# AP-TAS300N Time & Attendance IP Video Door Phone

High Performance Time & Attendance IP Video Door Phone Solution







AddPac Technology

2014, Sales and Marketing

#### Contents

- Product Overview
- Product Highlights
- Hardware Specification
- Software Service
- Video Service & Features
- Audio & Voice Service and Features
- Smart Web Manager
- Time & Attendance Web Manager
- Application Area
- Ordering Information



#### **Product Overview**

#### AP-TAS300N Time & Attendance IP Video Door Phone

- Smart Time & Attendance IP Video Door Phone Solution
- High Performance SIP Video Door Phone Solution
- Video Camera, 3x4 Key, 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 www.addpac.com

## **Product Highlights**

AP-TAS300N Time & Attendance IP Video Door Phone

#### **Smart Time & Attendance IP Video Door Phone**

**IP based Video Door Phone** 

Powerful Acoustic Echo Canceller

RF Card Interface, Fingerprint Recognition Alarm & Relay Out Interface

> APOS<sup>™</sup>Technology Multimedia Network Protocol

> > IP based Network Protocol & Video/Voice Traffic QoS

3.5 Inch LCD Display 320 x 240 Resolution

High Performance RISC CPU & Programmable DSP

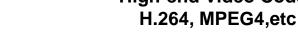
High-quality Image VGA, 30fps 64Kbps to 1Mbps

State-of-art Signaling SIP Signaling Stack

**Broadband IP Networking With one 10/100Mbps ethernet** 



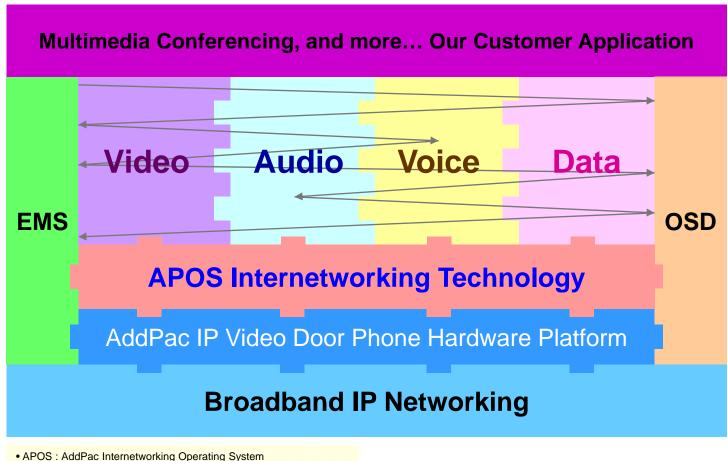


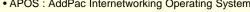




#### Multimedia Service

AP-TAS300N Time & Attendance IP Video Door Phone





• OSD : On- Screen Display

• EMS: Element Management System



5

#### AP-TAS300N Time & Attendance IP Video Door Phone

- RISC+DSP Microprocessor Computing Power
- Audio and Voice Interface
  - Internal MIC
  - Internal Speaker
  - 3 x 4 Key PAD
- 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)









#### AP-TAS300N Time & Attendance IP 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)

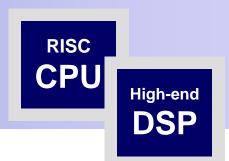
- IEEE802.3af compliant
- Input voltage range 36V to 57V











#### 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



AP-TAS300N Time & Attendance IP Video Door Phone





#### 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** 





AP-TAS300N Time & Attendance IP Video Door Phone





Fingerprint Recognition

Sensor Type : Capacitive

Resolution(dpi): 508

Sensing Area(mm): 12.8 x18.0Image Size(pixel): 256 x 360

CPU: 400MHz DSPFlash Memory: 4MB

– ERR : < 0.1%</p>

Enrollment Time: 800msec

1:1 Verification Time: 800msec

1:1000 Identification Time: 970msec

Template Size : 256~384bytes (configurable, 384bytes default)

Template Capacity: 9,000

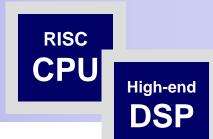
- Encryption: 256bit AES



Fingerprint Recognition



AP-TAS300N Time & Attendance IP Video Door Phone





RISC CPU High-end DSP

AP-TAS300N Time & Attendance IP Video Door Phone

**Back Side** 

RS485

**RS232** 

2 Alarm, 2 Relay Out



Option: Line Out

Option: MIC In

**LAN Port** 

Power Input : Terminal Block 12V 1A





AP-TAS300N Time & Attendance IP Video Door Phone

High-end DSP

**Power Supply** 



Example





#### Software Service

#### AP-TAS300N 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

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14

#### Video Service and Features

AP-TAS300N 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-TAS300N Time & Attendance IP Video Door Phone

- Audio & Voice Networking Interface
  - External Audio Line-Out Interface (RCA Connector)
  - External Audio MIC-In Interface (RCA Connector)
- VolP 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

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# Smart Web Manager (Example)



## Smart Web Manager

#### AP-TAS300N Time & Attendance IP Video Door Phone

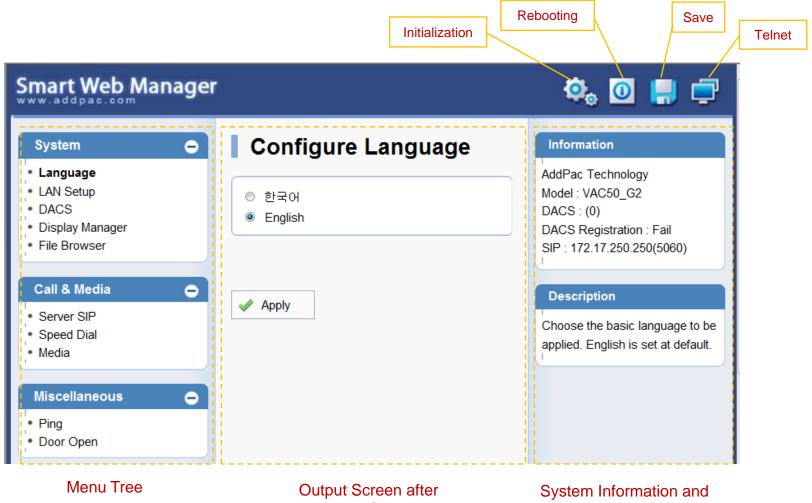
- Main Screen
- System
  - Language
  - LAN Setup
  - DACS
  - Display
  - File Browser
- SIP Call & Media
  - SIP (Session Initiation Protocol)
  - Speed Dial
  - Media
- Miscellaneous
  - Door Control and Test
  - Network Test





## Smart Web Manager: Main Screen

AP-TAS300N Time & Attendance IP Video Door Phone



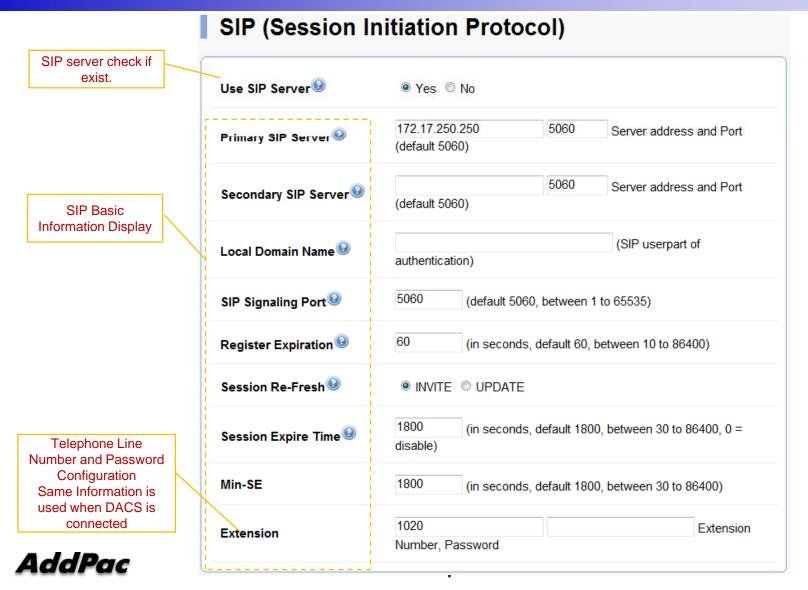


Menu Select

Help Message

## Smart Web Manager: SIP configuration

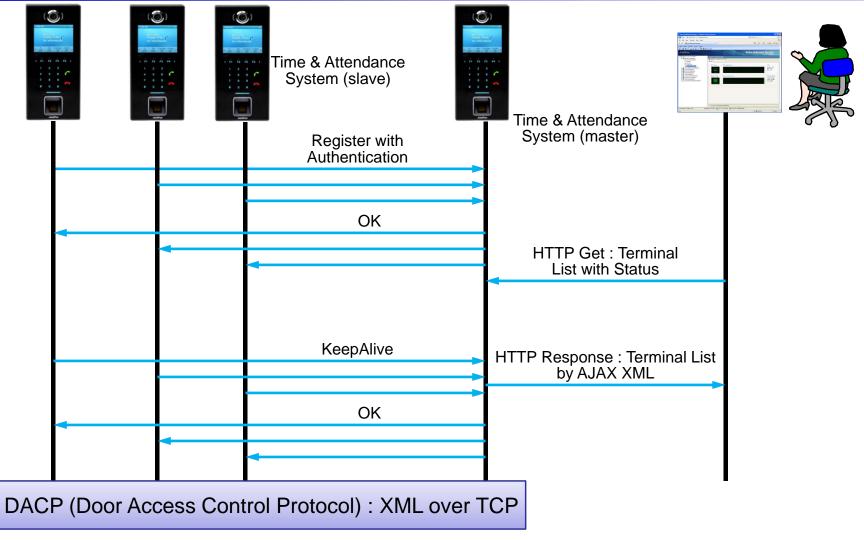
AP-TAS300N Time & Attendance IP Video Door Phone



# Time & Attendance System Message Flow



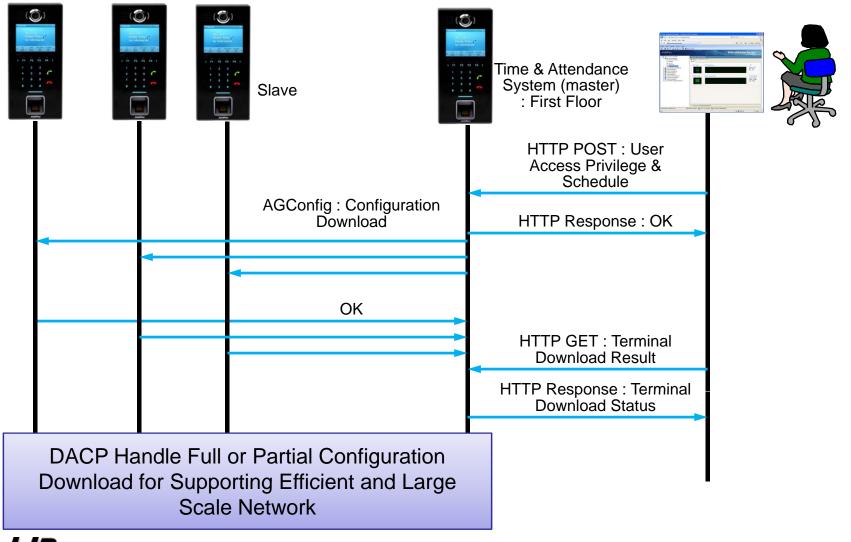
# Time & Attendance System Message Flow Registration and KeepAlive





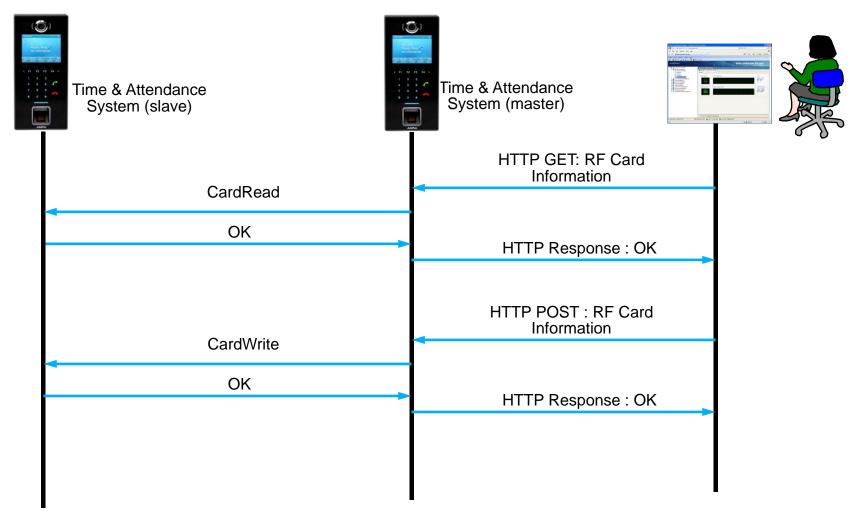
## Time & Attendance System Message Flow

Access Privilege and Schedule Download





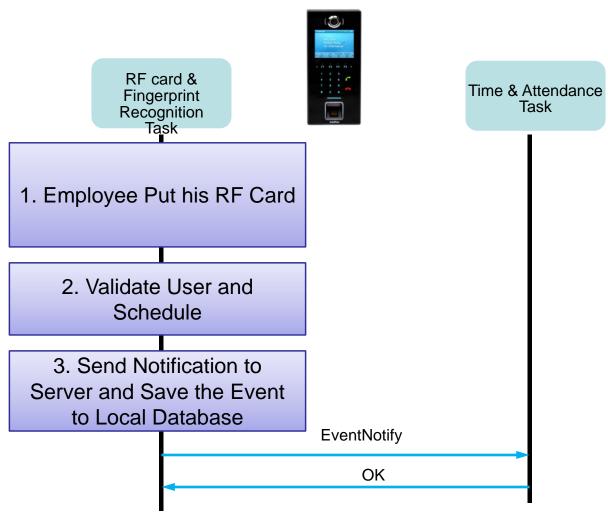
# Time & Attendance System Message Flow RF Card Read/Write and Registration





# Time & Attendance System Message Flow

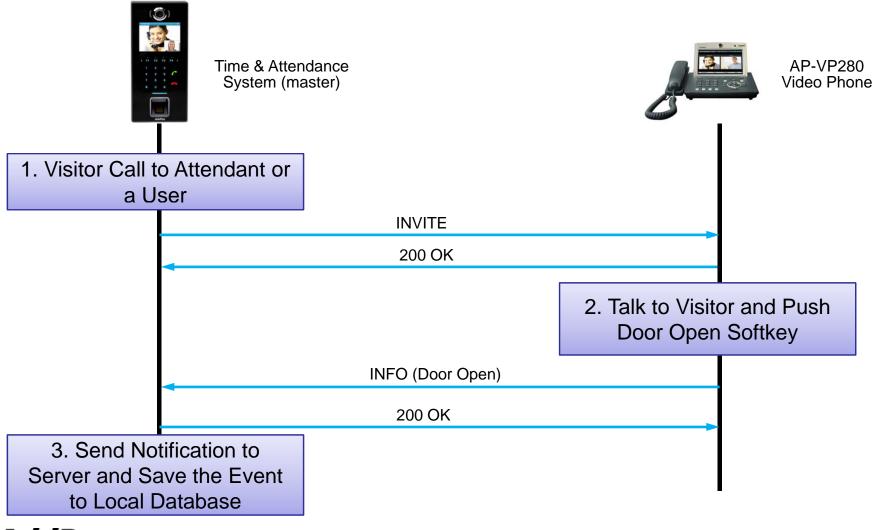
### Door Open by RF Card





## Time & Attendance System Message Flow

### **Door Open by Other Terminal**

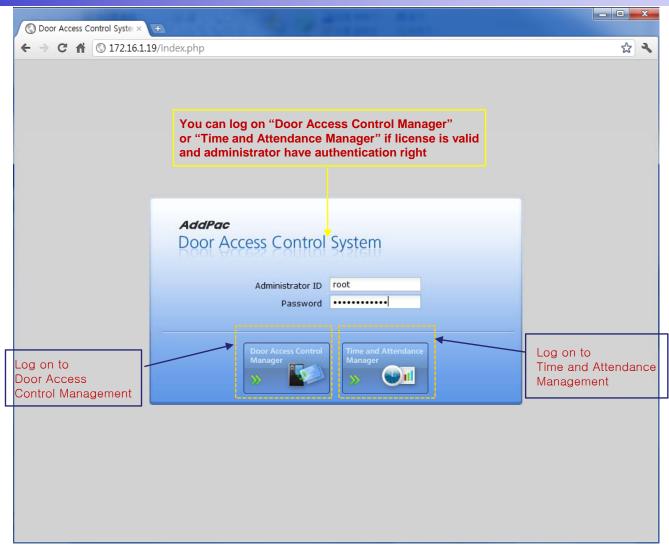


# Door Access Control Manager for AP-TAS300N



# DACS (Door Access Control System)

Login page

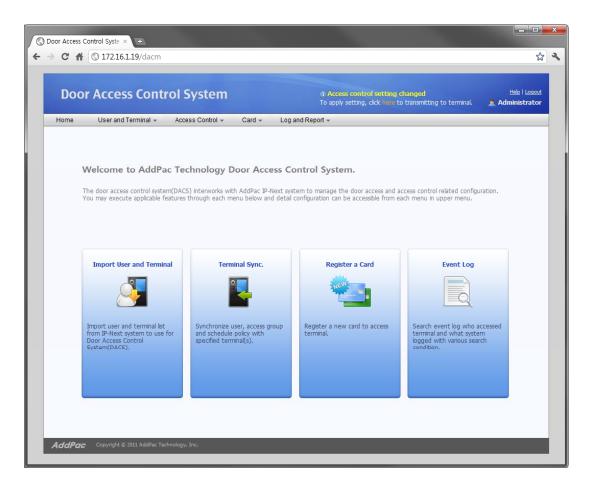




# Door Access Control Web Manager Software (DACM)

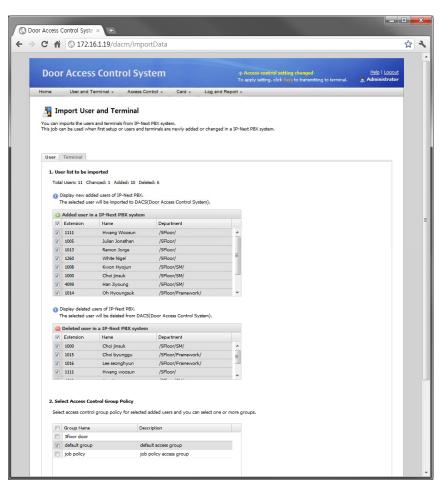


# DACM (Door Access Control Manager) Main Web Page





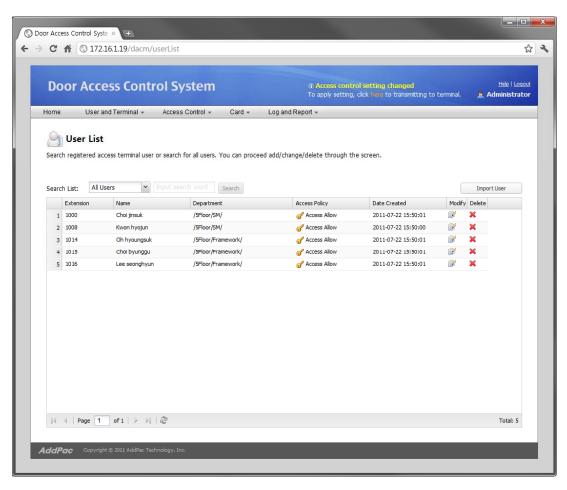
### **Import User and Terminal**





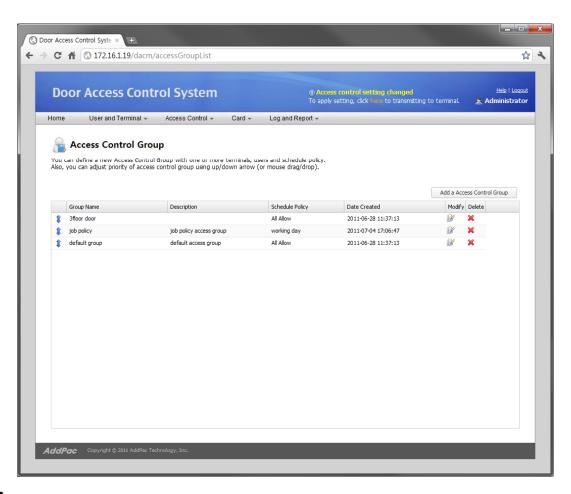
# DACM (Door Access Control Manager) User List

#### **User List**



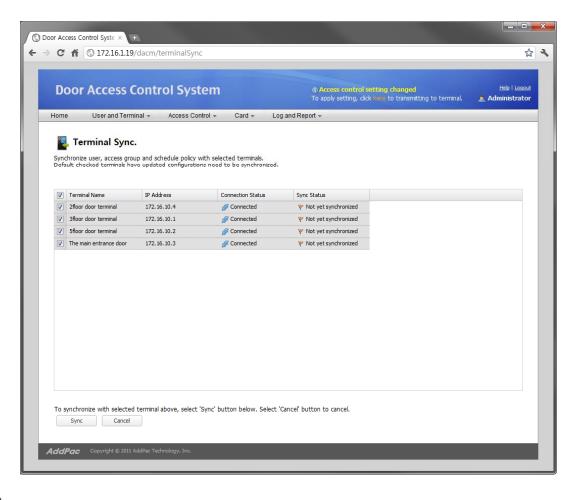


### Access Control Group Management



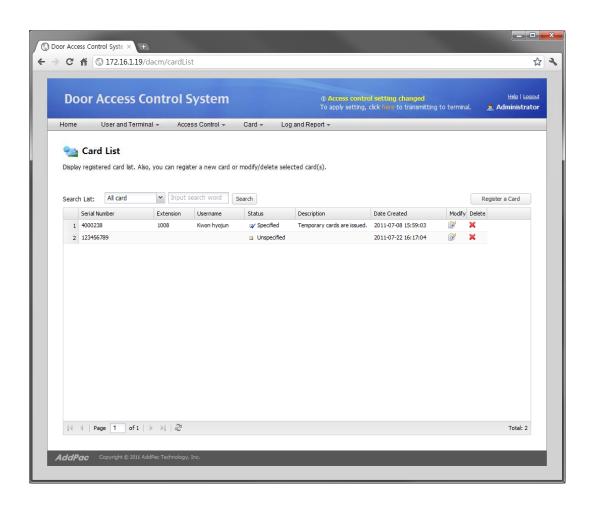


### Configuration Download to Terminal



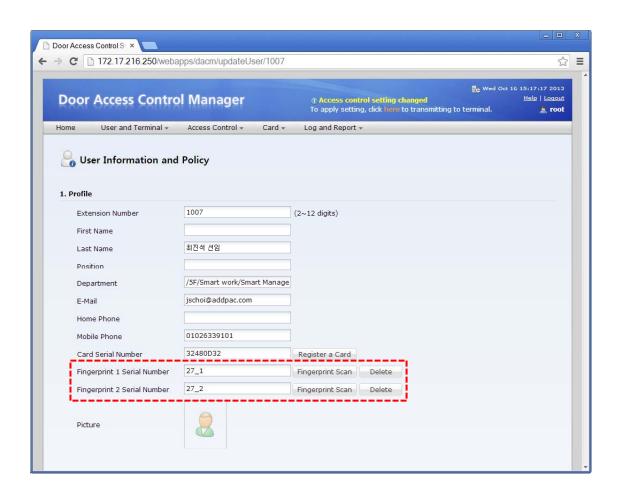


### RF Card Management





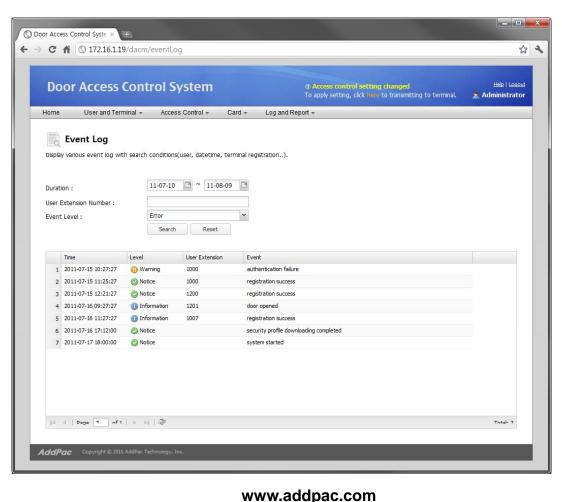
### Fingerprint Management





### DACM (Door Access Control Manager)

#### Access Log Management

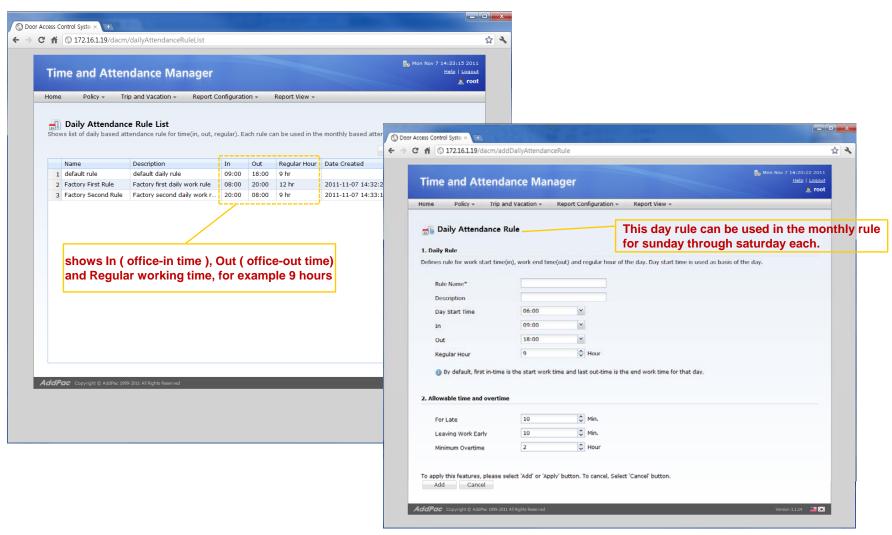




## Time Attendance Web Manager Software (TAAM)

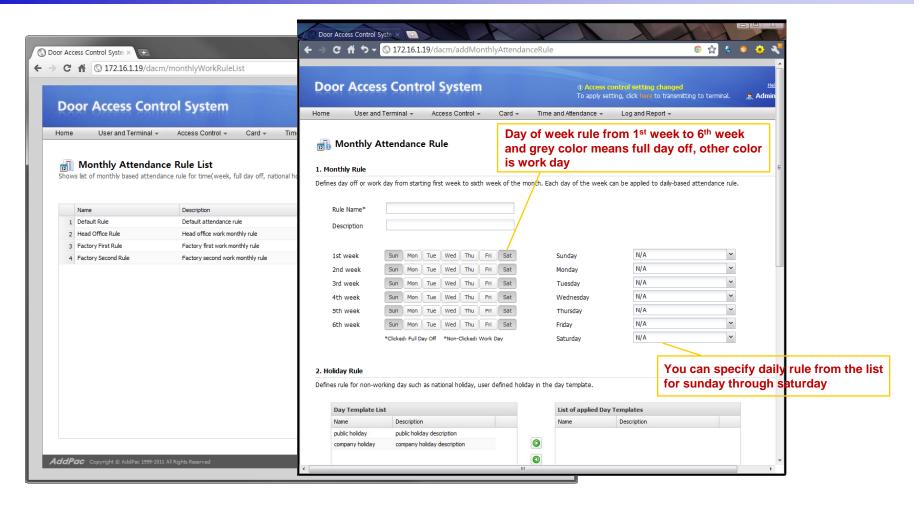


# TAAM (Time and Attendance Manager) Daily Attendance Rules



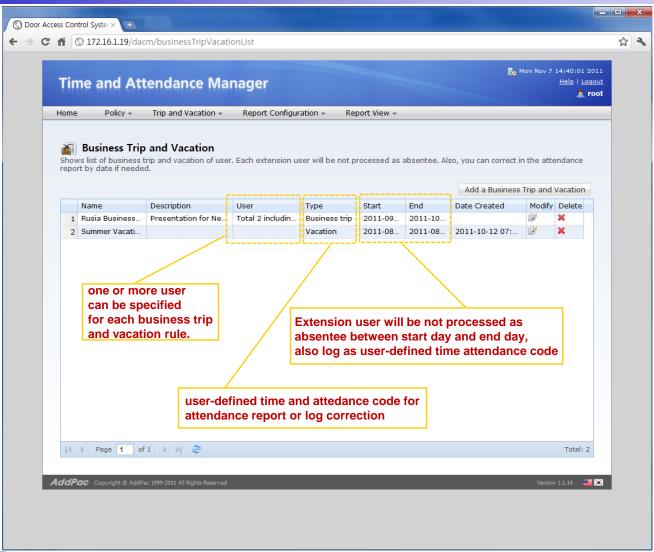


## TAAM (Time and Attendance Manager) Monthly Attendance Rules

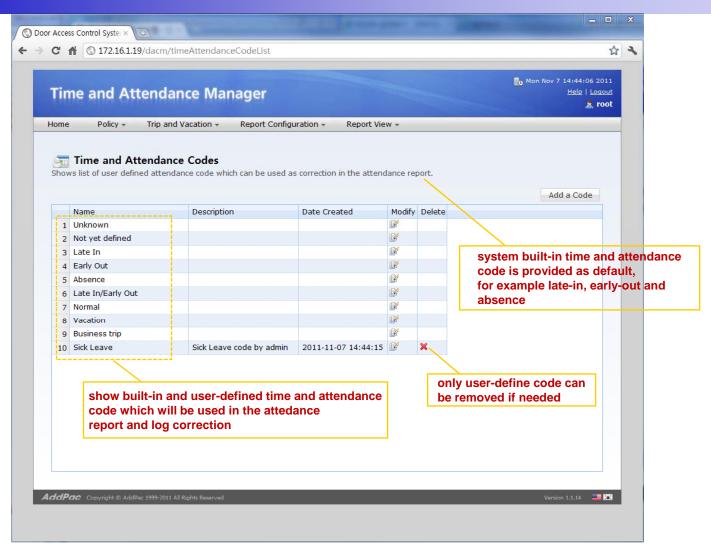




# TAAM (Time and Attendance Manager) Business Trip and Vacation

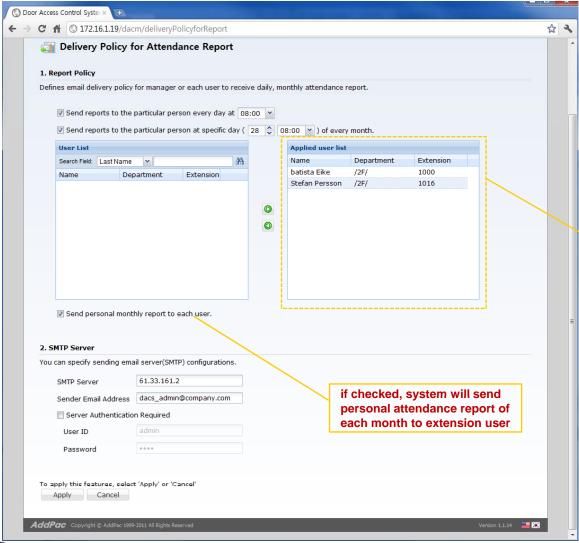


#### Time and Attendance Codes





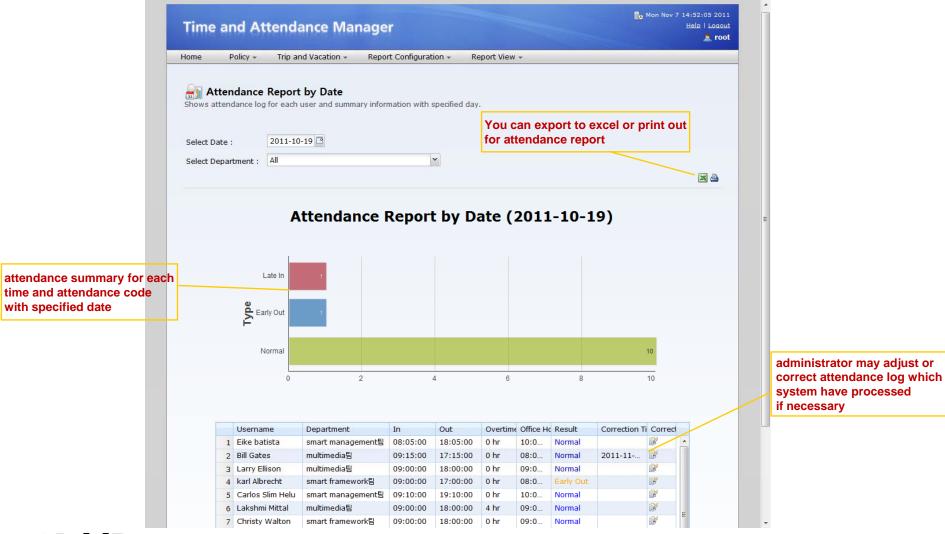
#### **Delivery Policy for Attendance Report**



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

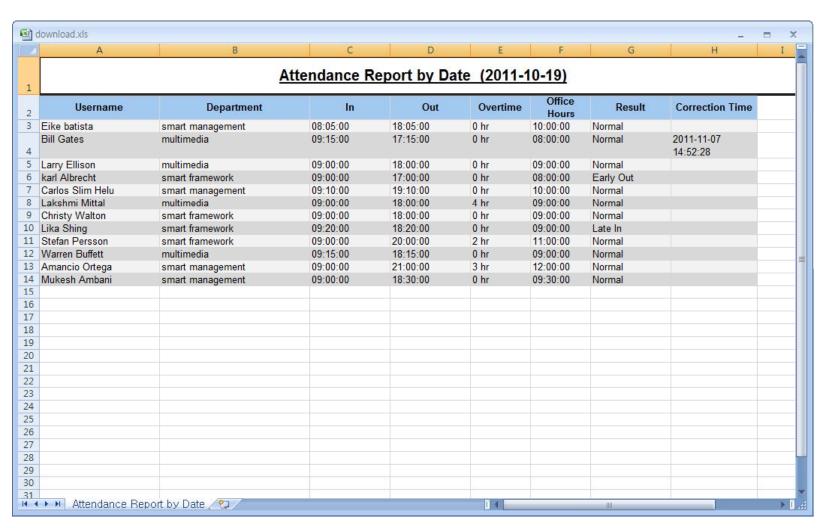


# TAAM (Time and Attendance Manager) Attendance Report by Date



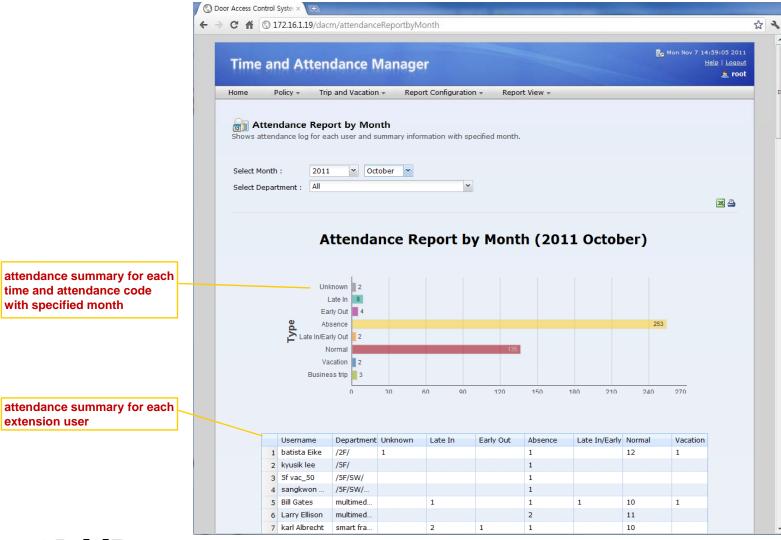


# TAAM (Time and Attendance Manager) Attendance Report Excel Export



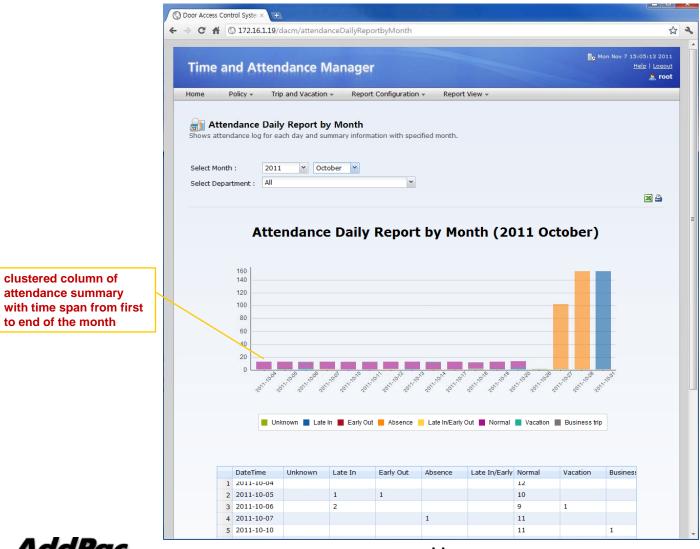


#### **Attendance Report by Month**





Attendance Daily Report by Month



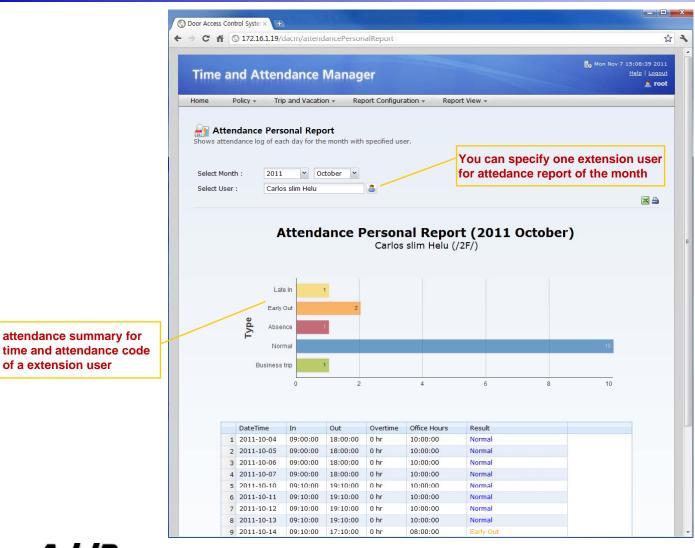


clustered column of

to end of the month

attendance summary

#### **Attendance Personal Report**





attendance summary for

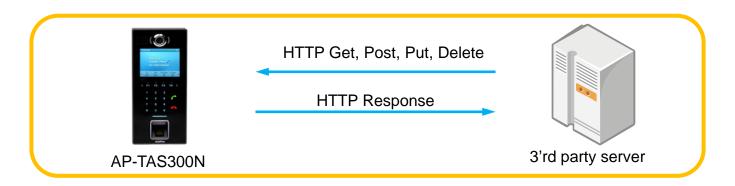
of a extension user

## 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) ,...



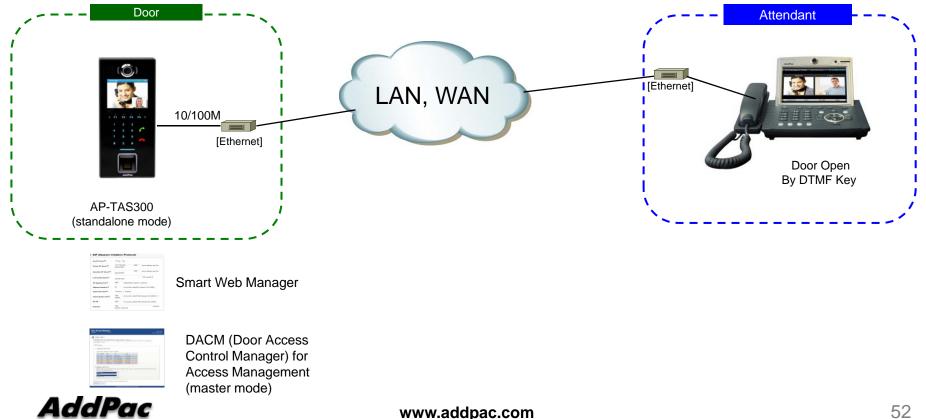
### **Application Area**

- Point-to-Point Application (Simple Application)
- Point-to-Multipoint Application
- Legacy IP-PBX Environment

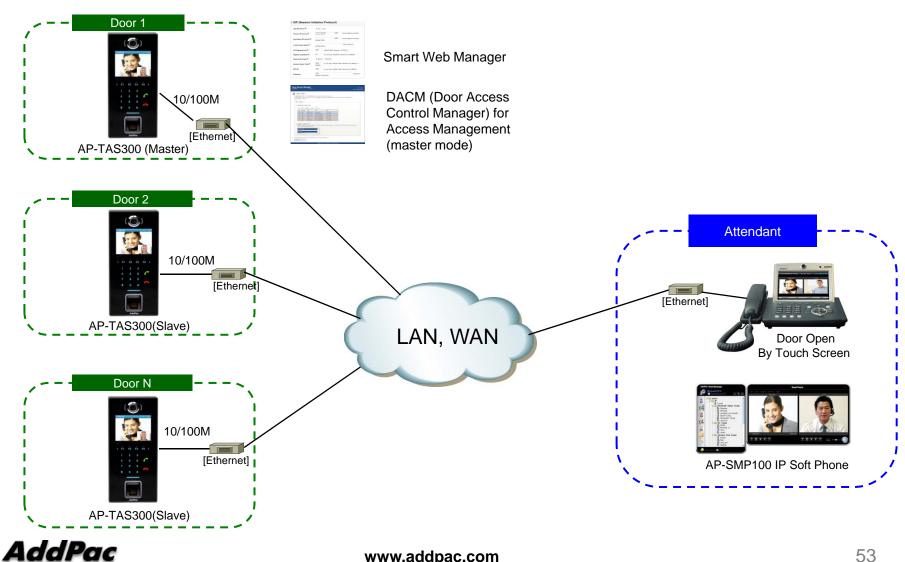




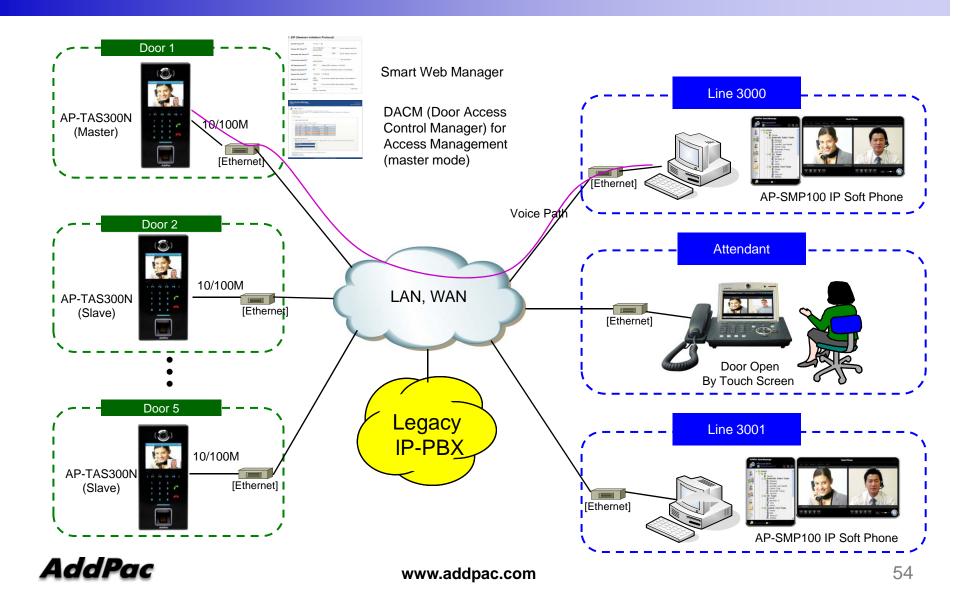
## Point-to-Point Connection (Simple Appl.)



#### Point-to-Multi-Point Connection



### Legacy IP-PBX Environment



#### Ordering Information

#### AP-TAS300N Time & Attendance IP Video Door Phone Hardware

- AP-TAS300N 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-TAS300N
- 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



## 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

