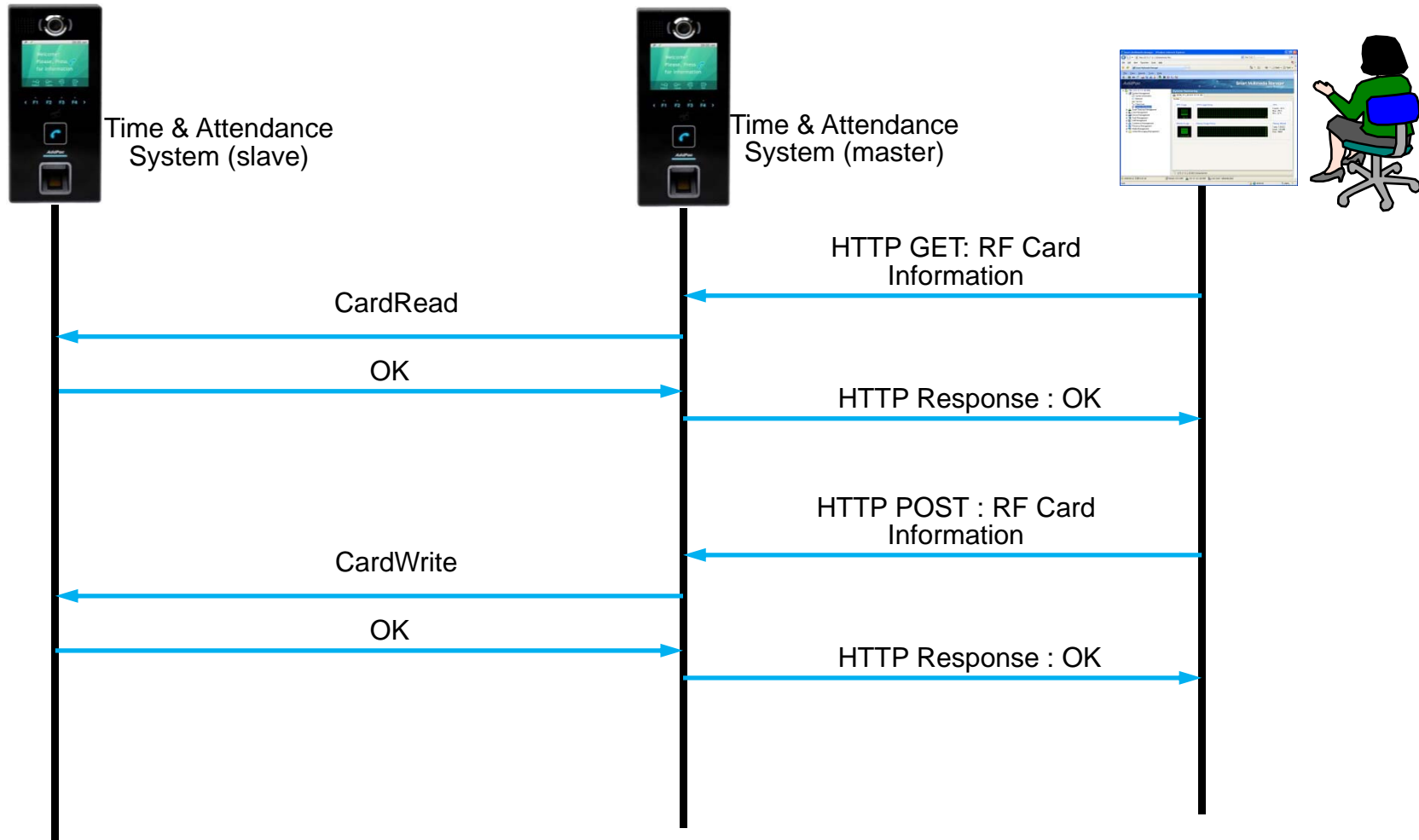
# Time & Attendance System Message Flow

## Access Privilege and Schedule Download



# Time & Attendance System Message Flow

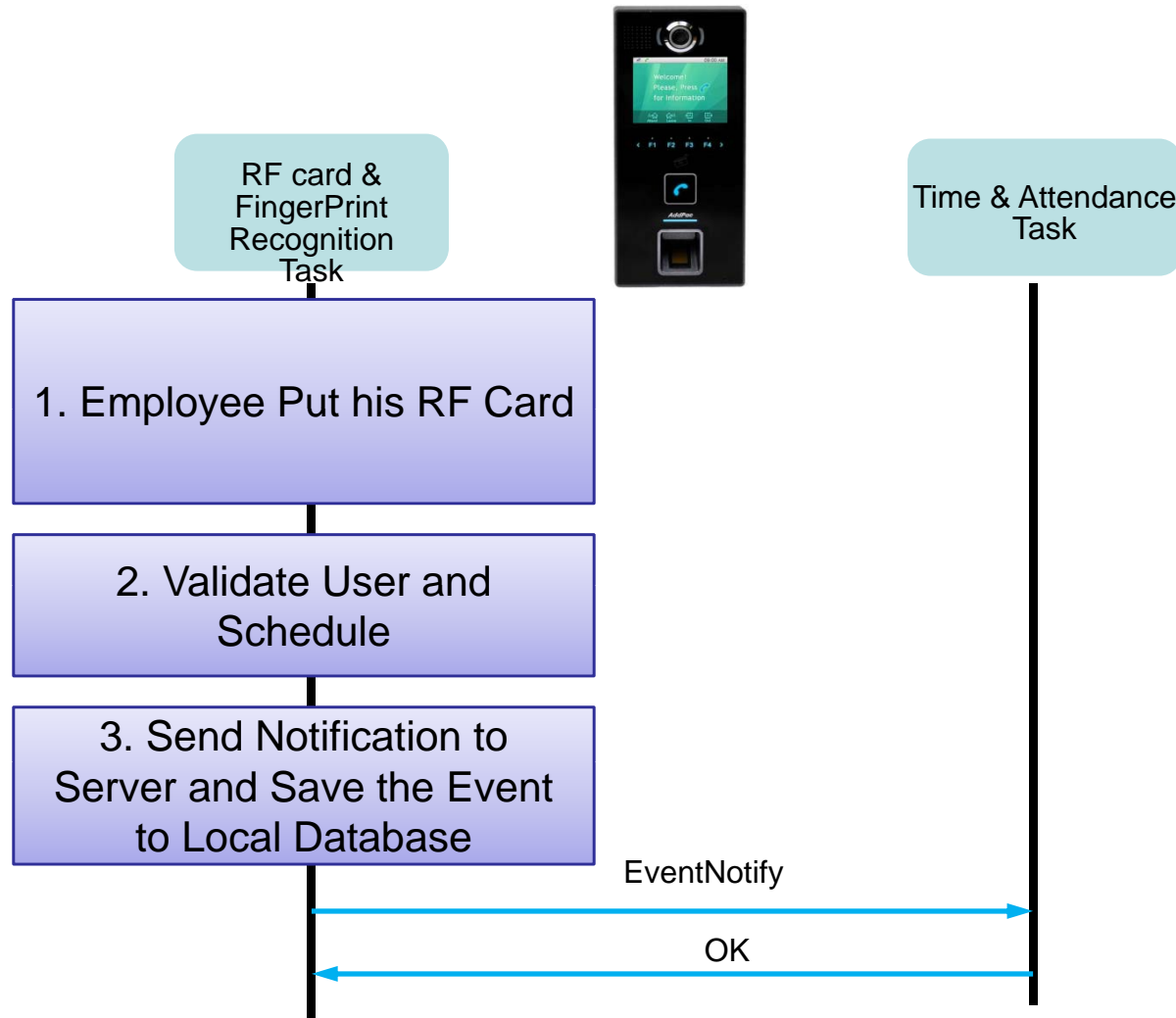
## RF Card Read/Write and Registration





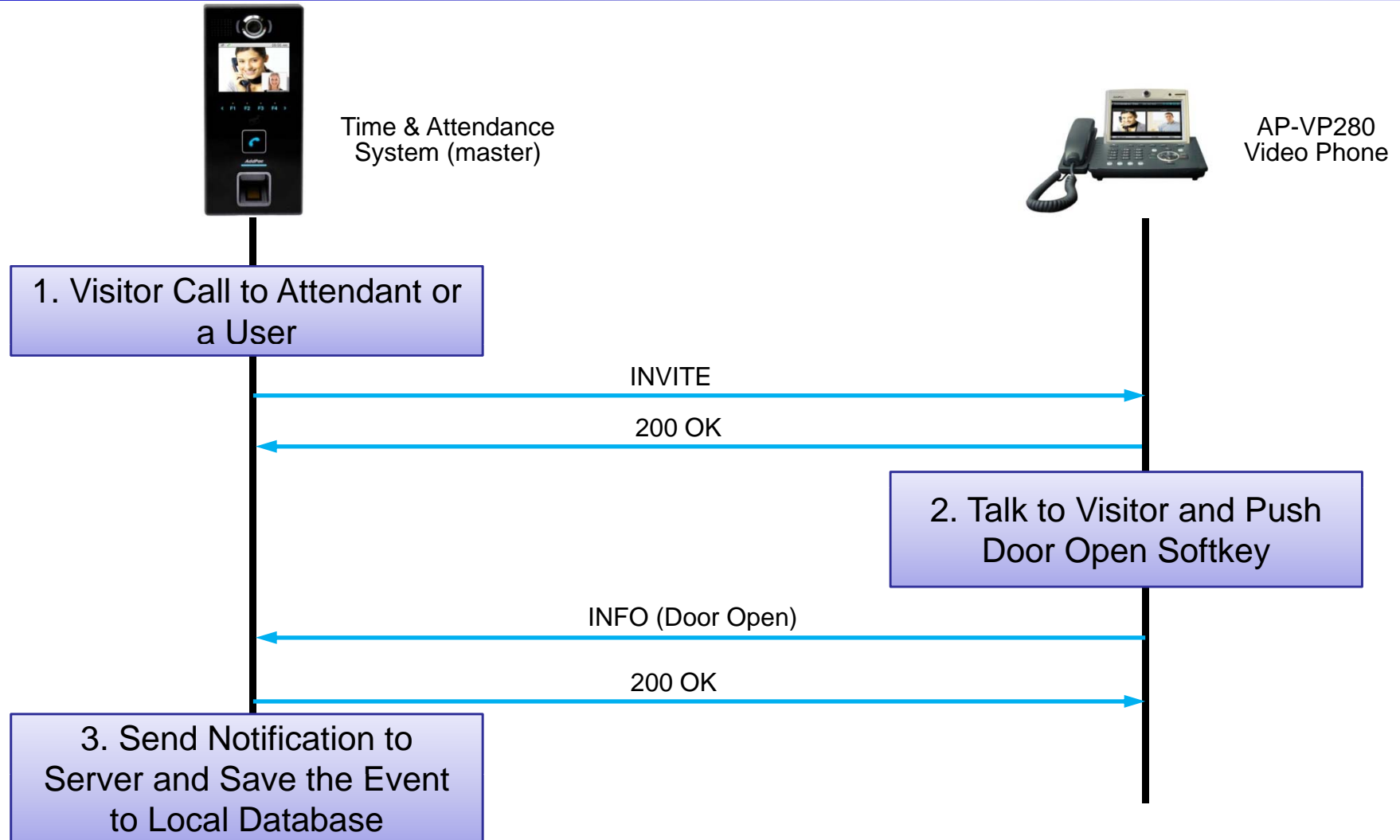
# Time & Attendance System Message Flow

## Door Open by RF Card



# Time & Attendance System Message Flow

## Door Open by Other Terminal





# Door Access Control Manager for AP-TAS300

# DACS (Door Access Control System)

## Login page

The screenshot shows a web browser window with the URL `172.16.1.19/index.php`. The page title is "Door Access Control System". The main content area features the "AddPac Door Access Control System" logo and a login form with the following fields:

- Administrator ID:
- Password:

Below the login form are two buttons:

- Door Access Control Manager**: Includes an icon of a smartphone and a card.
- Time and Attendance Manager**: Includes an icon of a clock and a bar chart.

Annotations on the screenshot:

- A yellow box at the top contains the text: "You can log on 'Door Access Control Manager' or 'Time and Attendance Manager' if license is valid and administrator have authentication right". A yellow arrow points from this box to the login form.
- A blue box on the left contains the text: "Log on to Door Access Control Management". A blue arrow points from this box to the "Door Access Control Manager" button.
- A blue box on the right contains the text: "Log on to Time and Attendance Management". A blue arrow points from this box to the "Time and Attendance Manager" button.

# TAAM (Time and Attendance Manager)

## Daily Attendance Rules

**shows In ( office-in time ), Out ( office-out time) and Regular working time, for example 9 hours**

Name	Description	In	Out	Regular Hour	Date Created
1 default rule	default daily rule	09:00	18:00	9 hr	
2 Factory First Rule	Factory first daily work rule	08:00	20:00	12 hr	2011-11-07 14:32:2
3 Factory Second Rule	Factory second daily work r...	20:00	08:00	9 hr	2011-11-07 14:33:1

**This day rule can be used in the monthly rule for sunday through saturday each.**

# TAAM (Time and Attendance Manager) Monthly Attendance Rules

**Monthly Attendance Rule List**

Name	Description
1 Default Rule	Default attendance rule
2 Head Office Rule	Head office work monthly rule
3 Factory First Rule	Factory first work monthly rule
4 Factory Second Rule	Factory second work monthly rule

**Monthly Attendance Rule Configuration**

**1. Monthly Rule**  
Defines day off or work day from starting first week to sixth week of the month. Each day of the week can be applied to daily-based attendance rule.

Rule Name\*

Description

1st week: Sun Mon Tue Wed Thu Fri Sat

2nd week: Sun Mon Tue Wed Thu Fri Sat

3rd week: Sun Mon Tue Wed Thu Fri Sat

4th week: Sun Mon Tue Wed Thu Fri Sat

5th week: Sun Mon Tue Wed Thu Fri Sat

6th week: Sun Mon Tue Wed Thu Fri Sat

\*Clicked: Full Day Off \*Non-Clicked: Work Day

Sunday: N/A

Monday: N/A

Tuesday: N/A

Wednesday: N/A

Thursday: N/A

Friday: N/A

Saturday: N/A

**2. Holiday Rule**  
Defines rule for non-working day such as national holiday, user defined holiday in the day template.

**Day Template List**

Name	Description
public holiday	public holiday description
company holiday	company holiday description

**List of applied Day Templates**

Name	Description
------	-------------

**Annotations:**

- Day of week rule from 1<sup>st</sup> week to 6<sup>th</sup> week and grey color means full day off, other color is work day
- You can specify daily rule from the list for sunday through saturday

# TAAM (Time and Attendance Manager)

## Business Trip and Vacation

The screenshot shows the 'Business Trip and Vacation' section of the TAAM application. It features a table with two entries and three callout boxes explaining specific details.

Name	Description	User	Type	Start	End	Date Created	Modify	Delete
1 Rusia Business...	Presentation for Ne...	Total 2 includin...	Business trip	2011-09...	2011-10...			
2 Summer Vacati...			Vacation	2011-08...	2011-08...	2011-10-12 07:...		

**Annotations:**

- one or more user can be specified for each business trip and vacation rule.
- Extension user will be not processed as absentee between start day and end day, also log as user-defined time attendance code
- user-defined time and attendance code for attendance report or log correction

# TAAM (Time and Attendance Manager)

## Time and Attendance Codes

The screenshot shows a web browser window with the URL `172.16.1.19/dacm/timeAttendanceCodeList`. The page title is "Time and Attendance Manager" and the user is logged in as "root". The main content area is titled "Time and Attendance Codes" and includes a description: "Shows list of user defined attendance code which can be used as correction in the attendance report." There is an "Add a Code" button. A table lists the following codes:

Name	Description	Date Created	Modify	Delete
1 Unknown				
2 Not yet defined				
3 Late In				
4 Early Out				
5 Absence				
6 Late In/Early Out				
7 Normal				
8 Vacation				
9 Business trip				
10 Sick Leave	Sick Leave code by admin	2011-11-07 14:44:15		

Annotations on the screenshot:

- A yellow dashed box highlights the first 10 rows of the table, with a callout: "show built-in and user-defined time and attendance code which will be used in the attendance report and log correction".
- A yellow box highlights the first 9 rows, with a callout: "system built-in time and attendance code is provided as default, for example late-in, early-out and absence".
- A yellow box highlights the 'Delete' column for the 'Sick Leave' row, with a callout: "only user-define code can be removed if needed".

Footer: AddPac Copyright © AddPac 1999-2011 All Rights Reserved. Version 1.1.14



# TAAM (Time and Attendance Manager) Delivery Policy for Attendance Report

**1. Report Policy**  
Defines email delivery policy for manager or each user to receive daily, monthly attendance report.

Send reports to the particular person every day at 08:00

Send reports to the particular person at specific day ( 28 ) of every month.

**User List**

Name	Department	Extension
------	------------	-----------

**Applied user list**

Name	Department	Extension
batista Eike	/2F/	1000
Stefan Persson	/2F/	1016

Send personal monthly report to each user.

**2. SMTP Server**  
You can specify sending email server(SMTP) configurations.

SMTP Server: 61.33.161.2

Sender Email Address: dacs\_admin@company.com

Server Authentication Required

User ID: admin

Password: \*\*\*\*

To apply this features, select 'Apply' or 'Cancel'

Apply Cancel

**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

Time and Attendance Manager

Mon Nov 7 14:52:05 2011 Help | Logout root

Home Policy Trip and Vacation Report Configuration Report View

**Attendance Report by Date**  
Shows attendance log for each user and summary information with specified day.

Select Date : 2011-10-19

Select Department : All

**Attendance Report by Date (2011-10-19)**

Username	Department	In	Out	Overtime	Office Hc	Result	Correction Ti	Correct
1 Eike batista	smart management팀	08:05:00	18:05:00	0 hr	10:0...	Normal		
2 Bill Gates	multimedia팀	09:15:00	17:15:00	0 hr	08:0...	Normal	2011-11-...	
3 Larry Ellison	multimedia팀	09:00:00	18:00:00	0 hr	09:0...	Normal		
4 karl Albrecht	smart framework팀	09:00:00	17:00:00	0 hr	08:0...	Early Out		
5 Carlos Slim Helu	smart management팀	09:10:00	19:10:00	0 hr	10:0...	Normal		
6 Lakshmi Mittal	multimedia팀	09:00:00	18:00:00	4 hr	09:0...	Normal		
7 Christy Walton	smart framework팀	09:00:00	18:00:00	0 hr	09:0...	Normal		

You can export to excel or print out for attendance report

attendance summary for each time and attendance code with specified date

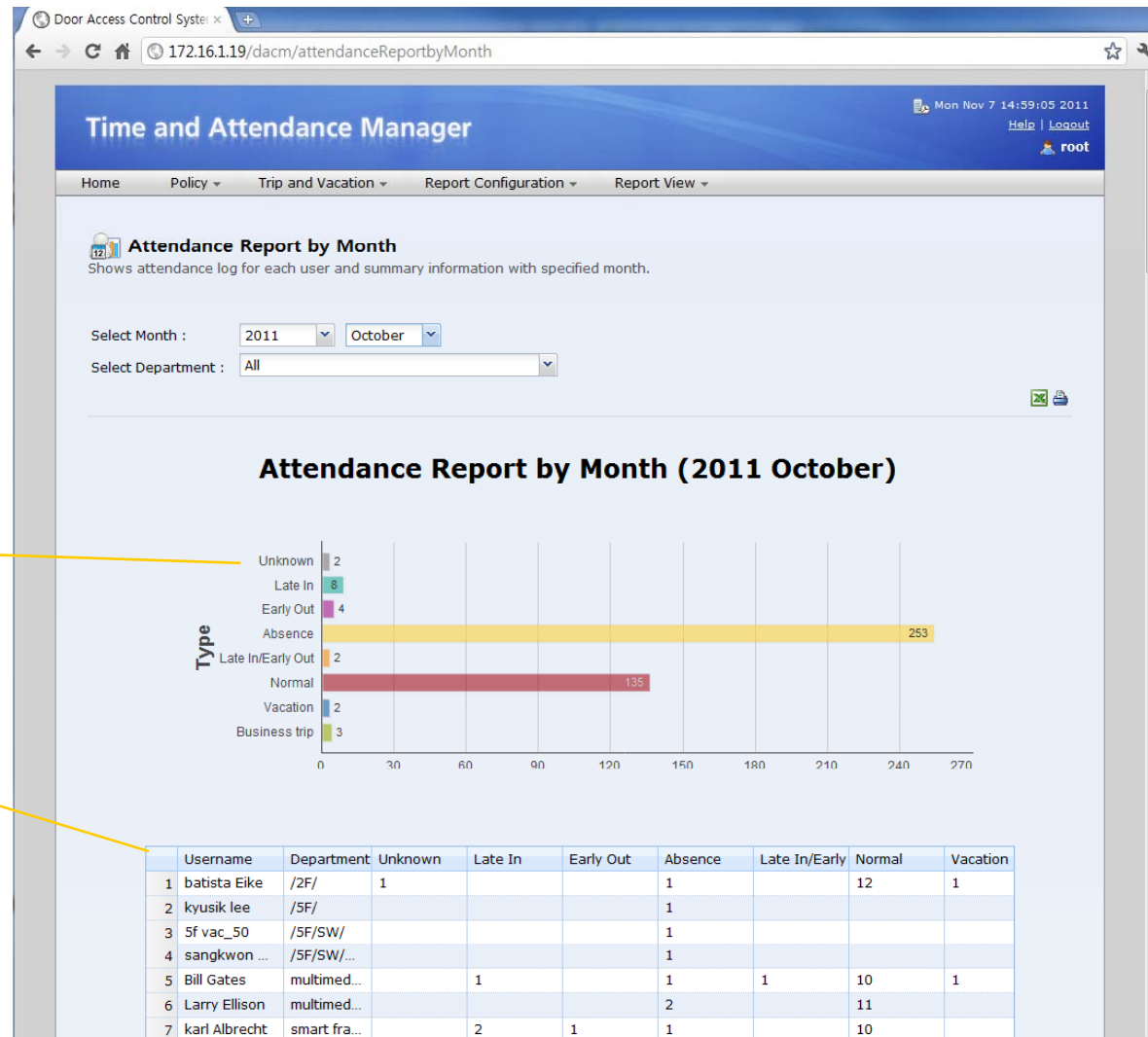
administrator may adjust or correct attendance log which system have processed if necessary

# TAAM (Time and Attendance Manager) Attendance Report Excel Export

<b>Attendance Report by Date (2011-10-19)</b>							
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	

# TAAM (Time and Attendance Manager)

## Attendance Report by Month

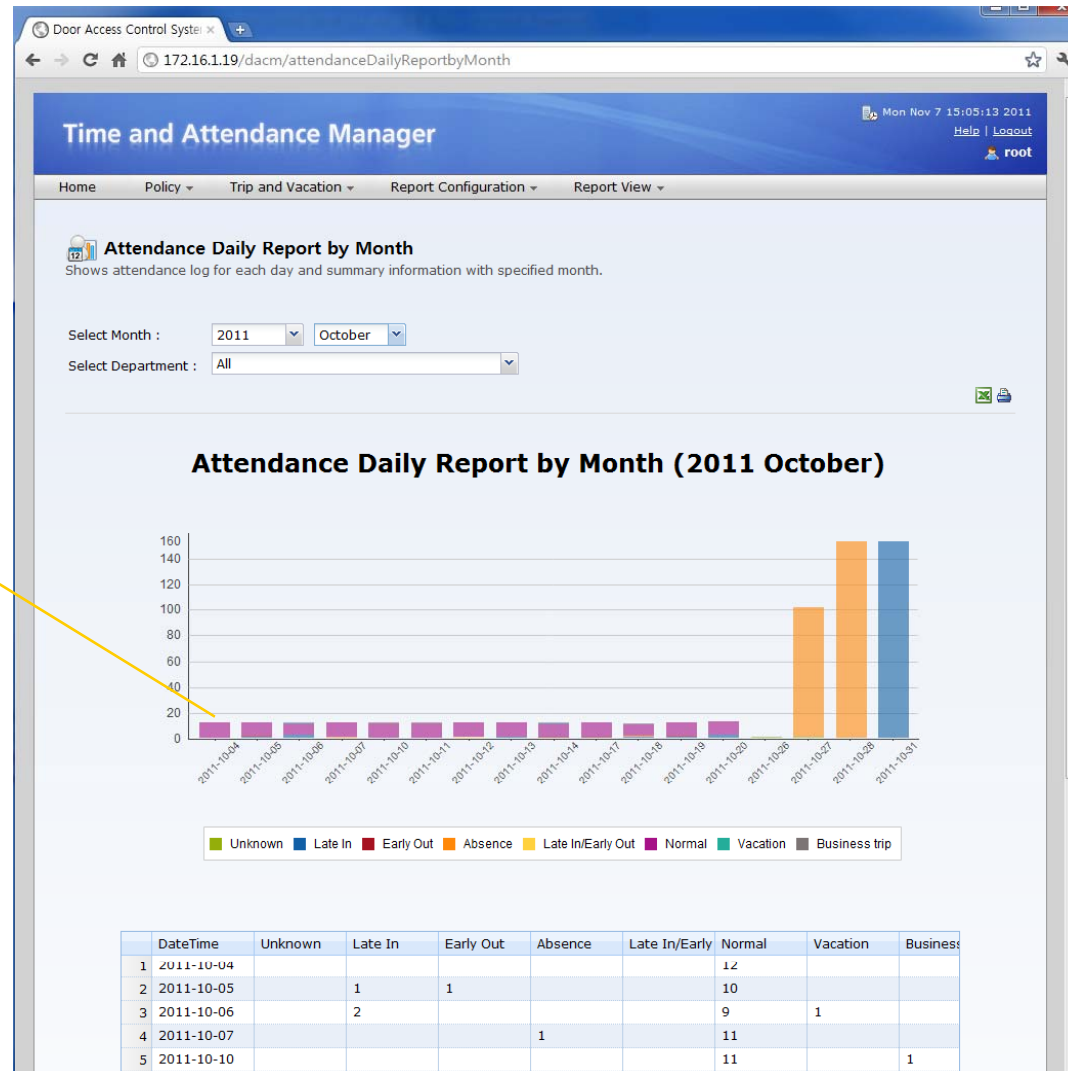


attendance summary for each time and attendance code with specified month

attendance summary for each extension user

# 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

**Time and Attendance Manager**  
Mon Nov 7 15:08:39 2011  
Help | Logout  
root

Home Policy Trip and Vacation Report Configuration Report View

**Attendance Personal Report**  
Shows attendance log of each day for the month with specified user.

Select Month : 2011 October  
Select User : Carlos slim Helu

**Attendance Personal Report (2011 October)**  
Carlos slim Helu (/2F/)

**Type**

Type	Count
Late In	1
Early Out	2
Absence	1
Normal	10
Business trip	1

	DateTime	In	Out	Overtime	Office Hours	Result
1	2011-10-04	09:00:00	18:00:00	0 hr	10:00:00	Normal
2	2011-10-05	09:00:00	18:00:00	0 hr	10:00:00	Normal
3	2011-10-06	09:00:00	18:00:00	0 hr	10:00:00	Normal
4	2011-10-07	09:00:00	18:00:00	0 hr	10:00:00	Normal
5	2011-10-10	09:10:00	19:10:00	0 hr	10:00:00	Normal
6	2011-10-11	09:10:00	19:10:00	0 hr	10:00:00	Normal
7	2011-10-12	09:10:00	19:10:00	0 hr	10:00:00	Normal
8	2011-10-13	09:10:00	19:10:00	0 hr	10:00:00	Normal
9	2011-10-14	09:10:00	17:10:00	0 hr	08:00:00	Early Out

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

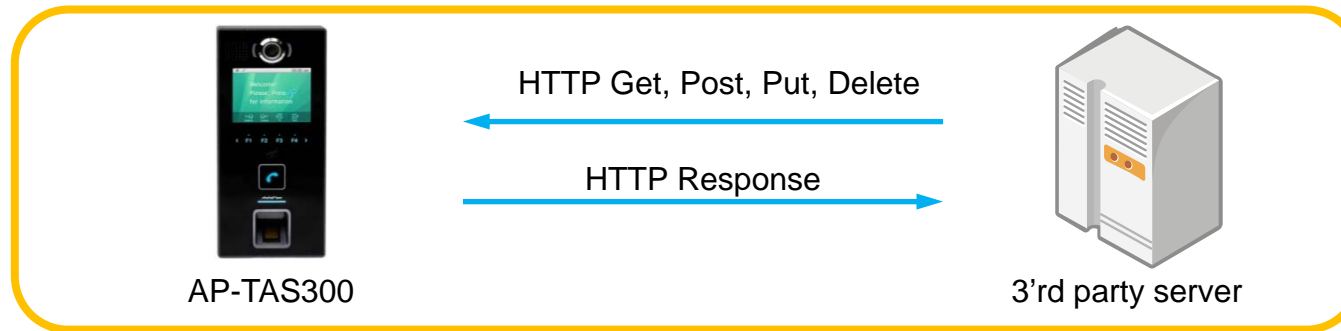
attendance summary for time and attendance code of a extension user



# Open API

# Open API

## Open API for 3'rd Party Management System



- HTTP based RESTful Open API for Door Access Management
- XML based Flexible and Expandable Message Contents
- Provides More than 40 APIs as Bellow
  - user\_list(GET), user(GET, POST, PUT, DELETE), ...
  - terminal\_list(GET), terminal(GET, POST, PUT, DELETE), ...
  - access\_group(GET, POST, PUT, DELETE), priority (PUT), ...
  - card\_list(GET), card(POST, PUT, DELETE), ...
  - schedule\_template(GET, POST, PUT, DELETE), rule(GET, POST, PUT, DELETE) ,...

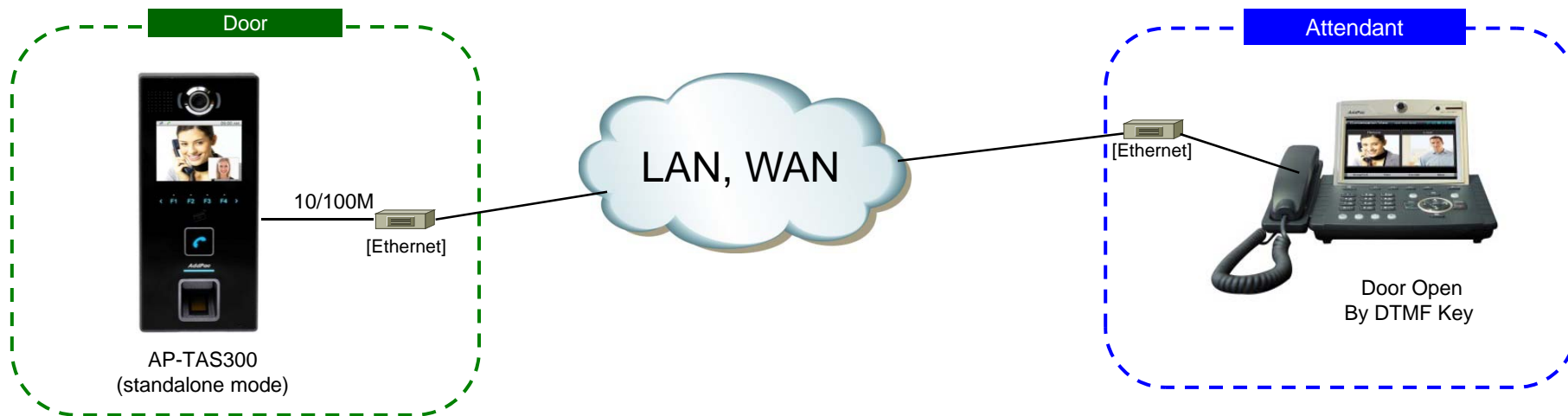


# Application Area

- Point-to-Point Application (Simple Application)
- Point-to-Multipoint Application



# Point-to-Point Connection (Simple Appl.)

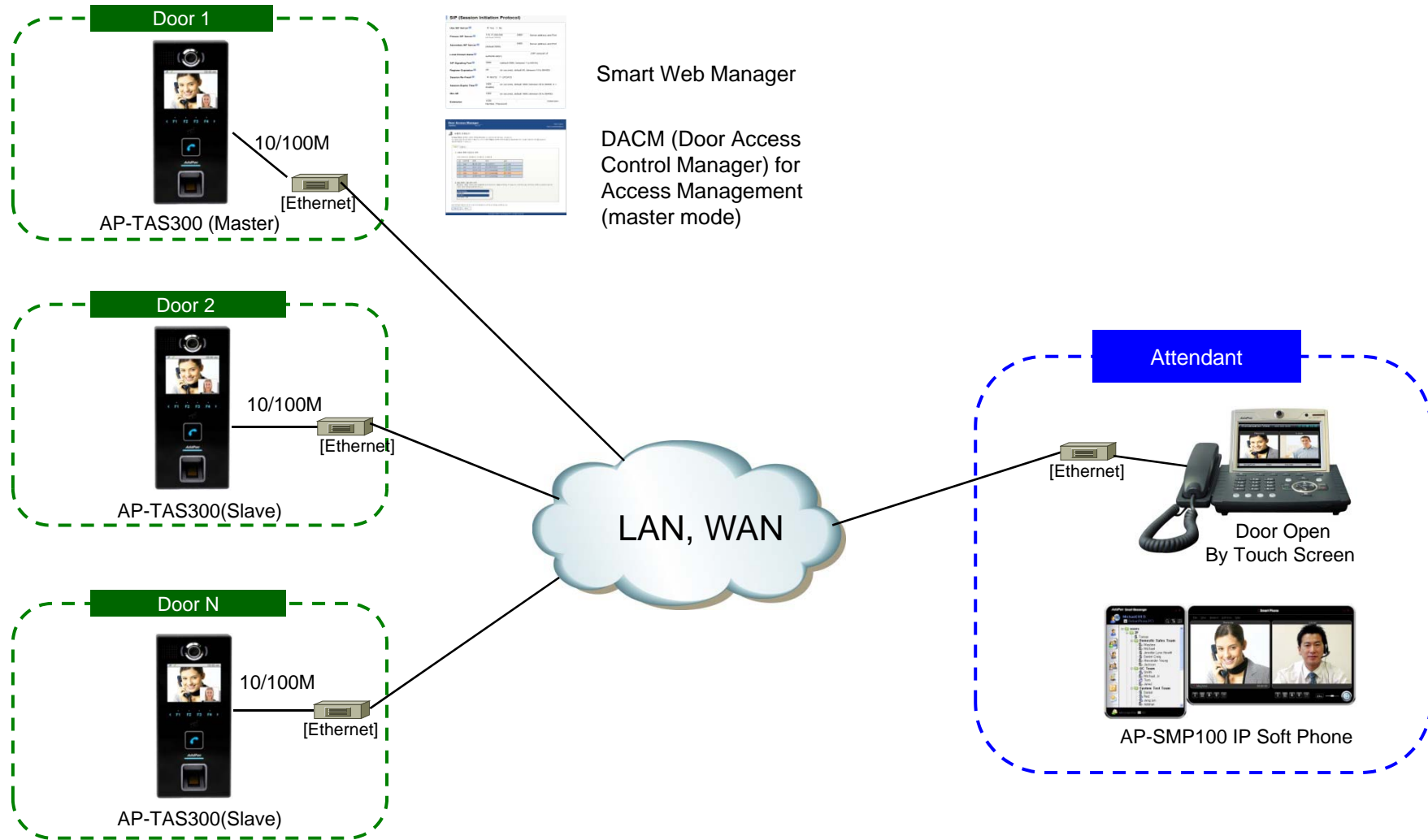


Smart Web Manager



DACM (Door Access Control Manager) for Access Management (master mode)

# Integrated Door Access Control and Call Control



# Ordering Information

- **AP-TAS300 Time & Attendance IP Video Door Phone Hardware**
  - AP-TAS300 Main Body
  - RISC Microprocessor with High-end Programmable DSP Architecture
  - 3.5 Inch LCD, Built In Camera, Side Light
  - Fingerprint Recognition, RF card Interface
  - Steel Chassis
  - Internal MIC, Internal Speaker
  - 1-ports 10/100Mbps Fast Ethernet
  - PoE Interface
  - Including Network Cable Set & Ext. Power Supply, etc.
- **Built-in APOS Internetworking Software for AP-TAS300**
- **Including 1 Year Hardware Warranty**
- **Product Documents**
  - Install and Operation Guide (PDF)
- **Pricing**
  - AddPac Technology Regional Sales Manager
  - Authorized Sales and Marketing Representatives
  - Please Contact [www.addpac.com](http://www.addpac.com)



# Thank you!

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