IP Attendant Console Solution

AddPac Technology

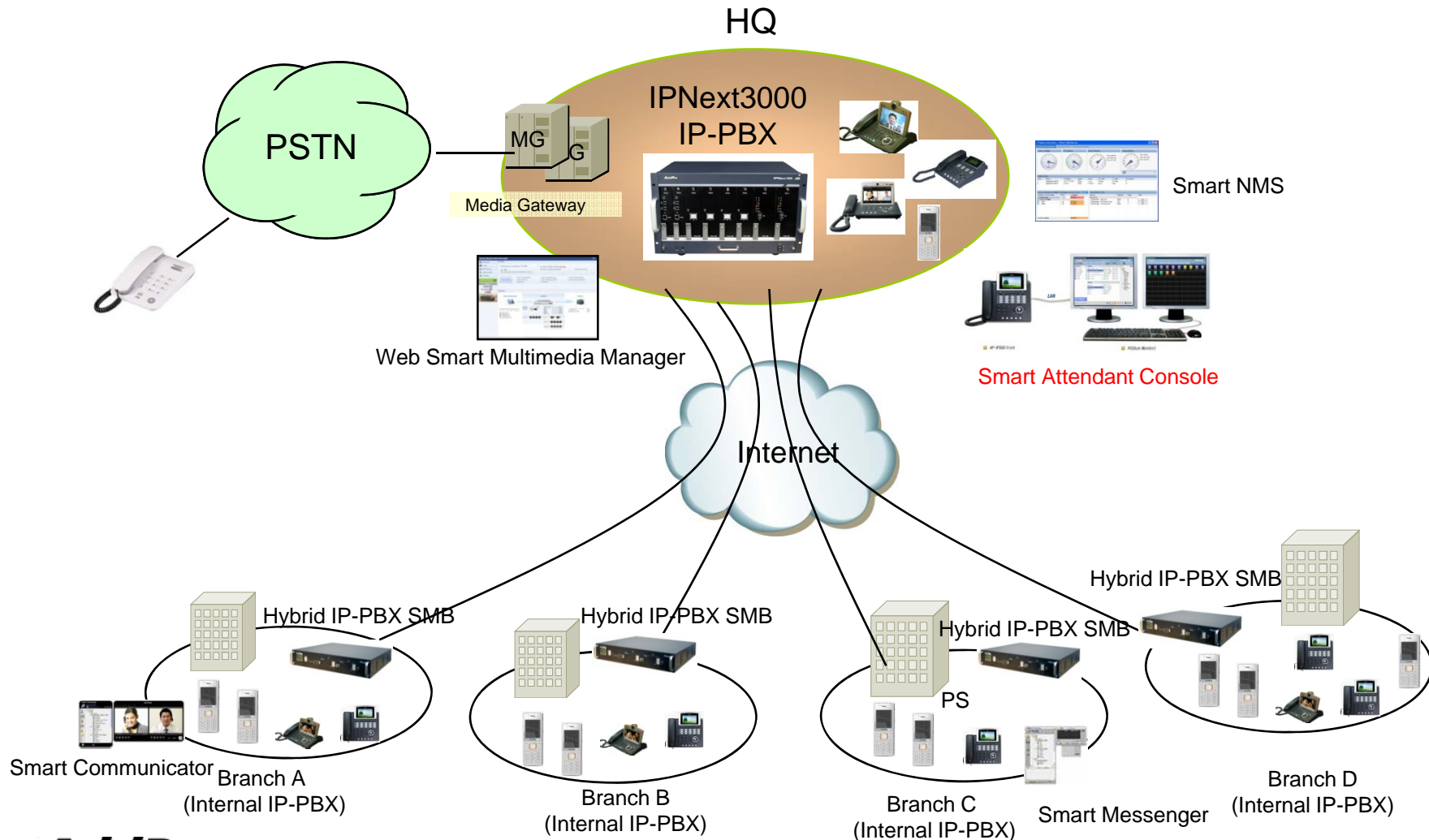2013, Sales and Marketing

www.addpac.com

Contents

- IP Telephony Service Diagram
- Dual Redundancy IP-PBX Products (example)
- IP Telephony Hardware Terminals
- IP Attendant Console Software Solution
    - Smart Attendant Console
    - Smart Office Console
- Application Note (Korea Express Train : KTX)
    - Touch Screen based Attendant Console

IP Telephony Service Diagram

HQ

IPNext3000
IP-PBX

PSTN

MG
G

Media Gateway

Smart NMS

Web Smart Multimedia Manager

Smart Attendant Console

Internet

Hybrid IP-PBX SMB

Hybrid IP-PBX SMB

Hybrid IP-PBX SMB

Hybrid IP-PBX SMB

PS

Smart Communicator

Branch A
(Internal IP-PBX)

Branch B
(Internal IP-PBX)

Branch C
(Internal IP-PBX)

Smart Messenger

Branch D
(Internal IP-PBX)

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IPNext IP-PBX Comparison Table

Model / Service Features	IPNext5000	IPNext3000	IPNext2000	IPNext600
Registration User Number	5000	3000	2000	500
Concurrent Call User Number	1000	800	500	100
IPv4/IPv6 Dual Stack Support	Support	Support	Support	Support
VoIP Signaling — Internal	SIP	SIP	SIP	SIP
VoIP Signaling — External	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
Powerful IVR, UMS, Media Service, User Presence Service	Support	Support	Support	Support
RTP Proxy Service (IPv6, Private IP)	Support	Support	Support	Support
LAN Port	2	2	2	2
System Duplication	Support(built-in)	Support(built-in)	Support(built-in)	Support(Built-In)
Power Supply	Dual Redundancy Power(Module Type)	Dual Redundancy Power(Module Type)	Dual Redundancy Power(Module Type)	Dual Redundancy Power(Module Type)

IP Video Phones
for AddPac IP-PBX

IP Video Phones for AddPac IP-PBX

	AP-VP500	AP-VP350	AP-VP300N	AP-VP280	AP-VP250	AP-VP230	AP-VP150	AP-VP120
LCD Size	12.1 Inch Touch Screen	7Inch Touch Screen	7Inch Touch Screen	7Inch Touch Screen	4.3Inch Touch Screen	5Inch Touch Screen	4.3Inch Touch Screen	4.3Inch
Camera	CCD	CCD	CCD	CMOS	CMOS	CMOS	CCD	CMOS
Video Codec	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264	H.263 MPEG4 H.264
Signaling	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
Video MCU	N/A	4-Party Video MCU	N/A	N/A	N/A	N/A	N/A	N/A
Voice MCU	3-Party	3-Party	3-Party	3-Party	3-Party	3-Party	3-Party	3-Party
LAN Port	2	2	2	2	2	2	2	2
PoE	N/A	N/A	Support	Support	Support	Support	Support	Support

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IP Phones
for AddPac IP-PBX

IP Phones for AddPac IP-PBX

	AP-IP300	AP-IP250	AP-IP230	AP-IP160	AP-IP120	AP-IP90
LCD Size	4.3 Inch Color LCD	4.3 Inch Color LCD	5 Inch Color LCD	4 Text Line Graphic LCD	4 Text Line Graphic LCD	4 Text Line Graphic LCD
Touch Screen	N/A	Support	Support	N/A	N/A	N/A
Speed-Dial Keys	25 Key with Presence LED	Touch Screen based 25 Keys	Touch Screen based 25 Keys	16 Key with Presence LED	12 Key with Presence LED	N/A
Voice Codec	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723	G.711/G.726/ G.729/G.723
Signaling	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP	H.323/SIP
3-Party Conversation	Support	Support	Support	Support	Support	Support
LAN Port	2	2	2	2	2	2
PoE(Option)	Support	Support	Support	Support	Support	Support
FXO(Option)	Support	Support	Support	Support	Support	Support

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IP Extend Key Pack
for AddPac IP-PBX

IP Extend Key Pack Comparison Table

Model / Service Features	AP-PT100	AP-PT50	AP-PT20
Key Type	7 inch LCD Touch Screen	Push Button with User Presence Indication LAMP	Push Button with User Presence Indication LAMP
Key Number	Default : 9(row) x 4(column) = 36	60 Key	40 Key
User Presence Indication	Support	LED on, LED off, LED Blink	LED on, LED off, LED Blink
Multiple Cascading	Support	Support	Support
Speaker	Support	Support	Support
LAN Port	2	2	2
PoE(Option)	Support	Support	Support
Application	IP Phone or Video Phone Extend Key Pack	IP Phone or Video Phone Extend Key Pack	IP Phone or Video Phone Extend Key Pack

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IP Wifi Phone
AP-WP100 IP Wifi Phone

- Wi-Fi IP Phone Solution
- Various Call Scenario Support (IP-PBX)
- State-of-art SIP Signaling
- IEEE802.11b/g up to 54Mbps
- WPA(Wifi Protected Access), 802.11i Security Standard
- Wi-Fi IP Audio Broadcasting Terminal Solution
- External Audio In/Out Port for Headset
- Firmware Upgradeable Architecture
- VoIP Solution with Outstanding Network Service Capability
- Audio Privacy Protection

IP Attendant Console Software Solution

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IP Attendant Console Product Lists
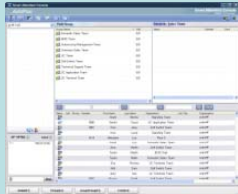
	Smart Attendant Console	Attendant Console Software for Large Company
	Smart Office Console	Attendant Console Software for Secretary (Option : Touch Screen)

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IP Attendant Console Feature Comparison

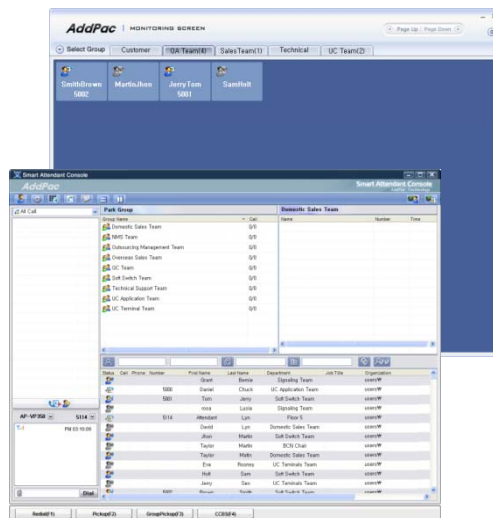|	Smart Attendant Console	Smart Office Console
Feature Lists	• Support Call Routing Service • Support Directory Search • Support User Presence Information • Support Phone Number Presence Information • Interoperation with Directory and Smart Attendant Console • Support Smart Call Control and Additional Service Control • Support Longest Wait Time based Incoming Call Process • Support Private Phone Book • Support Drag and Drop Call Control Service • Support Remote Broadcasting Control Feature	• Support Call Routing Service • Support User Presence Information • Support Phone Number Presence Information • Support Attendant Phone Call Control • Support Call Status Display • Support Group Call(Conference) • Support Various Monitoring Group

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Smart Attendant Console (version 1.0)

Contents

- Overview
- Smart Attendant Console Structure
- Smart Attendant Console System Diagram
- Smart Attendant Console System Configuration
- Smart Attendant Console Automatic Call Distribution
- Smart Attendant Console Feature
- Smart Attendant Console UI
  - Main Screen Feature
  - Monitoring Screen and Feature
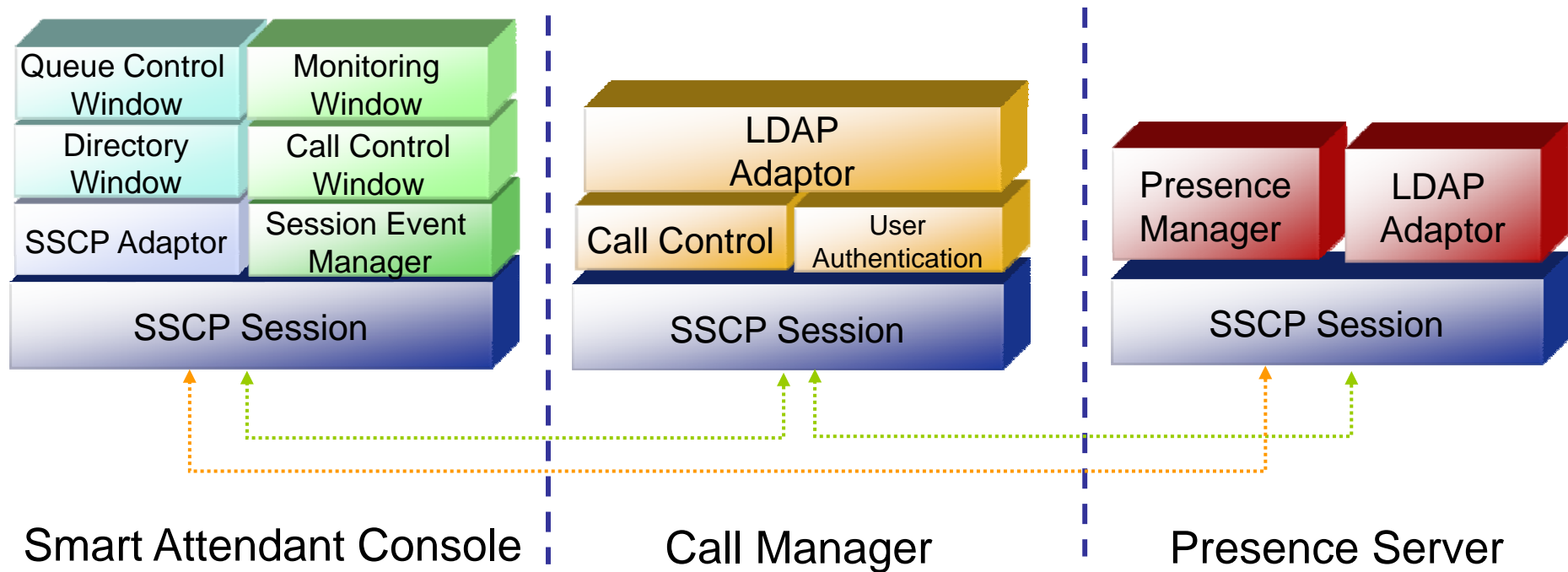 - Broadcasting Screen and Feature
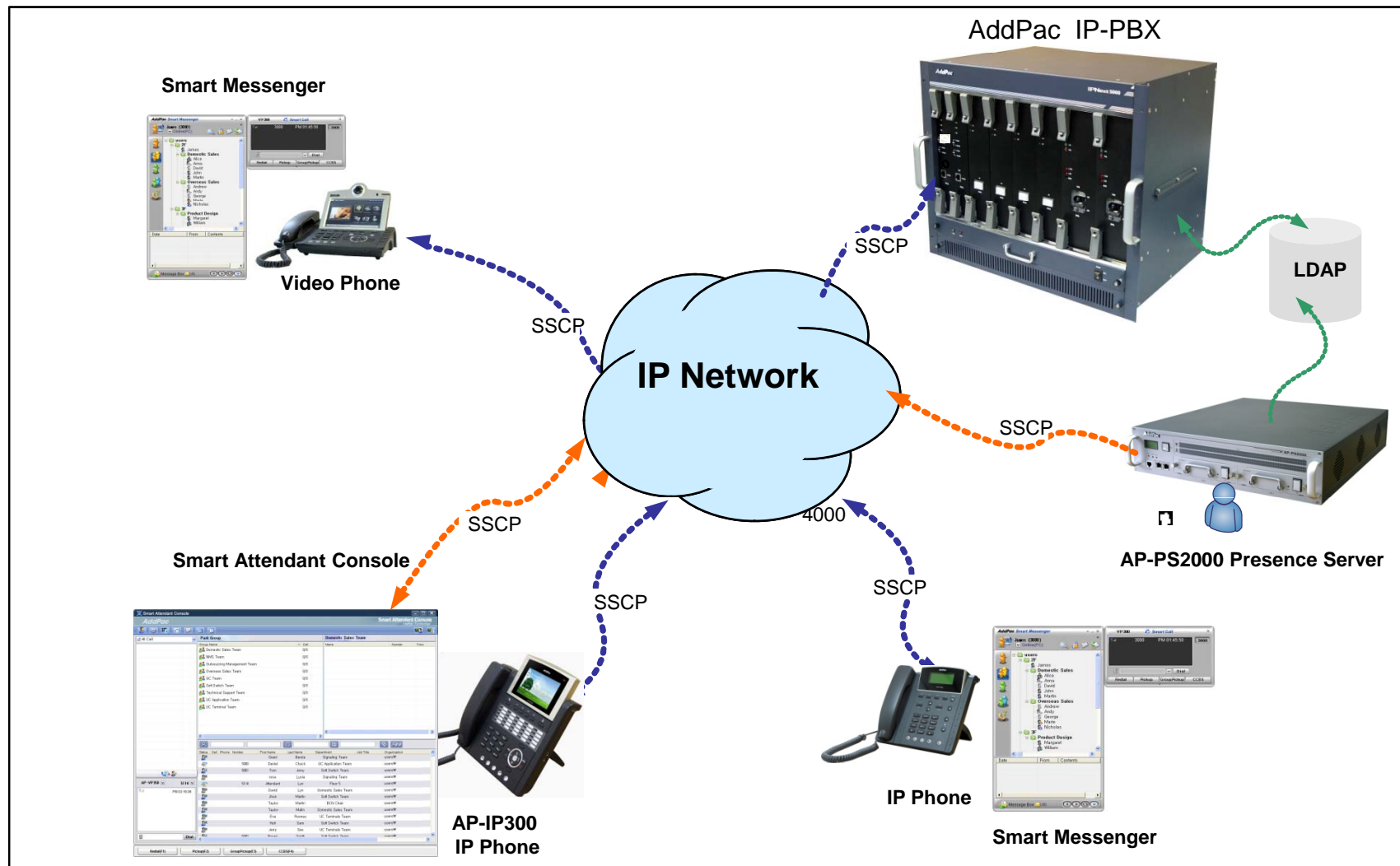 - Fire Alerting Screen And Feature

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Overview

Support Efficiently Call Routing and Smart Presence Service

- Smart Attendant Console Function
  - Support Call Routing Service
  - Support Directory Search
  - Support User Presence Information
  - Support Phone Number Presence Information
  - Interoperation with Directory and Smart Attendant Console
  - Support Smart Call Control and Additional Service Control
  - Support Longest Wait Time based Incoming Call Process
  - Support Private Phone Book
  - Support Drag and Drop Call Control Service
  - Support Remote Broadcasting Control Feature

Smart Attendant Console Structure

| Smart Attendant Console | Call Manager | Presence Server |

Smart Attendant Console System Diagram

AddPac IP-PBX

Smart Messenger

Video Phone

SSCP

SSCP

IP Network

LDAP

SSCP

AP-PS2000 Presence Server

SSCP

Smart Attendant Console

SSCP

4000

SSCP

AP-IP300 IP Phone

IP Phone

Smart Messenger

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Smart Attendant Console System Configuration

Single Monitor Mode

Dual Monitor Mode

Smart Attendant Console
Automatic Call Distribution

AddPac IP-PBX

IP Network

Smart Attendant Console

AP-IP300
IP Phone

Smart Attendant Console

AP-IP300
IP Phone

Smart Attendant Console

AP-IP300
IP Phone

Automatic Call Distribution
- Longest Idle Time
- High Priority
- Sequential

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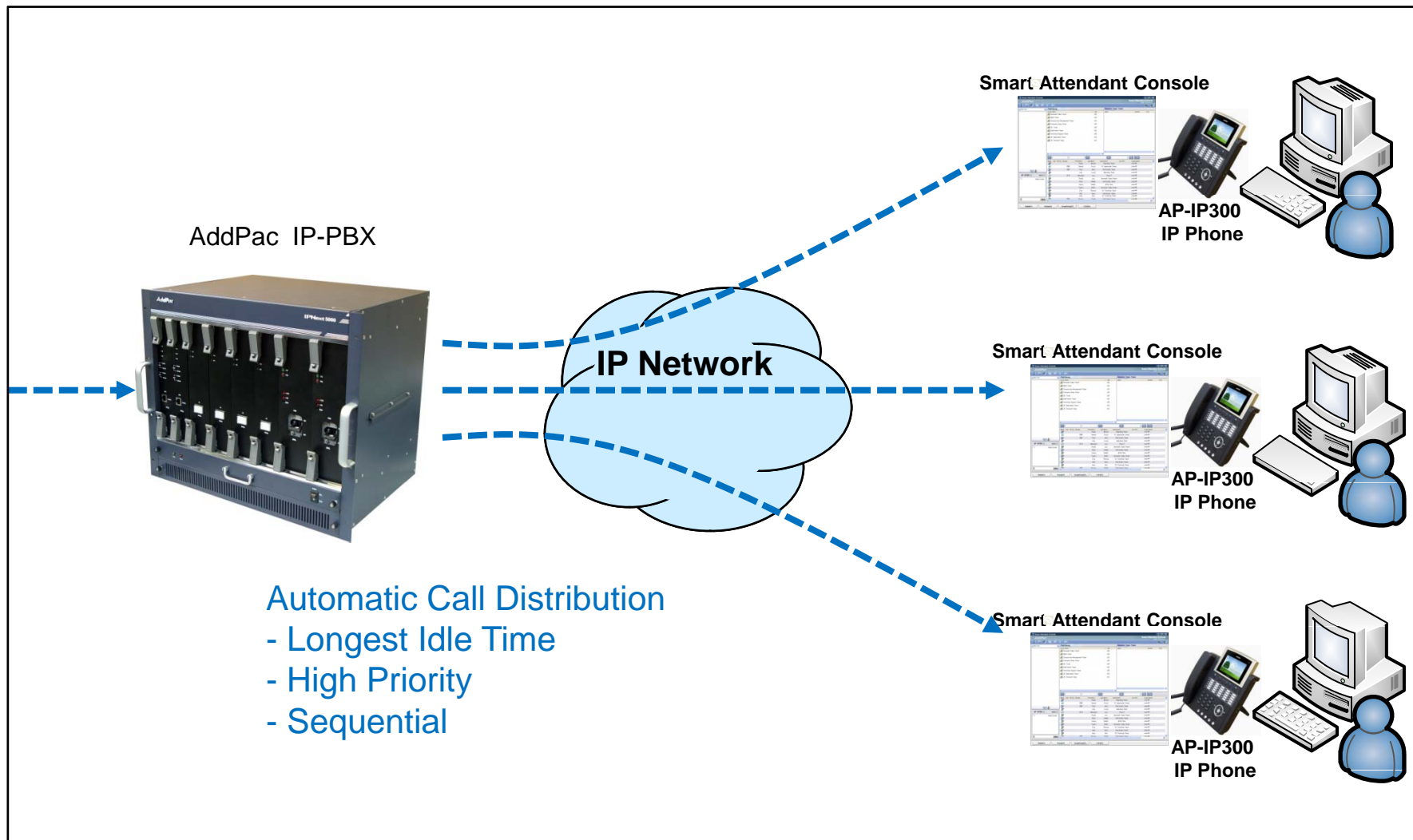
Smart Attendant Console Feature

- **Smart Login Service**
  - User Login and Logout Feature

- **Automatic Call Distribution Feature**
  - No Call Distribution Mode
    - An Available Attendant Manually Answer a Call in the Queue
  - Longest Idle Time Mode
    - Call Manager Automatically Send a Call to Longest Idle Attendant
  - Preference Mode
    - Call Manager Automatically Send a Call to High Priority Attendant
  - Sequential Mode
    - Call Manager Automatically Send a Call to an Attendant Sequentially

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Smart Attendant Console Feature (cont.)

- **Queue Call Control Feature**
  - Wait Time Based Call Answer
    - Longest Wait Call Answer
  - Show Incoming Call by Call Type
    - Internal Call Show
    - External Call Show
    - Show All Call
  - Display Call Status Icon for Waiting Time
    - Call Busy, Call Wait Alerting, Call Wait Warning
    - User Configure the Wait Status Time

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Smart Attendant Console Feature (cont.)

- **Additional Call Service**
  - Park Group Monitoring
    - Show Park Group Call Status for All Park Group
    - Show Detail Park Group Call List for Specify Park Group
    - Call Group Park, Park Group Call Pickup
    - Display Call Status Icon for Waiting Time
      - Call Busy, Call Wait Alerting, Call Wait Warning
      - User Configure the Wait Status Time

Smart Attendant Console Feature (cont.)

- **Additional Call Service**
  - Phone Book Feature
    - Group Create, Modify, Delete
    - Contact Add, Delete, Modify
    - Common Feature
      - Dial
      - View Detail Contact Information
      - Send e-mail
    - Dial, Send e-mail Using Phone Book
    - Private Contacts Managing Feature
    - Detail Contact Information View

  - Support Emergency / Night Mode (ToDo)
    - Configure Emergency Voice Content and Enable/Disable Emergency Mode
    - Enable/Disable Night Mode

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Smart Attendant Console Feature (cont.)

- **Directory Search Service**
  - User Search Feature
    - Various Search Options
      - First Name, Last Name, Department, Phone Number
    - Search User Presence Status View
      - PC Online, Phone Online, PC-Phone Online
      - Working, Away, Absence
      - Be In Conference, Call Busy
    - Interoperate with Directory Search User Information
      - Double Click Call Dial and Manual Call Dial
      - Drag and Drop Call Transfer and Manual Call Transfer
      - Dynamic Conference

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Smart Attendant Console Feature (cont.)

- Monitoring Presence Service
  - Support Monitoring Group
    - Add, Modify, Delete Monitoring Group and User
    - Add Group from Public Contacts
  - Phone Presence Status
    - Online, Working, Away, Absence
    - Be In Conference, Call Busy
  - Display Call Information
    - Caller Name, Phone Number
    - Phone Type (Phone, Mobile), Call Type (In/Out-Bound Call)
  - Display Call Status Icon for Waiting Time
    - Call Idle, Call Busy, Call Wait Alerting, Call Wait Warning
    - User Configure the Wait Status Time

Smart Attendant Console Feature (cont.)

- **Broadcasting Service**
  - Support Broadcasting Control Feature
    - Easy to Start/Stop Broadcasting
    - Show Broadcasting Group Status
    - Set Broadcasting Volume
  - Support User Friendly Design

- **Fire Alerting Service**
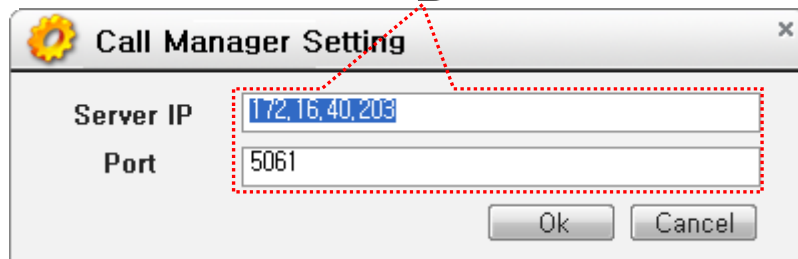 - Automatic Fire Alerting Broadcasting
  - Show Fire Alerting Status

Smart Attendant Console Login
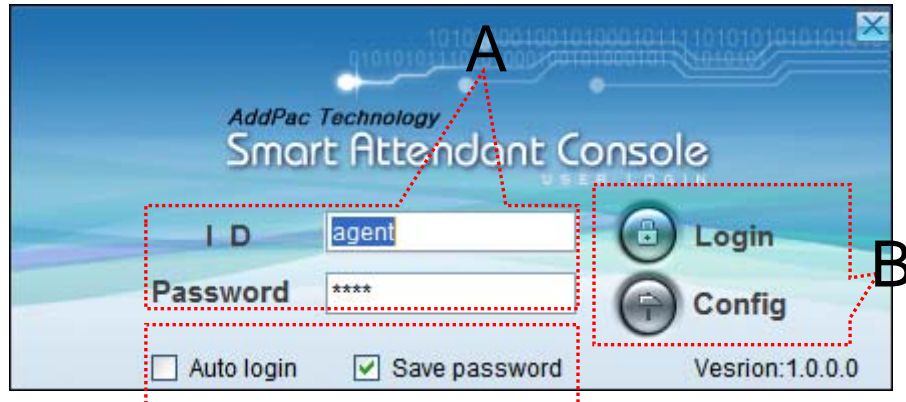


A

B

C

[Figure 1]

D

[Figure 2]

E

[Figure 3]

- Attendant Console Login
  - [Figure 1] shows the login picture of smart attendant Console program. "E" of [Figure3] is ICON of Smart Attendant Console Program.

  - When program is started initially, user should set the network configuration parameter such as IP address, Port number of Presence Server.[Figure2]

  - After inputting ID and Password, press the login button

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Smart Attendant Console
Main Screen Feature
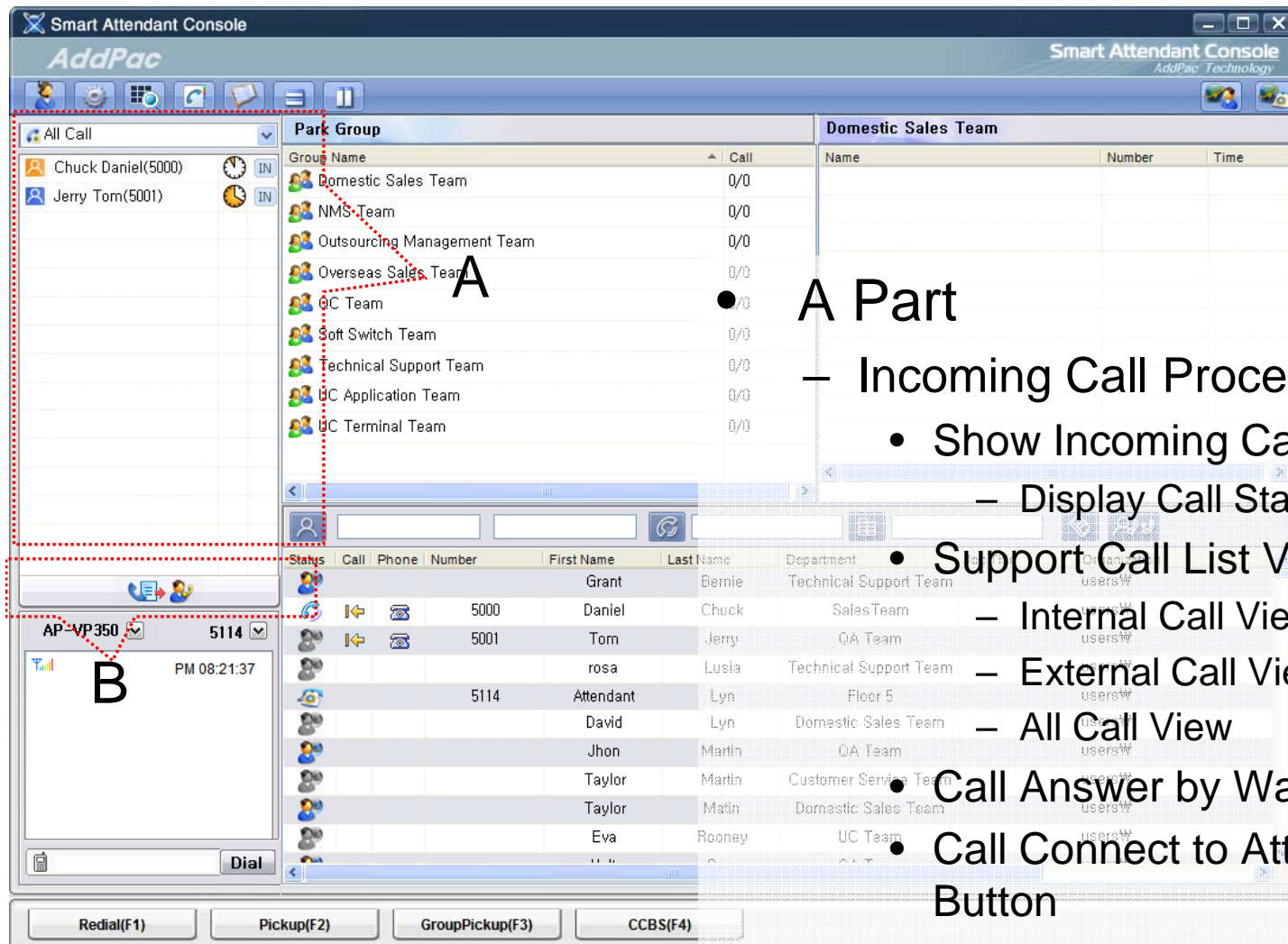
- **A Part**
  - Incoming Call Process Part
    - Show Incoming Call Status
      - Display Call Status by Wait Time Icon
    - Support Call List View Option
      - Internal Call View
      - External Call View
      - All Call View
  - Call Answer by Wait Time
  - Call Connect to Attendant Using "B" Button

Smart Attendant Console
Main Screen Feature (cont.)

- **B Part**
  - Additional Service Run Part
    - Service On/Off Button
    - Configuration Button
    - Monitoring Screen Run Button
    - Phone Book Button
    - Directory Refresh Button
    - Program Arrange Layout Button

- **C Part**
  - Call Control
    - Connected Call Control Soft-Key
      - Support Dynamic Soft-Key
    - Input Dial Number and Dial

B

C

Smart Attendant Console Main Screen Feature (cont.)

- **D Part**
  - Directory Search Part
    - Provide Various Search Options
      - First Name, Second Name
      - Department
      - Phone Number
    - Support User Presence Service
    - Interoperation with Directory Search User

Smart Attendant Console Main Screen Feature (cont.)

- • E Part
  - – Park Group Management Part
    - • Show Park Group Call Status
    - • Show Detail Park Group Call List
    - • Support Group Park, Group Park Call Pickup

Smart Attendant Console
Main Screen Feature (cont.)

- **F Part**
  - Phone Book Management Part
    - Group Create, Modify, Delete
    - Contact Add, Delete, Modify
    - Common Feature
      - Dial
      - View Detail Contact Information
      - Send e-mail
    - Dial, Send e-mail Using Phone Book
    - Private Contacts Managing Feature
    - Detail Contact Information View

F
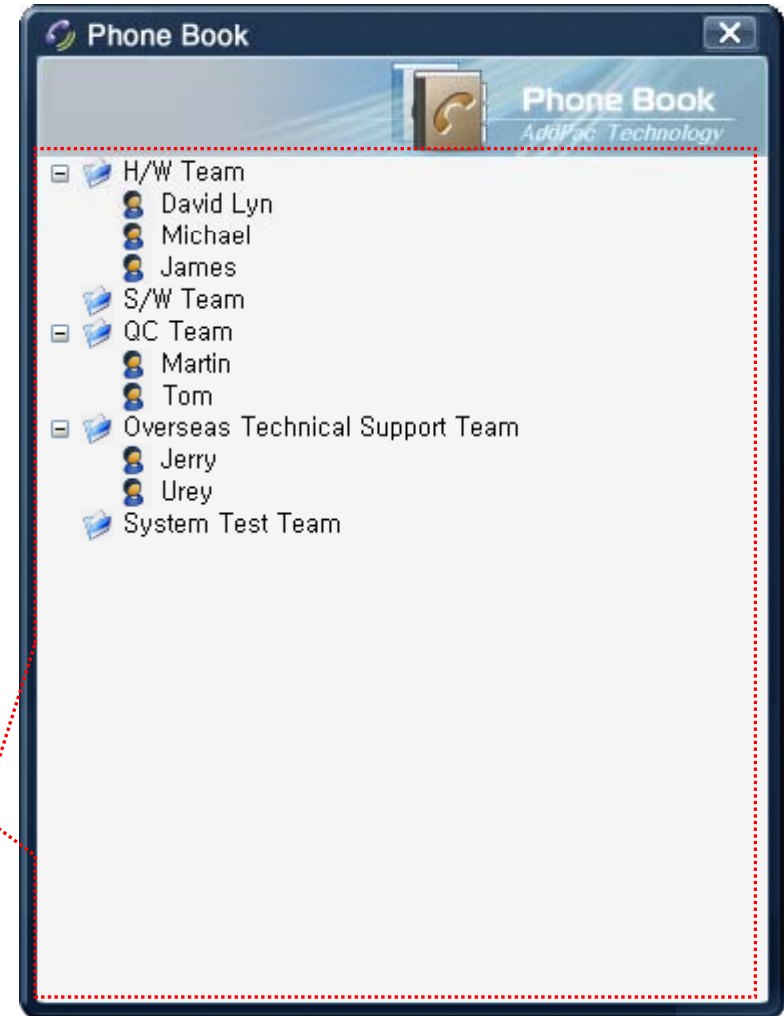
Smart Attendant Console Monitoring Screen Feature

- **A Part**
  - Monitoring Department Control Part
    - Provide Select Monitoring Group Button
    - Add, Modify, Delete Monitoring Group and User

- **B Part**
  - Monitoring User Part
    - Provide Various User Presence Status
      - PC Online, PC-Phone Online, Phone Online
      - Offline, Away, Absence
      - Be in Conference, Call Busy
    - Support Drag and Drop Call Transfer
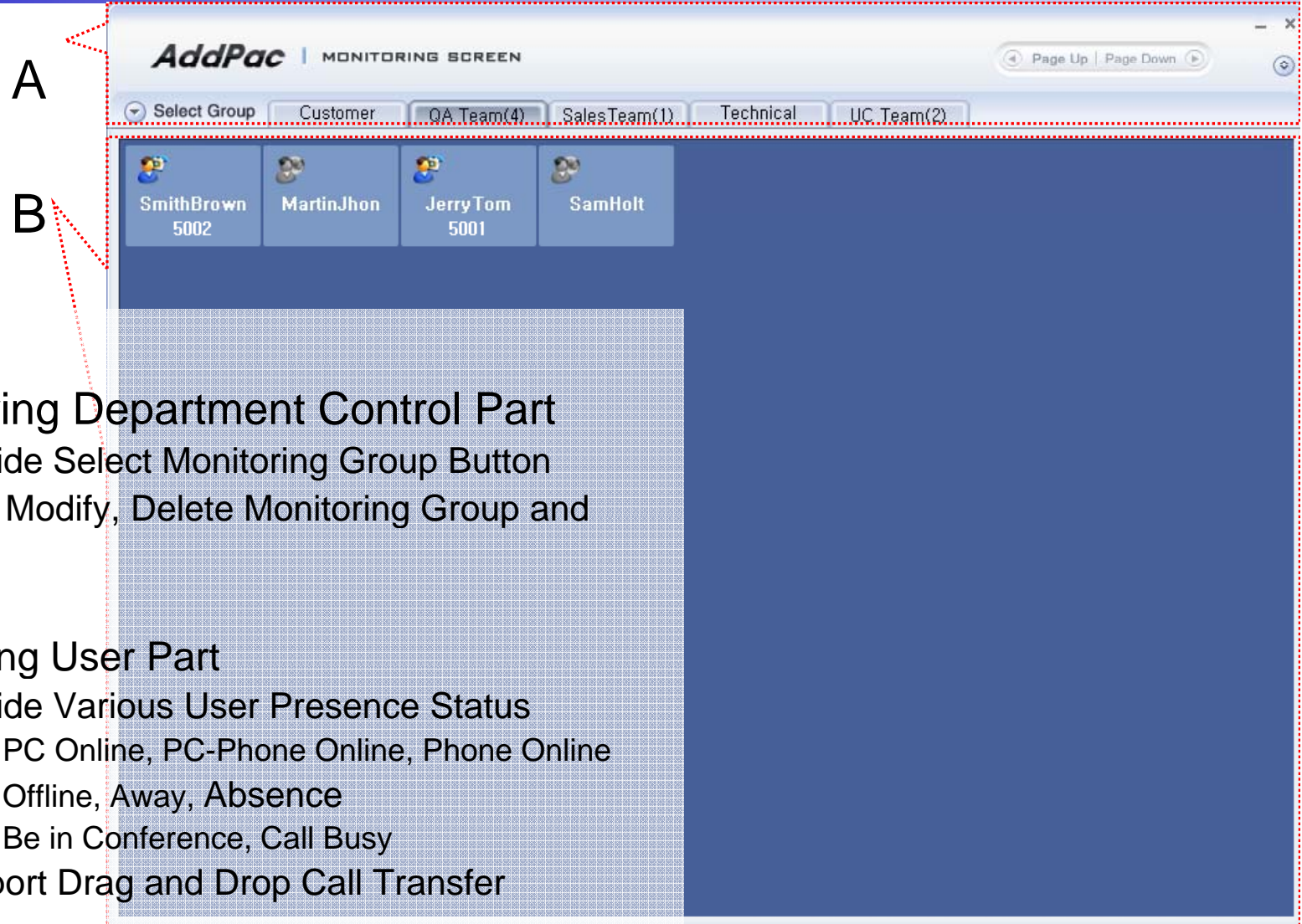
Smart Attendant Console
Broadcasting Screen Feature

- **A Part**
  - Broadcasting Status Part
    - Show Group Broadcasting Status
      - Broadcasting, Idle, Other Service

- **B Part**
  - Broadcasting Control Part
    - Broadcasting Start/Stop Button
    - Chime Bell Play Button
    - Volume Control Button

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Smart Attendant Console
Fire Alerting Screen Feature
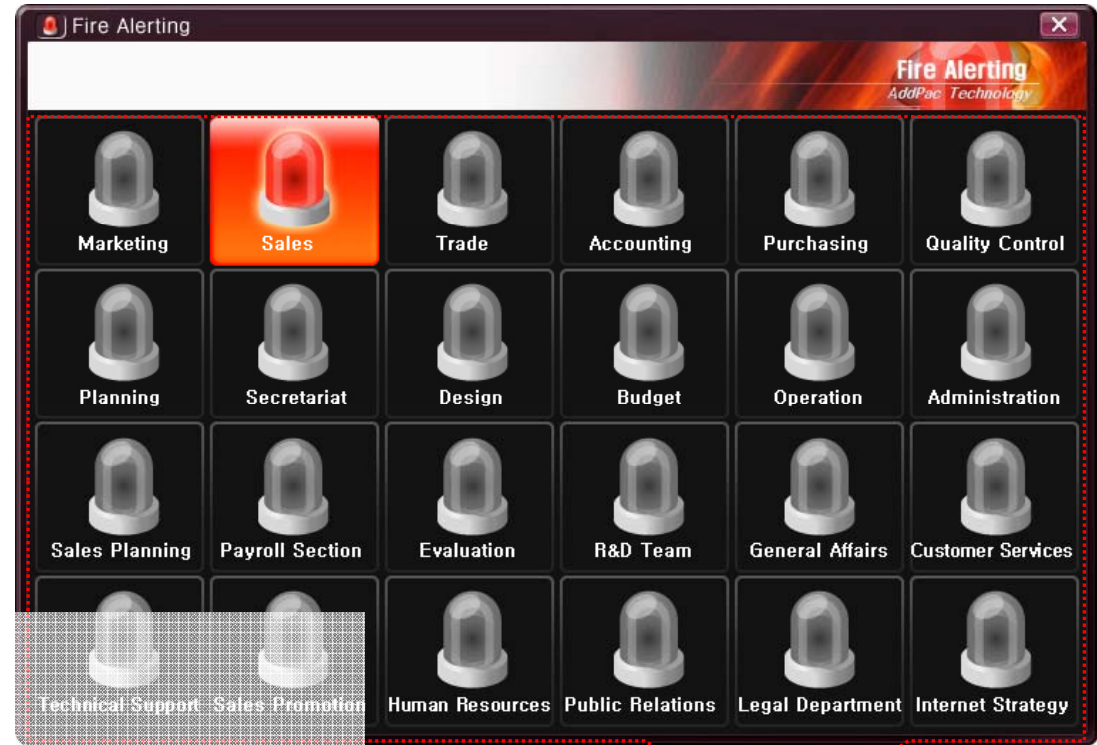
- A Part
  - Fire Alerting Part
    - Automatic Fire Alerting Broadcasting
    - Show Fire Alerting Status

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Smart Office Console
(Version 1.1)

Contents

- Overview
- Smart Office Console System Diagram
- Smart Office Console Feature
- Smart Office Console UI
  - Login Feature
  - Main Screen Feature

Overview

Support Efficiently Call Routing and Smart Presence
Service

- Smart Office Console Function
  - Support Call Routing Service
  - Support User Presence Information
  - Support Phone Presence Information
  - Support Attendant Phone Call Control
  - Support Call Status Display
  - Support Group Call(Conference)
  - Support Various Monitoring Group

Smart Office Console System Diagram

IP-PBX IPNext5000

Smart Messenger

Video Phone

SSCP

SSCP

IP Network

SSCP

LDAP

SSCP

AP-PS2000 Presence Server

SSCP

Secretary

SSCP

LAN

AP-IP300 IP Phone

Smart Office Console

SSCP

IP Phone

Smart Messenger

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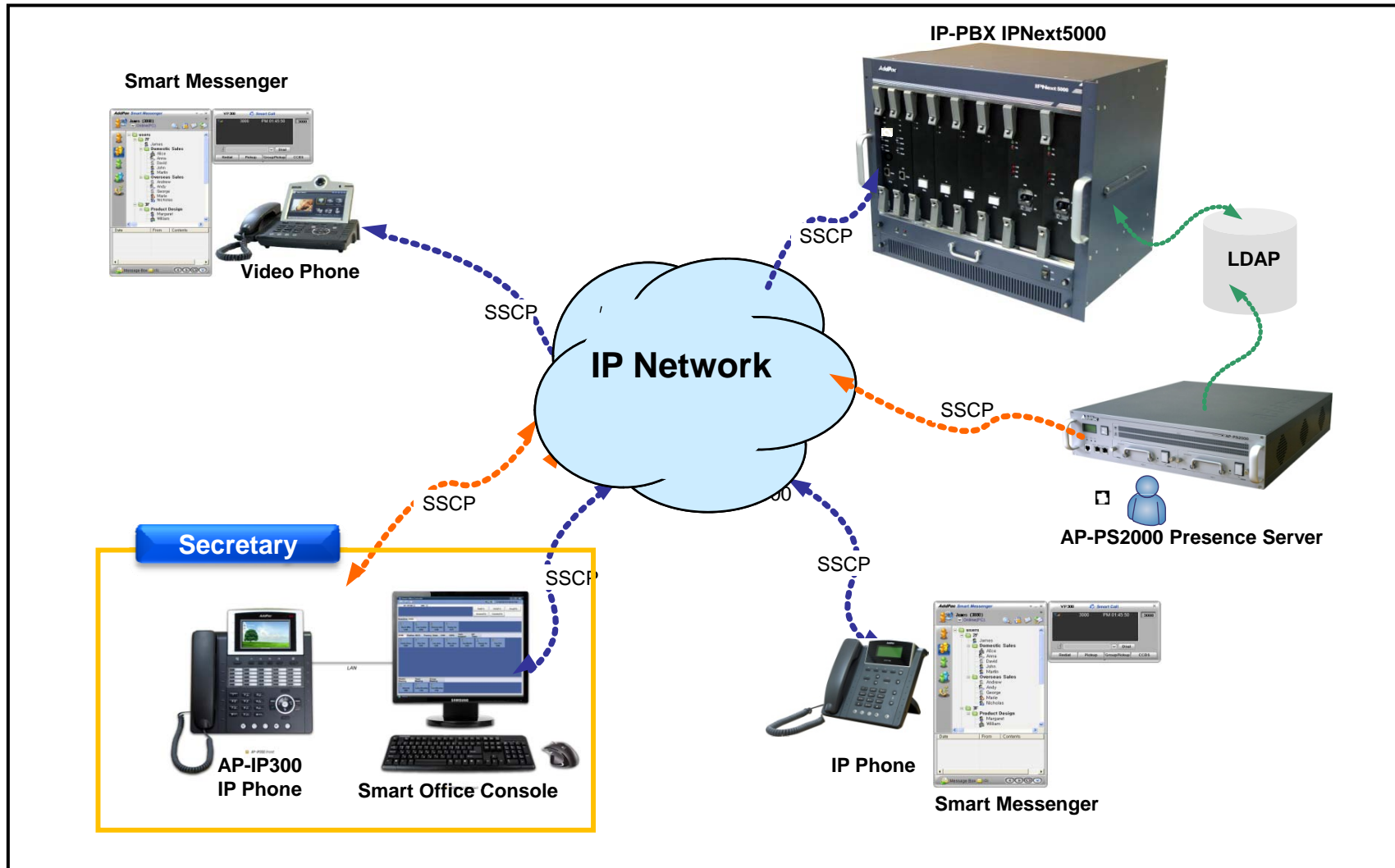
Smart Office Console Structure

Queue Control Window | Monitoring Window
Directory Window | Call Control Window
SSCP Adaptor | Session Event Manager
SSCP Session

LDAP Adaptor
Call Control | User Authentication
SSCP Session

Presence Manager | LDAP Adaptor
SSCP Session

Smart Office Console | Call Manager | Presence Server
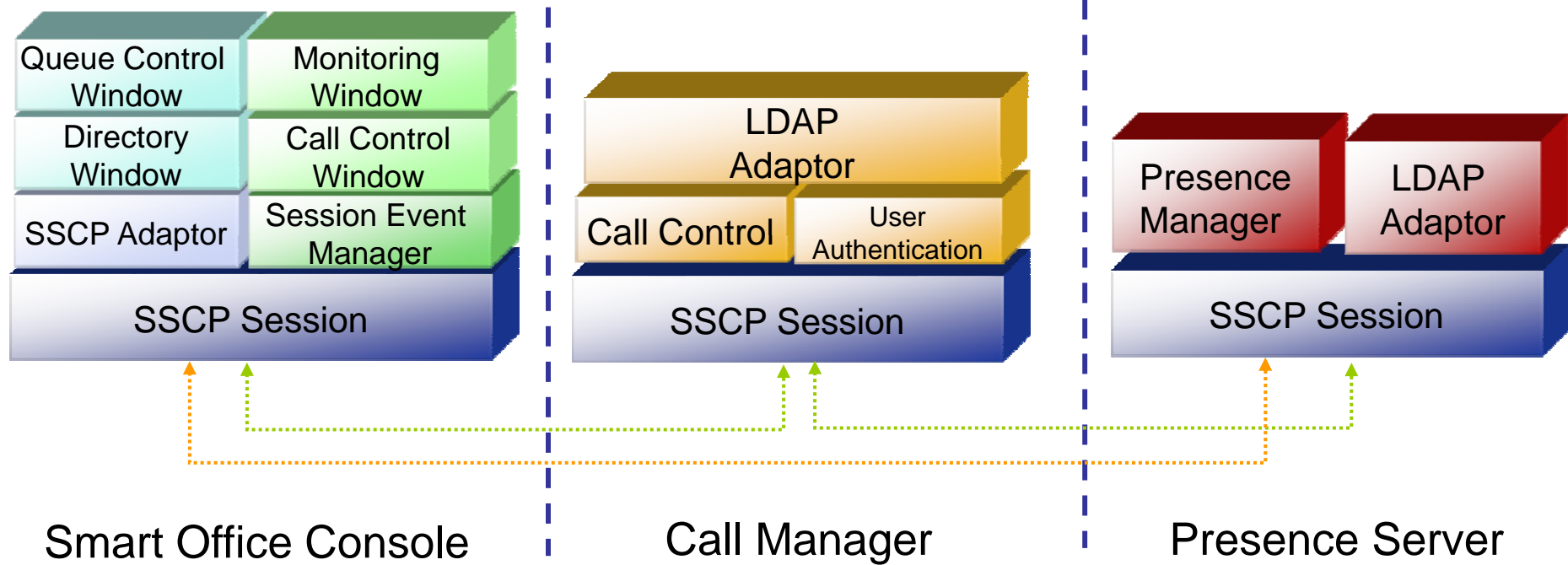
Smart Office Console Feature

- **User Login Service**
  - User Login and Logout Feature

- **Monitoring and Group Management Service**
  - Support Various Group
    - Attendant and Direct Phone Group
    - Office Phone Group
    - Conference Group
  - Support Group Management Feature
    - Add Group, Rename Group, Delete Group
    - Add User, Delete User
   - Add Conference Room, Delete Conference Room

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Smart Office Console Feature

- Monitoring and Group Management Service
  - Presence Feature
    - Phone Presence Status
      - Online, Working, Away, Absence, Be In Conference, Call Busy
    - User Presence Status
      - PC Online, Phone Online, PC-Phone Online
      - Working, Away, Absence, Be In Conference, Call Busy
    - Display Call Status
      - Display Talking Call Status Icon for Talking Time
      - Call Busy, Call Wait Alerting
      - User Configure the Talking Status Time
  - Call Control Feature
    - Interoperate with Monitoring Phone Information
    - Manual Call Dial
    - Drag and Drop Call Transfer and Manual Call Transfer

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Smart Office Console Feature

- **Attendant Phone Call Control Service**
  - Display Phone Call Status
    - Display Call Status Icon for Call State
    - Display Talking Call Status Icon for Talking Time
      - Call Busy, Call Wait Alerting
      - User Configure the Talking Status Time
    - Support Multi-Call
  - Phone Call Control Feature
    - Dial to Monitoring Phone and Conference
    - Incoming Call Answer
    - Call Hold and UnHold
    - Call Transfer
    - Call Drop
    - Interoperate with Monitoring Phone Information
      - Drag and Drop Call Transfer and Manual Call Transfer

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Smart Office Console Login
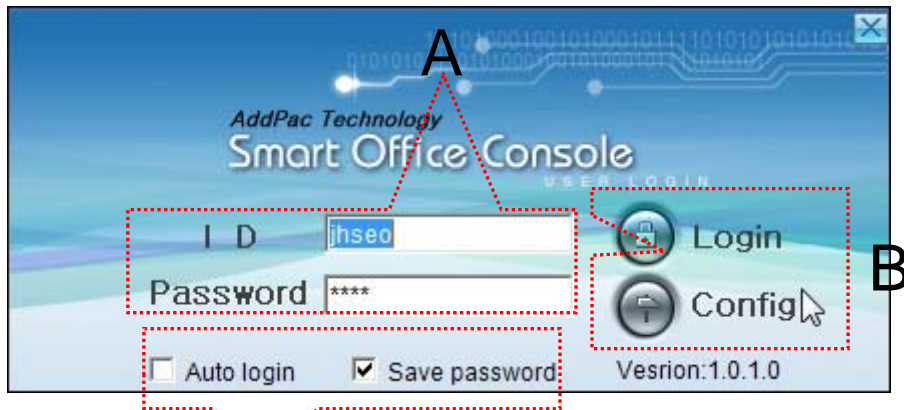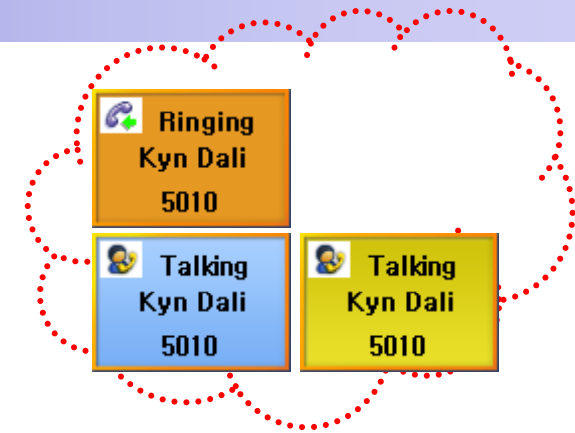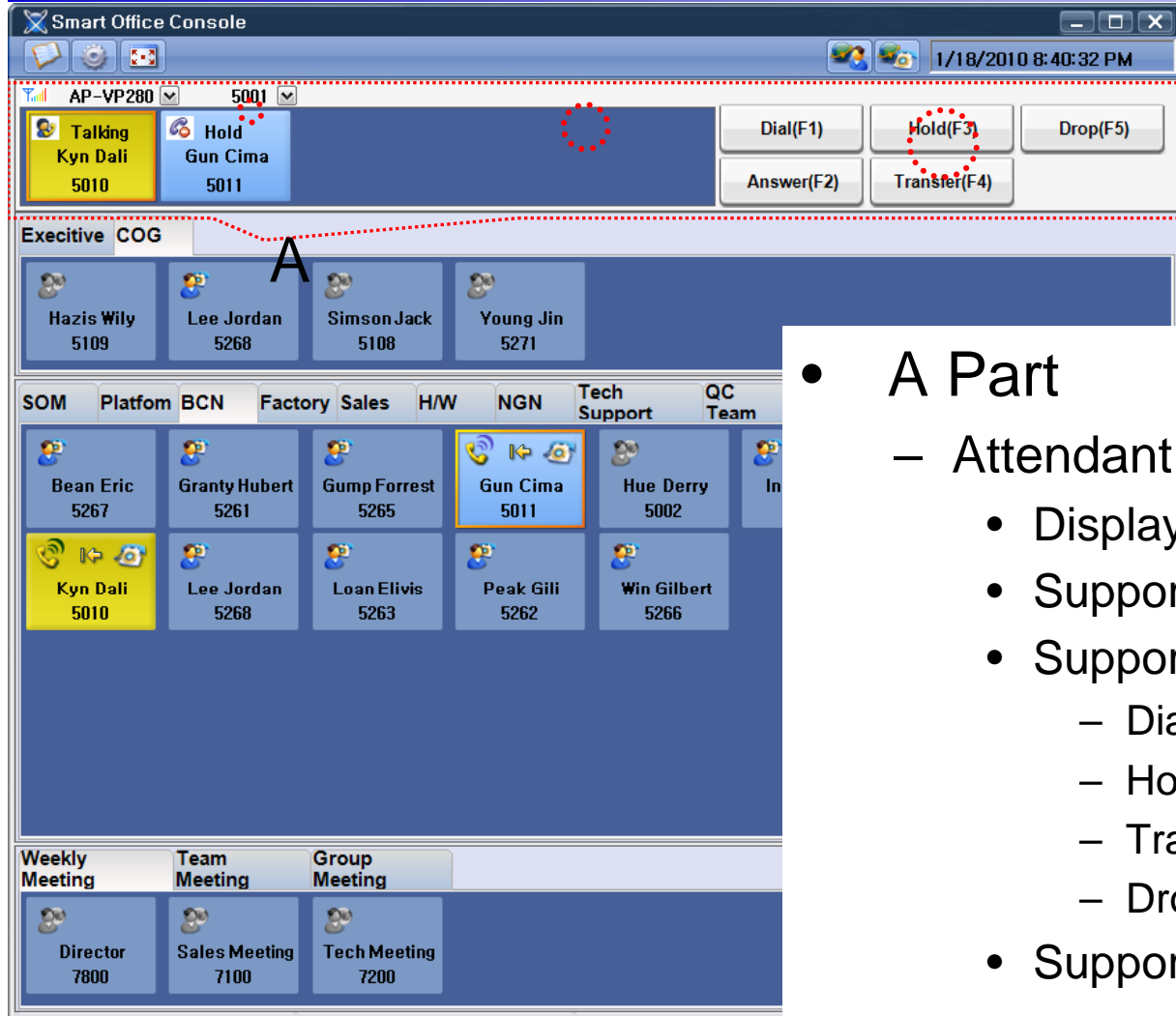

A

B

C

[Figure 1]

D

[Figure 2]

E
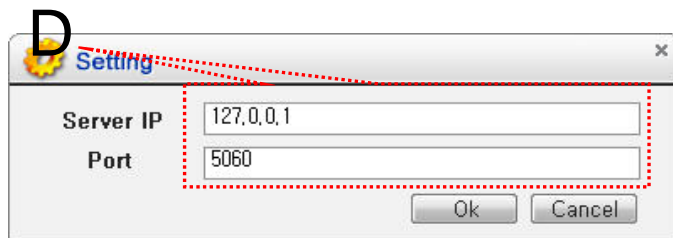
[Figure 3]

- Attendant Console Login
  - [Figure 1] shows the login picture of Smart Office Console program. "E" of [Figure3] is Icon of Smart Office Console Program.

  - When program is started initially, user should set the network configuration parameter such as IP address, Port number of Presence Server.[Figure2]

  - After inputting ID and Password, press the login button

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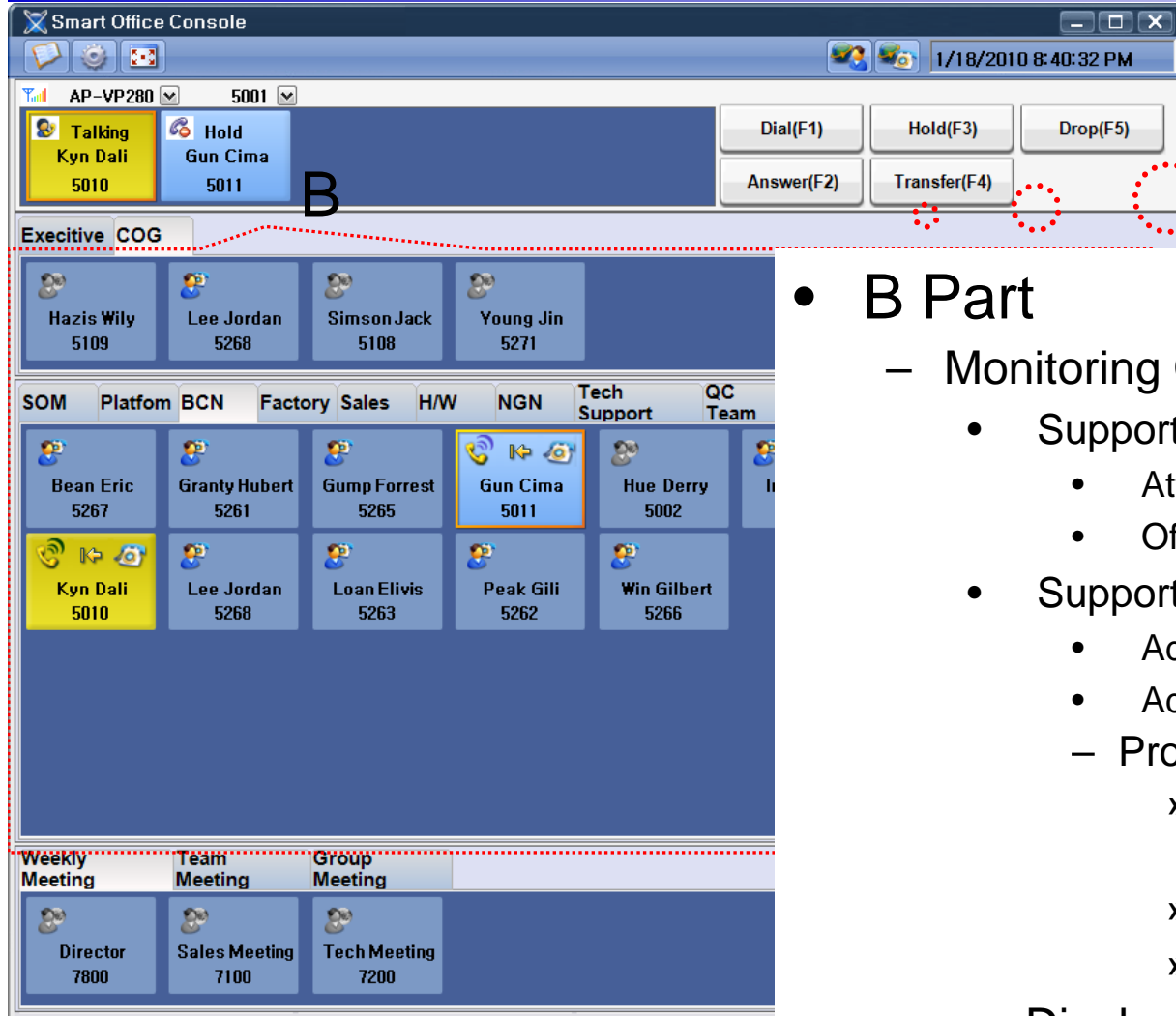www.addpac.com

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Smart Office Console
Main Screen – Call Control

- **A Part**
  - Attendant Phone Call Control Part
    - Display Call Status
    - Support Multi-Call Display
    - Support Call Control Feature
      - Dial, Answer
      - Hold/UnHold
      - Transfer
      - Drop
    - Support Short Key Call Control

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Smart Office Console
Main Screen – Monitoring

B

- **B Part**
  - Monitoring Group Part
    - Support Various Group
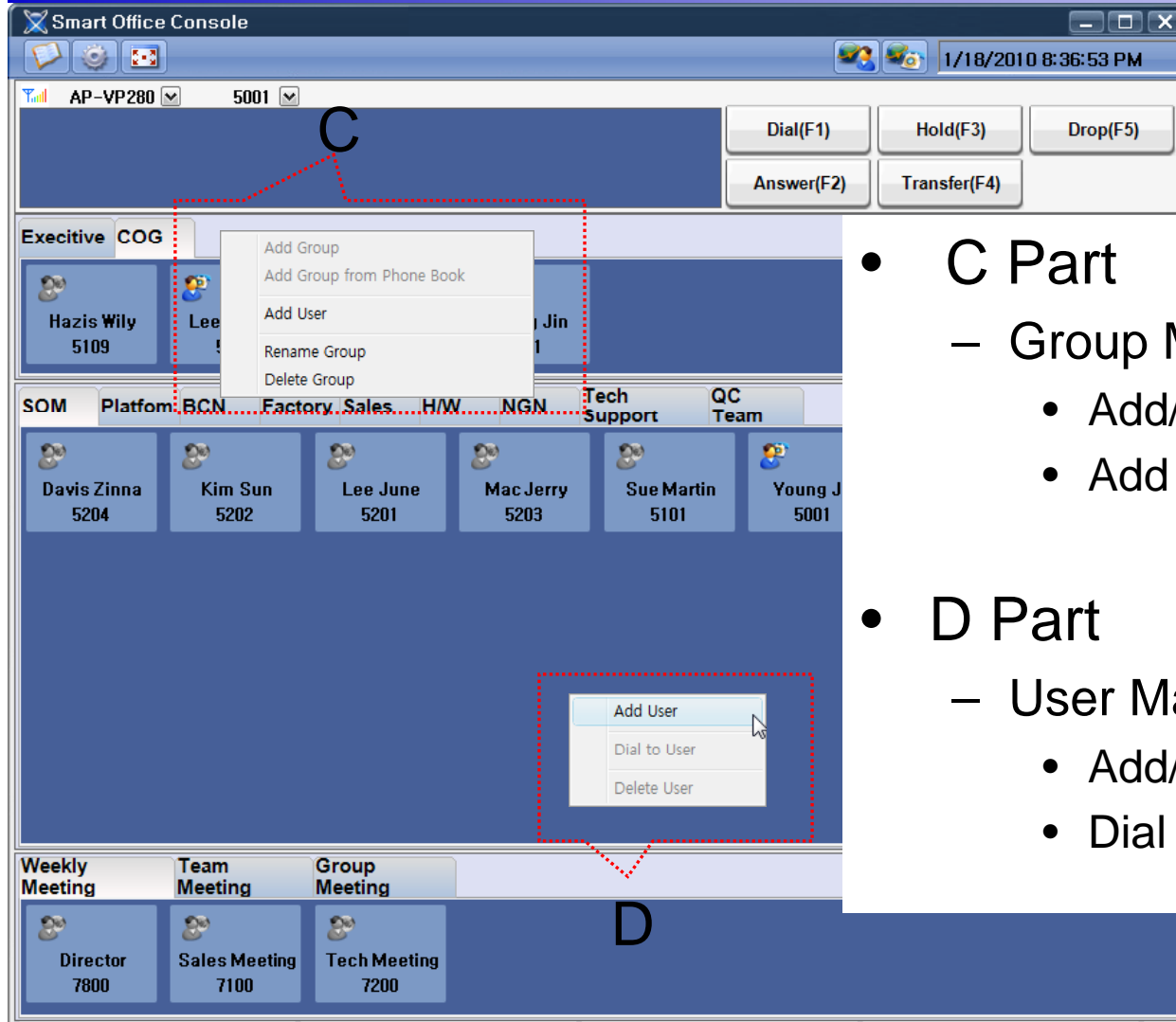   - Attendant and Direct Phone Group
      - Office Phone Group
    - Support Group Management Feature
      - Add Group, Rename Group, Delete Group
      - Add User, Delete User
    - Provide Various User Presence Status
      - » PC Online, PC-Phone Online, Phone Online
      - » Offline, Away, Absence
      - » Be in Conference, Call Busy
  - Display Call Status
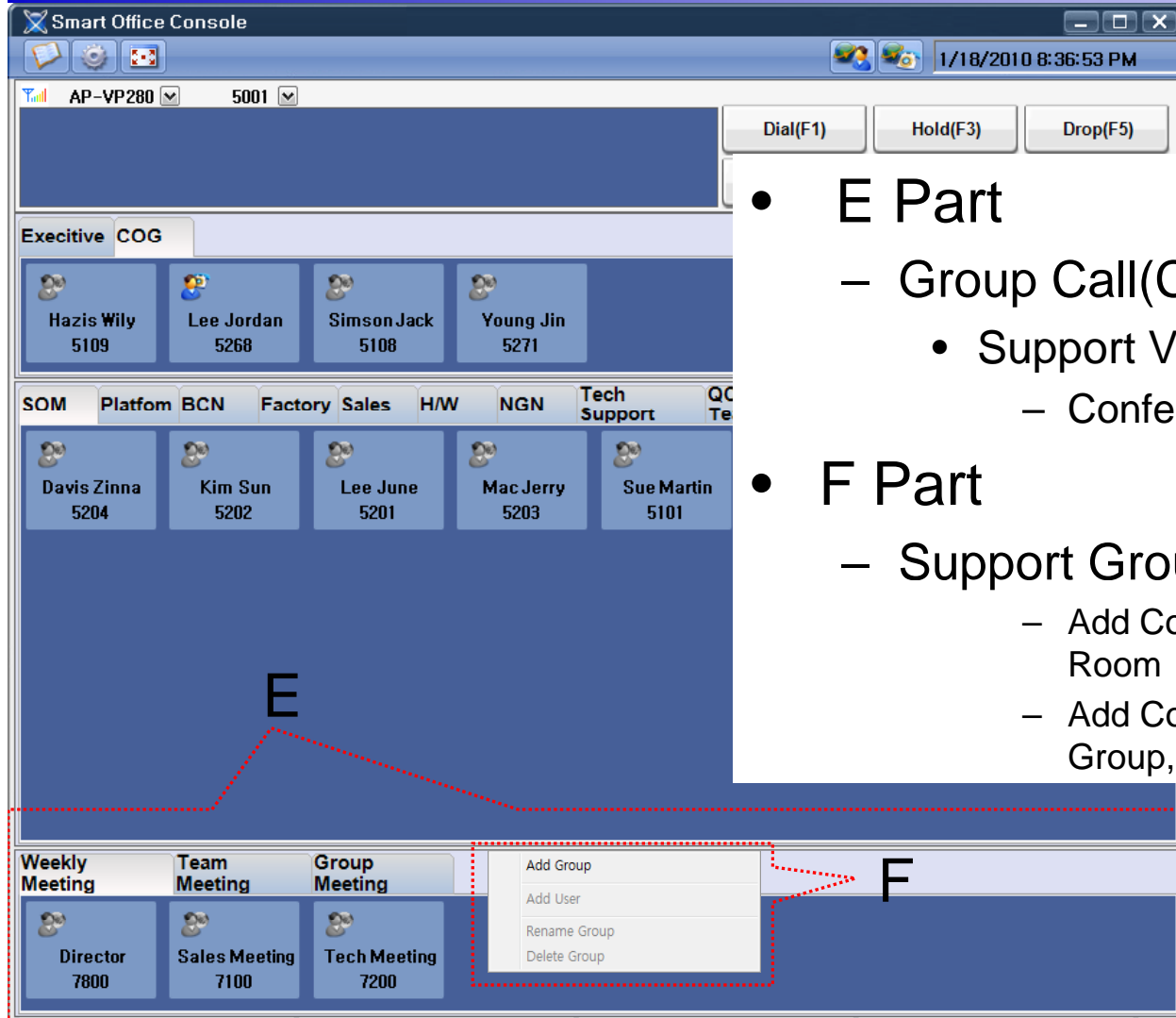
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Smart Office Console
Main Screen – Monitoring Group

- **C Part**
  - Group Management Feature
    - Add/Delete/Rename Group
    - Add User

- **D Part**
  - User Management Feature
    - Add/Delete User
    - Dial to User

Smart Office Console
Main Screen – Group Call

- **E Part**
  - Group Call(Conference) Part
    - Support Various Group
      - Conference Call Group

- **F Part**
  - Support Group Management Feature
    - Add Conference Room, Delete Conference Room
    - Add Conference Group, Rename Conference Group, Delete Conference Group

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Application Note
(Korea Express Train : KTX)

Touch Screen based
Attendant Console
(version 1.1)

Contents

- Overview
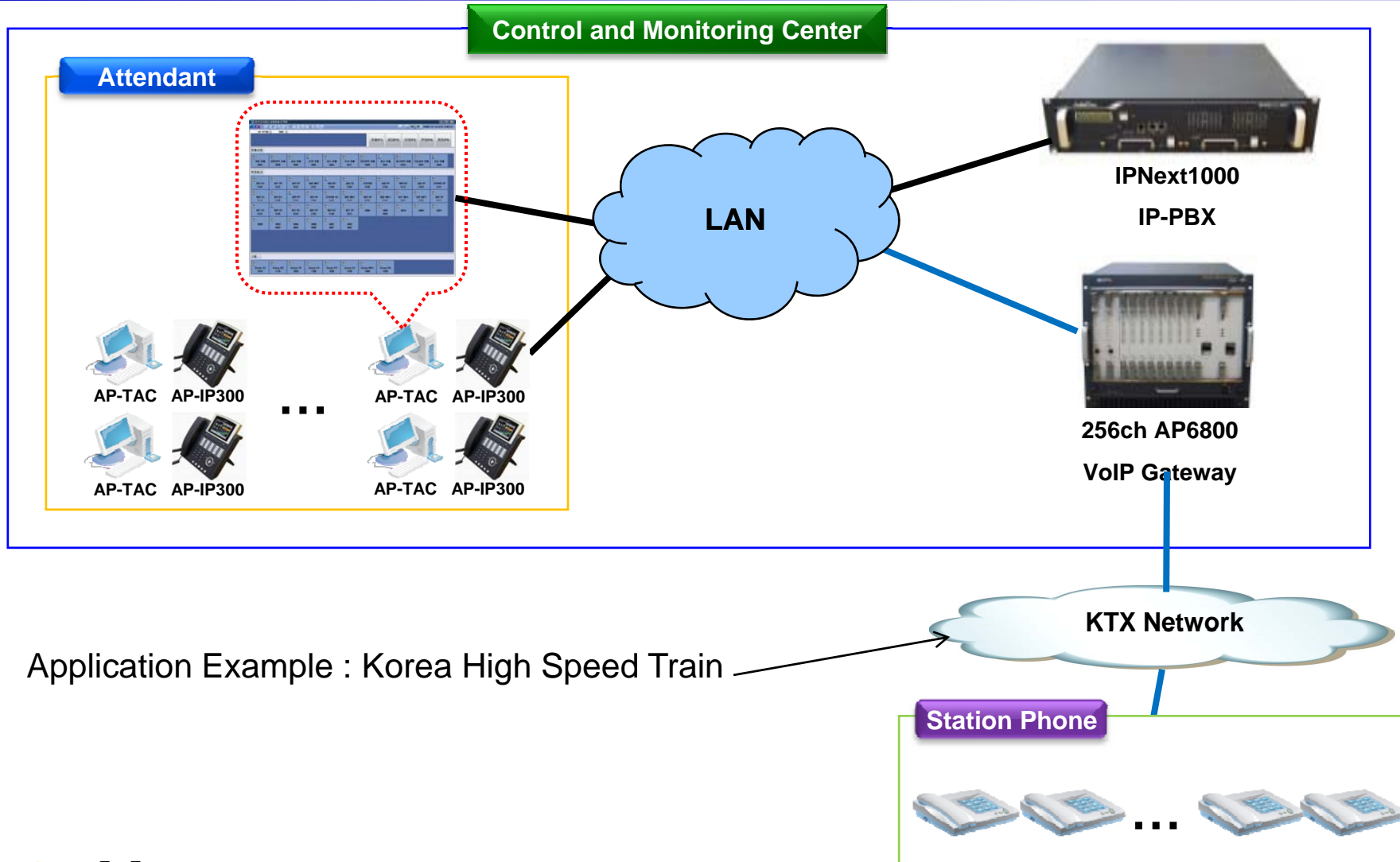- Touch Screen based Attendant Console System Diagram
- Touch Screen based Attendant Console Feature
- Touch Screen based Attendant Console UI
    - Login Feature
    - Main Screen Feature

Overview

Support Efficiently Call Routing and Smart Presence Service

- Touch Screen based Attendant Console Function
  - Support Call Routing Service
  - Support User Presence Information
  - Support Phone Number Presence Information
  - Support Attendant Phone Call Control
  - Support Call Status Display
  - Support Group Call(Conference)
  - Support Various Monitoring Group

Touch Screen based Attendant Console System Diagram

Control and Monitoring Center

Attendant

LAN

IPNext1000

IP-PBX

AP-TAC AP-IP300 ... AP-TAC AP-IP300

AP-TAC AP-IP300 AP-TAC AP-IP300

256ch AP6800

VoIP Gateway

KTX Network

Application Example : Korea High Speed Train

Station Phone

...

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Touch Screen based Attendant Console Feature

- ## User Login Service
  - User Login and Logout Feature

- ## Monitoring and Group Management Service
  - Support Various Group
    - Attendant and Direct Phone Group
    - Office Phone Group
    - Conference Call Group
  - Support Group Management Feature
    - Add Group, Rename Group, Delete Group
    - Add User, Delete User
   - Add Conference Room, Delete Conference Room

Touch Screen based Attendant Console Feature

- **Monitoring and Group Management Service**
  - Presence Feature
    - Phone Presence Status
      - Online, Working, Away, Absence
      - Be In Conference, Call Busy
    - User Presence Status
      - PC Online, Phone Online, PC-Phone Online
      - Working, Away, Absence
      - Be In Conference, Call Busy
    - Display Call Status
      - Display Call Status Icon for Talking Time
  - Call Control Feature
    - Interoperate with Monitoring Phone Information
    - Manual Call Dial
    - Drag and Drop Call Transfer and Manual Call Transfer

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# Touch Screen based Attendant Console Feature

- **Attendant Phone Call Control Service**
  - Display Phone Call Status
    - Display Call Status Icon for Call Stat
    - Display Talking Call Status Icon for Talking Time
    - Support Multi-Call
  - Phone Call Control Feature
    - Dial to Monitoring Phone and Conference
    - Incoming Call Answer
    - Active Call Hold and UnHold
    - Call Transfer
    - Call Disconnect
    - Interoperate with Monitoring Phone Information
      - Drag and Drop Call Transfer and Manual Call Transfer

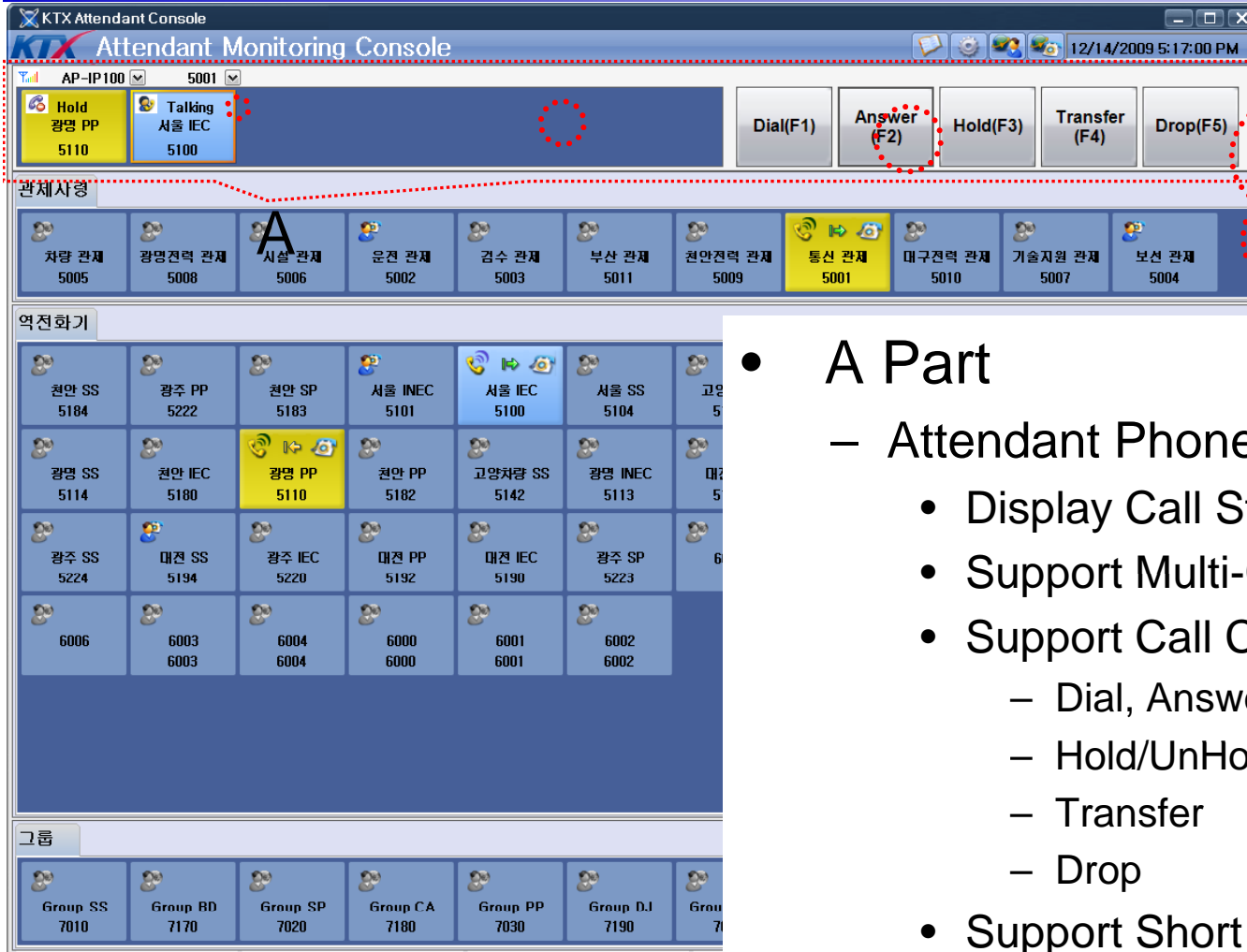# Touch Screen based Attendant Console User Login

[Figure 1]

A

B

C

D

[Figure 2]

E
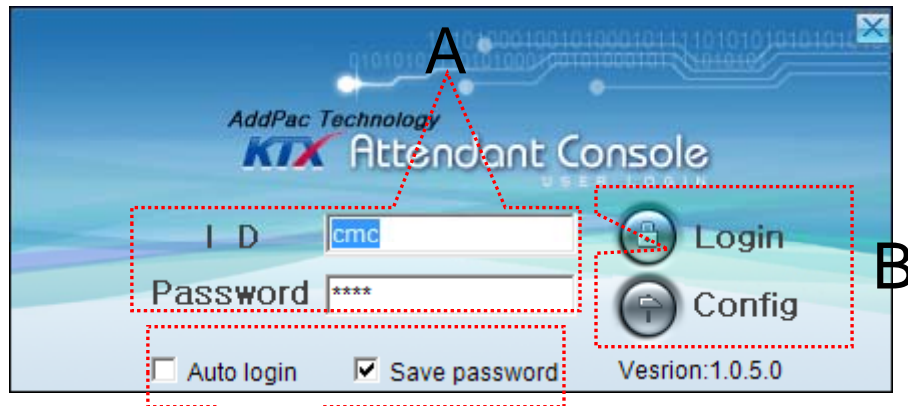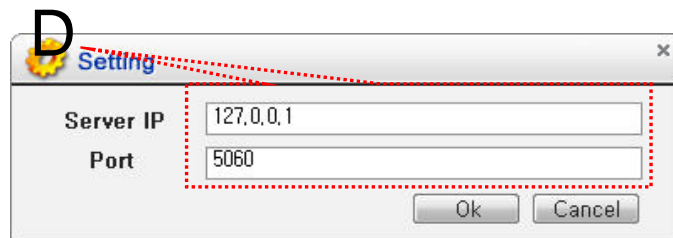
[Figure 3]

- Attendant Console Login
  - [Figure 1] shows the login picture of KTX Attendant Console program. "E" of [Figure3] is Icon of KTX Attendant Console Program.

  - When program is started initially, user should set the network configuration parameter such as IP address, Port number of Presence Server.[Figure2]

  - After inputting ID and Password, press the login button

AddPac

Touch Screen based Attendant Console Main Screen –Call Control

- **A Part**
  - Attendant Phone Call Control Part
    - Display Call Status
    - Support Multi-Call Display
    - Support Call Control Feature
      - Dial, Answer
      - Hold/UnHold
      - Transfer
      - Drop
    - Support Short Key Call Control

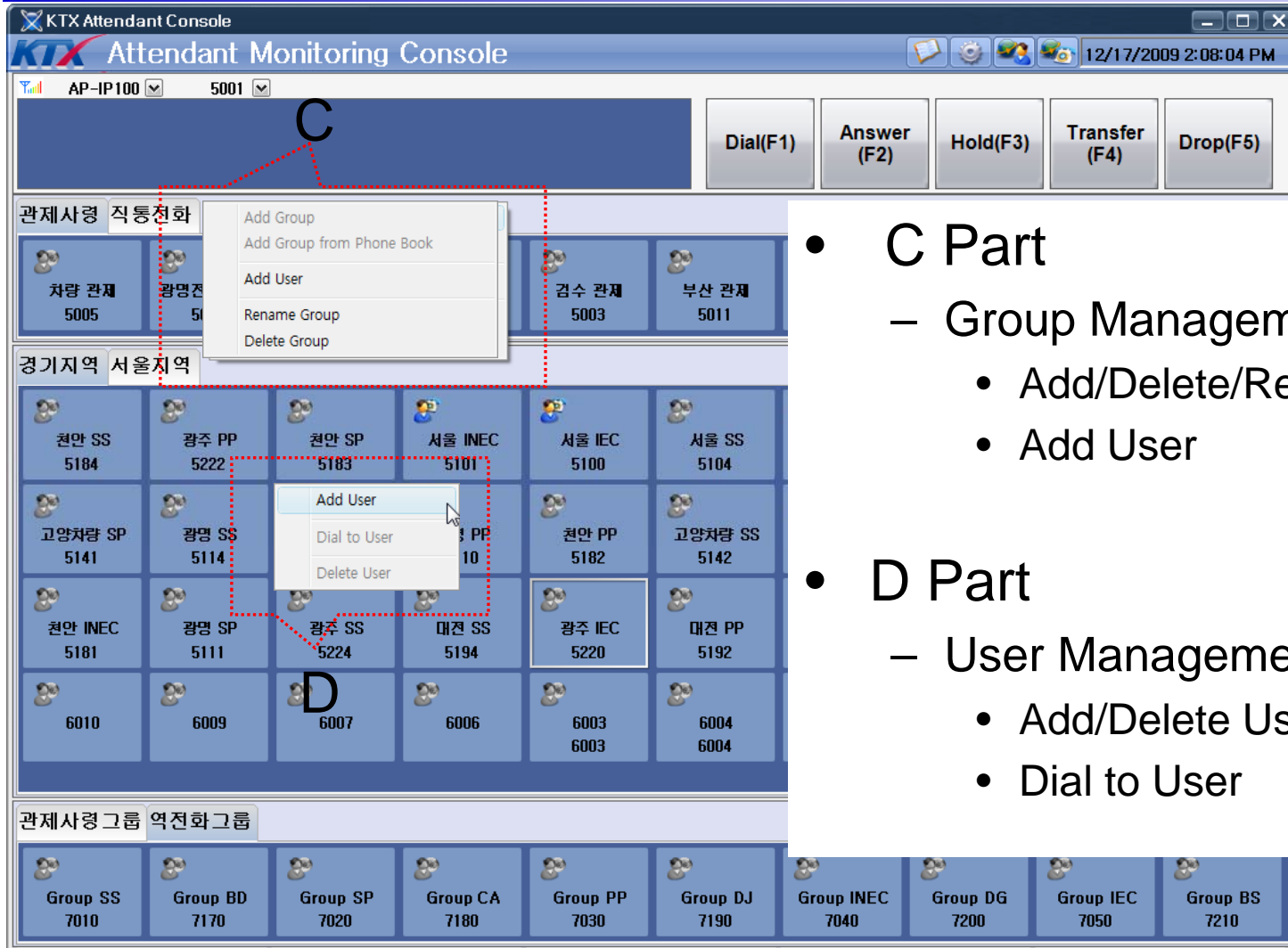# Touch Screen based Attendant Console Main Screen – Monitoring

- **B Part**
  - Monitoring Group Part
    - Support Various Group
      - Attendant and Direct Phone Group
      - Office Phone Group
    - Support Group Management Feature
      - Add Group, Rename Group, Delete Group
      - Add User, Delete User
      - Provide Various User Presence Status
        » PC Online, PC-Phone Online, Phone Online
        » Offline, Away, Absence
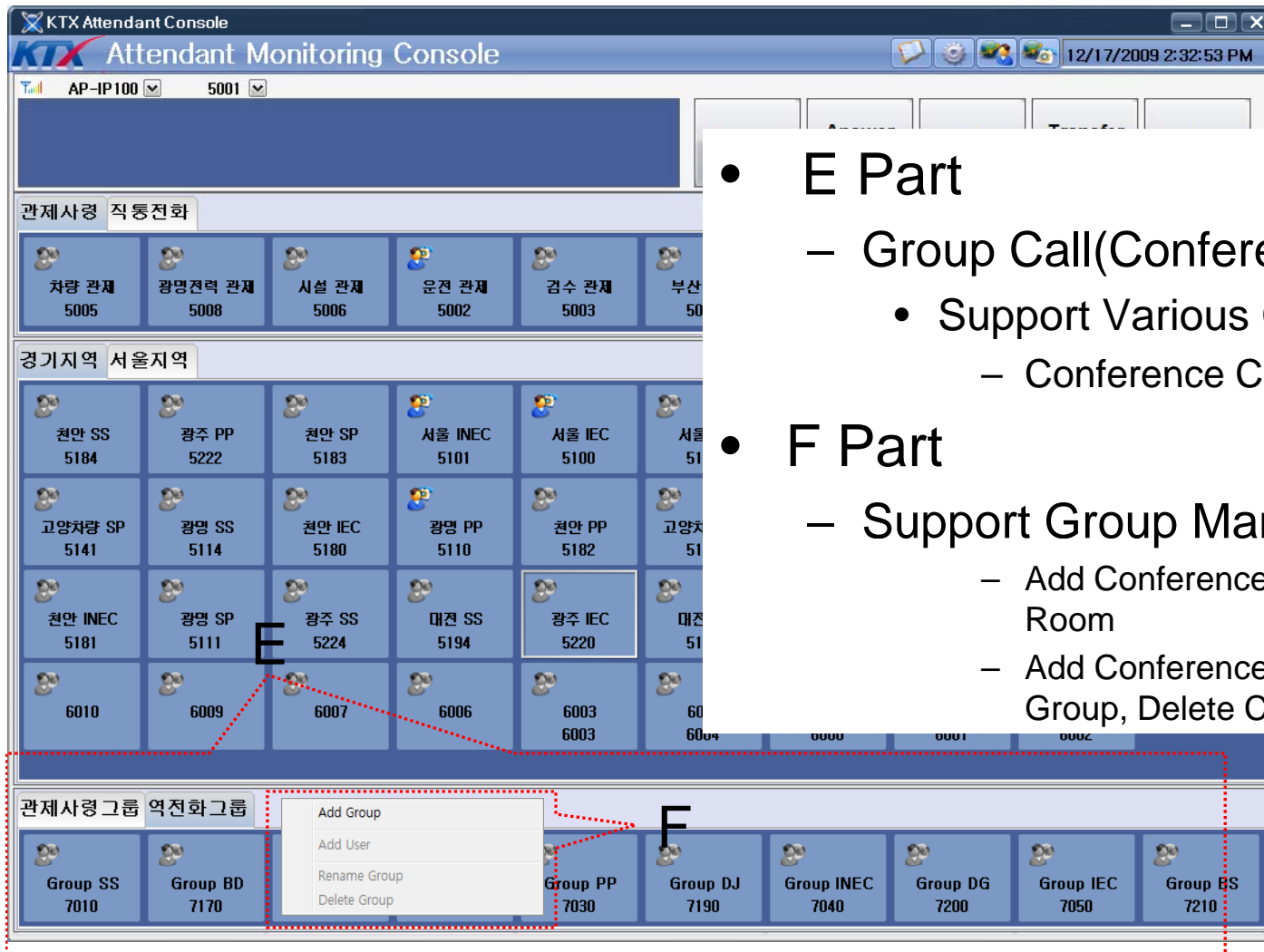   » Be in Conference, Call Busy
  - Display Call Status

Touch Screen based Attendant Console Main Screen – Monitoring Group

- **C Part**
  - Group Management Feature
    - Add/Delete/Rename Group
    - Add User

- **D Part**
  - User Management Feature
    - Add/Delete User
    - Dial to User

Touch Screen based Attendant Console Main Screen – Group Call

- **E Part**
  - Group Call(Conference) Part
    - Support Various Group
      - Conference Call Group

- **F Part**
  - Support Group Management Feature
    - Add Conference Room, Delete Conference Room
    - Add Conference Group, Rename Conference Group, Delete Conference Group

Thank you!

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