MAP based IP Emergency Call Center Solution



AddPac

AddPac Technology

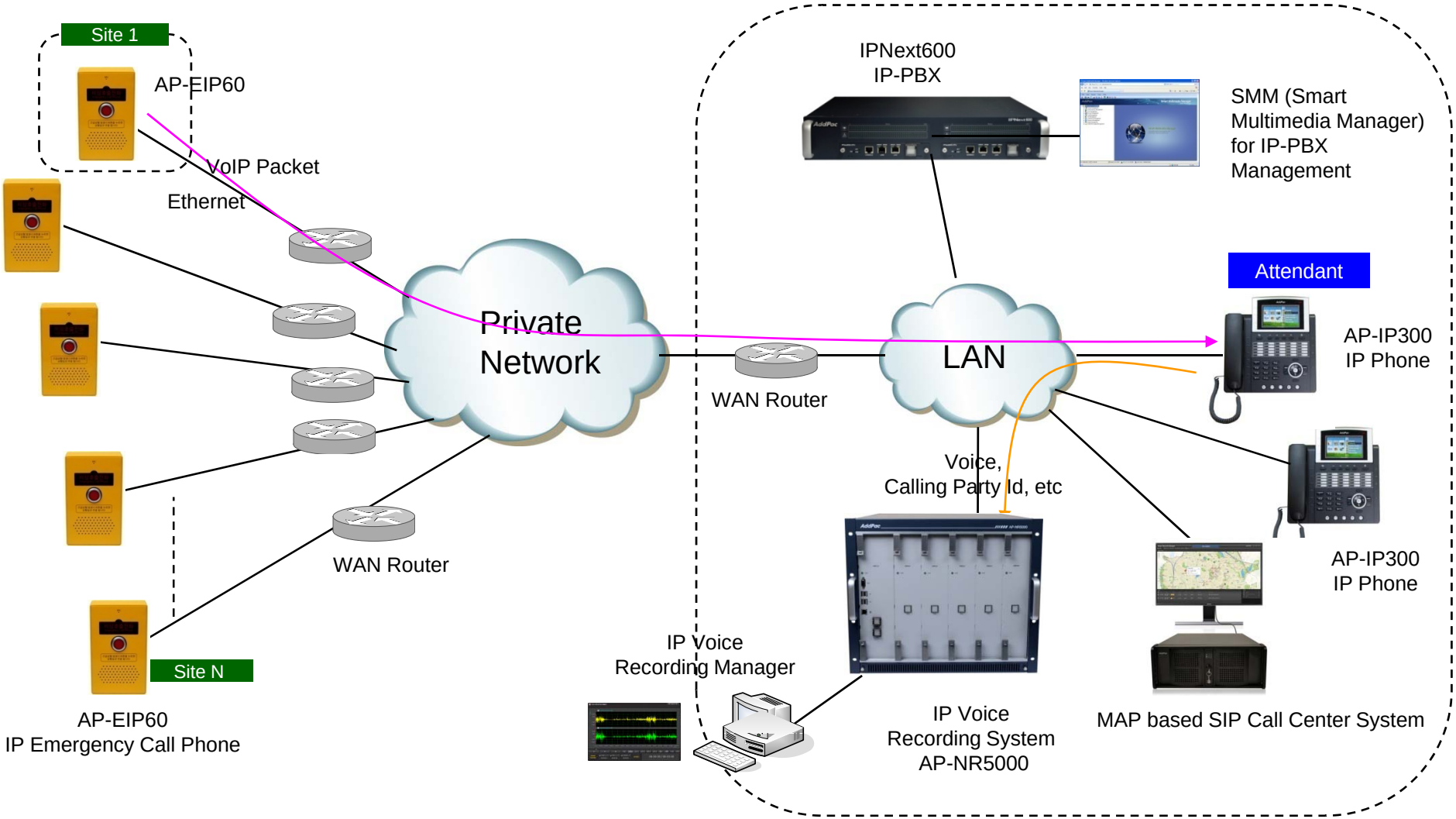
Sales and Marketing

www.addpac.com

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- IP Emergency Call Center Network Diagram
- Emergency Call IP Phone Comparison Table
  - AP-EIP100
  - AP-EIP90
  - AP-EIP80
  - AP-EIP70
  - AP-EIP60, AP-EIP60L
  - AP-EIP50
- AP-MSCS MAP based IP Emergency Call Center System
- IPNext600 IP-PBX Solution for Call Center
- IP Phone Solution for Call Center
- IP Voice Recording Solution (Option)
- GPS based Embedded NTP Server for Time Sync. (Option)

Network Diagram



Emergency Call IP Phone Solution

(SIP VoIP Standard Signaling Protocol)

Emergency Call IP Phone Comparison Table

Model / Service Features	AP-EIP100	AP-EIP90	AP-EIP80	AP-EIP70	AP-EIP50
					
Duplex	Full Duplex (Acoustic Echo Canceller)	Full Duplex (Acoustic Echo Canceller)	Full Duplex (Acoustic Echo Canceller)	Full Duplex (Acoustic Echo Canceller)	Full Duplex (Acoustic Echo Canceller)
Key Pad	3x4 Key Support	N/A	N/A	N/A	N/A
Handset	Support	N/A	N/A	N/A	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
Signaling	SIP	SIP	SIP	SIP	SIP
Speaker Phone	Support	Support	Support	Support	Support
LAN Port	1	1	1	1	1
PoE(Option)	Support	Support	Support	Support	Support
Application	Indoor	Outdoor(water resistance)	Outdoor(water resistance)	Outdoor(water resistance)	Indoor

Emergency Call IP Phone Comparison Table

Model Service Features	AP-EIP60 	AP-EIP60L 
Duplex	Full Duplex (Acoustic Echo Canceller)	Full Duplex(Acoustic Echo Canceller)
Key Pad	N/A	N/A
Handset	N/A	N/A
Voice Codec	G.711/G.726/G.729/G.723	G.711/G.726/G.729/G.723
Signaling	SIP	SIP
Speaker Phone	Support (Internal SPK.Watt is comparative large for Outdoor Env.)	Support
LAN Port	1	1
PoE(Option)	Support	Support
Chassis	Die-Casting Steel Frame Chassis(Option) Front, Back (Steel)	Front Panel (Steel)
Application	Outdoor(water resistance)	Indoor

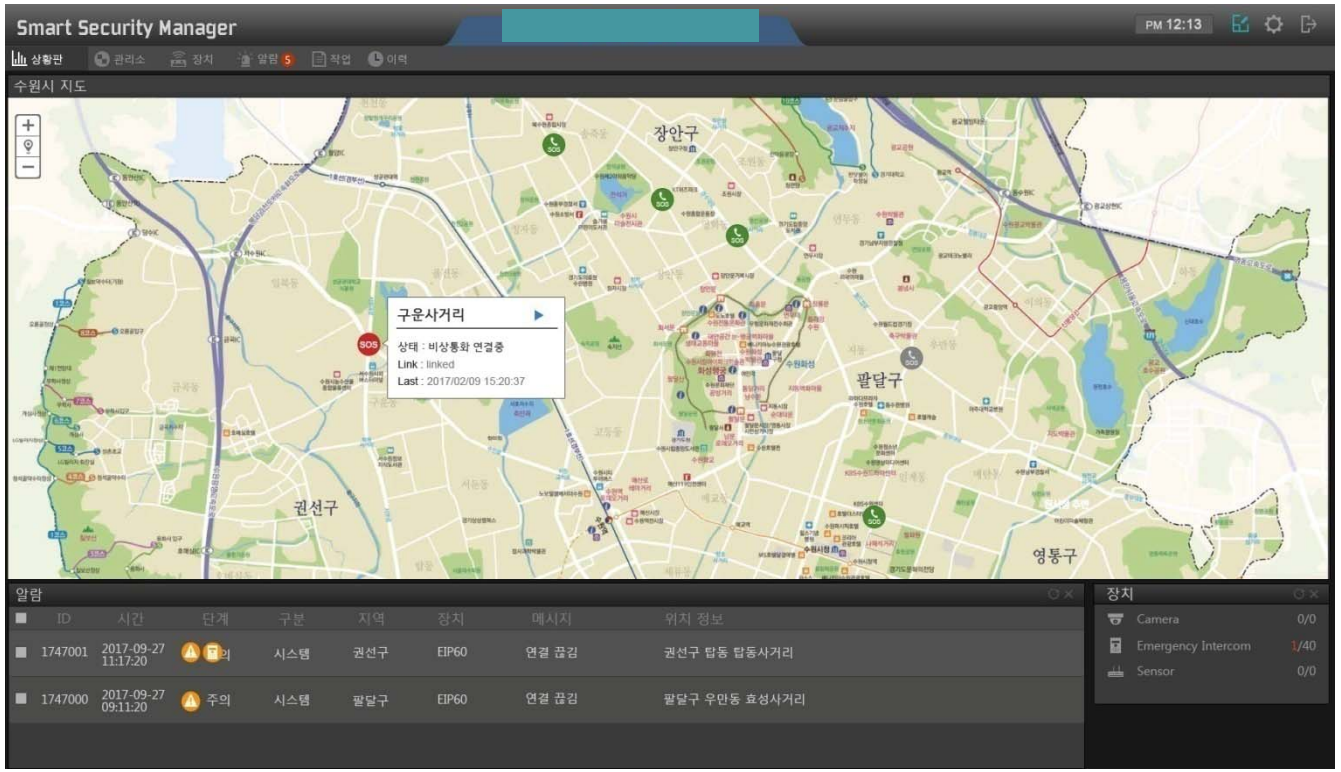
MAP based SIP Emergency Call Center System (AP-MSCS)



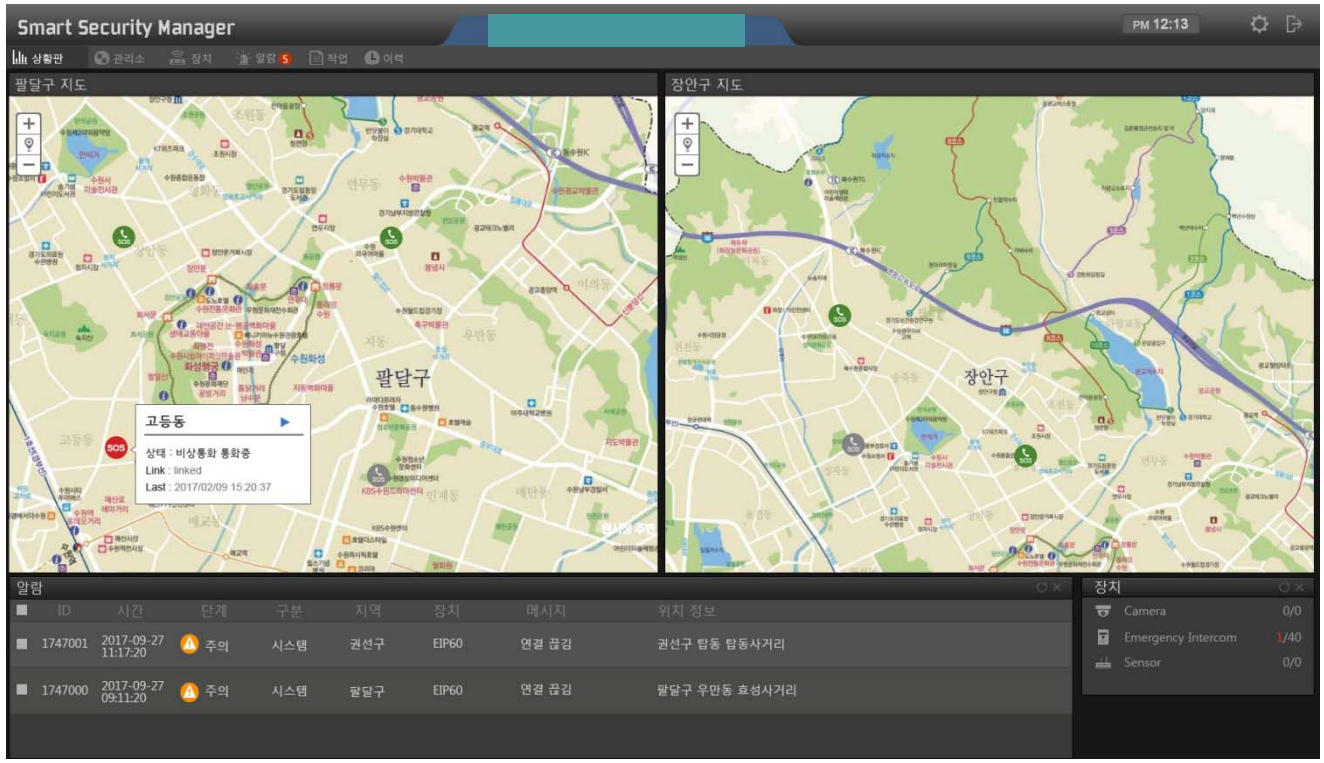
MAP based SIP Emergency Call Service Overview

- JavaScript based Interactive MAP Service
- Integrated Security Management Service via MAP based Device Overlay Display
- SIP Emergency Call Phone, Video Phone, etc, Geographical Display on MAP for Instinctive Control Service
- MAP Editor Service (Background Image, Device Lists, etc)
- MAP based IP Emergency Call Phone Status Display
- Zoom to Area, Double Click Zoom, Scroll Wheel Zoom, etc
- Tile Layer, etc

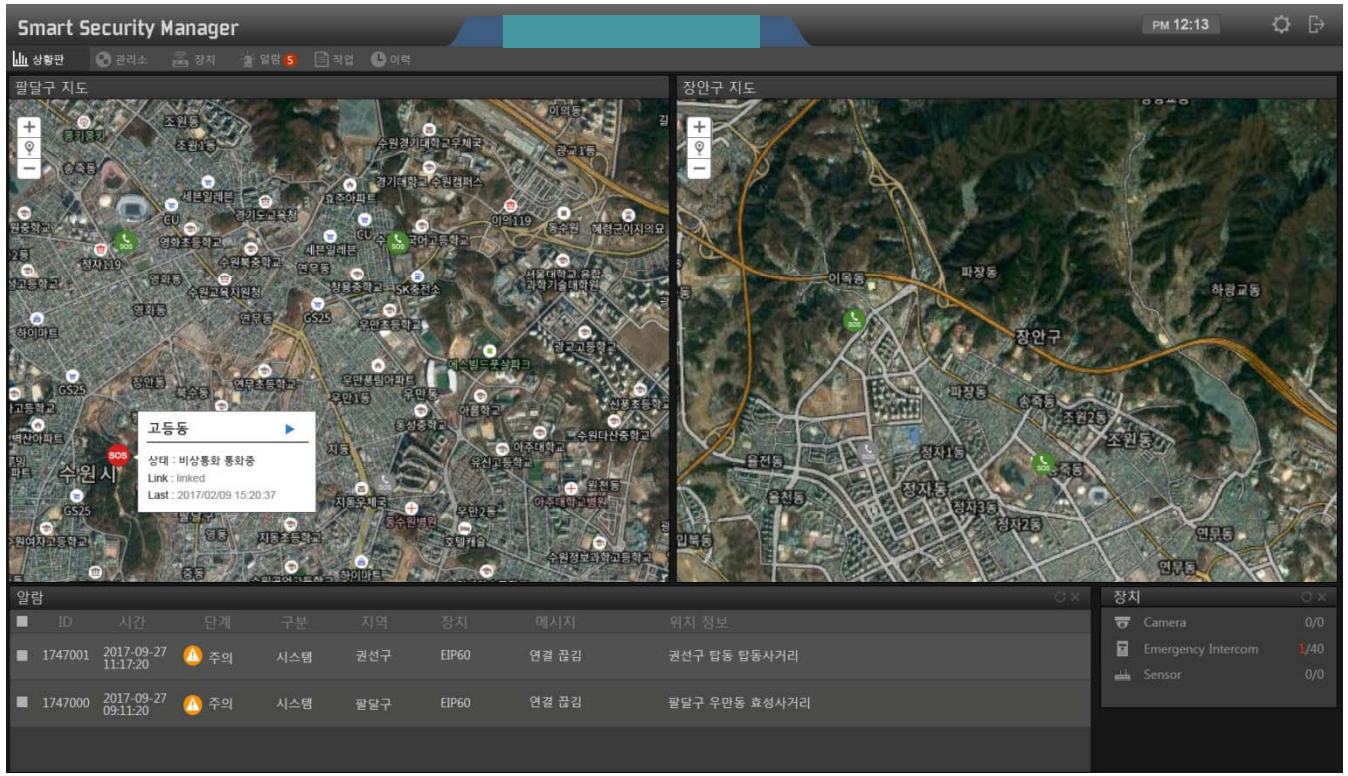
MAP based SIP Emergency Call Service Overview (Example)



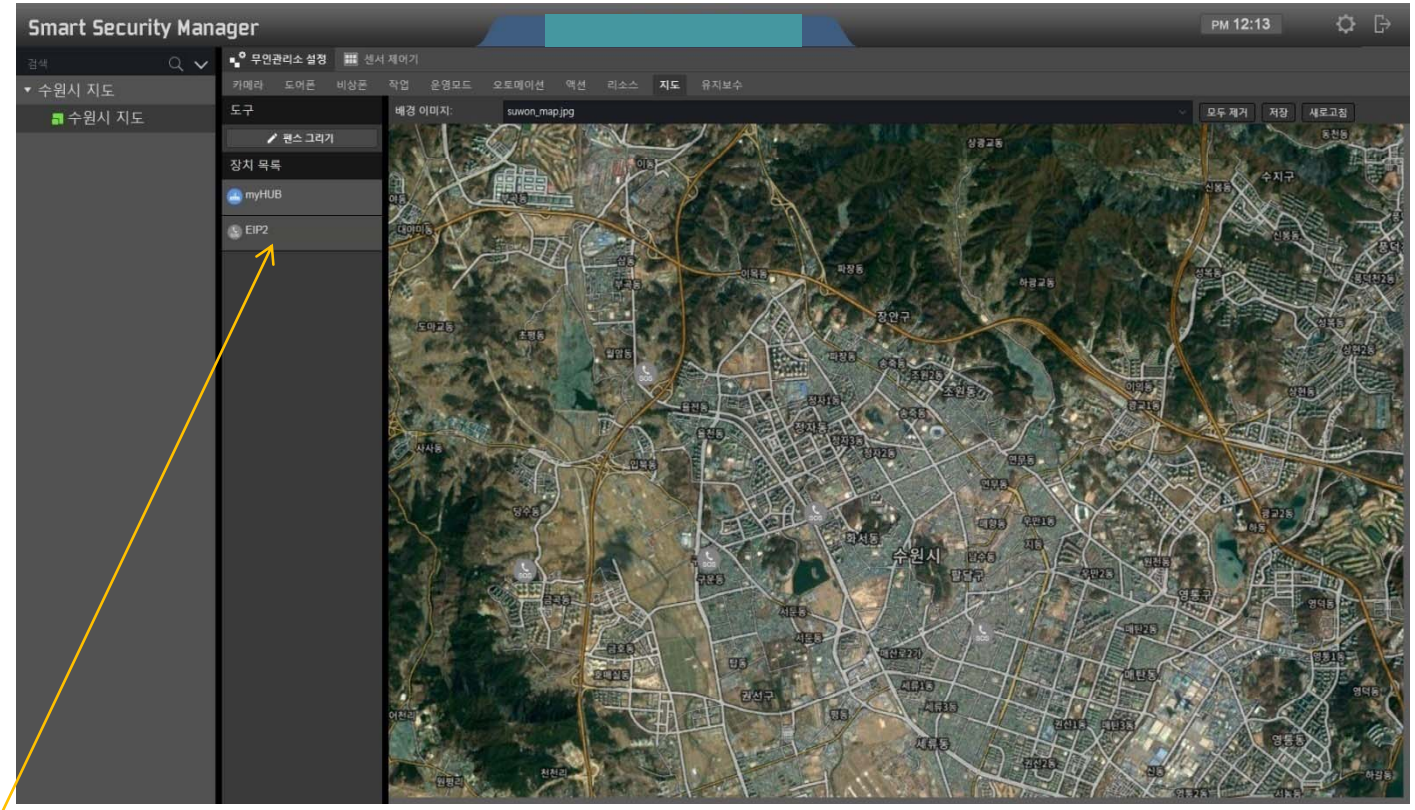
MAP based SIP Emergency Call Service Overview (Tile Layer Example)



MAP based SIP Emergency Call Service Overview (Tile Layer Example)

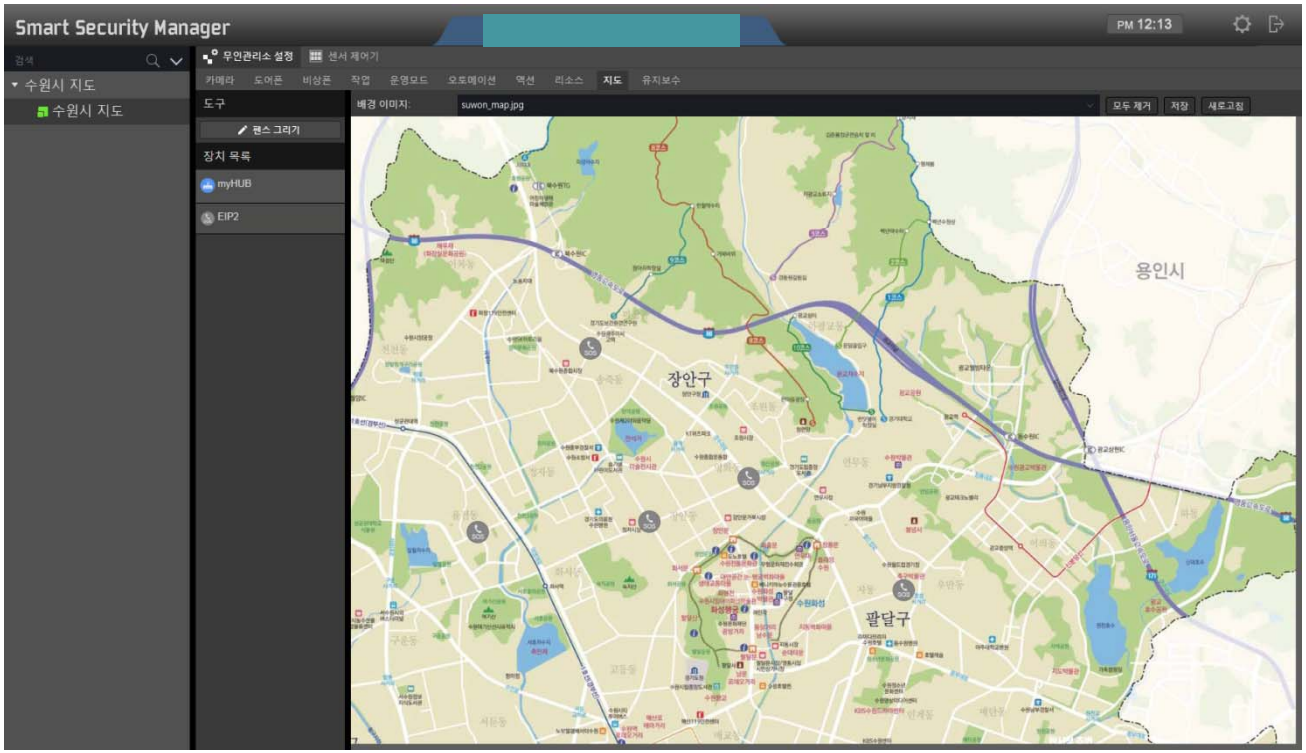


MAP based SIP Emergency Call Service Overview (MAP Editor Service)



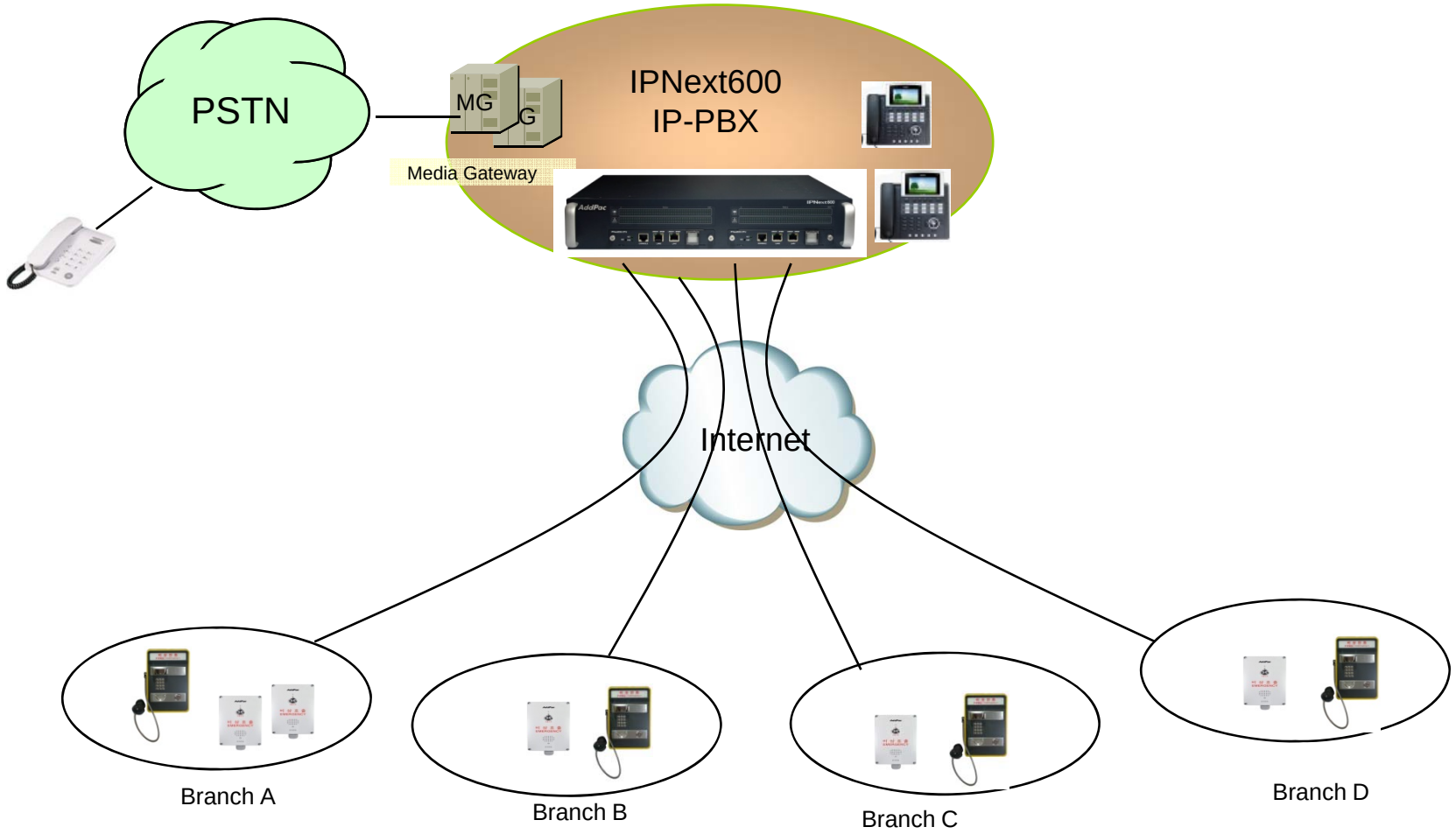
Device Lists : IP Emergency Call Phone, IP paging terminal etc

MAP based SIP Emergency Call Service Overview (MAP Editor Service)



IPNext600 IP-PBX Solution for Call Center

Network Diagram



Product Overview

IPNext 600 Next Generation IP-PBX System

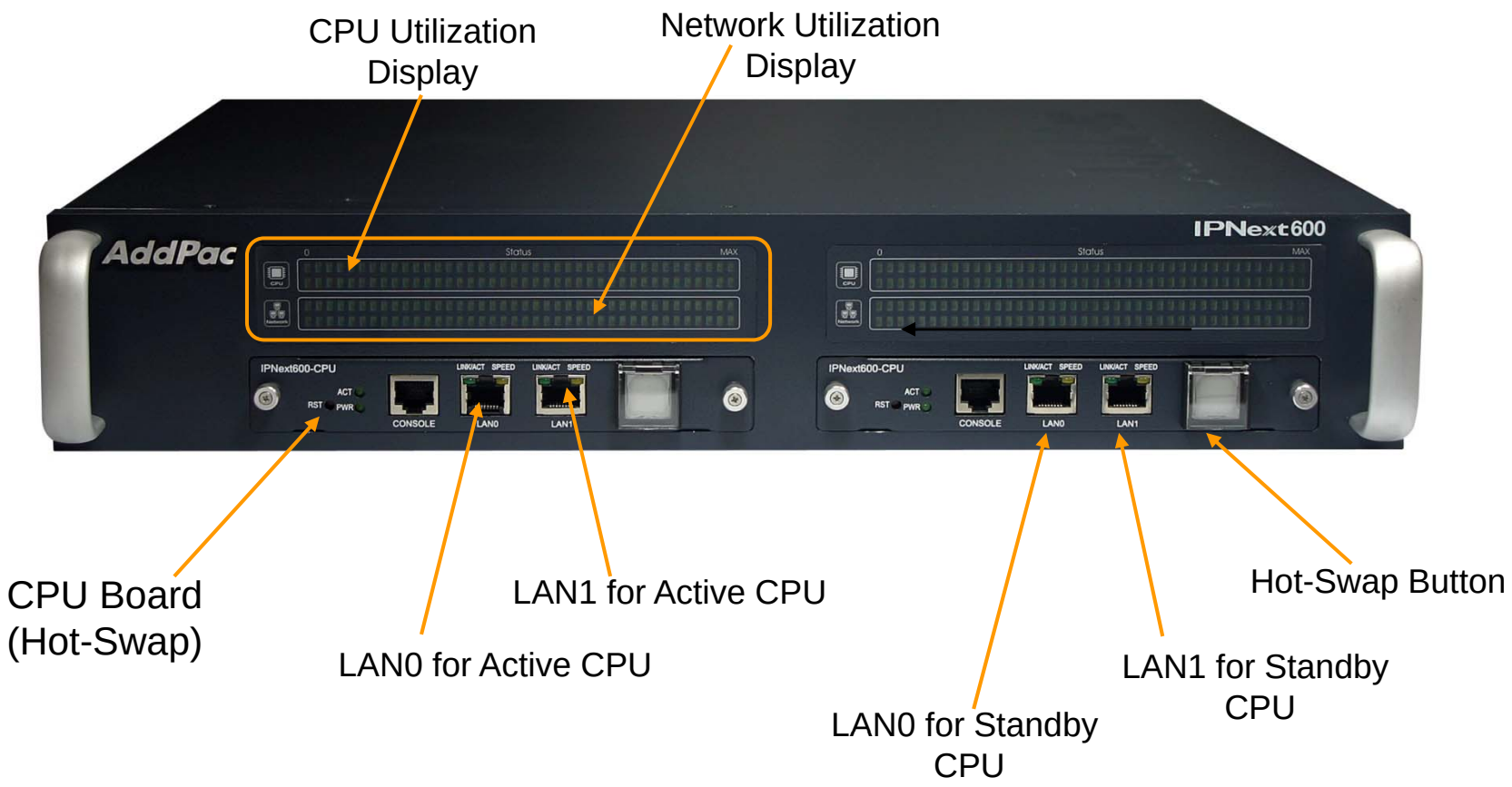
- SIP Application Server, Proxy, Registrar and Location Server
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
- Dual System Redundancy Architecture
  - Two(2) Fast Ethernet Interface / System
- High Performance RISC Architecture
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- IPv4/IPv6 Dual Stack
- RTP Proxy Function Embedded for Private IP and IPv6 Address Interworking
- User Presence Service Features for Smart Multimedia Messenger and Smart IP Phone
- IVR Scenario Editor, Voice Mail, Media Service (Coloring), Conference
- Firmware Upgradeable Architecture
- Smart Multimedia Manager for IP-PBX Management
- Smart Messenger Service (click to dial) for Unified Communication
- Smart NMS for Large Scale Deployment
- Advanced Voice QoS Mechanism
- Dual Redundancy Power Module

Hardware Specification

IPNext 600 Next Generation IP-PBX System

RISC CPU

IPNext 600 Front Side



Hardware Specification

IPNext 600 Next Generation IP-PBX System

RISC CPU

IPNext 600 Back Side



Dual Power Supply Modules (Hot-Swap)

PSU Module A

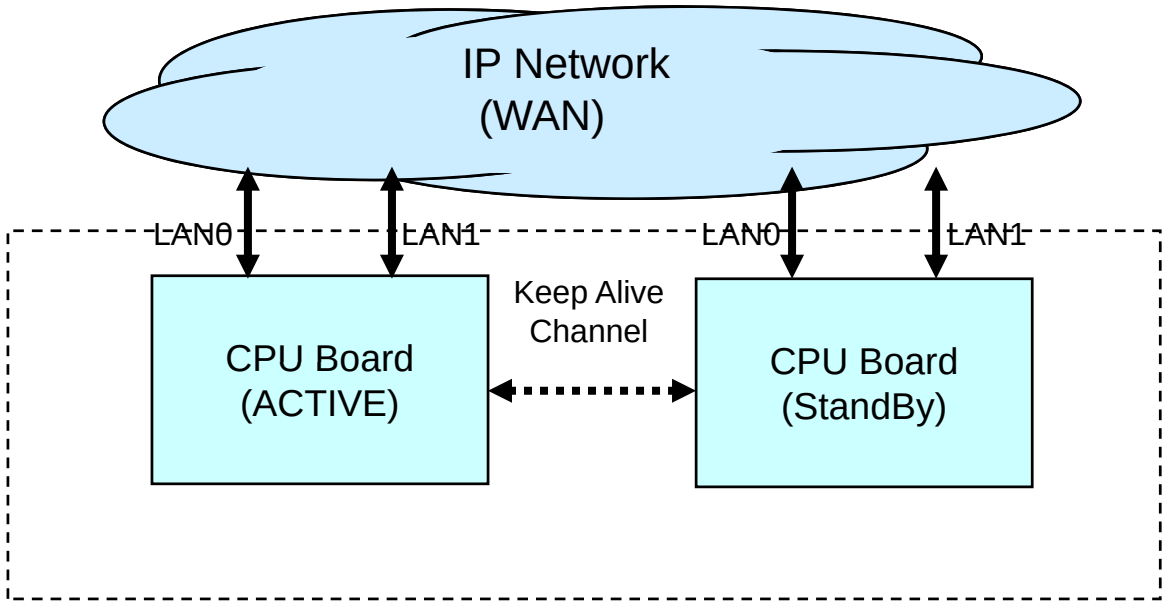
PSU Module B

Power On/Off Switch for System

System Redundancy Features

IPNext 600 Next Generation IP-PBX System

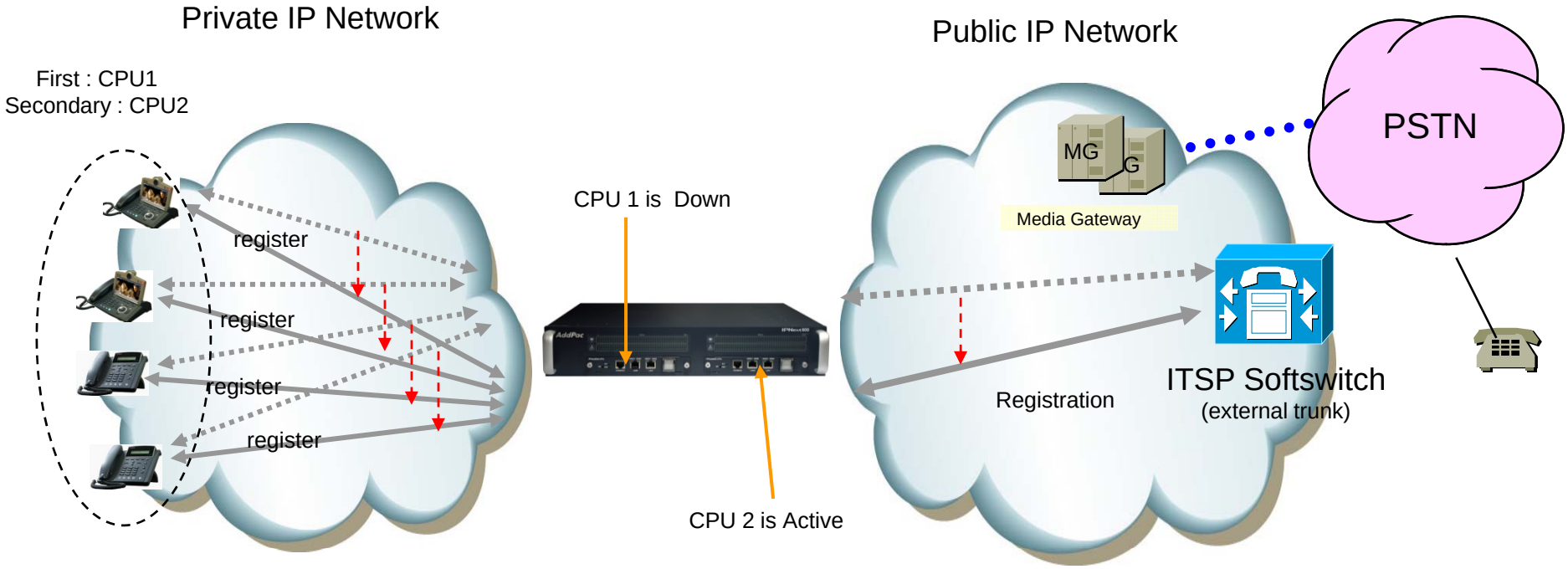
IPNext600 System Block Diagram



System Redundancy Features

IPNext 600 Next Generation IP-PBX System

- Active– Active Duplication Scheme
- Active – Standby Duplication Scheme
- VRRP based Duplication Scheme



Active – Standby Duplication Scheme (example)

IP Phone Solution for Call Center

IP Phone Comparison Table

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

IP Voice Recording Solution

Contents

- IP Voice Recording Servers
- Network Diagram for Voice Recording
- SIP Voice Call Flow Diagram
- Smart Digital Voice Recording Management Program

IP Voice Recording Server
AP-NR5000

Product Overview

AP-NR5000 IP Voice Recording Server

- IP based Voice Recording Server
- Linux Operating System
- Powerful Management and User Friendly Features
- High-performance Voice/Video Recoding Service
- External IP Phone (AP-IP300, AP-IP230, etc) Interworking Support
- Firmware Upgradeable Architecture
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- Up to Five(5) 3.5Inch SATA Hard Disk Interface Support
- USB Interface Support

Hardware Specification

AP-N5000 IP Voice Recording Server

- High Performance Computing Power
- Main Processor Board
  - Network Interface
    - One(1) 10/100/1000Mbps Gigabit Ethernet
  - Video Output Interface
    - RGB Video Output
  - USB 2.0 Interfaces for Mouse, Keyboard, etc
- Hard Disk Board
  - Module Type Design
  - Up Five(5) Hard Disk Slots
  - 10~20 Tera HDD Capacity
- Power Supply
  - Dual Power Supply for Power Redundancy
  - Module Type Power Supply

Hardware Specification

AP-NR5000 IP Voice Call Recording Server

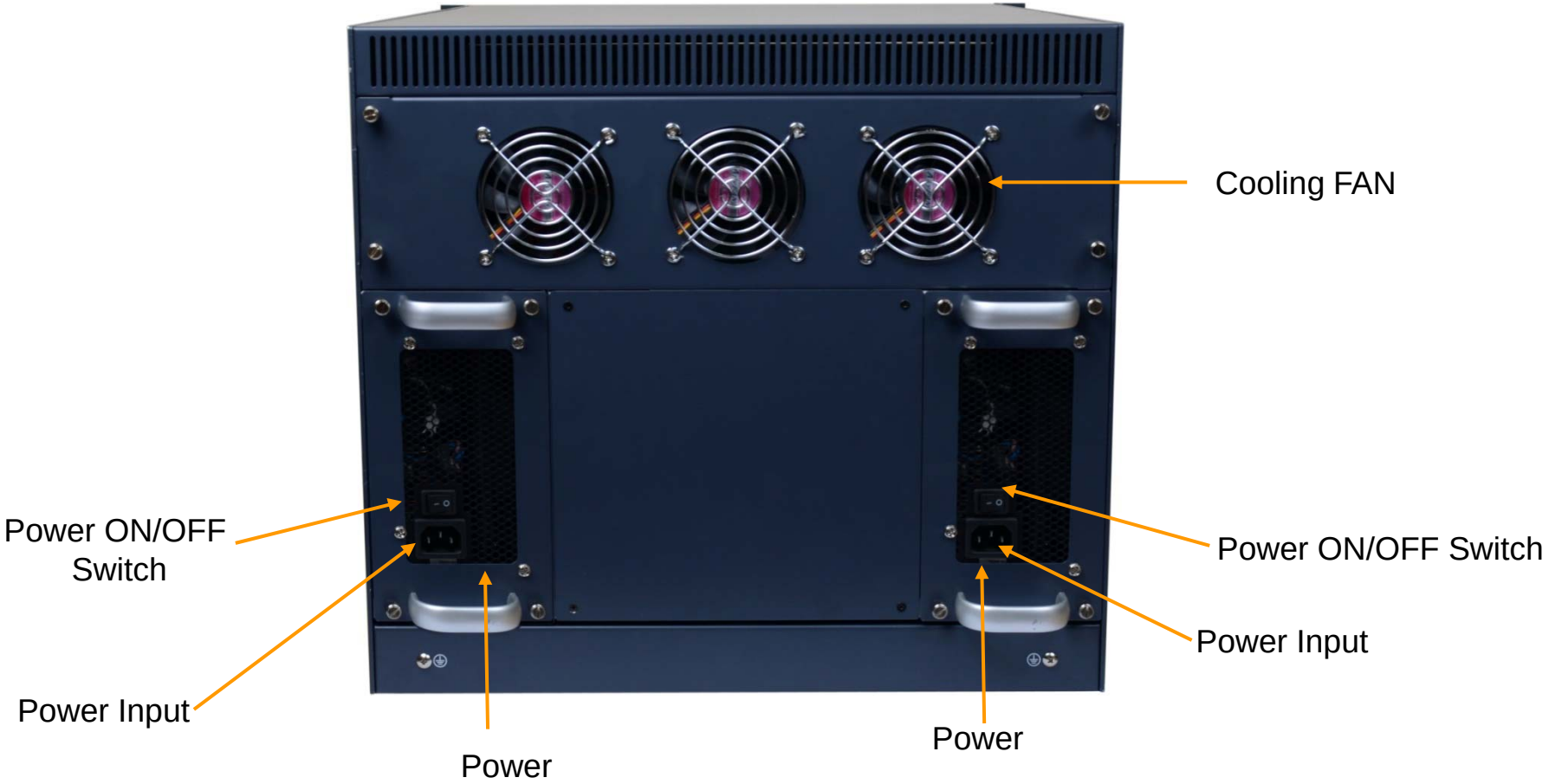
AP-NR5000 Front Side



Hardware Specification

AP-NR5000 IP Voice Call Recording Server

AP-NR5000 Back Side
(Dual Power)



IP Voice Recording Server
AP-NR1500

Product Overview

AP-NR1500 IP Voice Call Recording Server

- IP based Network Voice Call Recording Server
- Linux Operating System
- Powerful Management and User Friendly Features
- High-performance Voice Recording Service
- External AddPac IP Terminal (Ex: IP Phone, IP Intercom, IP Emergency Phone) Interworking Support
- Firmware Upgradeable Architecture
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- Up to Two(2) 3.5Inch SATA Hard Disk Interface Support
- Two(2) USB Interface Support
- One(1) RS232C Console Interface

Hardware Specification

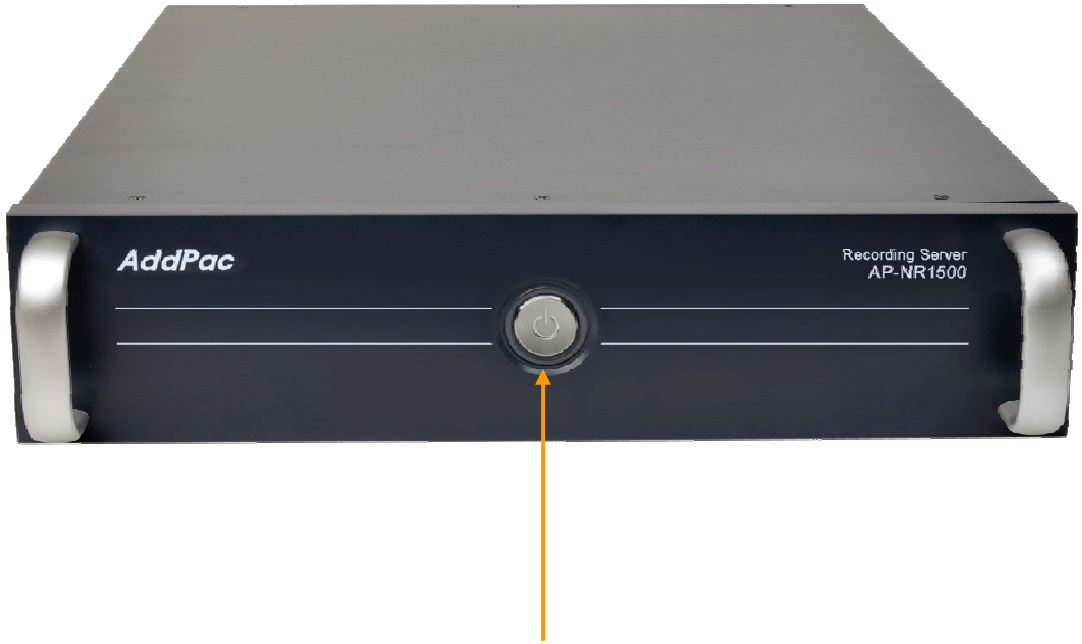
AP-N1500 IP Voice Call Recording Server

- High Performance Computing Power
- Network Interface
  - One(1) 10/100/1000Mbps Gigabit Ethernet Port
- Two(2) USB 2.0 Interfaces for Mouse, Secondary Storage, etc
- One(1) RS232C Console Interface (RJ45)
- Up Two(2) SATA type Hard Disk (4~8 Tera HDD Capacity)
- Power On/Off Soft Switch with LED Indication Lamp (Front Side)

Hardware Specification

AP-NR1500 IP Voice Call Recording Server

AP-NR1500 Front Side



Power On/Off Switch with LED Indication LAMP

Hardware Specification

AP-NR1500 IP Voice Call Recording Server

AP-NR1500 Back Side



Power ON/OFF Hard Switch

Power Input

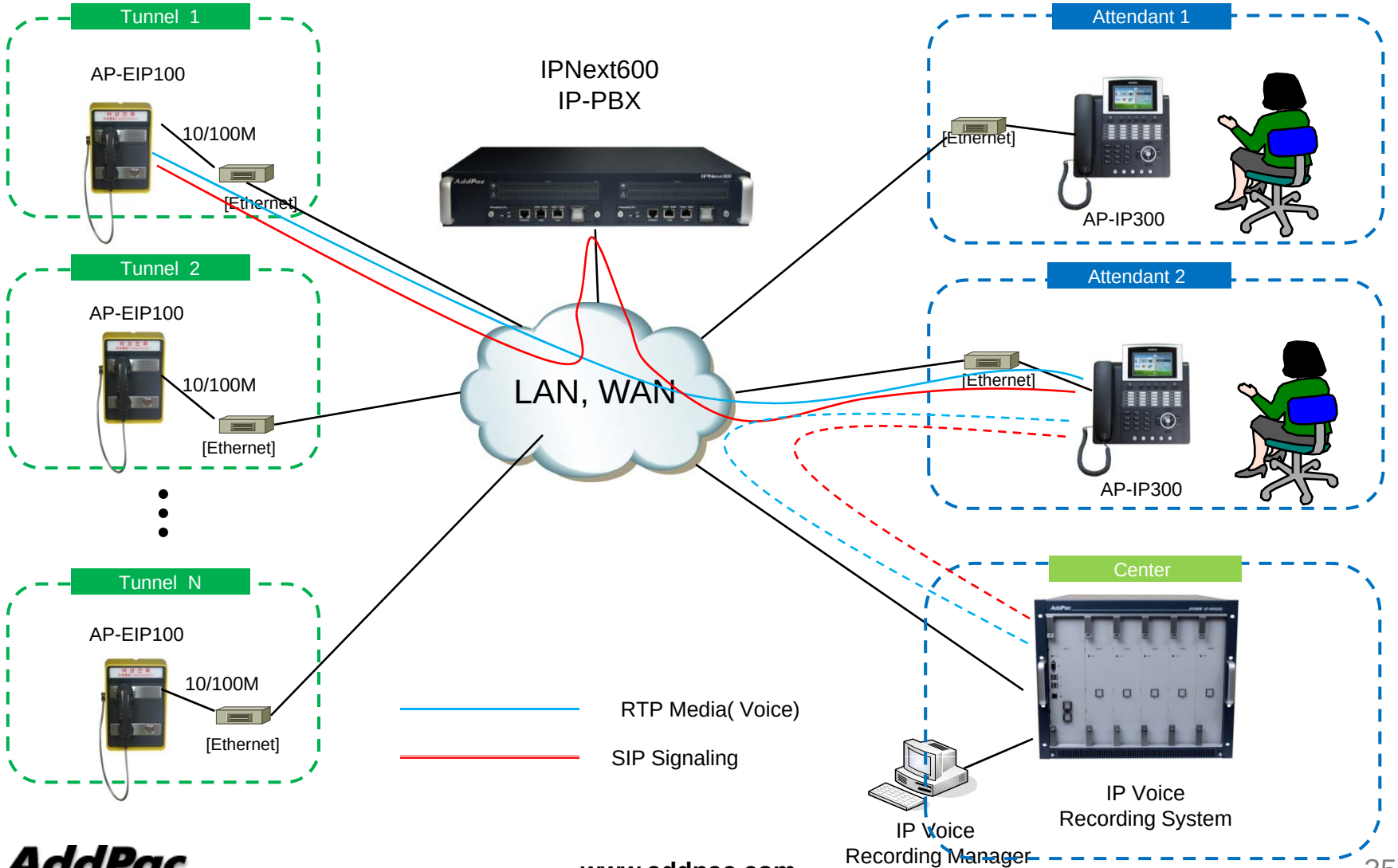
Gigabit Ethernet Interface

RS232C Console Interface

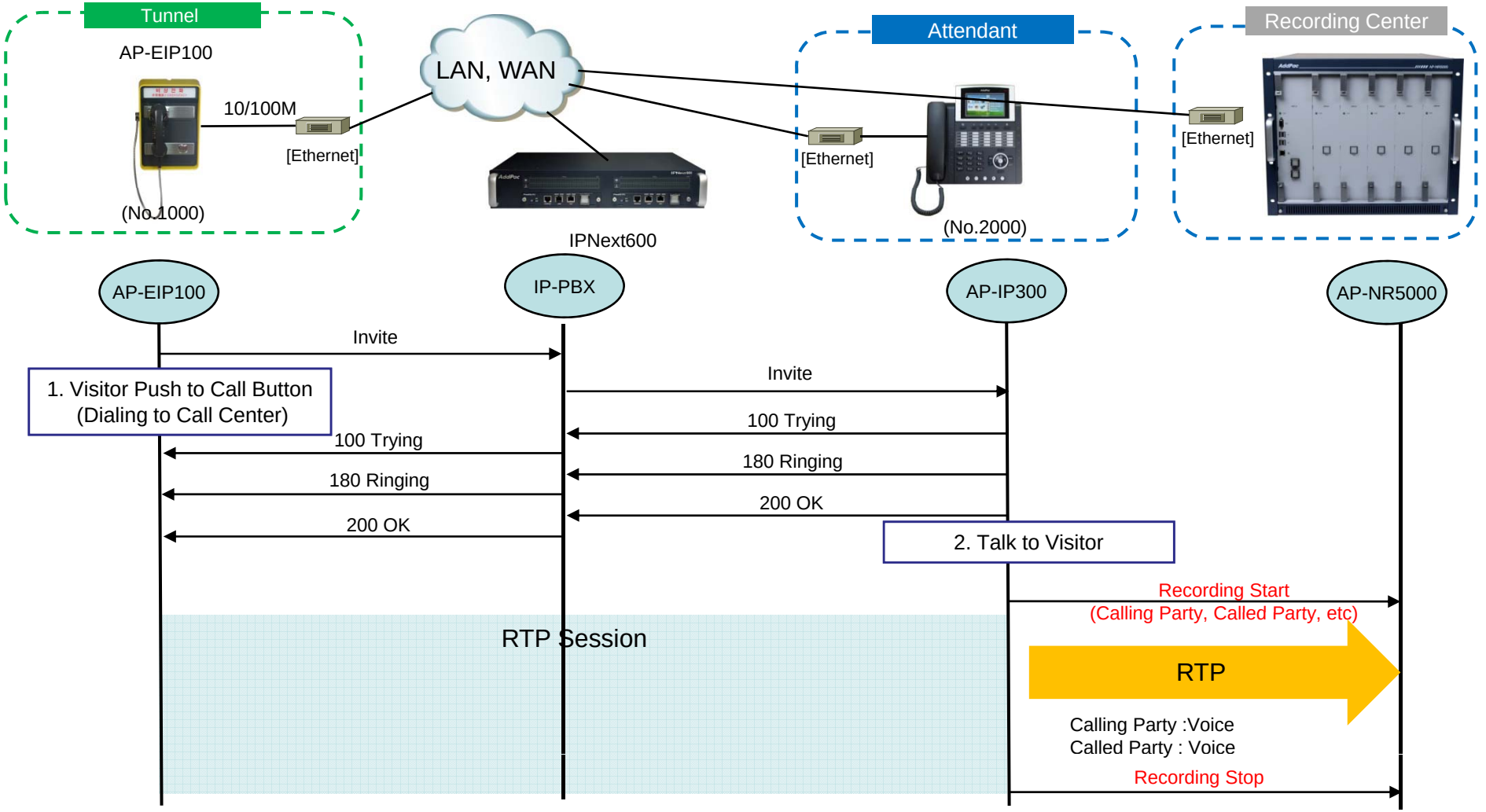
USB Interface for Mouse, Storage, etc

Cooling FAN

Network Diagram for IP Phone Recording

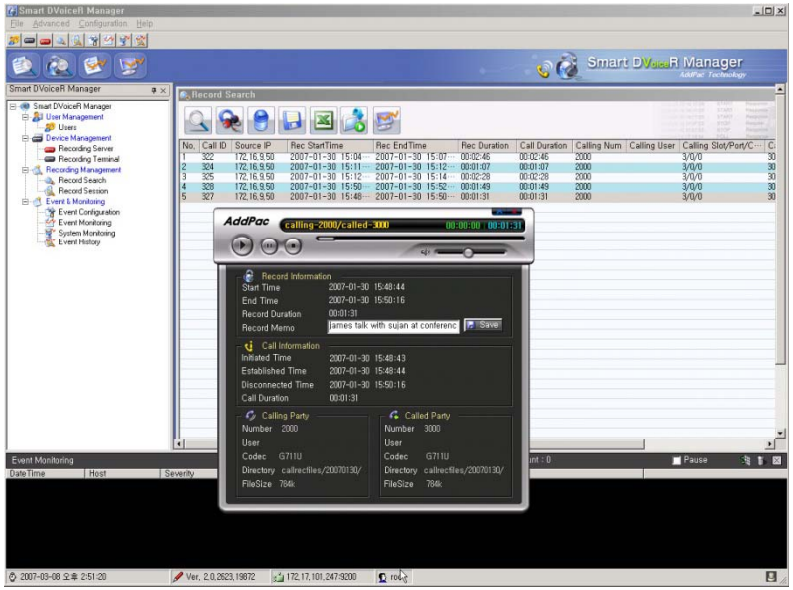


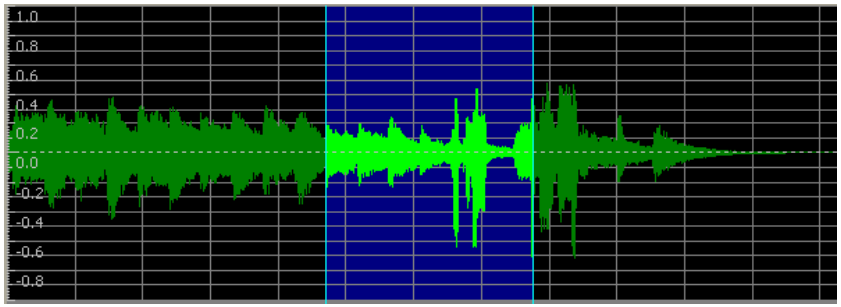
SIP VoIP Call Flow



Smart DVoiceR Manager

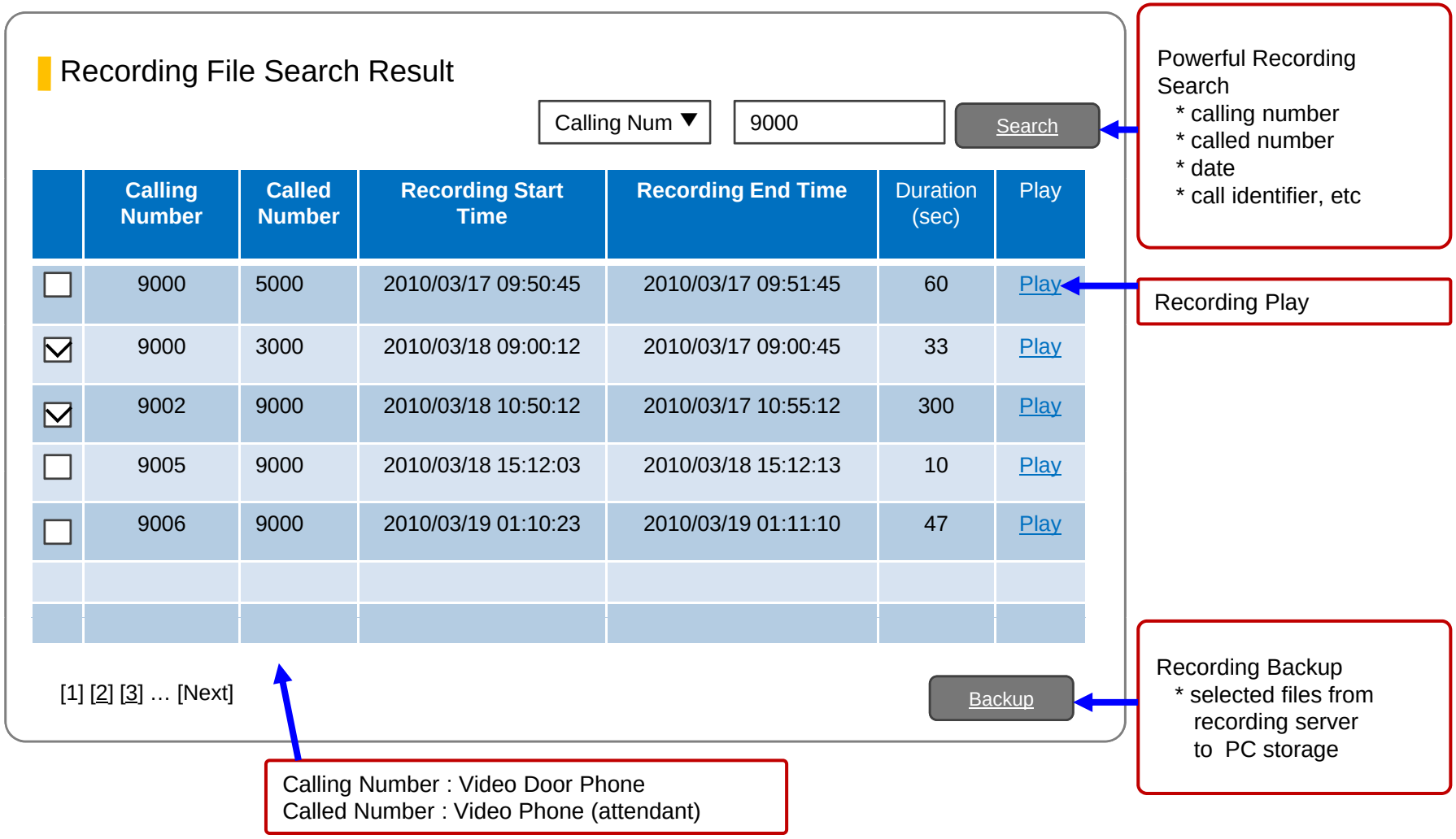
Smart DVideo door phoneR Management Program



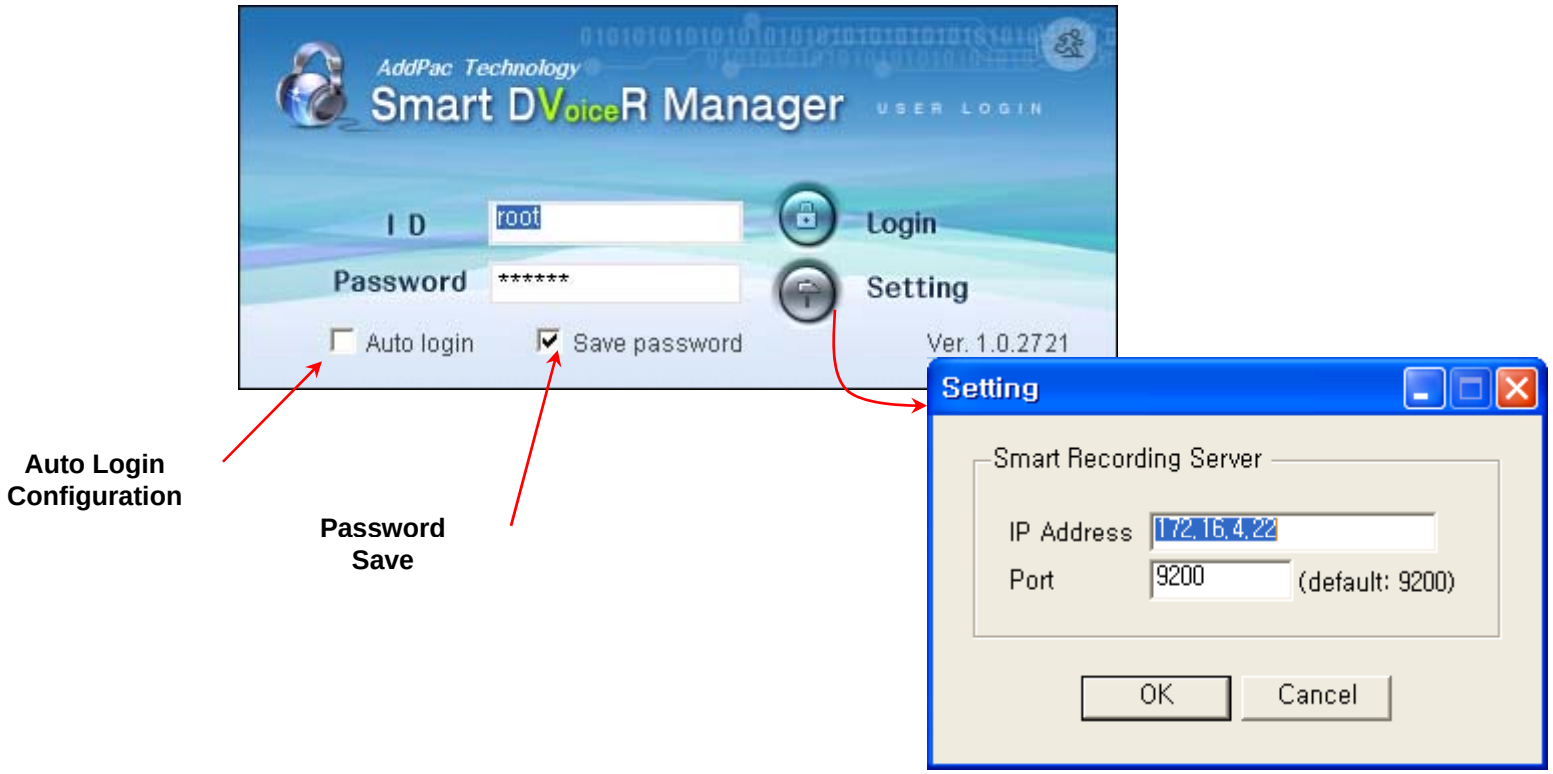


- Call History Management (search/modify/delete/save)
- Media Play Management (Play/Stop/Seek/Pause)
- Live Call List Management, Live Call Monitoring
- Local Backup (File Manager Support, PC HDD, DVD) and Local Play
- User Management (registration/modify/delete/search)
- Server Status (CPU/Memory/HDD) & Event Monitoring
- Recording Source Management (Video Phone, etc)
- Live Recording Board

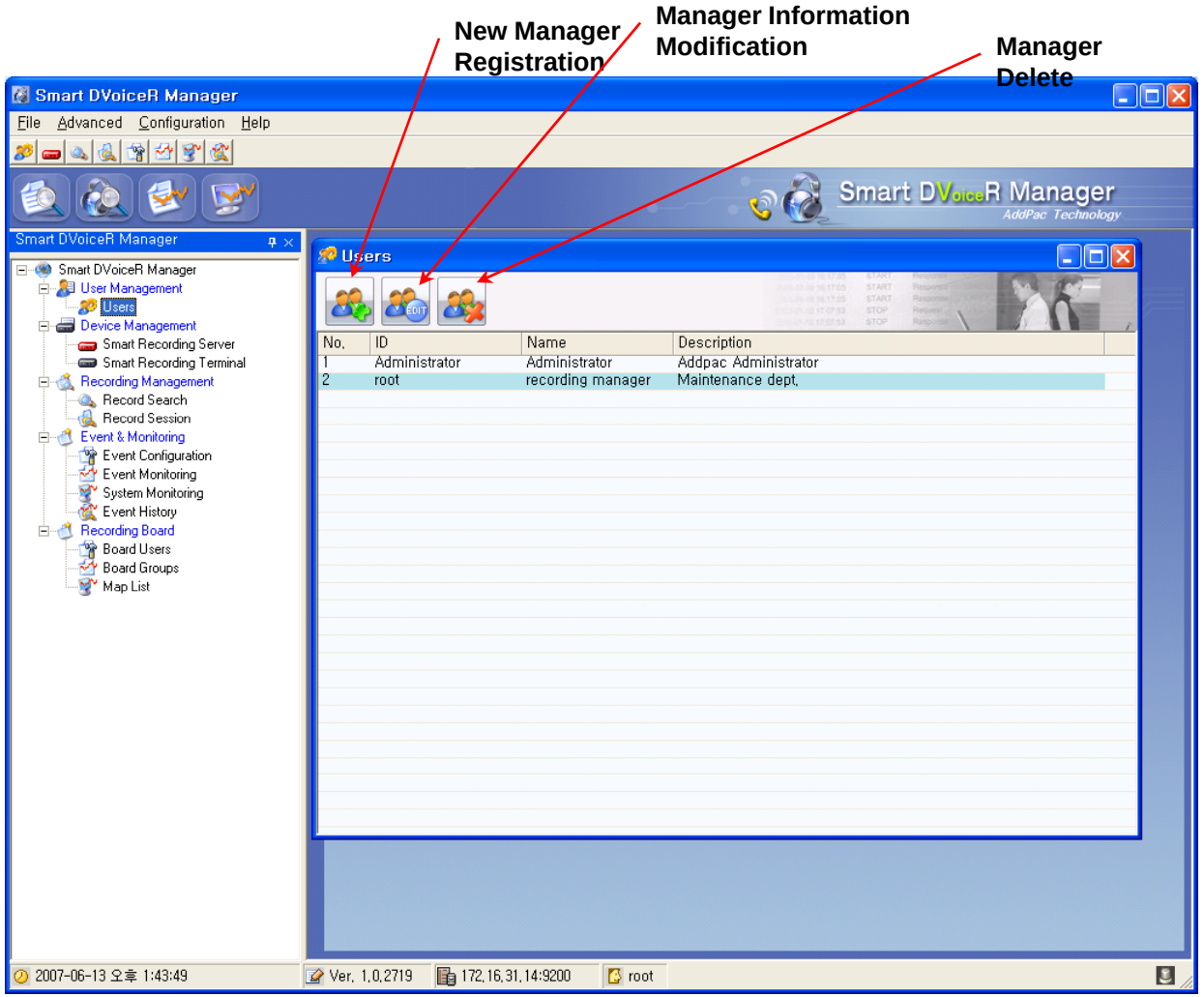
UI example (recording file search..)



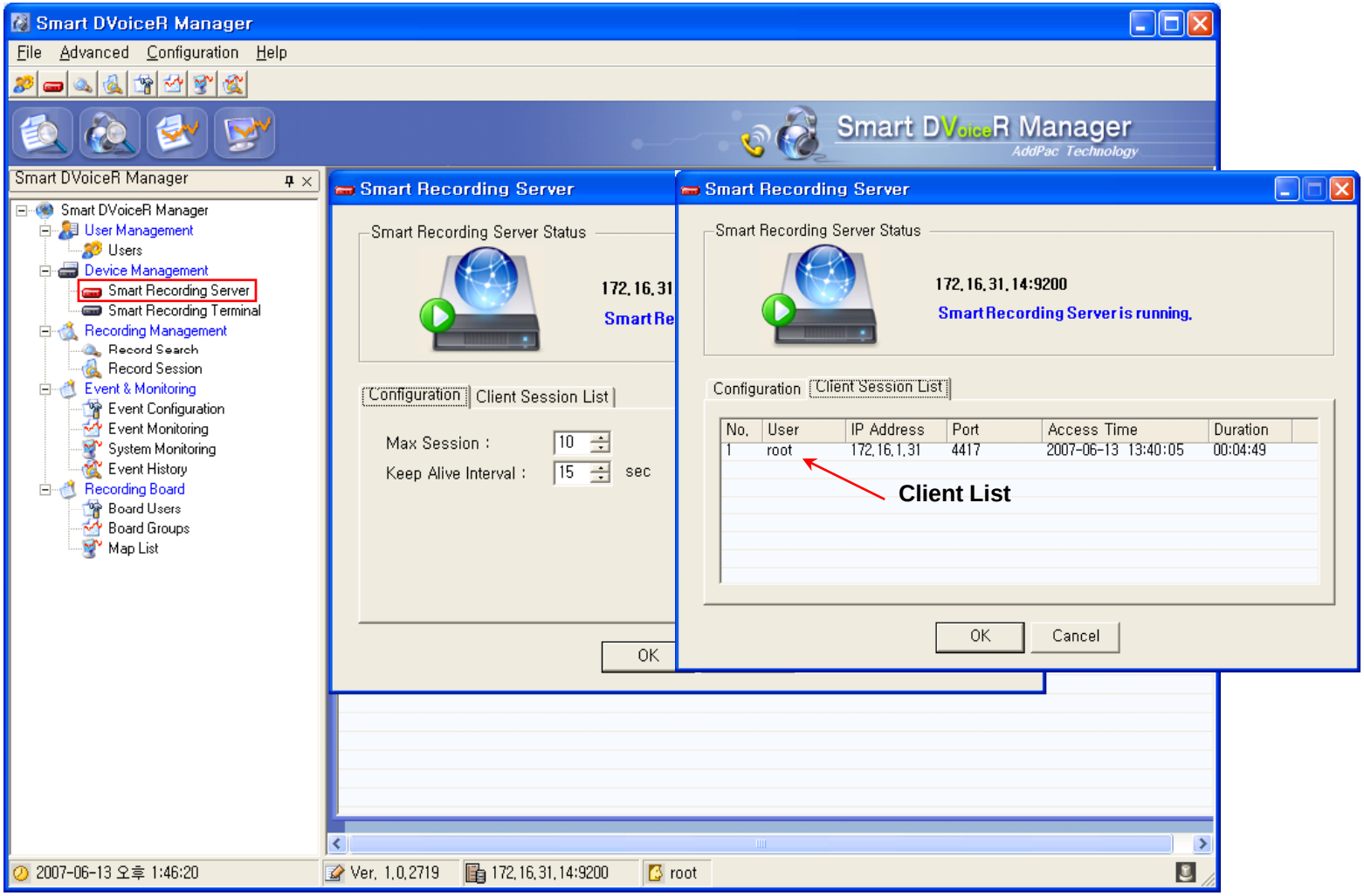
Login


AddPac Technology
Smart DVoiceR Manager
USER LOGIN
I D
root
Password
******
Auto login
Save password
Login
Setting
Ver. 1.0.2721
Setting
Smart Recording Server
IP Address
172.16.4.22
Port
9200
(default: 9200)
OK
Cancel
Auto Login Configuration
Password Save

User Management

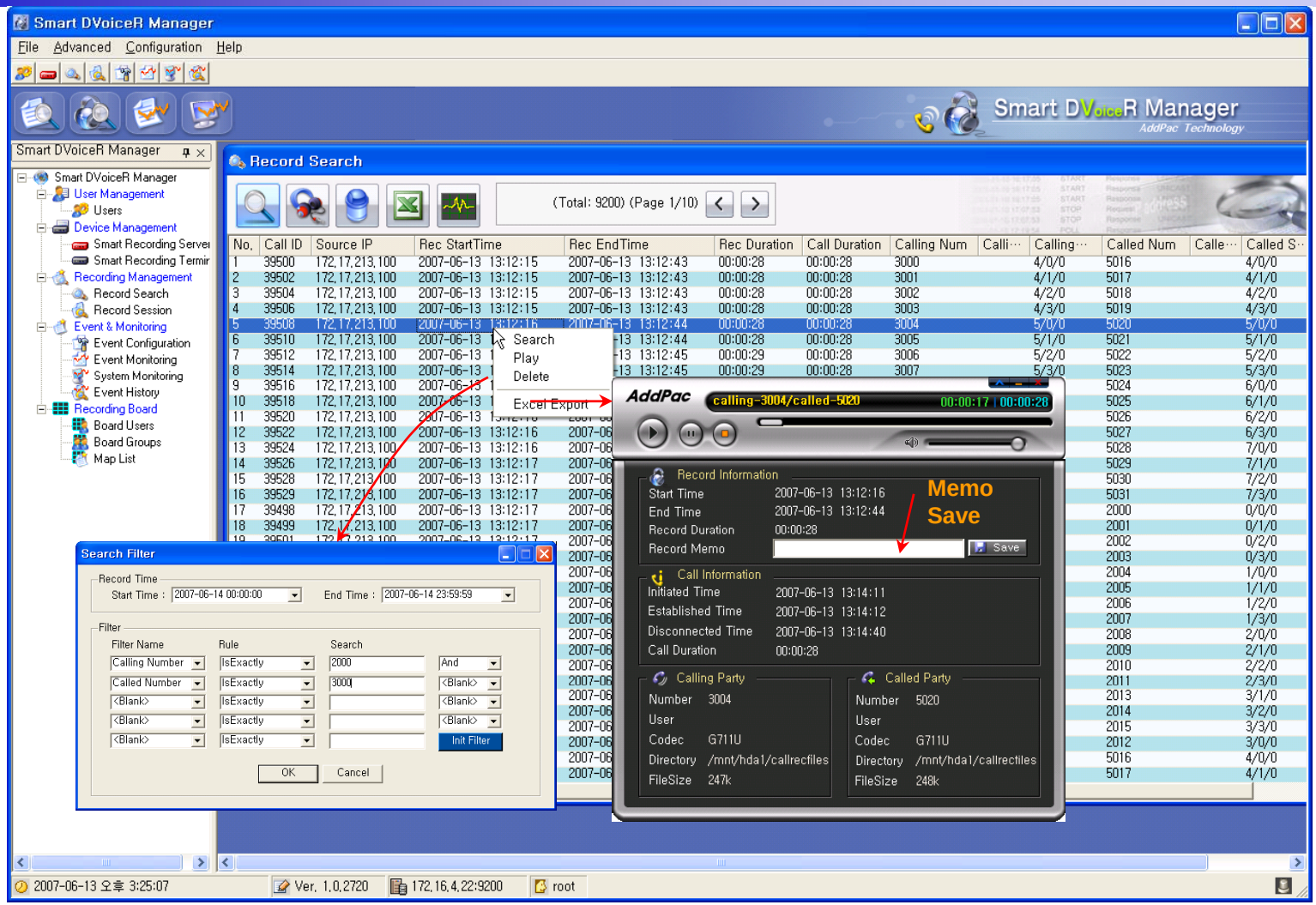


Recording Server Status Monitoring

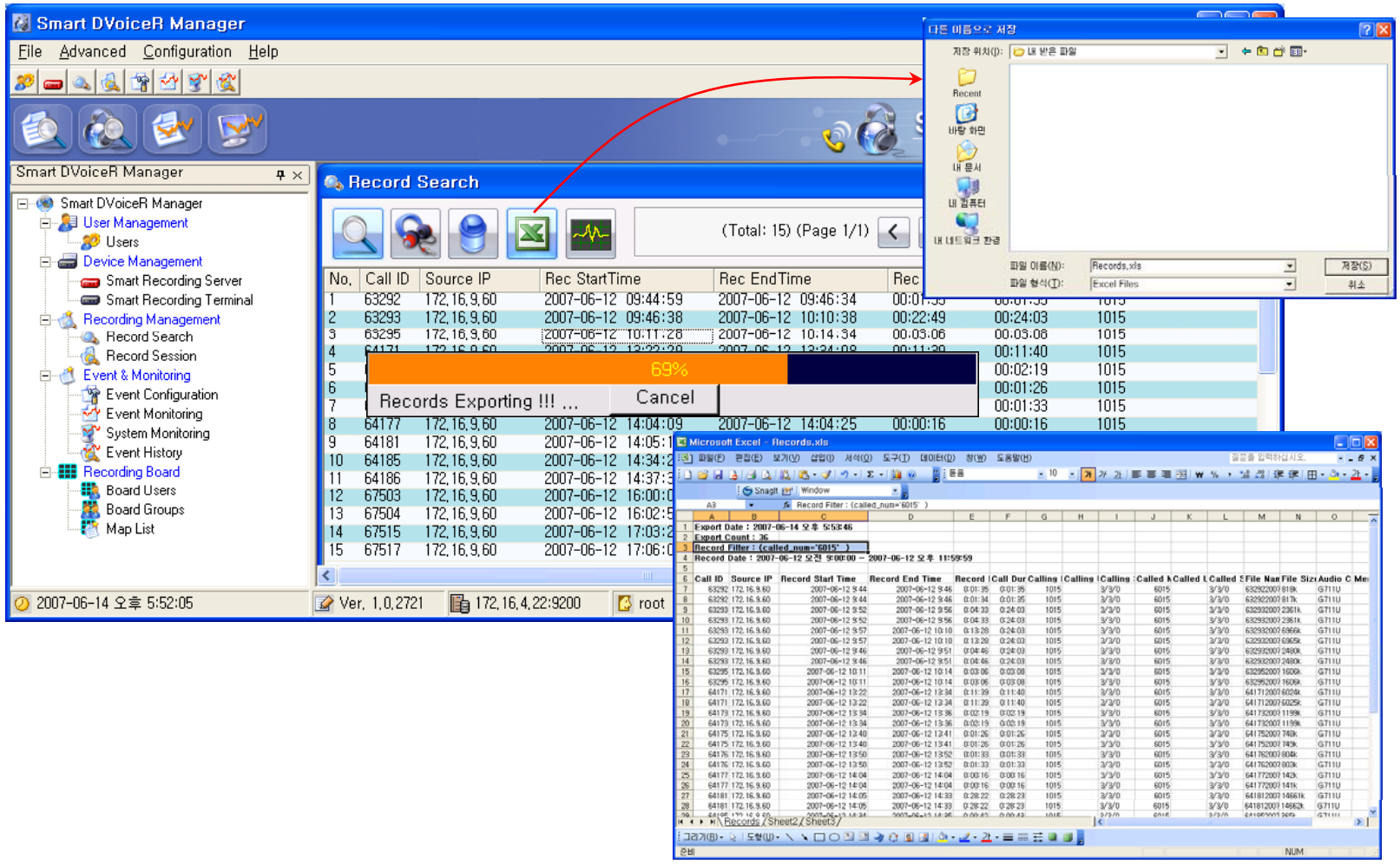


Recording File Management

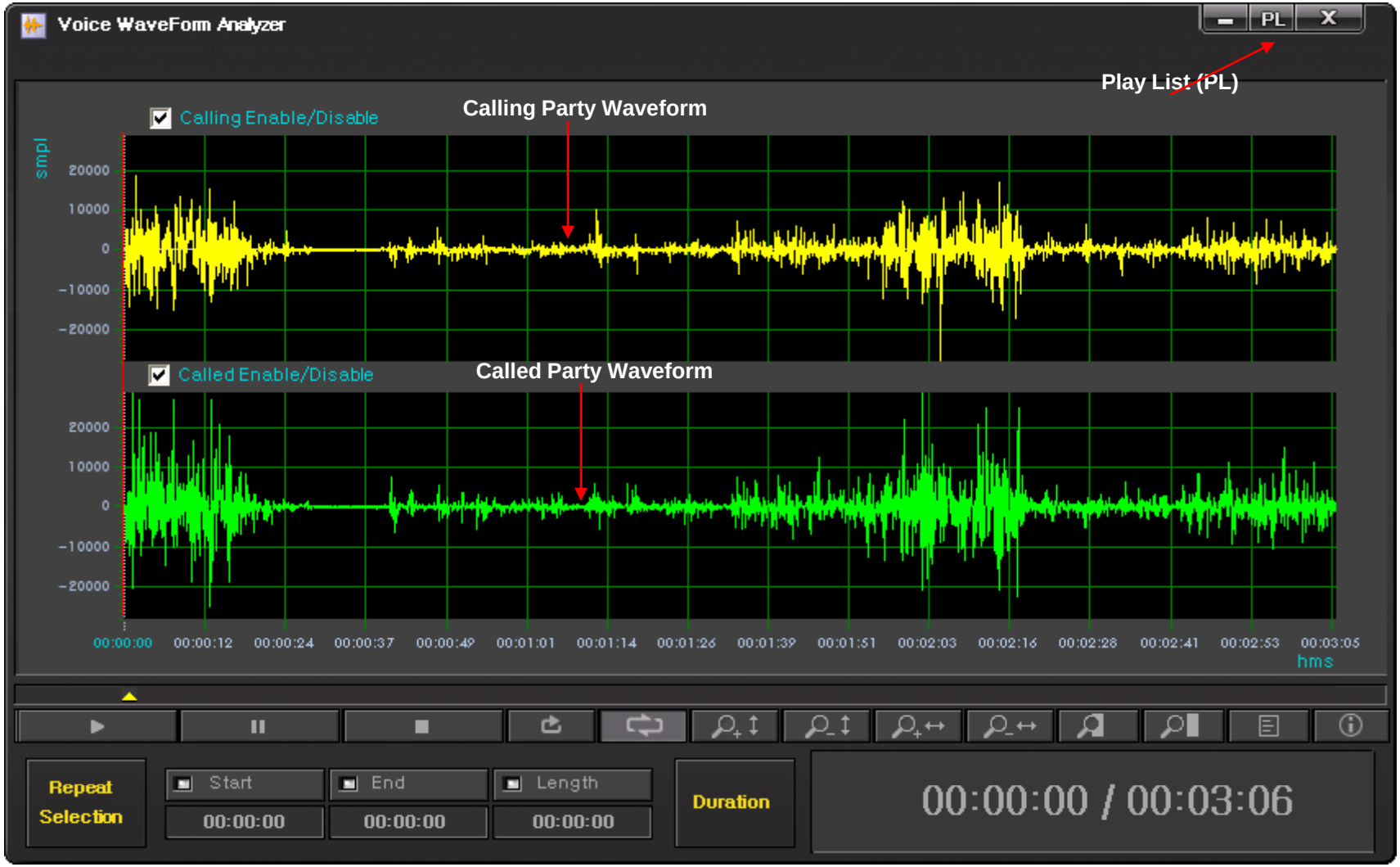
(Recorded File Monitoring (play/seek/pause/resume/stop))



Recording File List Save
(Excel File Format)



Recording File Waveform Analyzer



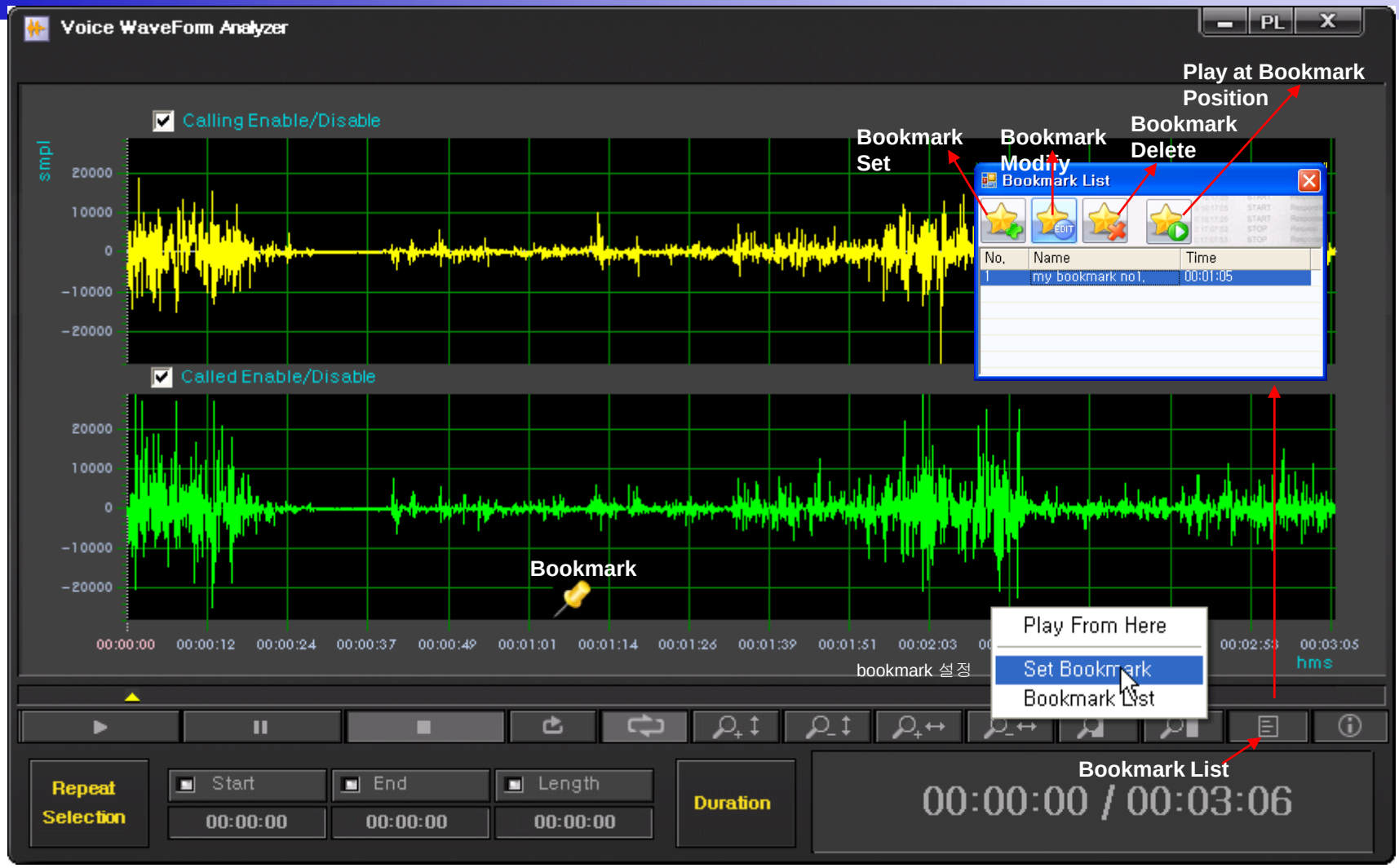
Recording File Waveform Analyzer

(Repeated Play)



Recording File Waveform Analyzer

(Bookmark Play)



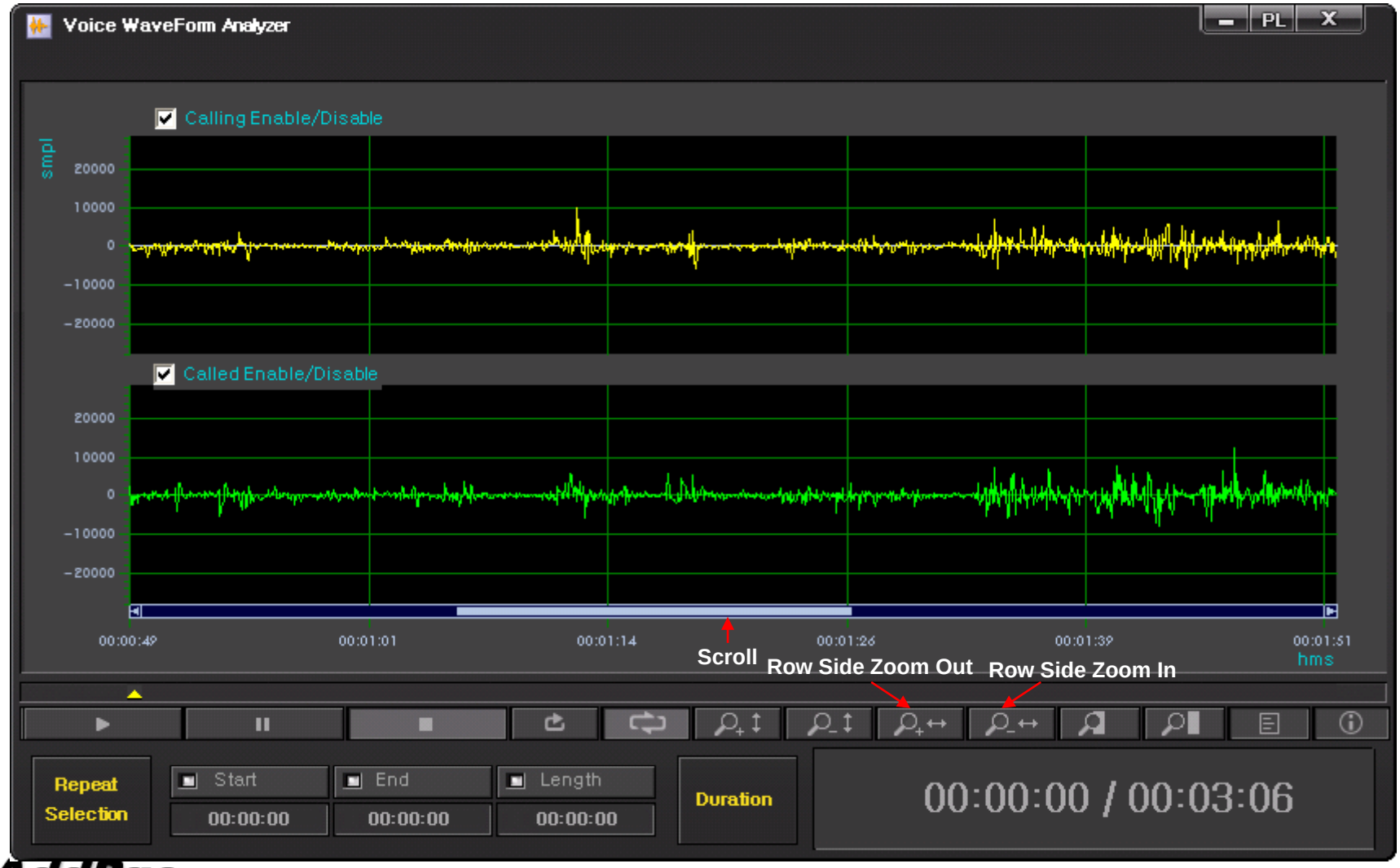
Recording File Waveform Analyzer

(Column Side Zooming)

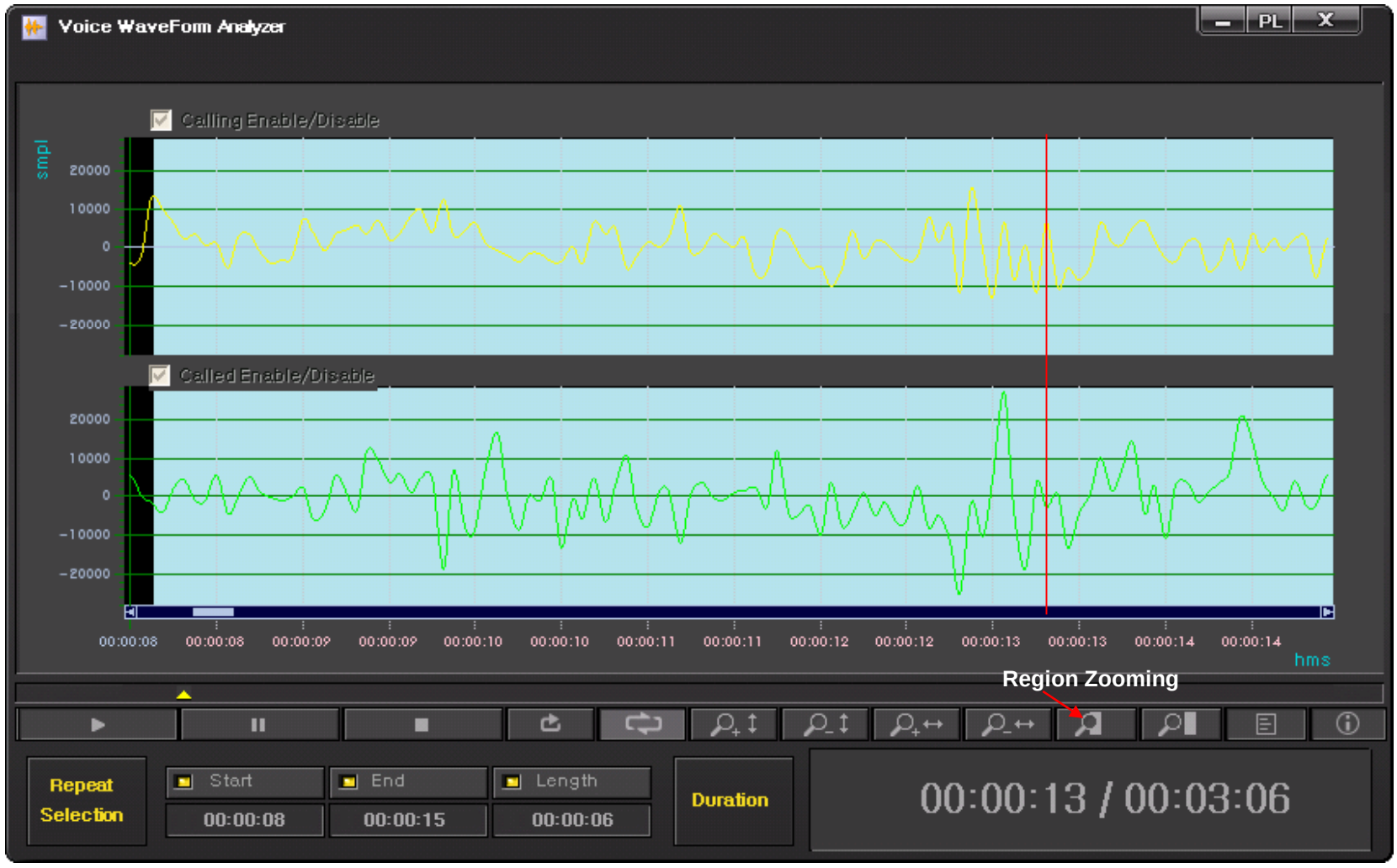


Recording File Waveform Analyzer

(Row Side Zooming)

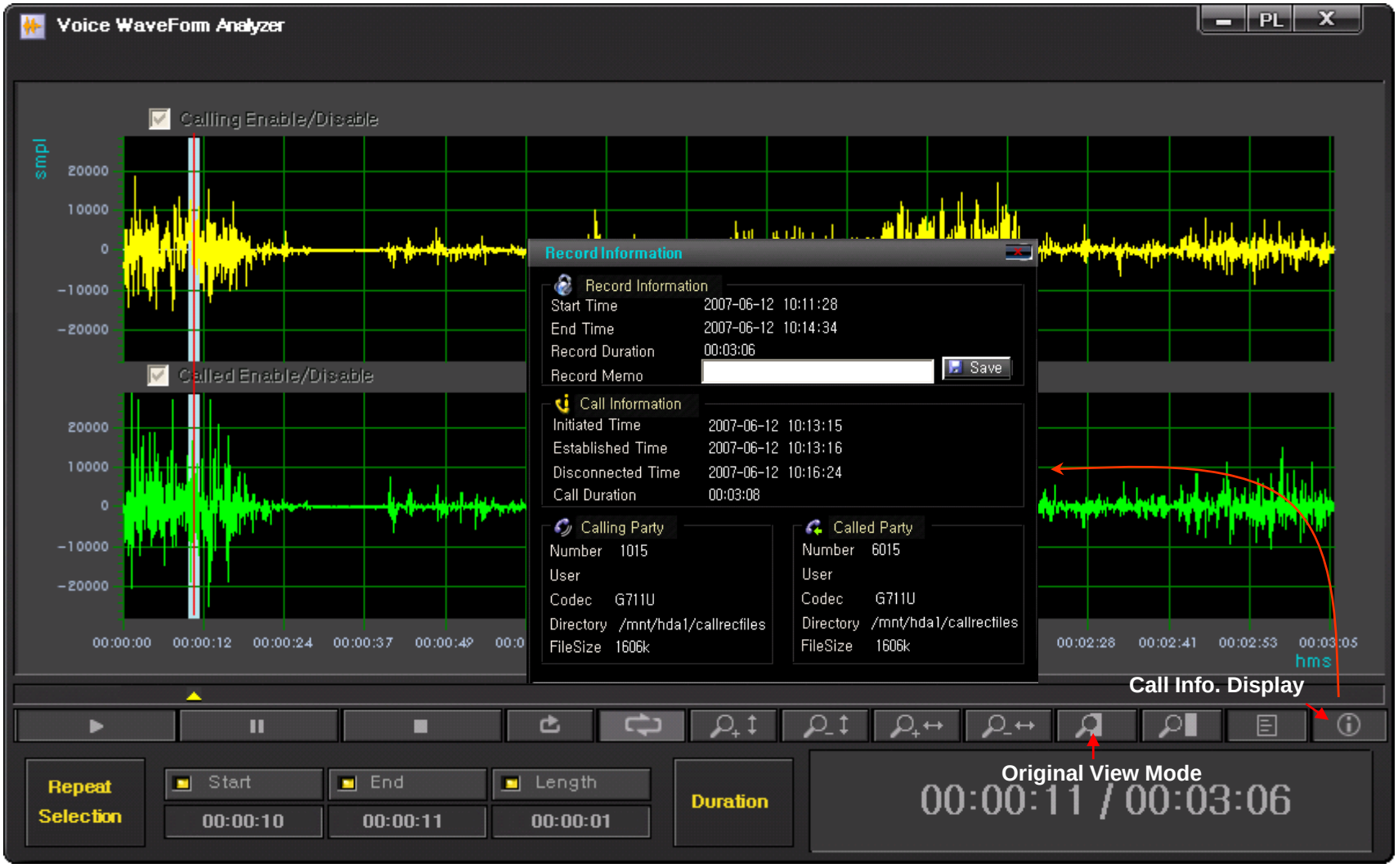


Recording File Waveform Analyzer
(Region Zooming)

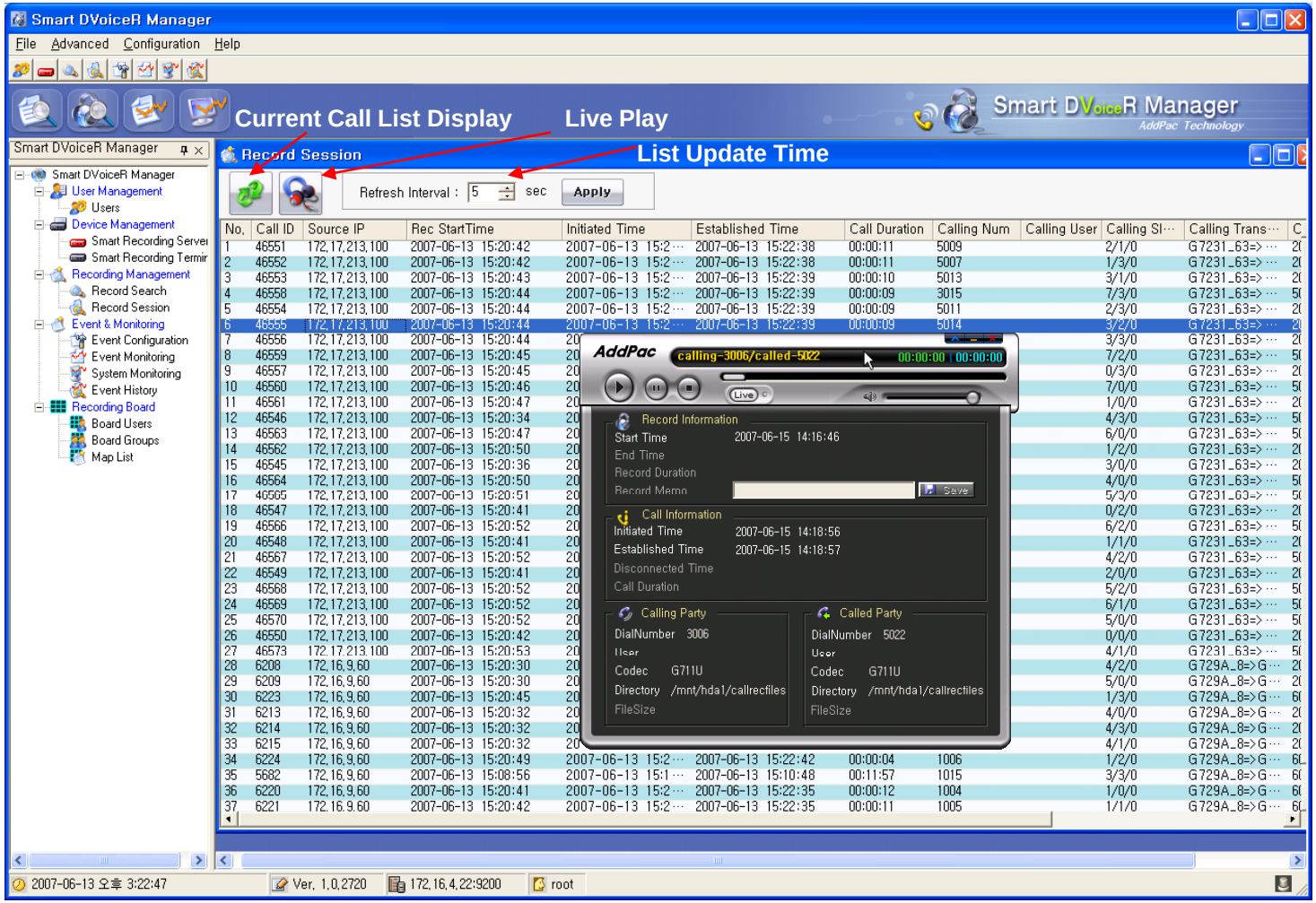


Recording File Waveform Analyzer

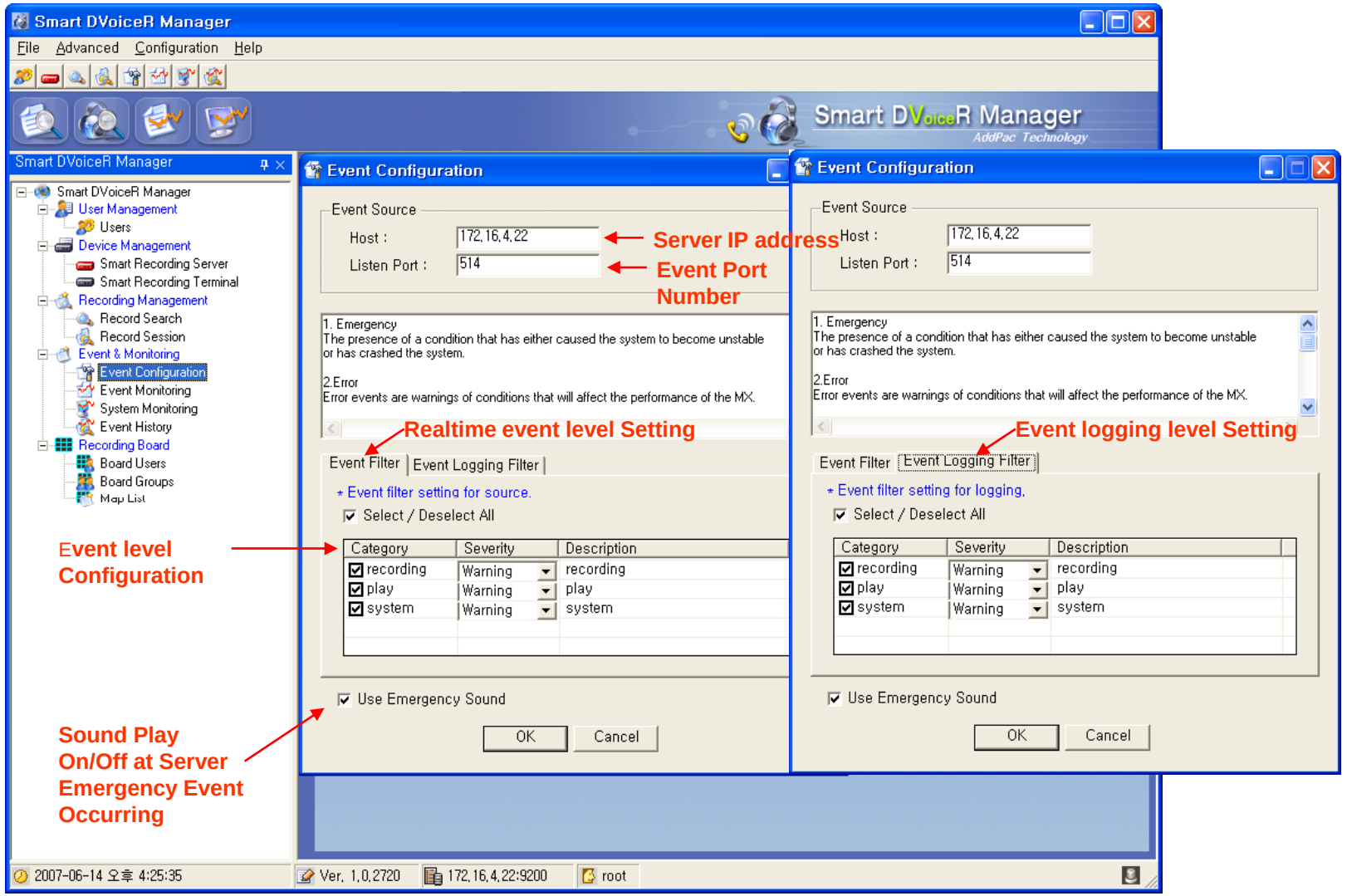
(Call Info. Display)



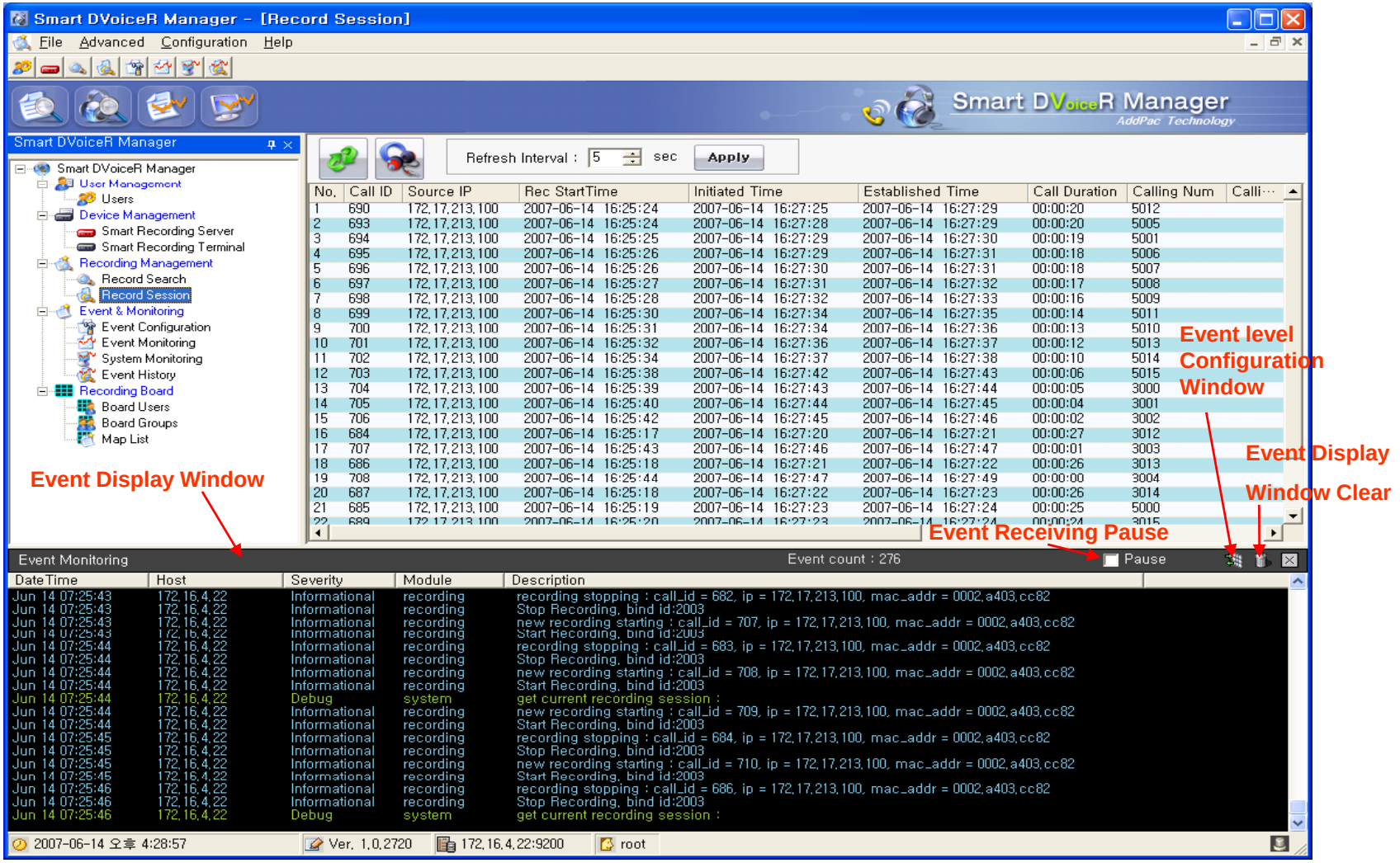
Live Call Recording List and Monitoring



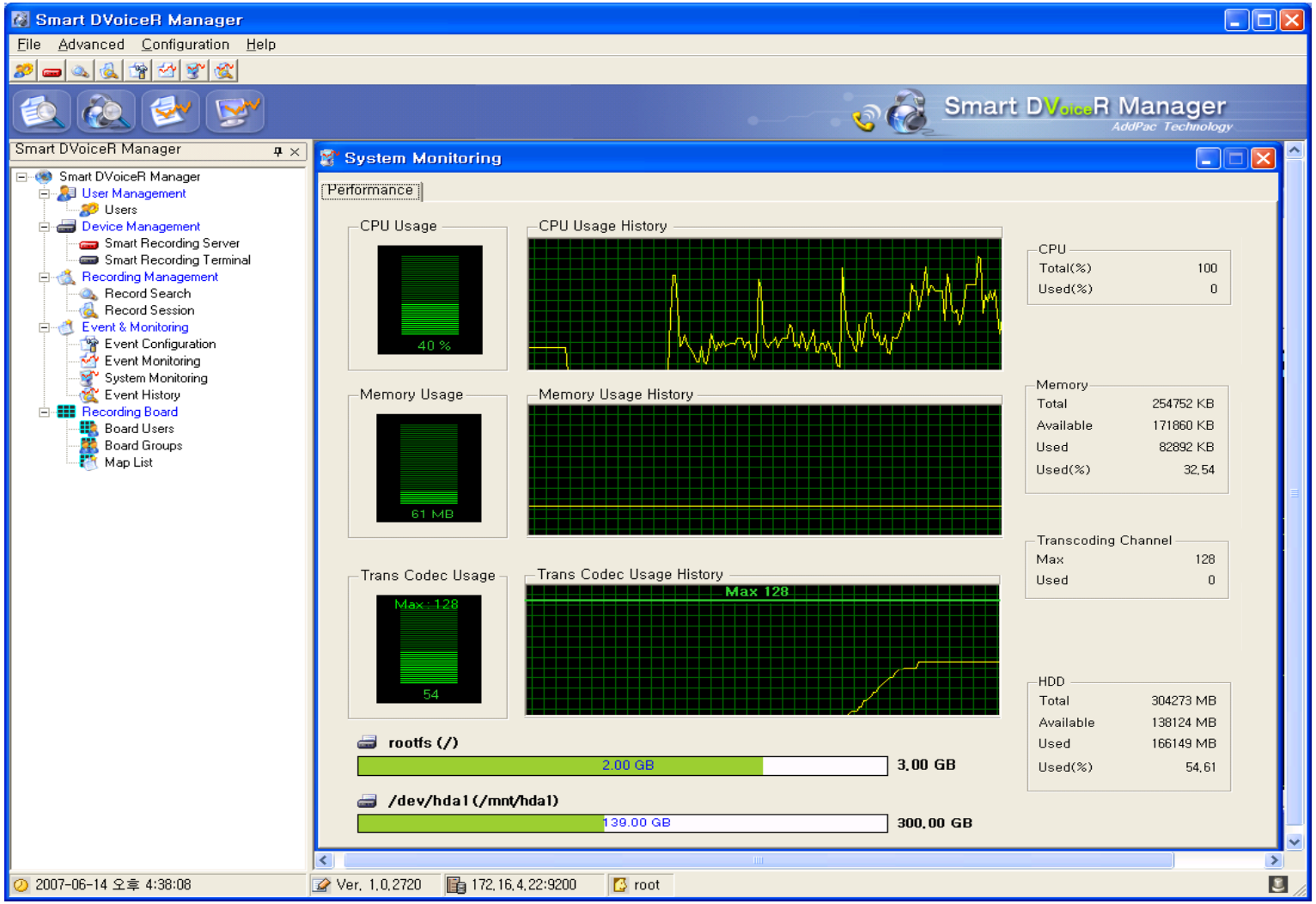
Event Management
(Configuration)



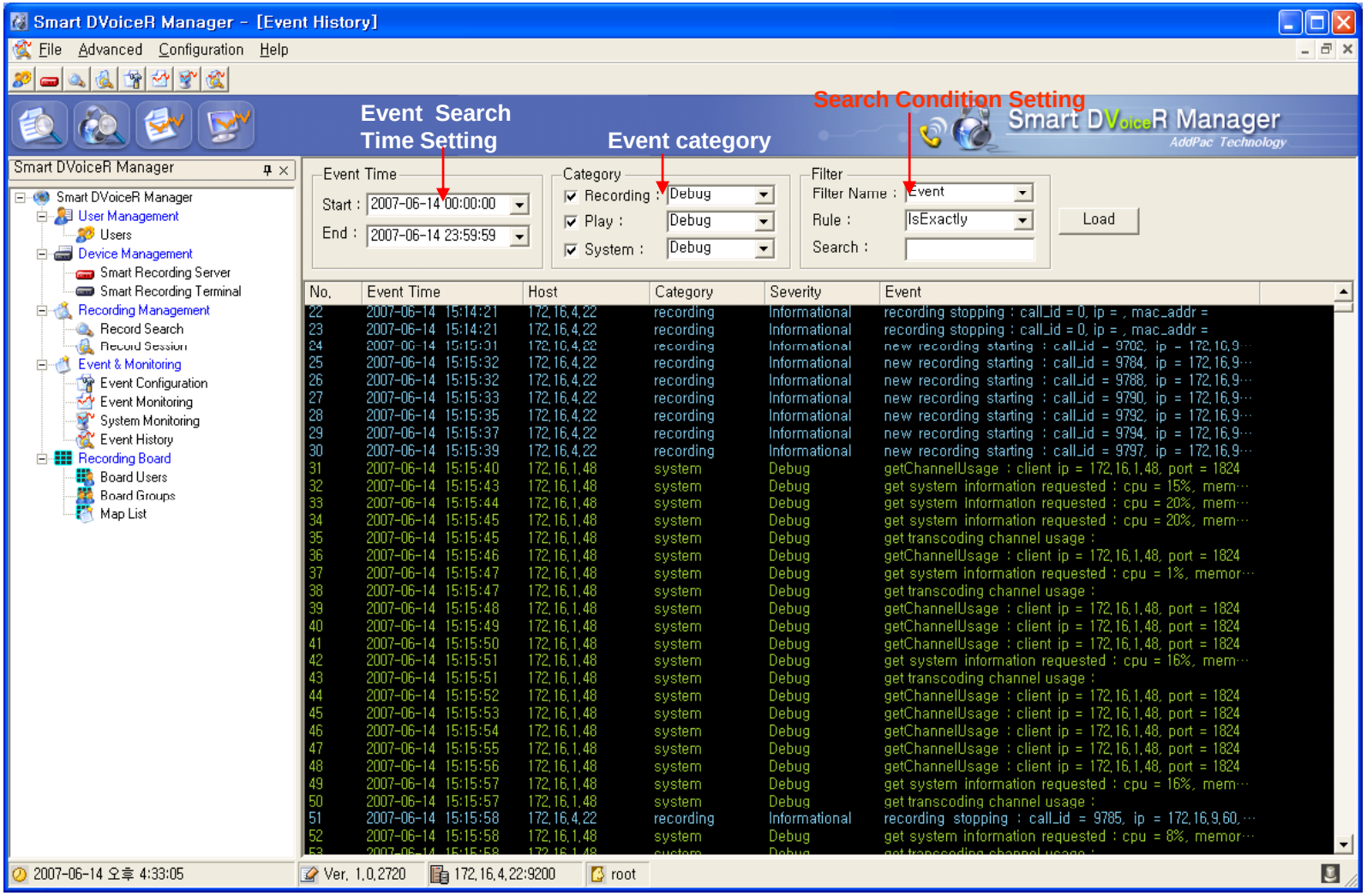
Event Management
(Monitoring)



Event Management
(System Monitoring)



Event Management
(Event History)

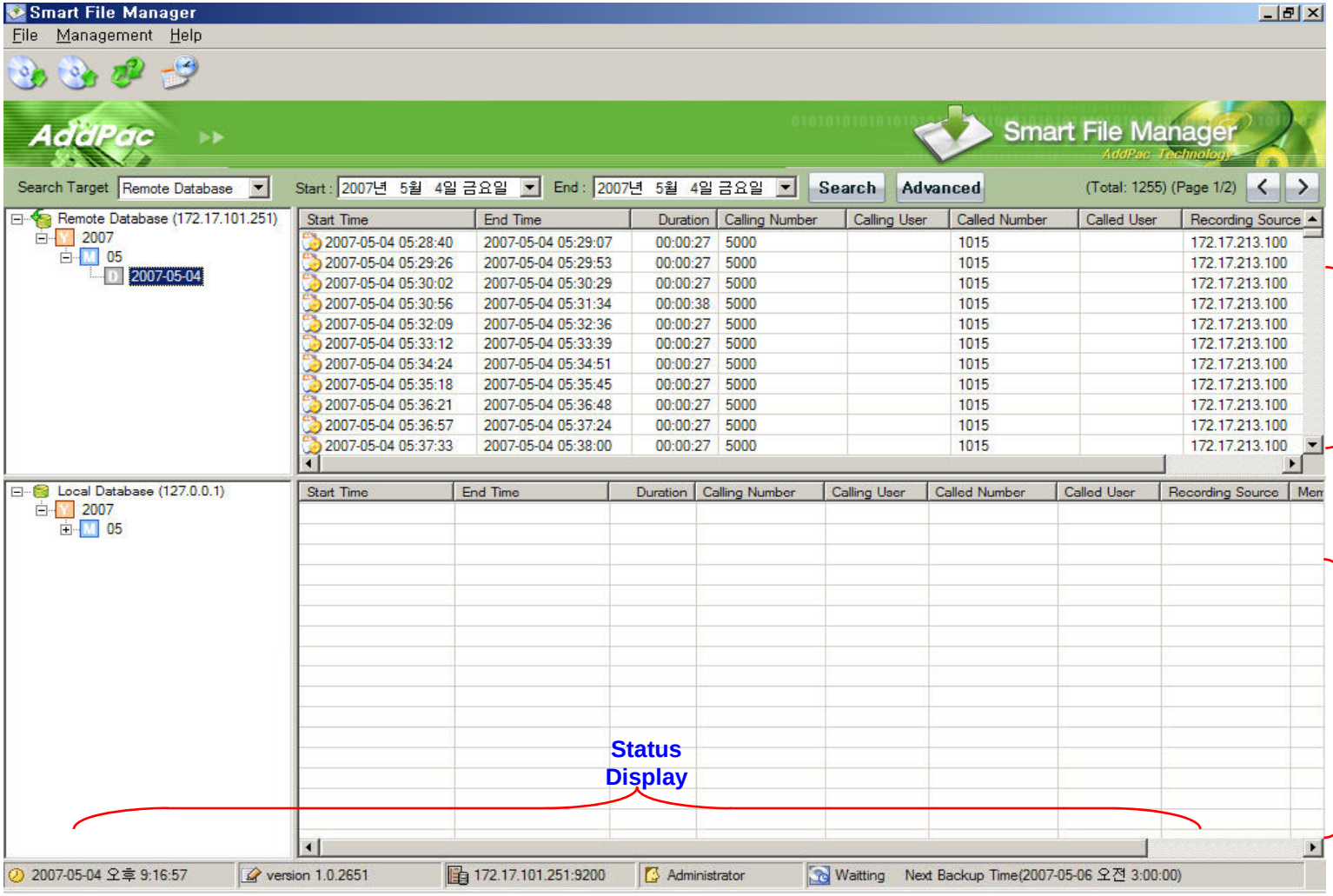


Smart File Manager
(Login)



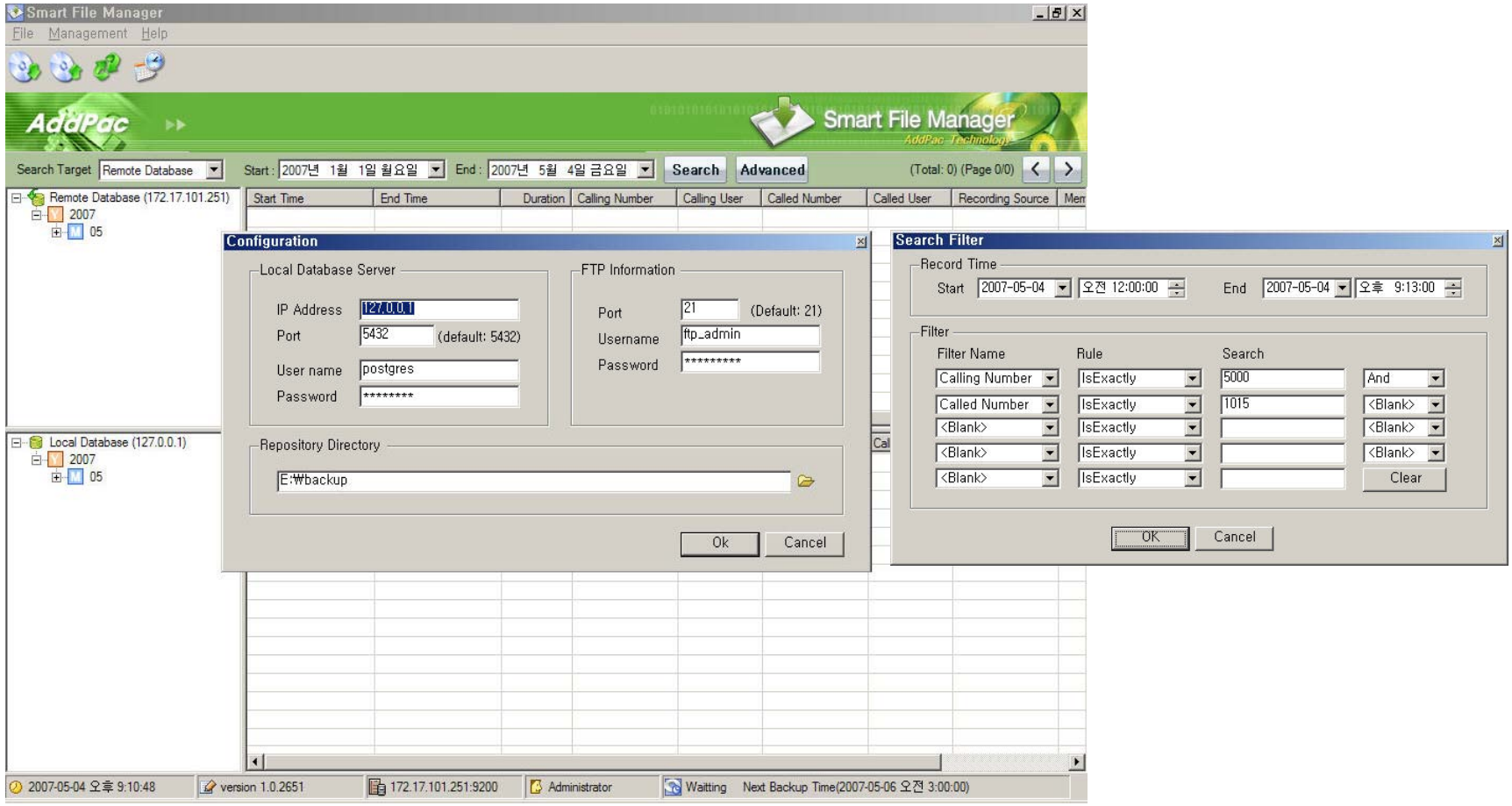
Smart File Manager

(Recorded Call List Search)



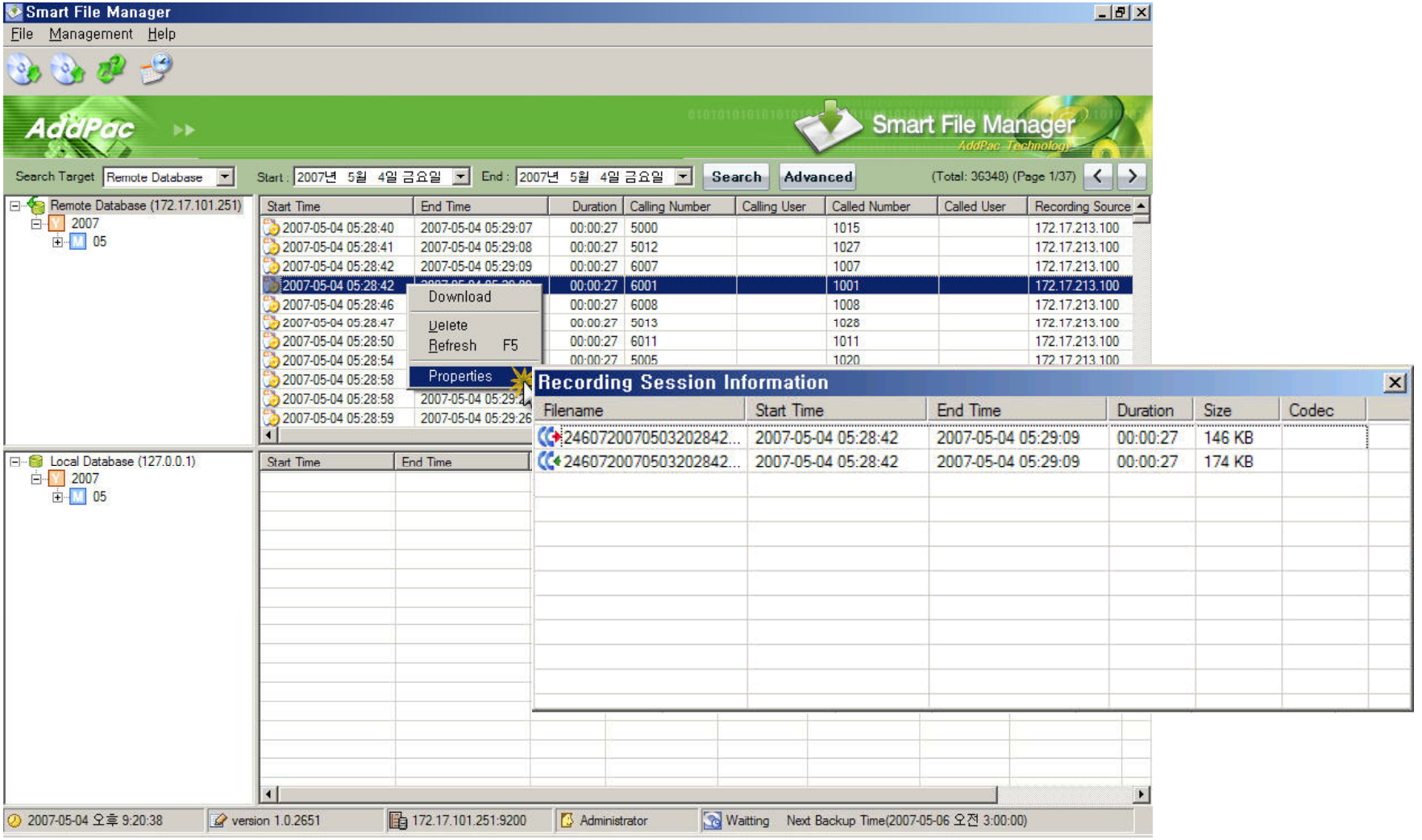
Smart File Manager

(Configuration and Search Filter)



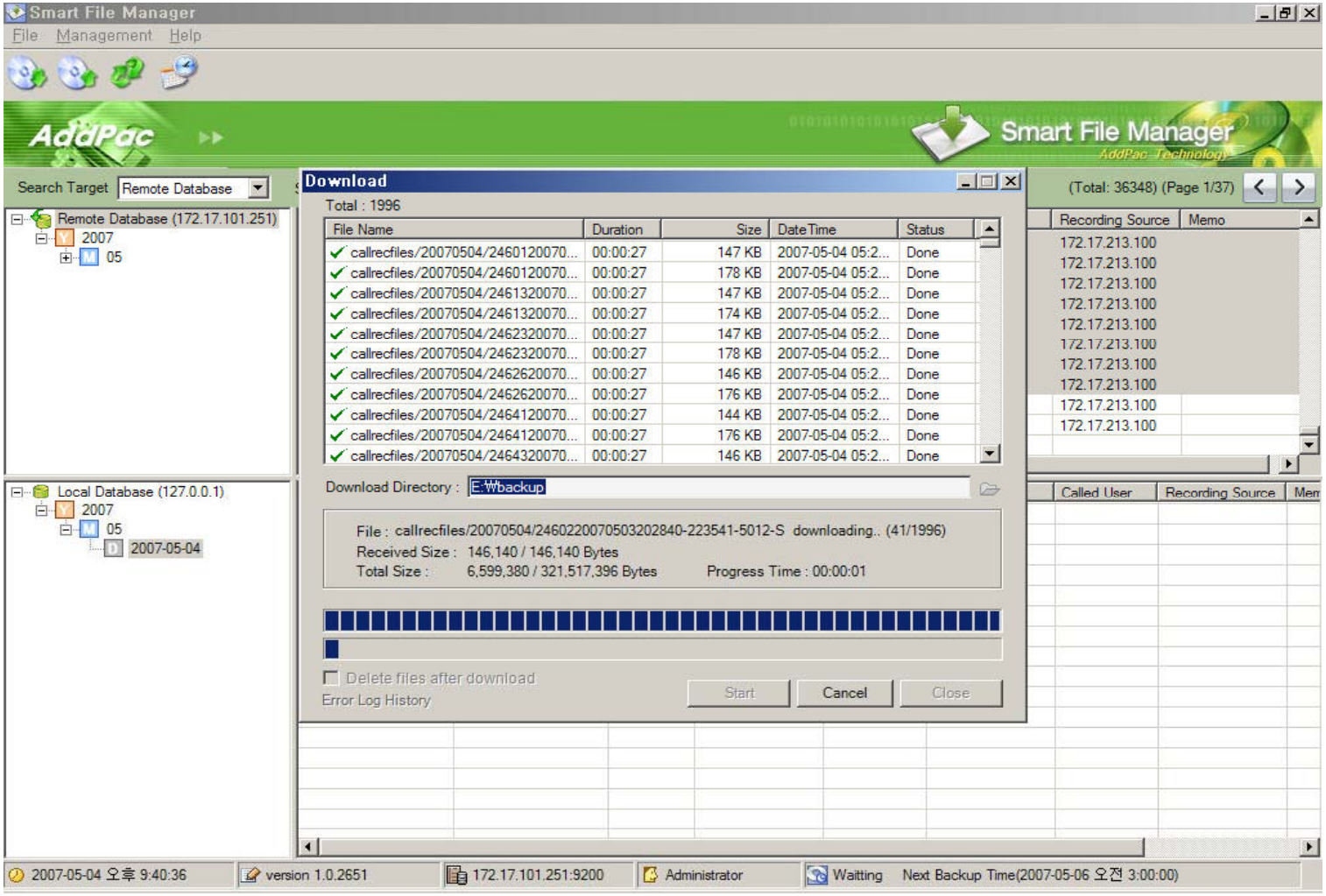
Smart File Manager

(Call List Properties)

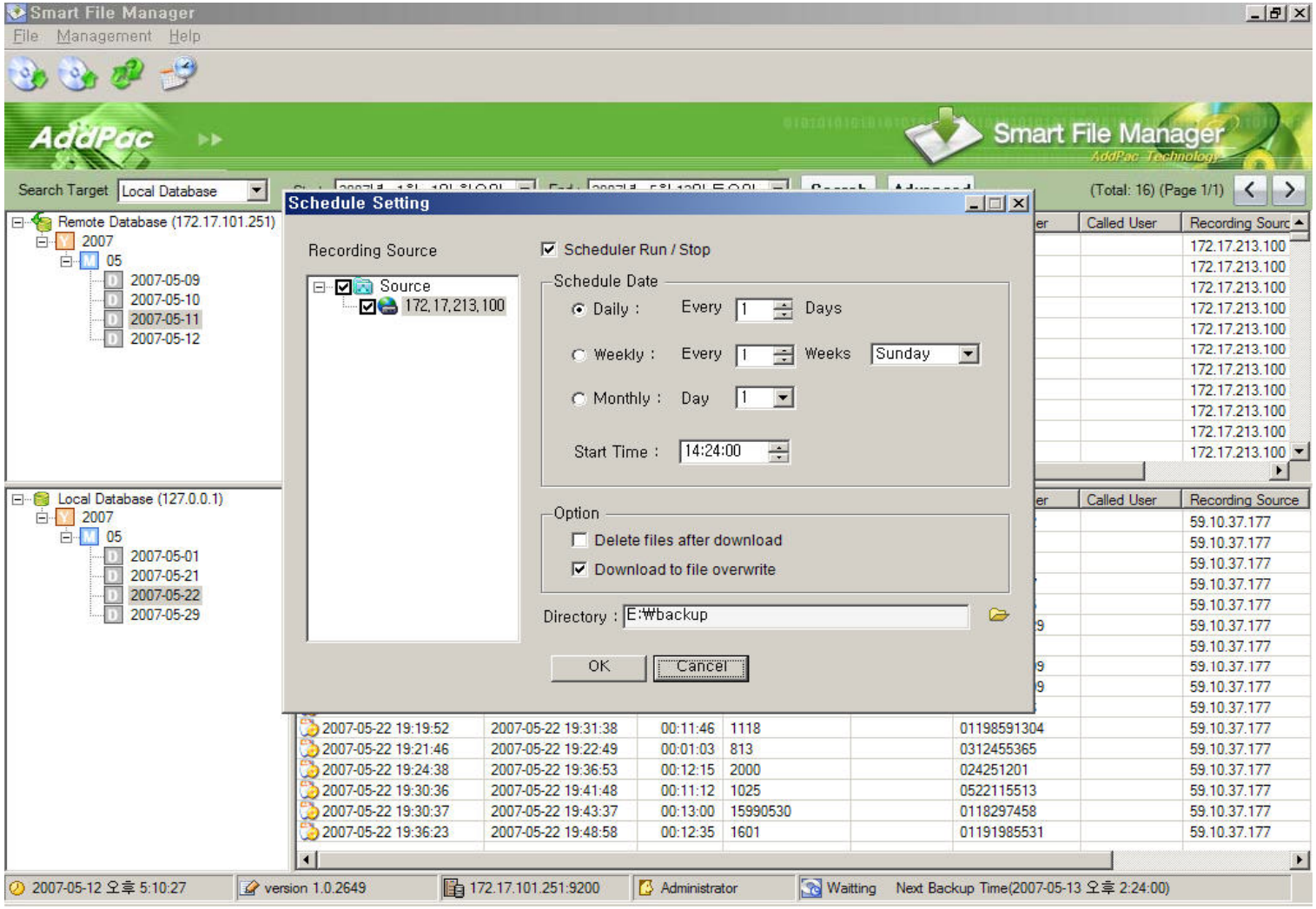


Smart File Manager

(Server to Local Backup)



Smart File Manager
(Periodical Backup)



GPS based Embedded NTP Server for Time Sync. AP-GTR1000



Contents

- Product Overview
- Hardware Specification
- Simple NTP (Network Time Protocol)
- Network Diagram



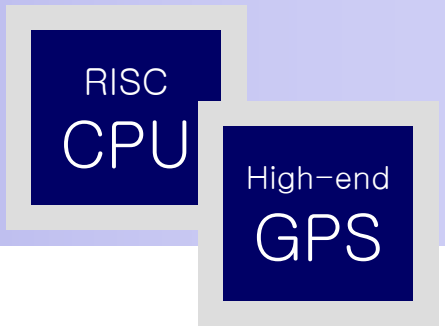
Product Overview

AP-GTR1000 IP based GPS Time Receiver Terminal

- High Performance GPS Time Receiver Terminal Solution
- IP based GPS Time Receiver (Location Free, etc)
- NTP (Network Time Protocol) Sever Solution
- Dual RS232 Port for GPS Time Information Transmission
- LCD Display for GPS Time Information
- External Antenna Interface Support
- Various Antenna Support for GPS Signal
- Blue LAMP for Device Status
- Smart Web Manager for System Configuration & Management
- Window, Linux Simple Socket API Program Support
- Firmware Upgradeable Architecture
- Broadcasting Solution with Outstanding Network Service Capability

Hardware Specification

AP-GTR1000 IP based GPS Time Receiver Terminal



- RISC Microprocessor Computing Power
- High-end GPS Module Hardware Architecture
- One(1) Module Slot for GPS Module
- LCD Display at Front Side
- Blue LAMP
- One(1) 10/100Mbps Fast Ethernet Interface
- Dual(2) DB-9 RS232C Interface
- Internal Power Supply
- Rack Mount Bracket (Option)
- GPS Antenna (Option)
- Option Module : AP-GPS-RS232
  - Two(2) DB-9 RS232C Interface Port
  - GPS Antenna Interface Port

Hardware Specification

AP-GTR1000 IP based GPS Time Receiver Terminal

RISC CPU

High-end GPS

Front Side



One(1) 10/100Mbps LAN

RS232C Console

Status LCD

On-Air Blue LAMP & Switch

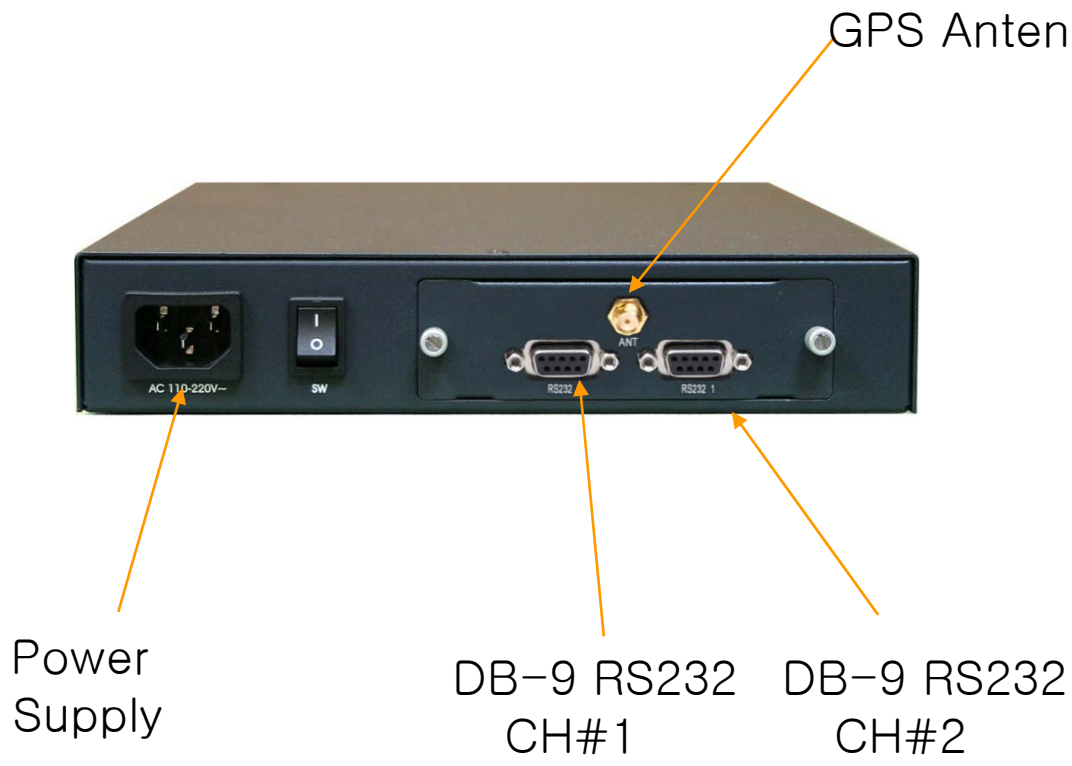
Hardware Specification

AP-GTR1000 IP based GPS Time Receiver Terminal

RISC CPU

High-end GPS

Back Side



Hardware Specification

AP-GTR1000 IP based GPS Time Receiver Terminal

RISC CPU

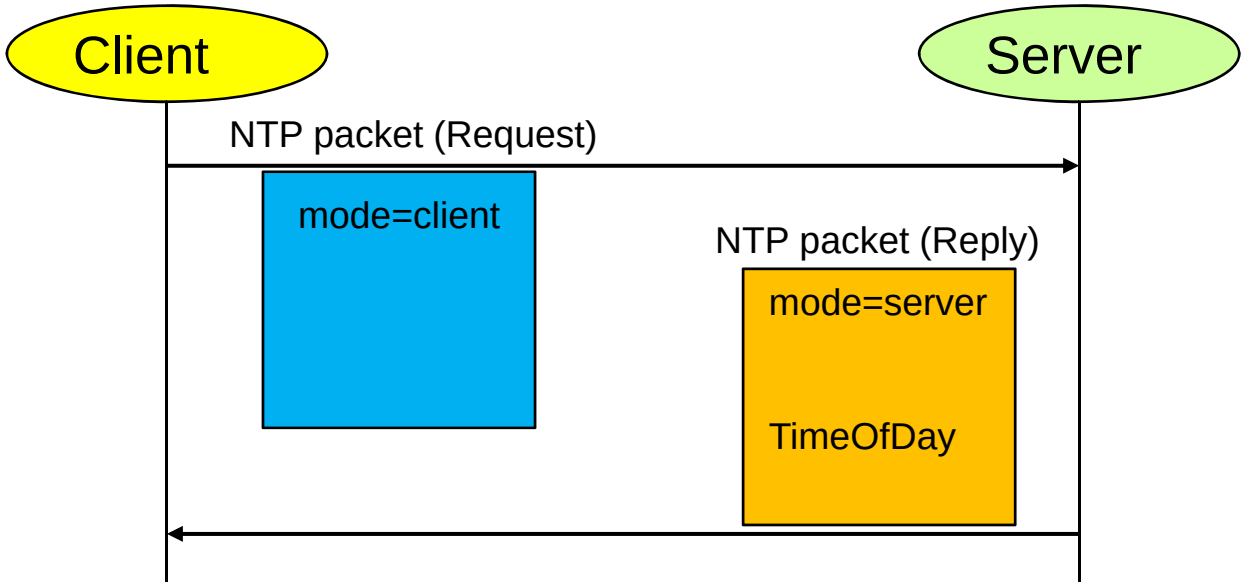
High-end GPS

GPS Antenna

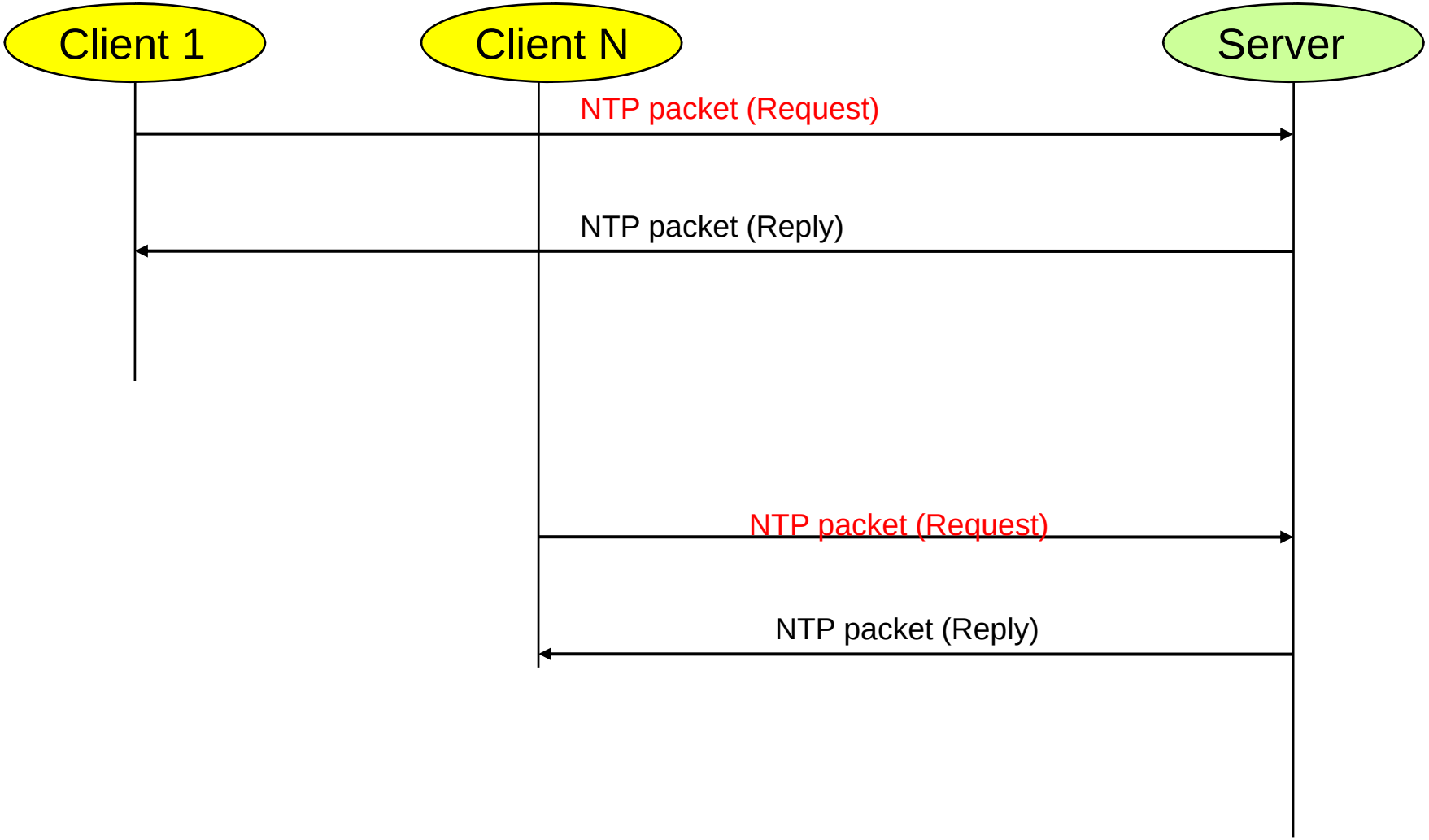


SNTP (Simple Network Time Protocol)

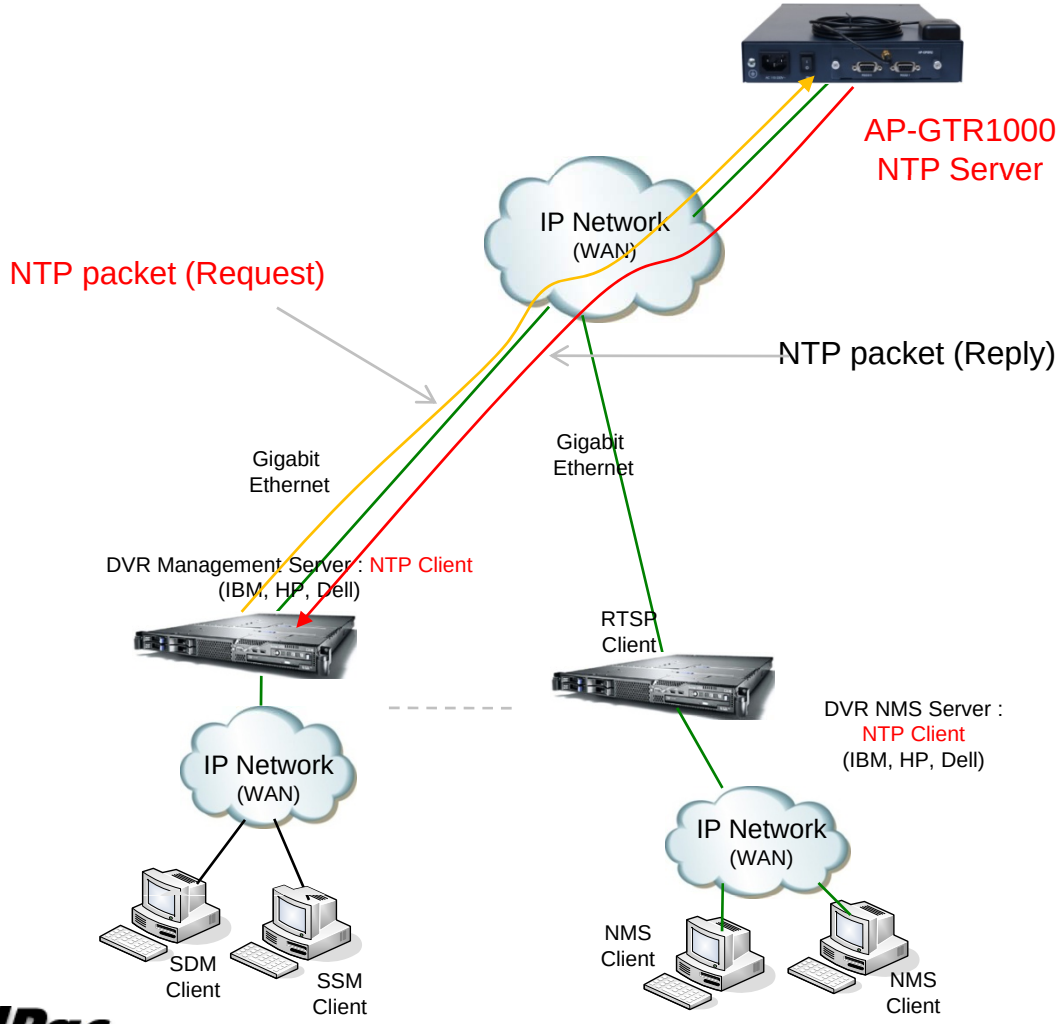
- Transport : UDP (port number 123)
- Protocol Version : 4
- Client/Server Mode



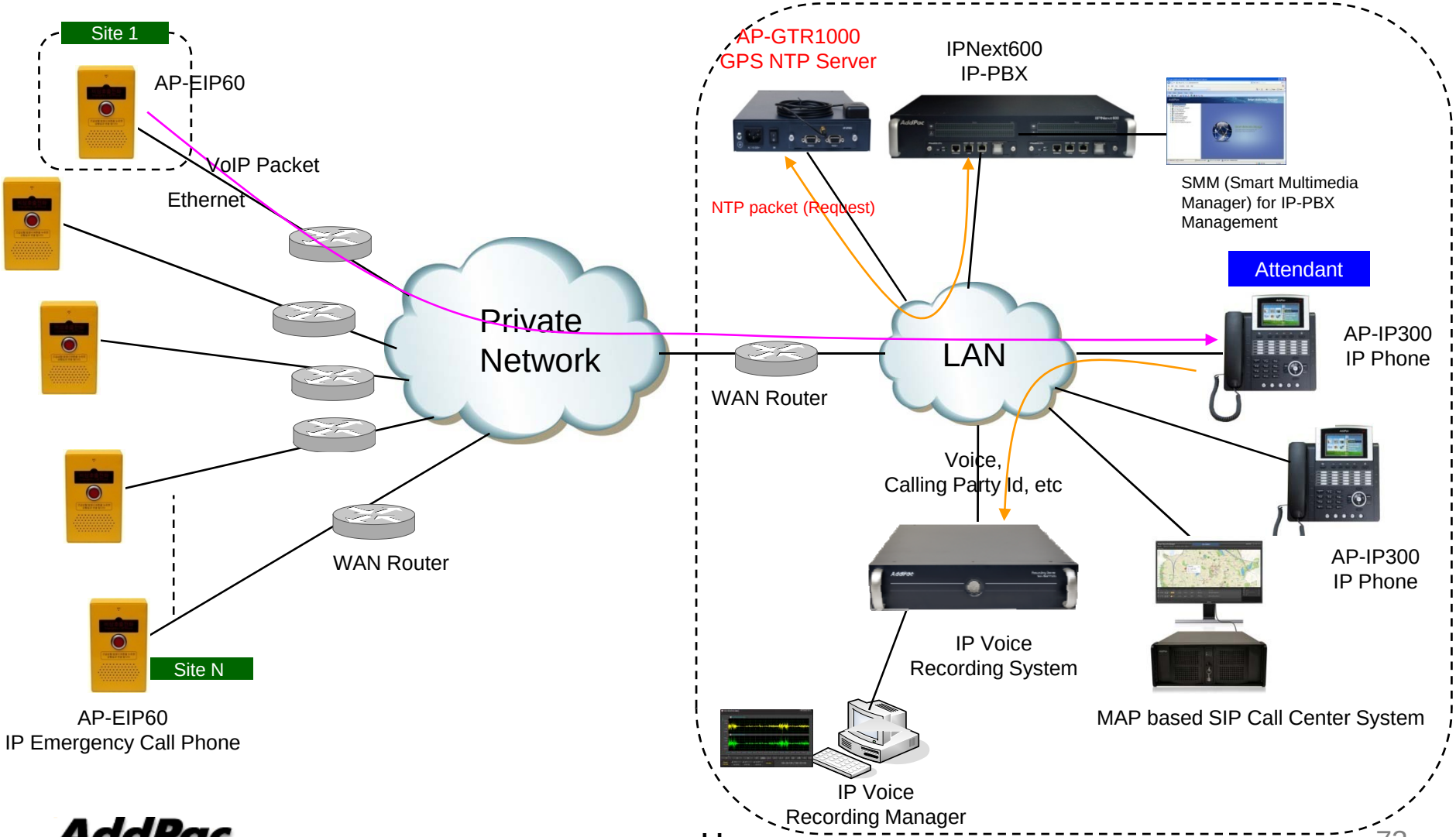
SNTP (Simple Network Time Protocol)



SNTP (Simple Network Time Protocol)



Network Diagram



Thank you!

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