

# GPS based NTP Server for IP Emergency Call Center



**AddPac**

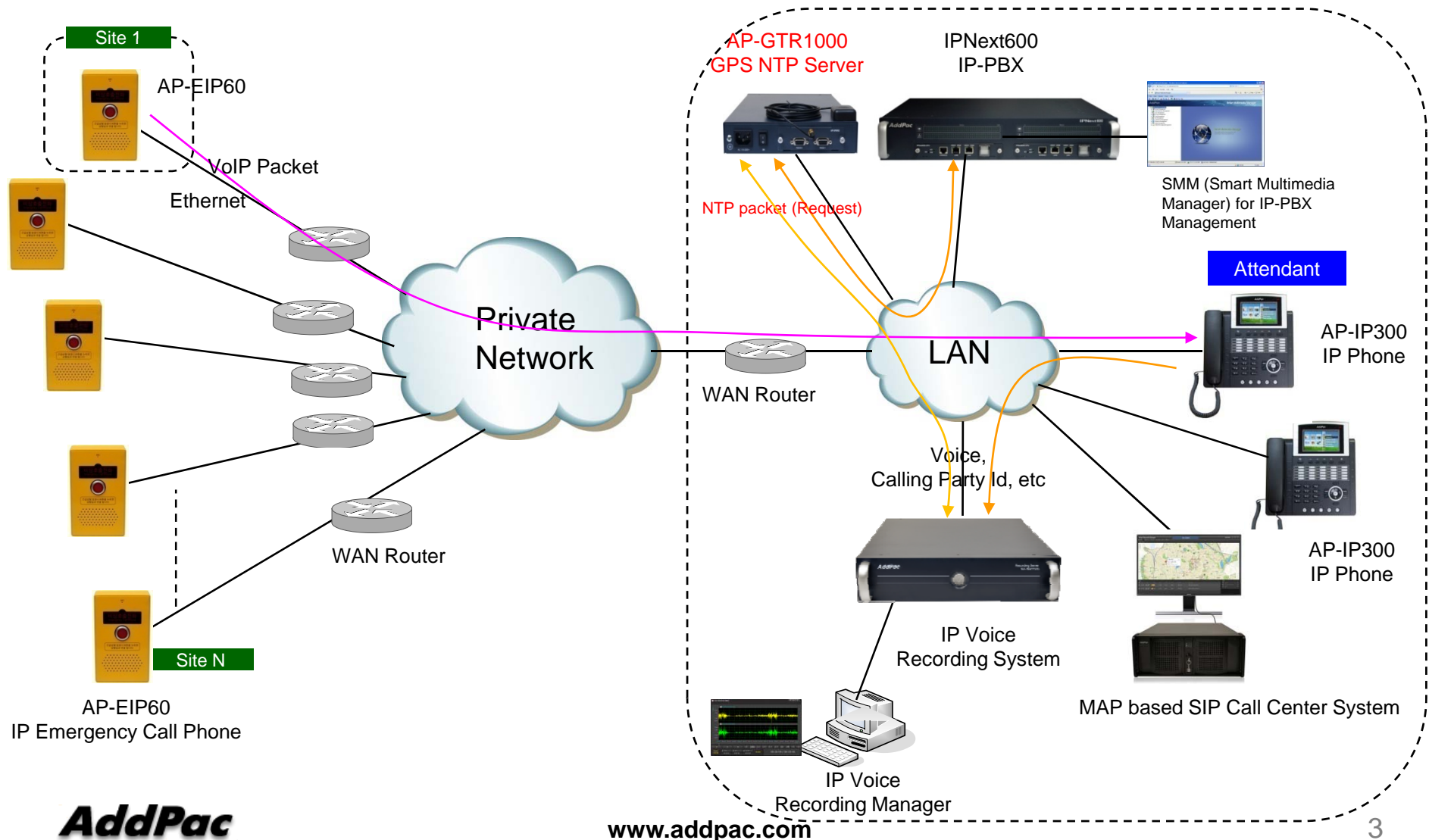
**AddPac Technology**

Sales and Marketing

# Contents

- Network Diagram
- Product Solution Table
- IP Emergency Call Phone Comparison Table
- GPS based Embedded NTP Server for Time Sync.
- IPNext600 IP-PBX Solution for Call Center
- IP Phone Solution for Call Center
- IP Voice Recording Solution (Option)
- AP-MSCS MAP based IP Emergency Call Center System (Option)

# Network Diagram



# IP Emergency Call Solution Product Table






MAP based Management System	SIP Call Manager	SIP Emergency Phone	SIP Phone for Call Center	IP Voice Recording Server	GPS based NTP Server
	 <p>IPNext600</p>	 <p>AP-EIP100</p>	 <p>AP-IP300</p>	 <p>AP-NR1500</p>	 <p>AP-GTR1000</p>
		 <p>AP-EIP70</p>	 <p>AP-IP230</p>		
		 <p>AP-EIP60</p>			





# Emergency Call IP Phone Solution

(SIP VoIP Standard Signaling Protocol)

# Emergency Call IP Phone Comparison Table

Model	AP-EIP100	AP-EIP90	AP-EIP80	AP-EIP70	AP-EIP50
Service Features					
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(Optional)	Support	Support	Support	Support	Support
Application	Indoor	Outdoor(water resistance)	Outdoor(water resistance)	Outdoor(water resistance)	Indoor

# Emergency Call IP Phone Comparison Table

Model	AP-EIP60	AP-EIP60L
Service Features		
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(Optional)	Support	Support
Chassis	Die-Casting Steel Frame Chassis(Optional) Front, Back (Steel)	Front Panel (Steel)
Application	Outdoor(water resistance)	Indoor

# 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) Server 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  
CPU

High-end  
GPS

- 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

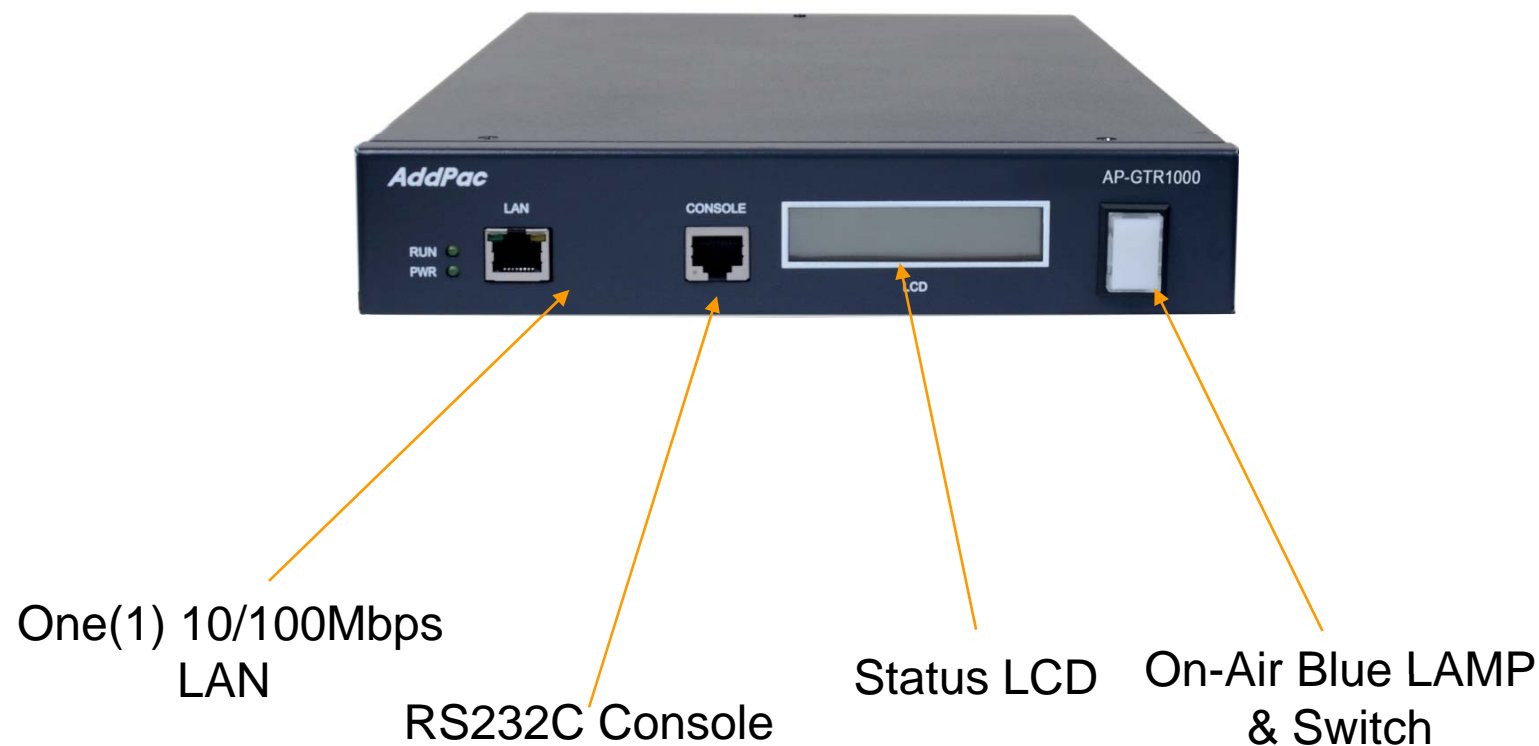
# Hardware Specification

AP-GTR1000 IP based GPS Time Receiver Terminal

RISC  
CPU

High-end  
GPS

## Front Side



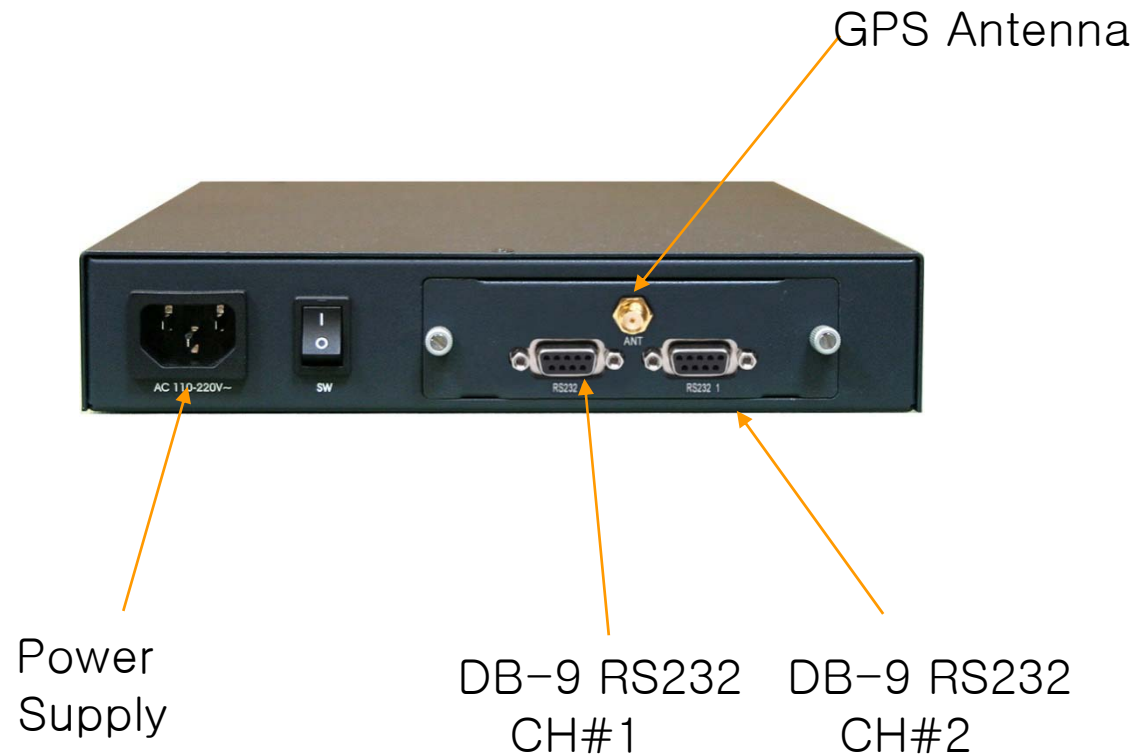
# Hardware Specification

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

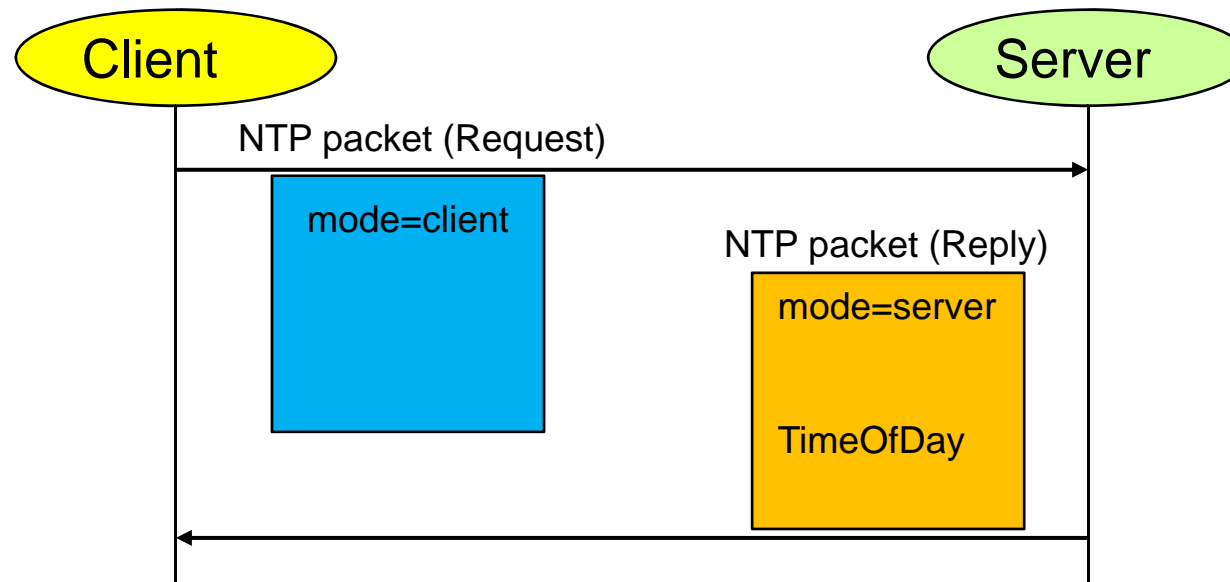
High-end  
GPS

## GPS Antenna

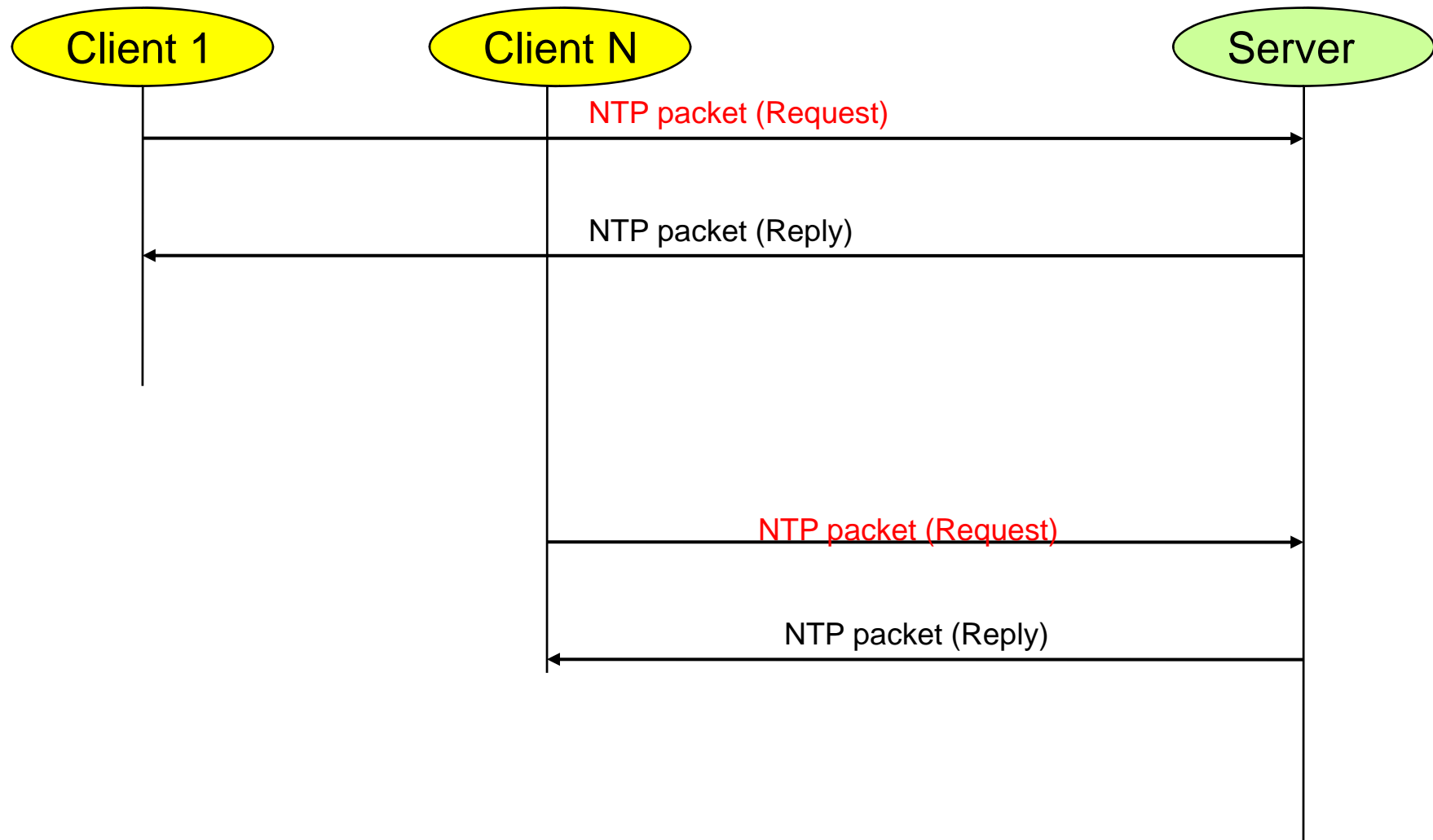


# SNTP (Simple Network Time Protocol)

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

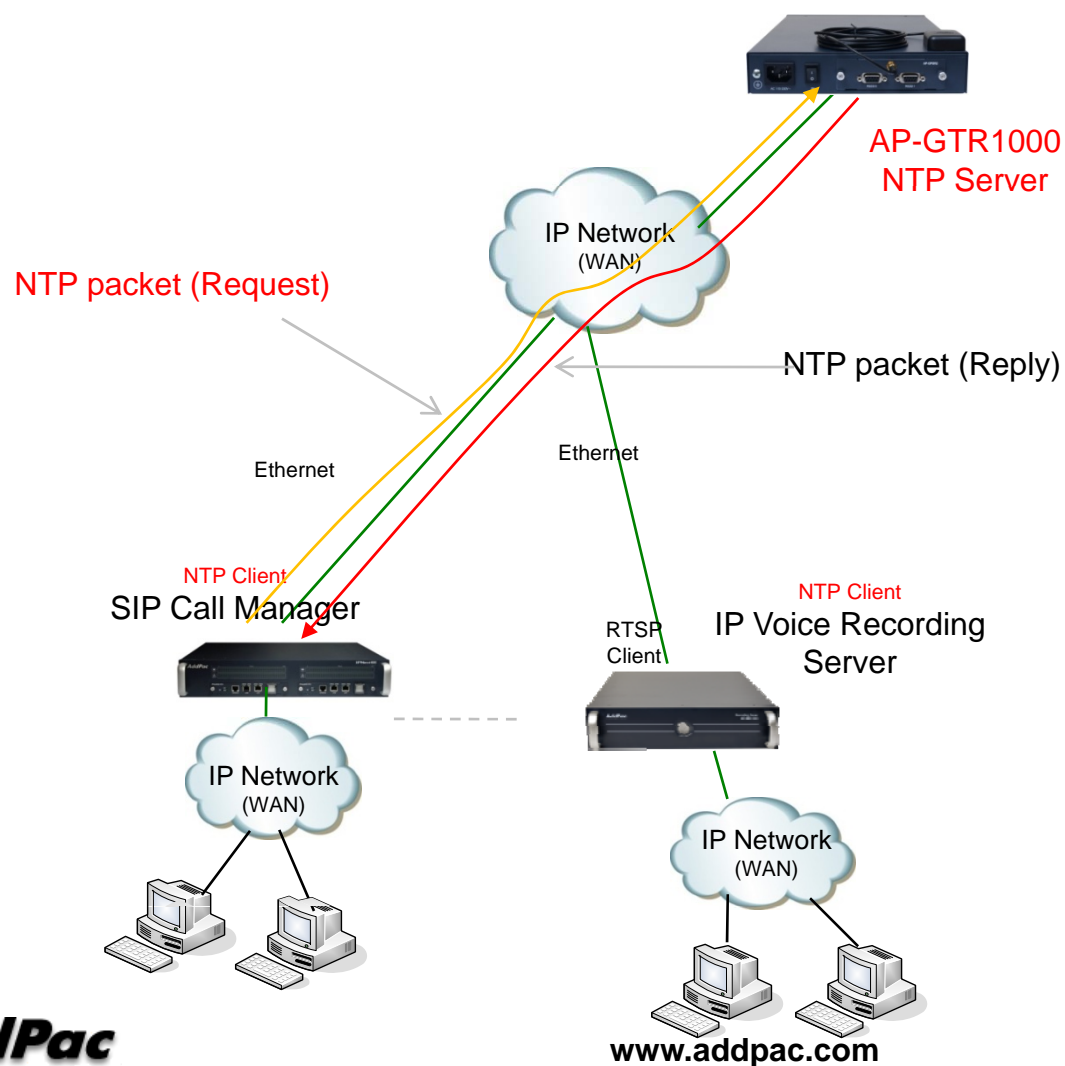


# SNTP (Simple Network Time Protocol)

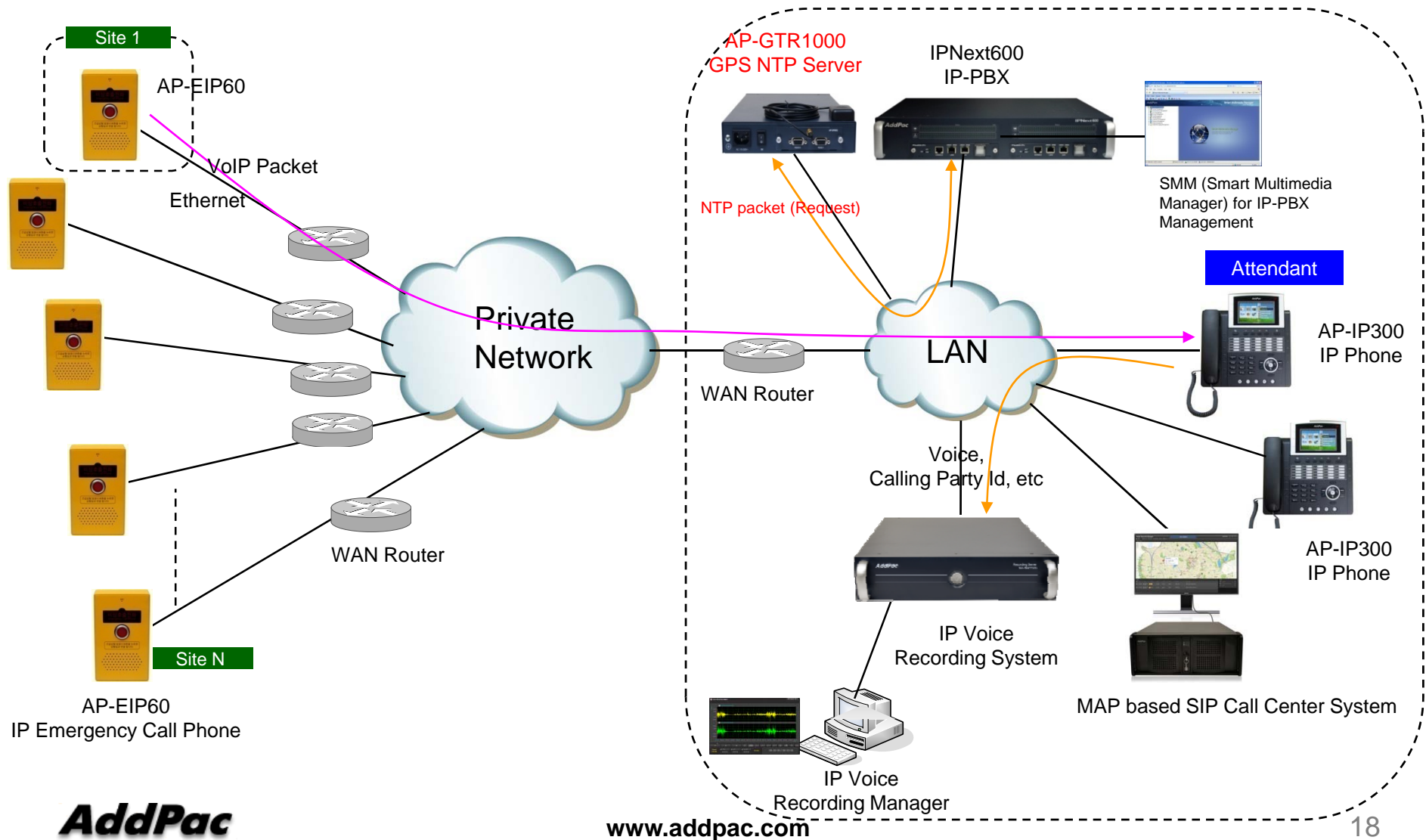




# SNTP (Simple Network Time Protocol)



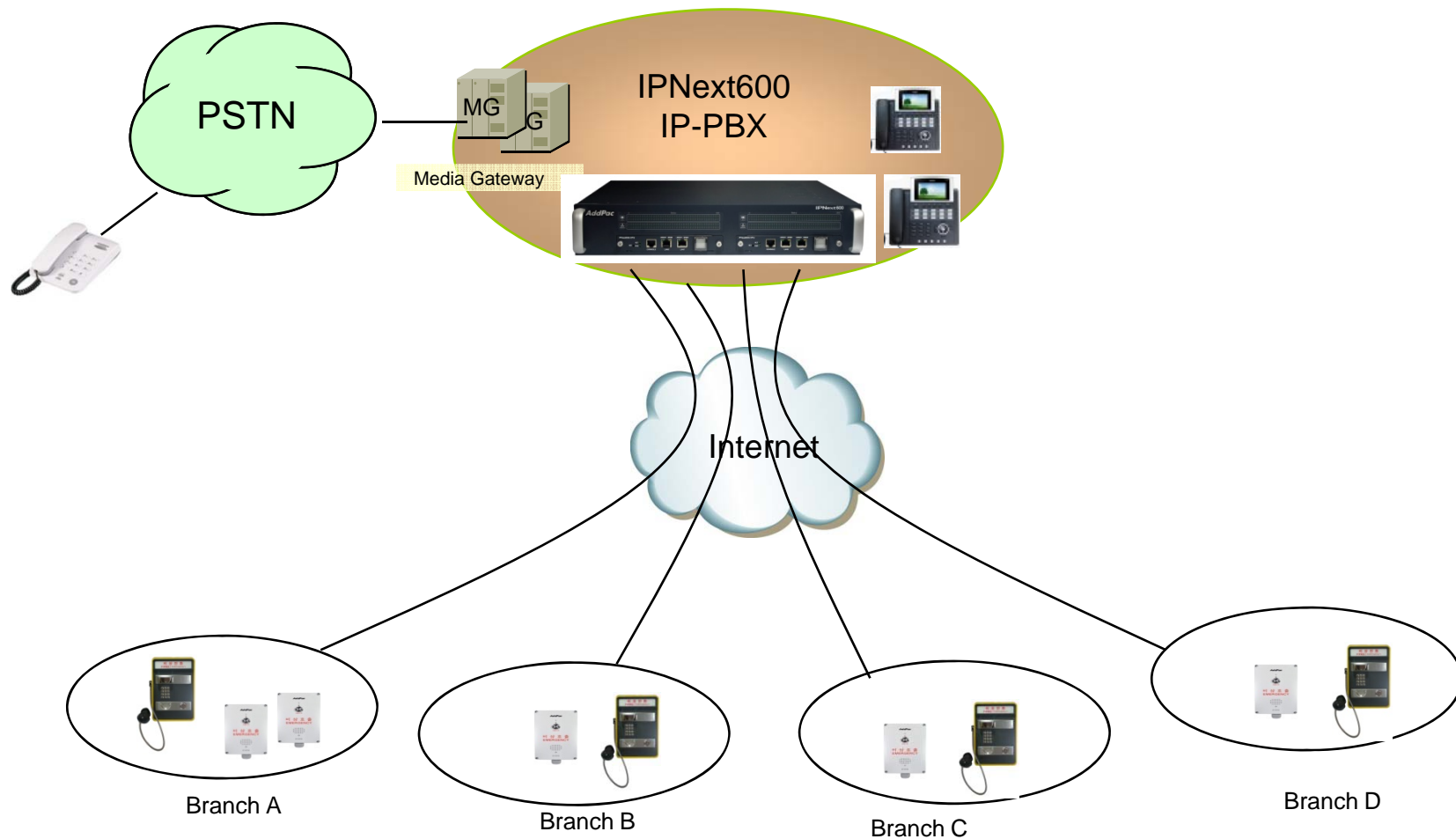
# Network Diagram





# IPNext600 IP-PBX Solution for Call Center

# Network Diagram



# Product Overview

## IPNext 600 Next Generation IP-PBX System

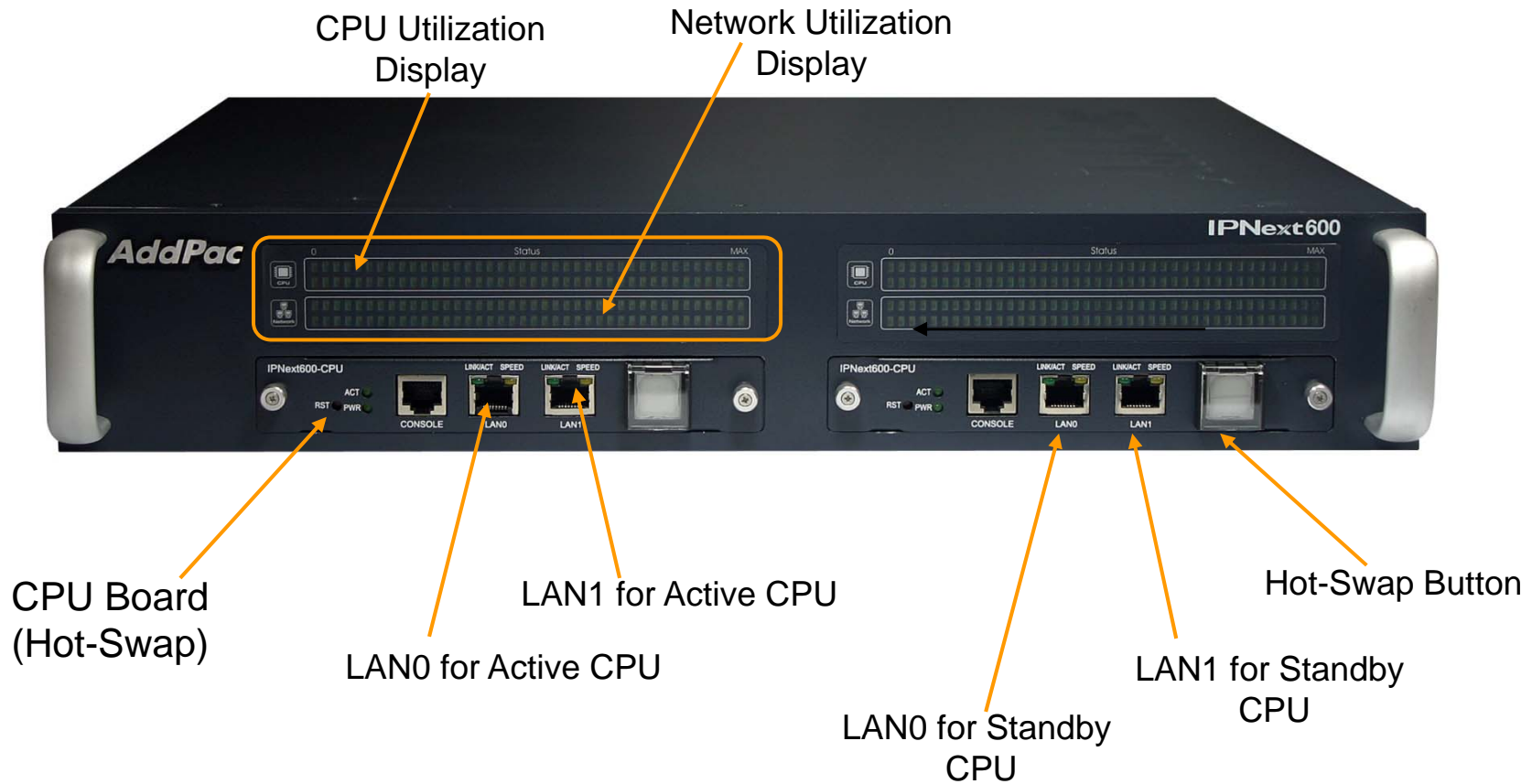
- SIP Application Server, Proxy, Registrar and Location Server
- Multiple ITSP Trunk with SIP & H.323 Accounts Support
- Dual System Redundancy Architecture
  - Two(2) Fast Ethernet Interface / System
- High Performance RISC Architecture
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- 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

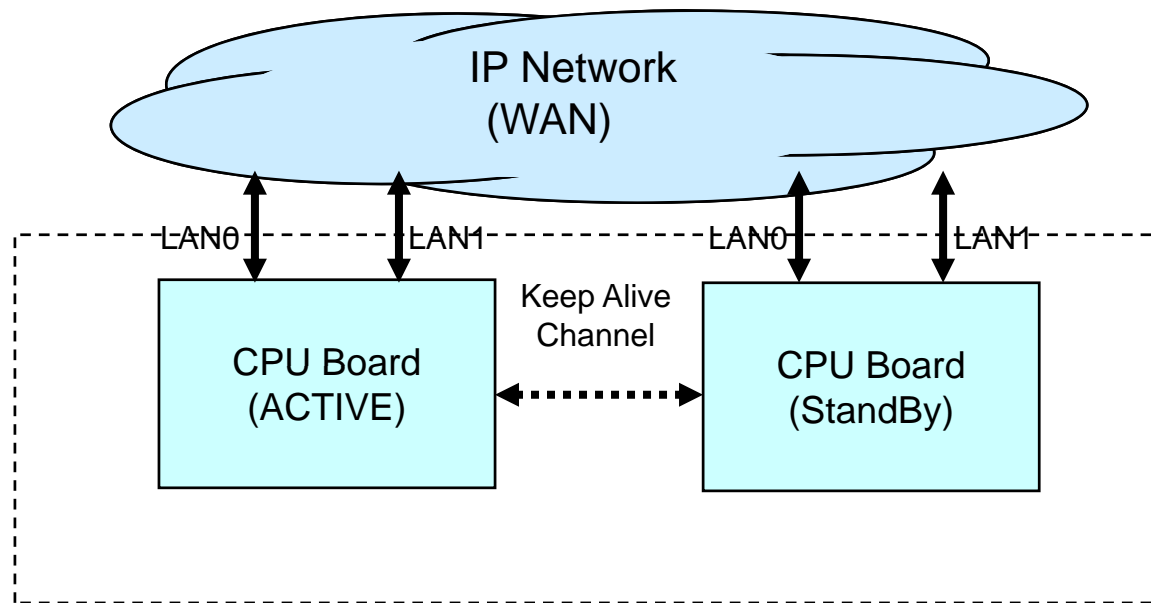
## IPNext 600 Back Side



# System Redundancy Features

IPNext 600 Next Generation IP-PBX System

IPNext600 System Block Diagram

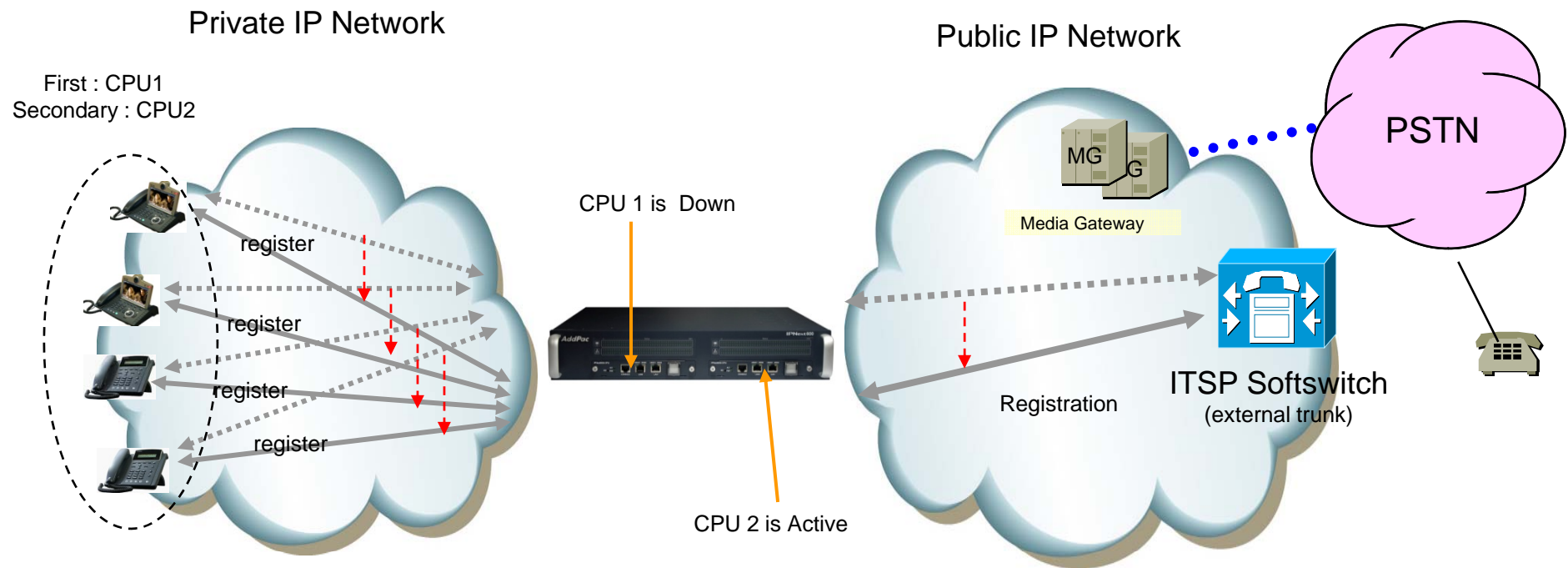




# System Redundancy Features

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	AP-IP300	AP-IP230
Spec.		
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(Optional)	Support	Support
FXO(Optional)	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-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

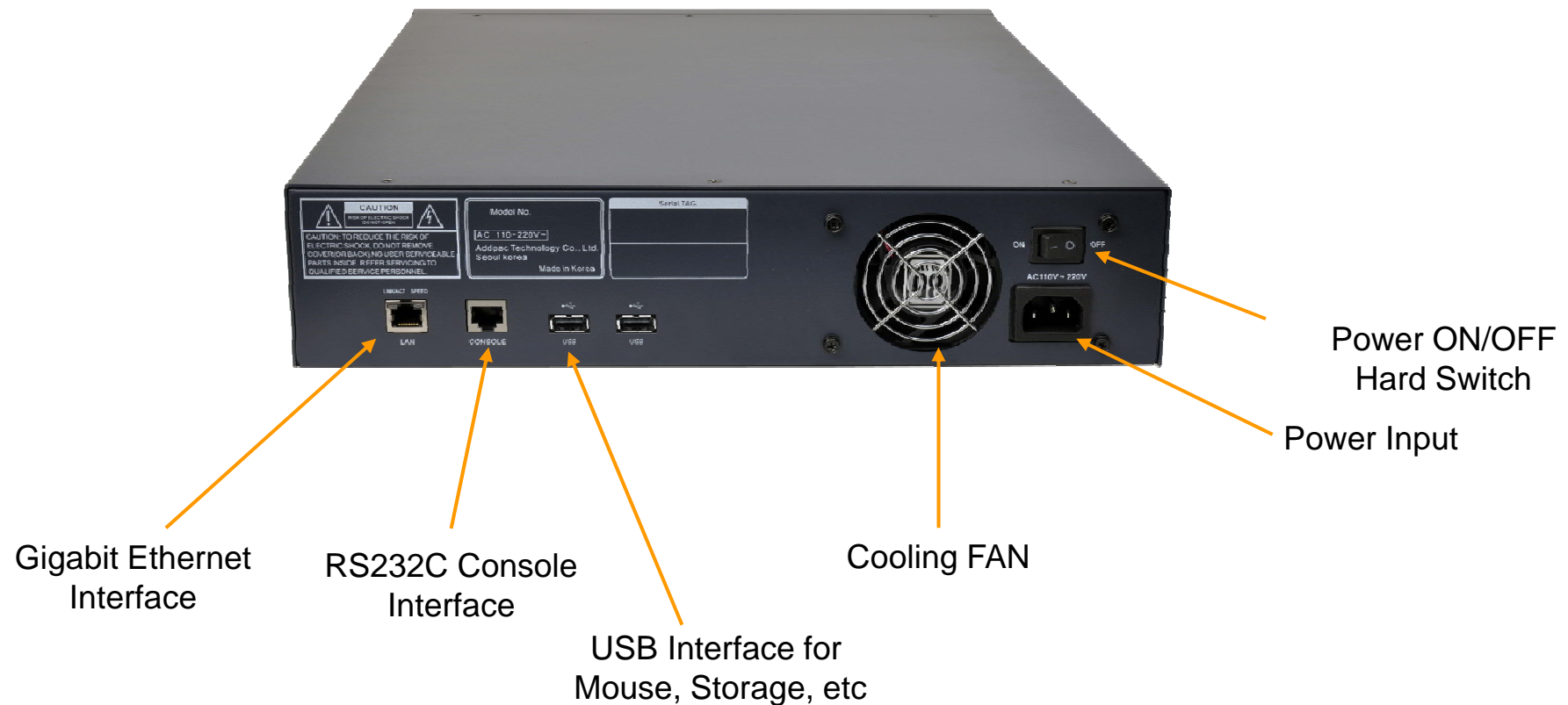


Power On/Off Switch with LED Indication LAMP

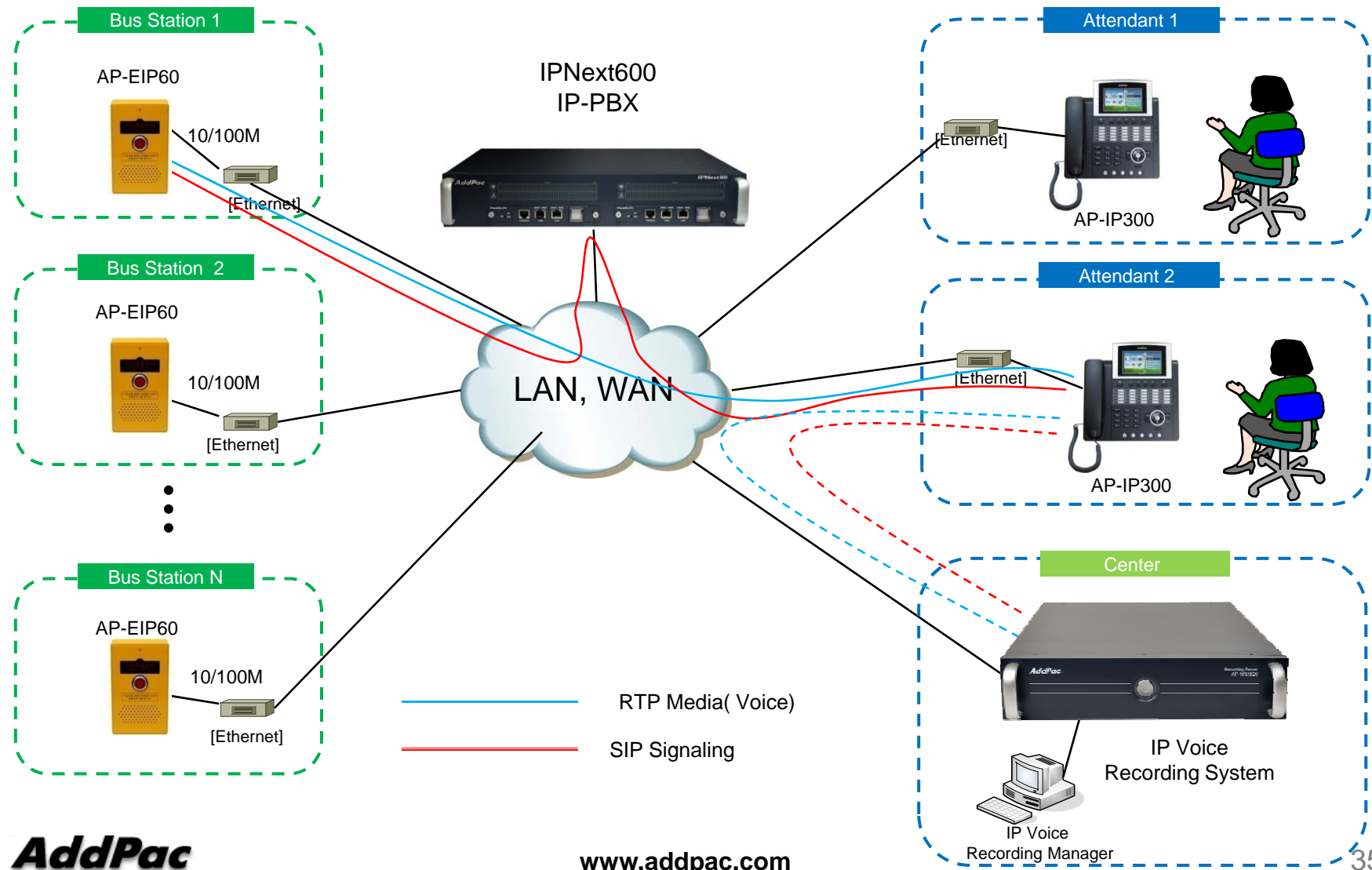
# Hardware Specification

## AP-NR1500 IP Voice Call Recording Server

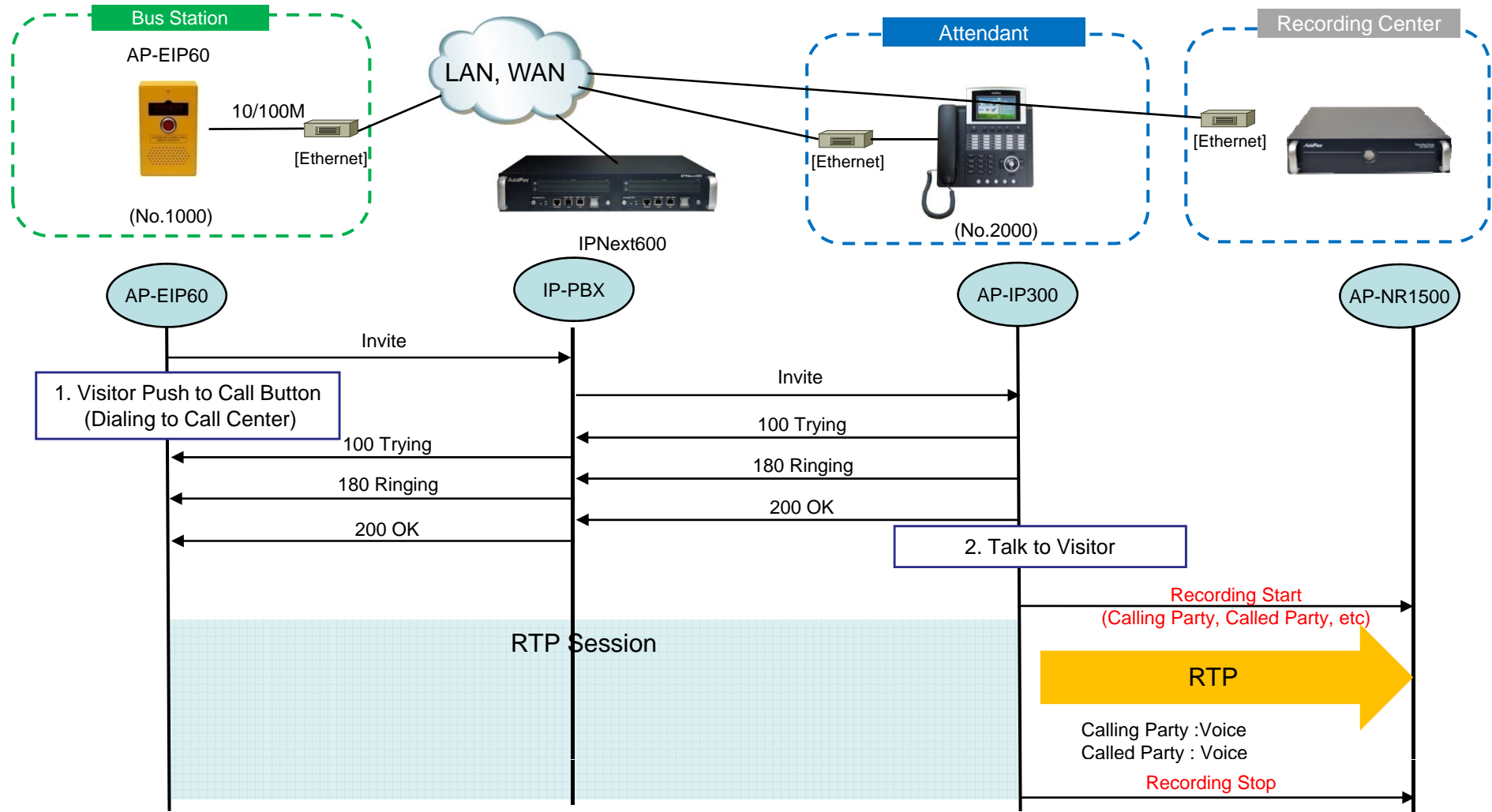
### AP-NR1500 Back Side



# Network Diagram for IP Phone Recording



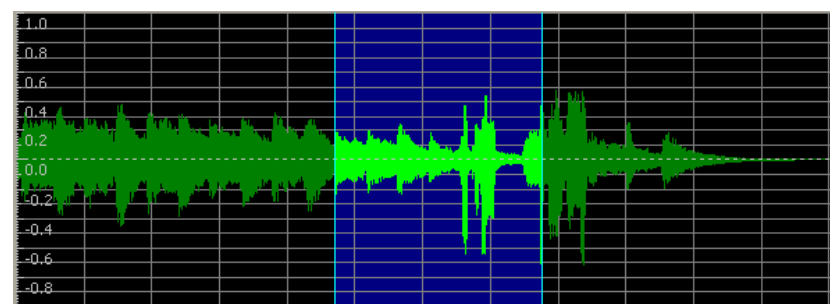
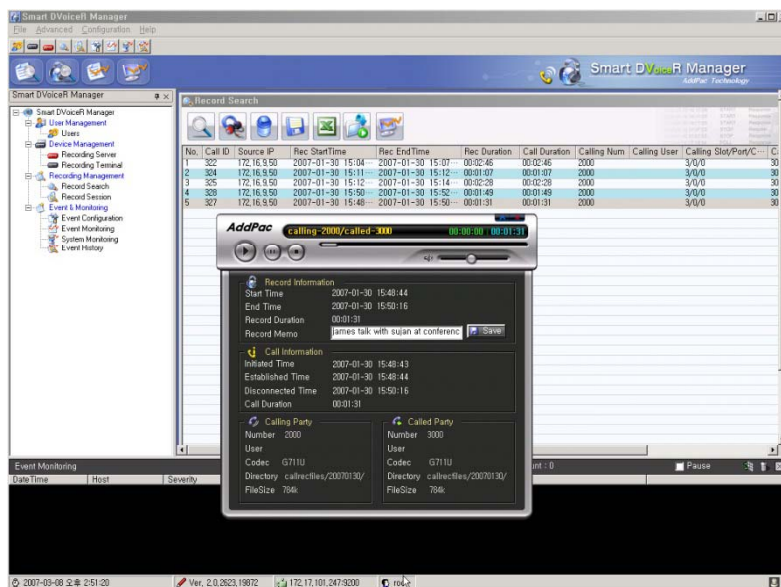
# SIP VoIP Call Flow





# Smart DVoiceR Manager

# Smart DV<sub>ideo</sub> 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..)

Recording File Search Result

Calling Num ▼

9000

Search

	Calling Number	Called Number	Recording Start Time	Recording End Time	Duration (sec)	Play
<input type="checkbox"/>	9000	5000	2010/03/17 09:50:45	2010/03/17 09:51:45	60	<a href="#">Play</a>
<input checked="" type="checkbox"/>	9000	3000	2010/03/18 09:00:12	2010/03/17 09:00:45	33	<a href="#">Play</a>
<input checked="" type="checkbox"/>	9002	9000	2010/03/18 10:50:12	2010/03/17 10:55:12	300	<a href="#">Play</a>
<input type="checkbox"/>	9005	9000	2010/03/18 15:12:03	2010/03/18 15:12:13	10	<a href="#">Play</a>
<input type="checkbox"/>	9006	9000	2010/03/19 01:10:23	2010/03/19 01:11:10	47	<a href="#">Play</a>

[1] [2] [3] ... [Next]

Backup

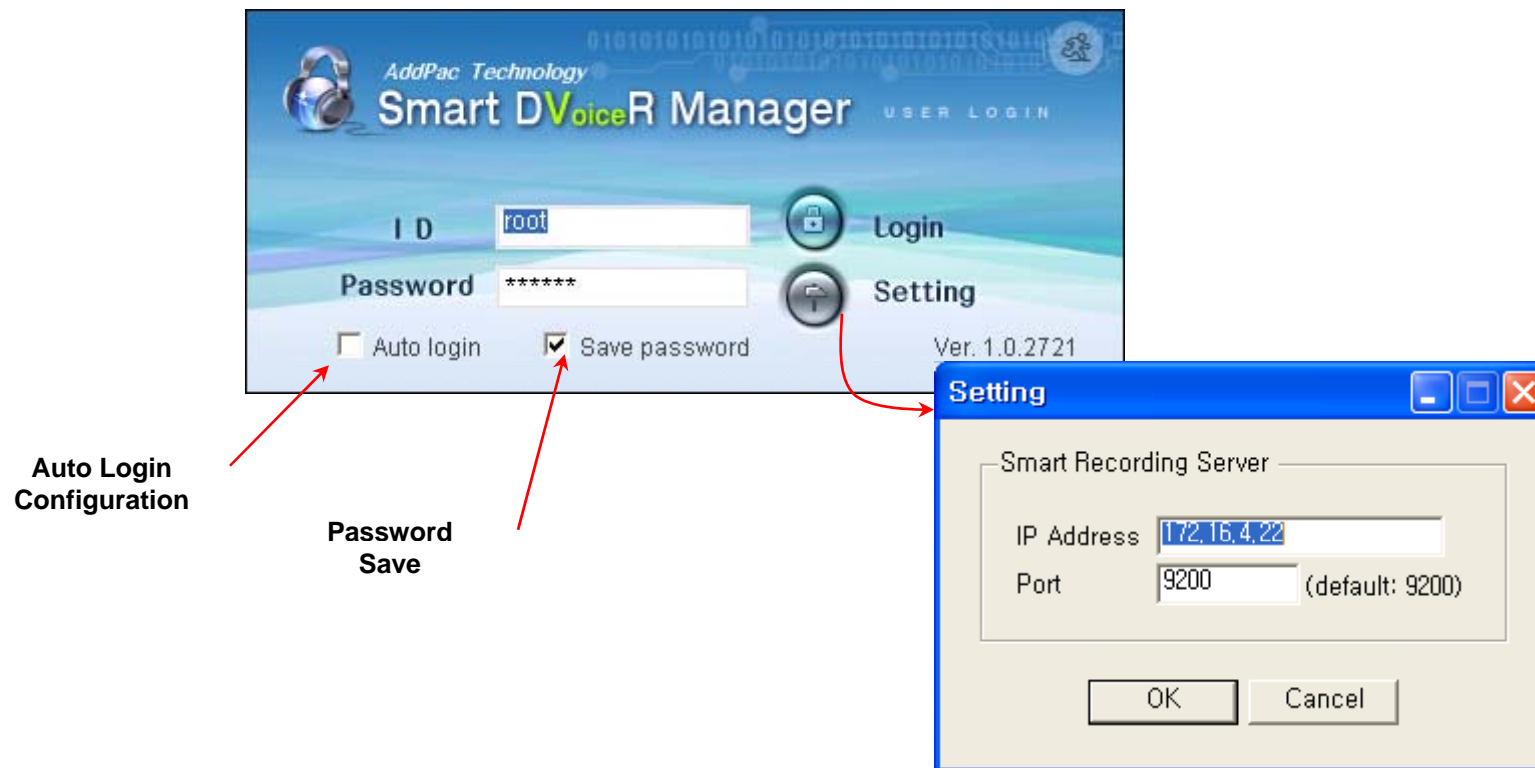
Powerful Recording Search  
\* calling number  
\* called number  
\* date  
\* call identifier, etc

Recording Play

Recording Backup  
\* selected files from recording server to PC storage

Calling Number : Video Door Phone  
Called Number : Video Phone (attendant)

# Login





# User Management

**New Manager Registration**      **Manager Information Modification**      **Manager Delete**

**Smart DVoiceR Manager**

File Advanced Configuration Help

Smart DVoiceR Manager  
AddPac Technology

**Users**

No.	ID	Name	Description
1	Administrator	Administrator	Addpac Administrator
2	root	recording manager	Maintenance dept.

2007-06-13 오후 1:43:49 Ver. 1.0.2719 172.16.31.14:9200 root

# Recording Server Status Monitoring

The screenshot displays the Smart DVoiceR Manager interface. The main window shows a tree view on the left with 'Smart Recording Server' highlighted. Two sub-windows, 'Smart Recording Server', are open, showing the server status and configuration.

**Smart Recording Server Status**

172.16.31  
Smart Re

**Configuration** | Client Session List

Max Session : 10  
Keep Alive Interval : 15 sec

**Client List**

No.	User	IP Address	Port	Access Time	Duration
1	root	172.16.1.31	4417	2007-06-13 13:40:05	00:04:49

OK Cancel

2007-06-13 오후 1:46:20 Ver. 1.0.2719 172.16.31.14:9200 root

# Recording File Management

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

The screenshot displays the Smart DVoiceR Manager software interface. The main window features a menu bar (File, Advanced, Configuration, Help) and a toolbar. A left sidebar contains a tree view with categories like Smart DVoiceR Manager, User Management, Device Management, Recording Management, Event & Monitoring, and Recording Board. The central area is titled 'Record Search' and shows a table of recorded calls. A 'Search Filter' dialog box is open, allowing users to filter records by time and various fields. A 'Record Information' dialog box is also open, displaying details for a selected call, including start/end times, duration, and party information. A playback control window is overlaid on the table, showing a progress bar and buttons for play, pause, and stop. A red arrow points to the 'Memo Save' button in the 'Record Information' dialog.

No.	Call ID	Source IP	Rec StartTime	Rec EndTime	Rec Duration	Call Duration	Calling Num	Calli...	Calling...	Called Num	Calle...	Called S...
1	39500	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:43	00:00:28	00:00:28	3000		4/0/0	5016		4/0/0
2	39502	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:43	00:00:28	00:00:28	3001		4/1/0	5017		4/1/0
3	39504	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:43	00:00:28	00:00:28	3002		4/2/0	5018		4/2/0
4	39506	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:43	00:00:28	00:00:28	3003		4/3/0	5019		4/3/0
5	39508	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:44	00:00:28	00:00:28	3004		5/0/0	5020		5/0/0
6	39510	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:44	00:00:28	00:00:28	3005		5/1/0	5021		5/1/0
7	39512	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:45	00:00:29	00:00:28	3006		5/2/0	5022		5/2/0
8	39514	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:45	00:00:29	00:00:28	3007		5/3/0	5023		5/3/0
9	39516	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:45	00:00:29	00:00:28	3007		5/3/0	5023		5/3/0
10	39518	172.17.213.100	2007-06-13 13:12:15	2007-06-13 13:12:45	00:00:29	00:00:28	3007		5/3/0	5023		5/3/0
11	39520	172.17.213.100	2007-06-13 13:12:16	2007-06-13 13:12:16	00:00:00	00:00:00				5024		6/0/0
12	39522	172.17.213.100	2007-06-13 13:12:16	2007-06-13 13:12:16	00:00:00	00:00:00				5025		6/1/0
13	39524	172.17.213.100	2007-06-13 13:12:16	2007-06-13 13:12:16	00:00:00	00:00:00				5026		6/2/0
14	39526	172.17.213.100	2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5027		6/3/0
15	39528	172.17.213.100	2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5028		7/0/0
16	39529	172.17.213.100	2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5029		7/1/0
17	39498	172.17.213.100	2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5030		7/2/0
18	39499	172.17.213.100	2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5031		7/3/0
19	39501	172.17.213.100	2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2000		0/0/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2001		0/1/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2002		0/2/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2003		0/3/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2004		1/0/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2005		1/1/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2006		1/2/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2007		1/3/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2008		2/0/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2009		2/1/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2010		2/2/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2011		2/3/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2013		3/1/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2014		3/2/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2015		3/3/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				2012		3/0/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5016		4/0/0
			2007-06-13 13:12:17	2007-06-13 13:12:17	00:00:00	00:00:00				5017		4/1/0

Search Filter

Record Time  
Start Time : 2007-06-14 00:00:00 End Time : 2007-06-14 23:59:59

Filter

Filter Name	Rule	Search	And
Calling Number	IsExactly	2000	
Called Number	IsExactly	3000	
<Blank>	IsExactly	<Blank>	
<Blank>	IsExactly	<Blank>	
<Blank>	IsExactly	<Blank>	
<Blank>	IsExactly	<Blank>	

OK Cancel

Record Information

Start Time 2007-06-13 13:12:16  
End Time 2007-06-13 13:12:44  
Record Duration 00:00:28  
Record Memo

Call Information

Initiated Time 2007-06-13 13:14:11  
Established Time 2007-06-13 13:14:12  
Disconnected Time 2007-06-13 13:14:40  
Call Duration 00:00:28

Calling Party

Number 3004  
User  
Codec G711U  
Directory /mnt/hda1/callrecfiles  
FileSize 247k

Called Party

Number 5020  
User  
Codec G711U  
Directory /mnt/hda1/callrecfiles  
FileSize 248k

Memo Save

calling-3004/called-5020 00:00:17 / 00:00:28

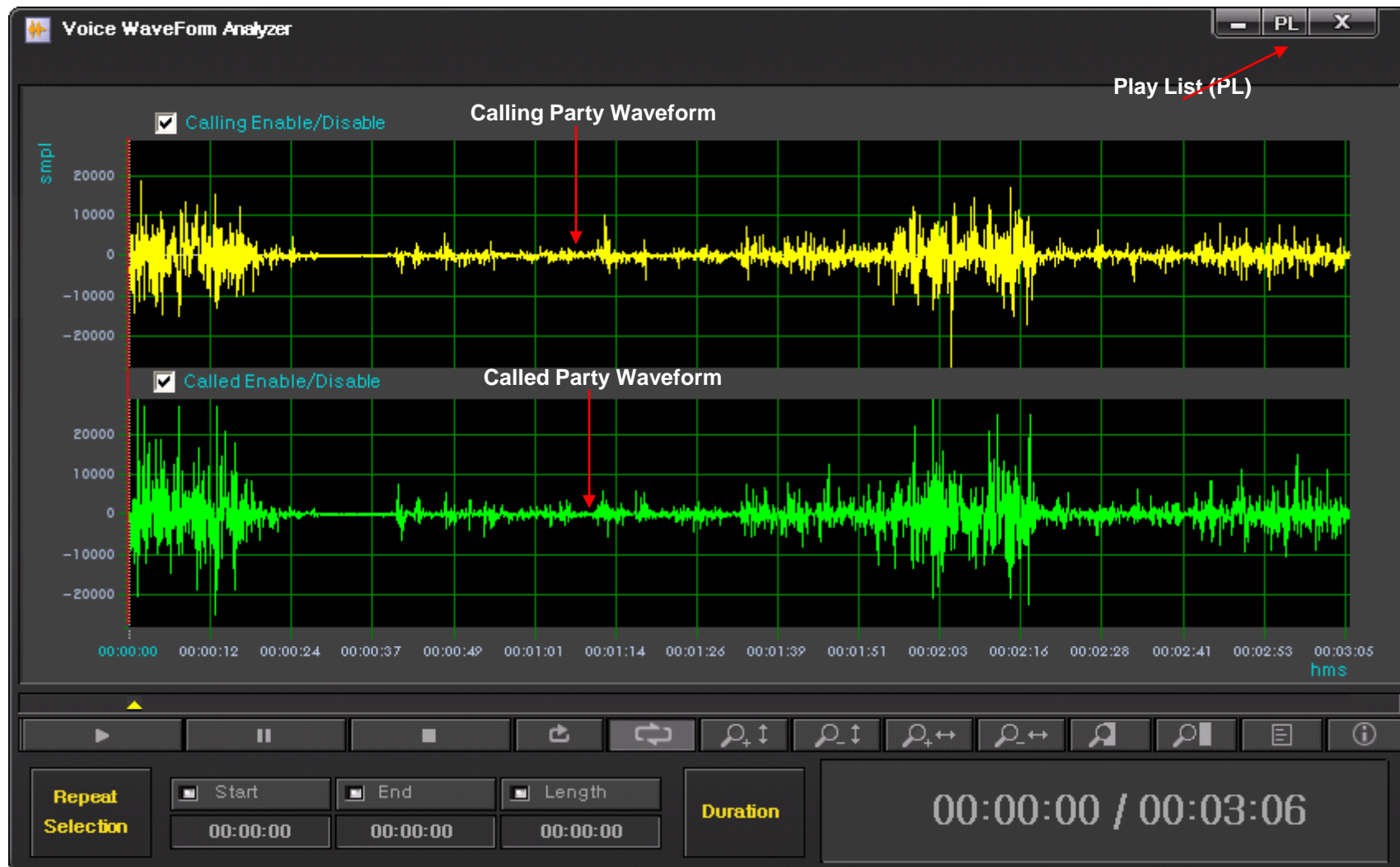
2007-06-13 오후 3:25:07 Ver. 1.0.2720 172.16.4.22:9200 root

# Recording File List Save (Excel File Format)

The screenshot shows the Smart DVoiceR Manager interface. The 'Record Search' window displays a list of recordings with columns: No., Call ID, Source IP, Rec StartTime, Rec EndTime, and Rec. A red arrow points from the 'Export' button in the Record Search window to the 'Records Exporting !!!' dialog box. The dialog box shows a progress bar at 69% and a 'Cancel' button. Below the dialog box, a Microsoft Excel window titled 'Records.xls' is open, displaying the exported data in a table format.

No.	Call ID	Source IP	Rec StartTime	Rec EndTime	Rec
1	63292	172.16.9.60	2007-06-12 09:44:59	2007-06-12 09:46:34	00:01:35
2	63293	172.16.9.60	2007-06-12 09:46:38	2007-06-12 10:10:38	00:22:49
3	63295	172.16.9.60	2007-06-12 10:11:28	2007-06-12 10:14:34	00:03:06
4	64171	172.16.9.60	2007-06-12 12:22:22	2007-06-12 12:24:09	00:01:47
5					
6					
7					
8	64177	172.16.9.60	2007-06-12 14:04:09	2007-06-12 14:04:25	00:00:16
9	64181	172.16.9.60	2007-06-12 14:05:11		00:00:16
10	64185	172.16.9.60	2007-06-12 14:34:21		
11	64186	172.16.9.60	2007-06-12 14:37:31		
12	67503	172.16.9.60	2007-06-12 16:00:00		
13	67504	172.16.9.60	2007-06-12 16:02:51		
14	67515	172.16.9.60	2007-06-12 17:03:21		
15	67517	172.16.9.60	2007-06-12 17:06:00		

# Recording File Waveform Analyzer



# Recording File Waveform Analyzer

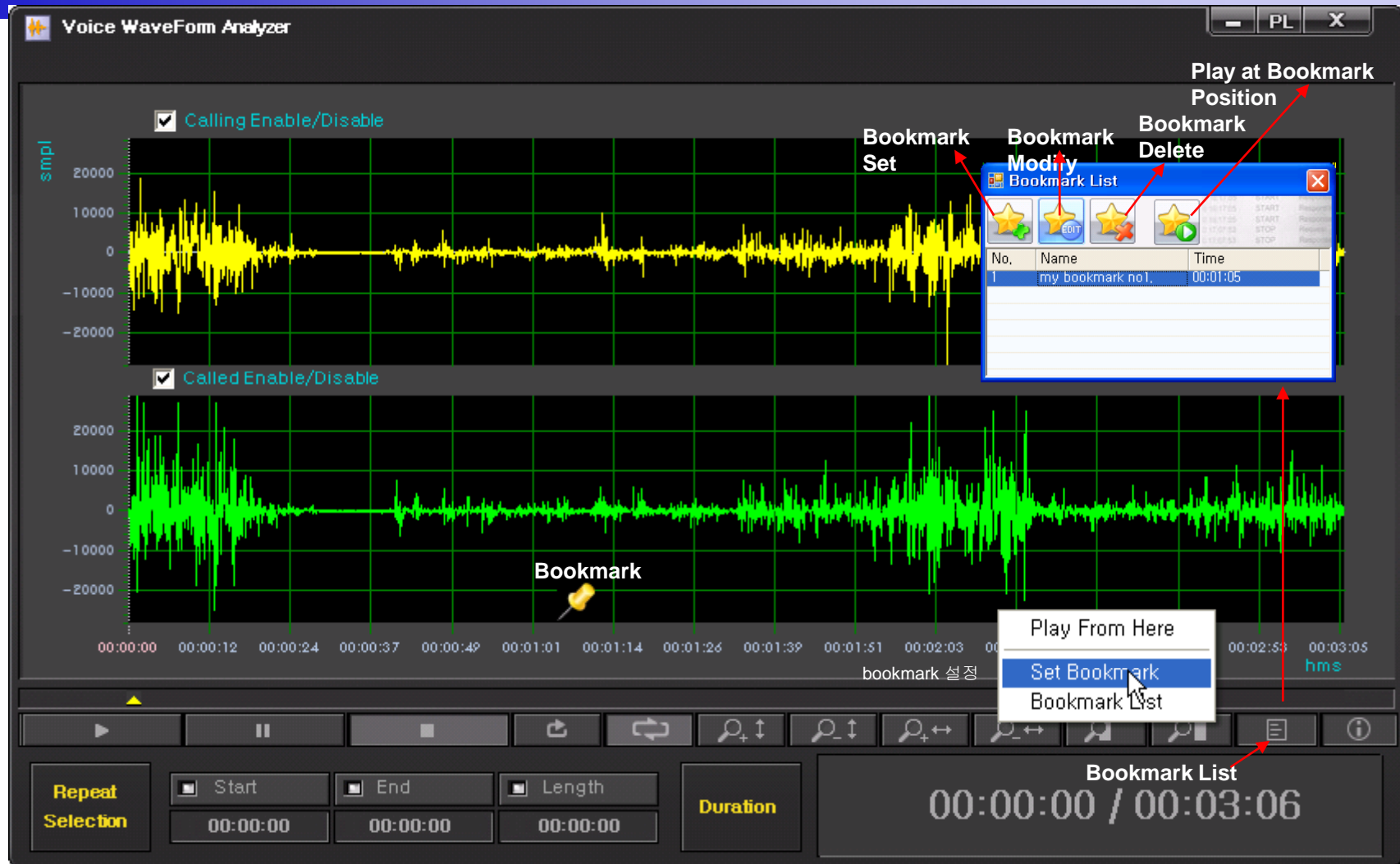
(Repeated Play)





# Recording File Waveform Analyzer

## (Bookmark Play)



# Recording File Waveform Analyzer

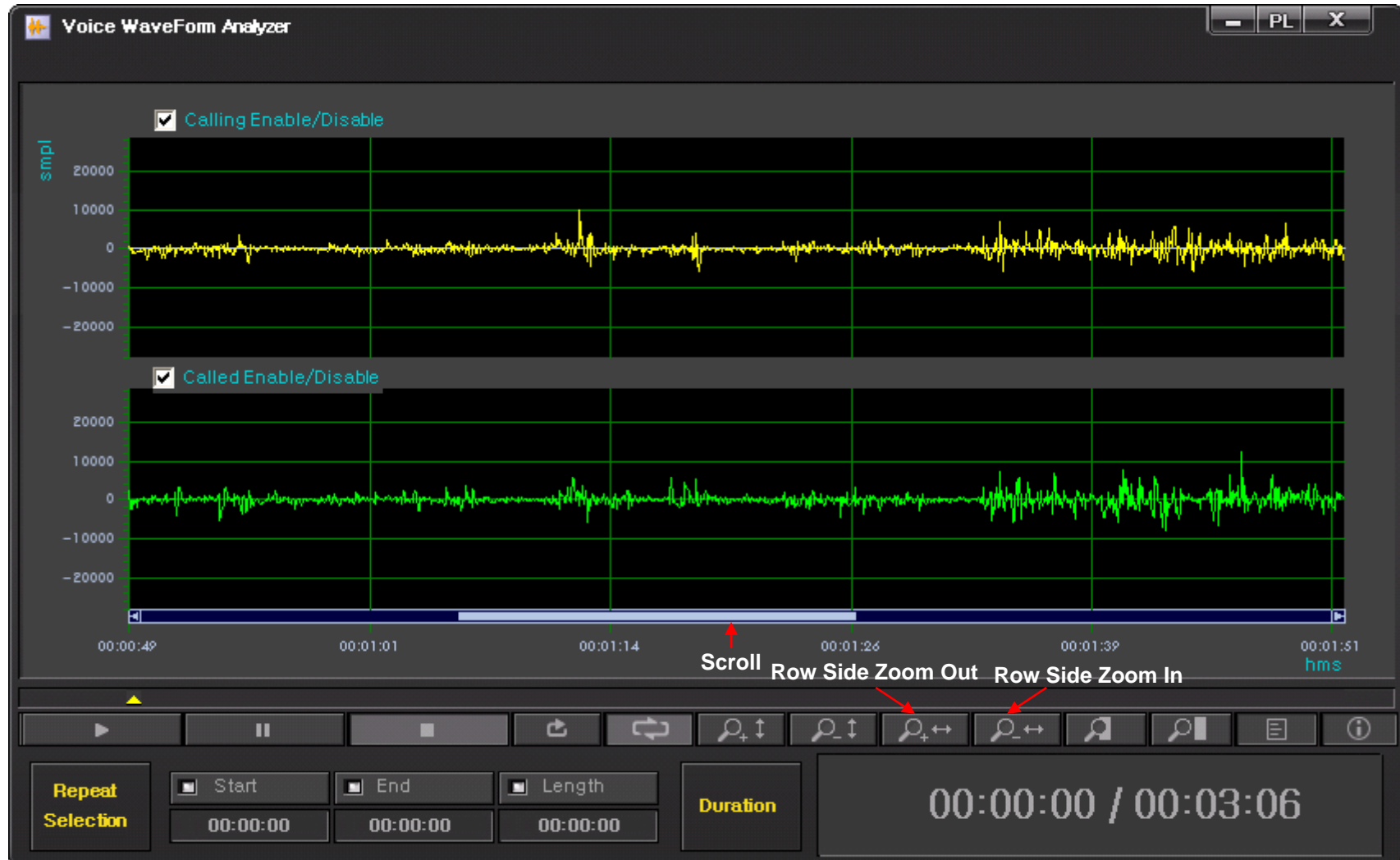
(Column Side Zooming)





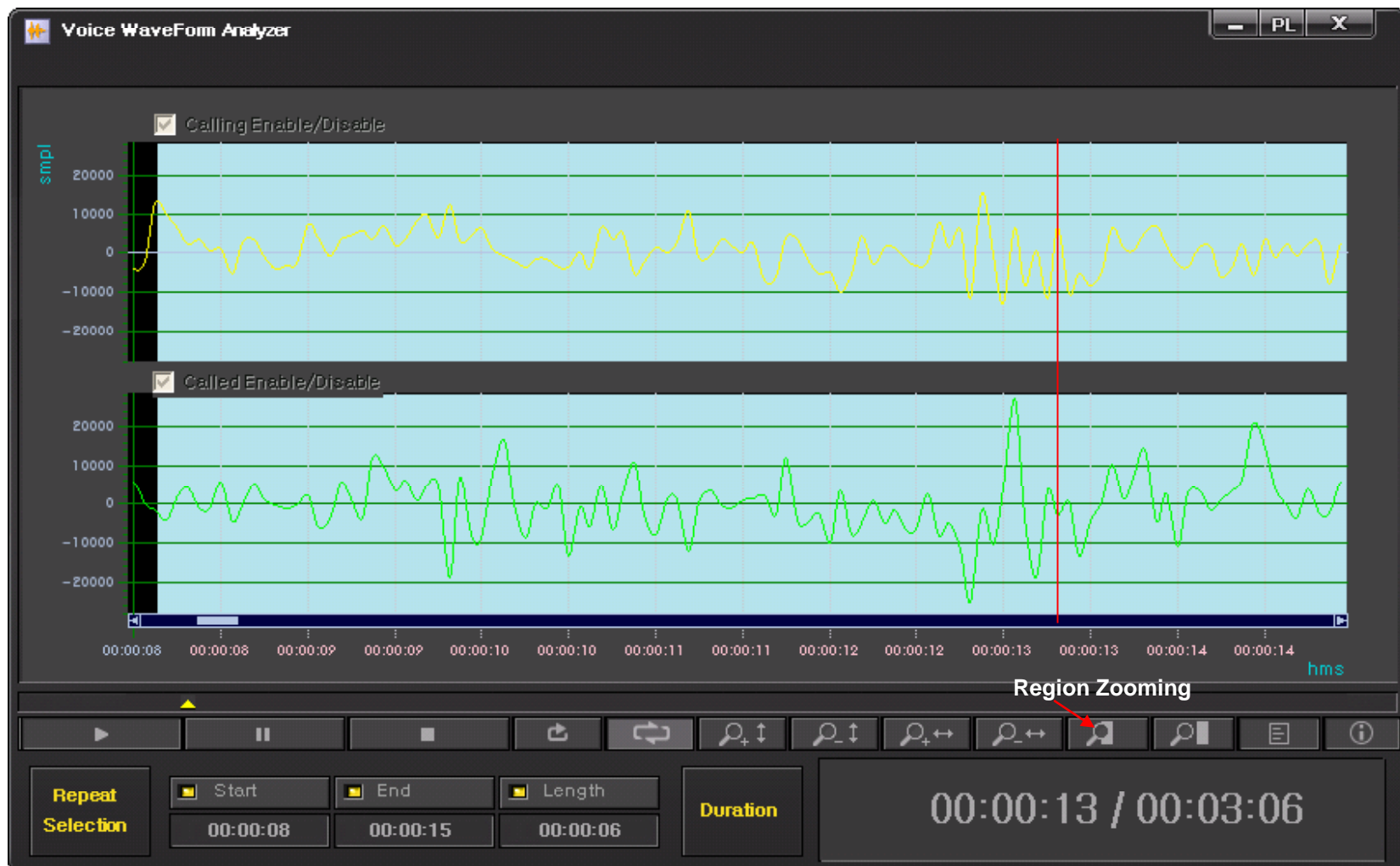
# Recording File Waveform Analyzer

(Row Side Zooming)



# Recording File Waveform Analyzer

(Region Zooming)



# Recording File Waveform Analyzer

(Call Info. Display)



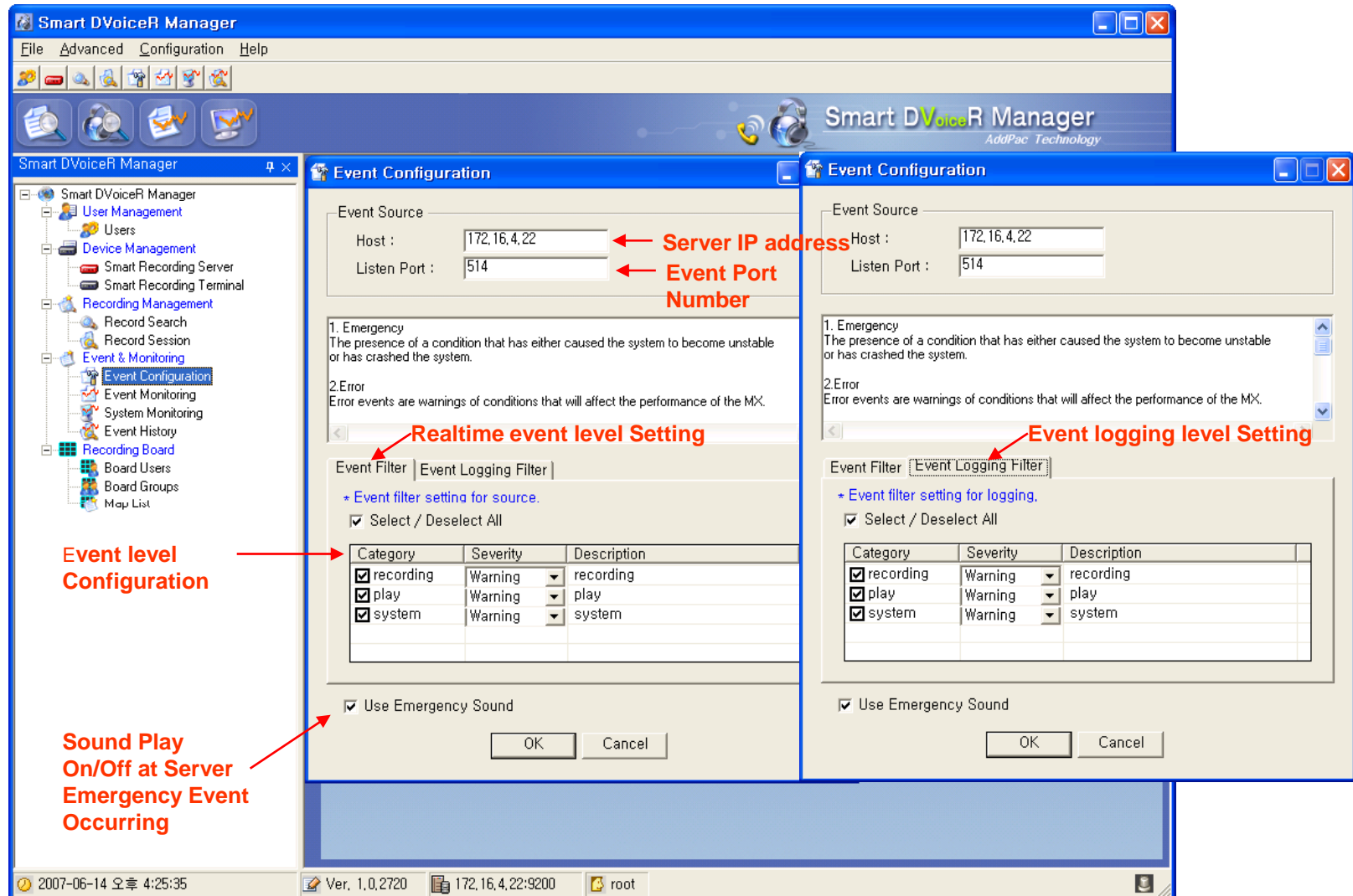
# Live Call Recording List and Monitoring

The screenshot displays the Smart DVoiceR Manager software interface. The main window is titled "Current Call List Display" and "Live Play". It features a "Record Session" button and a "Refresh Interval" set to 5 seconds. A table lists call records with columns: No., Call ID, Source IP, Rec StartTime, Initiated Time, Established Time, Call Duration, Calling Num, Calling User, Calling SI..., and Calling Trans... The table contains 37 rows of call data. A "Record Information" window is open, showing details for a call with ID 3006, including Start Time (2007-06-15 14:16:46), End Time, Record Duration, Record Name, Call Information (Initiated Time, Established Time, Disconnected Time, Call Duration), and Calling Party/Called Party details (DialNumber, User, Codec, Directory, FileSize).

No.	Call ID	Source IP	Rec StartTime	Initiated Time	Established Time	Call Duration	Calling Num	Calling User	Calling SI...	Calling Trans...
1	46551	172.17.213.100	2007-06-13 15:20:42	2007-06-13 15:2...	2007-06-13 15:22:38	00:00:11	5009		2/1/0	G7231_63-> ... 2
2	46552	172.17.213.100	2007-06-13 15:20:42	2007-06-13 15:2...	2007-06-13 15:22:38	00:00:11	5007		1/3/0	G7231_63-> ... 2
3	46553	172.17.213.100	2007-06-13 15:20:43	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:10	5013		3/1/0	G7231_63-> ... 5
4	46558	172.17.213.100	2007-06-13 15:20:44	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	3015		7/3/0	G7231_63-> ... 2
5	46554	172.17.213.100	2007-06-13 15:20:44	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5011		2/3/0	G7231_63-> ... 2
6	46555	172.17.213.100	2007-06-13 15:20:44	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
7	46556	172.17.213.100	2007-06-13 15:20:44	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
8	46559	172.17.213.100	2007-06-13 15:20:45	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
9	46557	172.17.213.100	2007-06-13 15:20:45	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
10	46560	172.17.213.100	2007-06-13 15:20:46	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
11	46561	172.17.213.100	2007-06-13 15:20:47	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
12	46546	172.17.213.100	2007-06-13 15:20:34	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
13	46563	172.17.213.100	2007-06-13 15:20:47	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
14	46562	172.17.213.100	2007-06-13 15:20:50	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
15	46545	172.17.213.100	2007-06-13 15:20:36	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
16	46564	172.17.213.100	2007-06-13 15:20:50	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
17	46565	172.17.213.100	2007-06-13 15:20:51	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
18	46547	172.17.213.100	2007-06-13 15:20:41	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
19	46566	172.17.213.100	2007-06-13 15:20:52	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
20	46548	172.17.213.100	2007-06-13 15:20:41	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
21	46567	172.17.213.100	2007-06-13 15:20:52	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
22	46549	172.17.213.100	2007-06-13 15:20:41	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
23	46568	172.17.213.100	2007-06-13 15:20:52	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
24	46569	172.17.213.100	2007-06-13 15:20:52	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
25	46570	172.17.213.100	2007-06-13 15:20:52	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
26	46550	172.17.213.100	2007-06-13 15:20:42	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
27	46573	172.17.213.100	2007-06-13 15:20:53	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
28	6208	172.16.9.60	2007-06-13 15:20:30	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
29	6209	172.16.9.60	2007-06-13 15:20:30	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
30	6223	172.16.9.60	2007-06-13 15:20:45	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
31	6213	172.16.9.60	2007-06-13 15:20:32	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
32	6214	172.16.9.60	2007-06-13 15:20:32	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
33	6215	172.16.9.60	2007-06-13 15:20:32	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
34	6224	172.16.9.60	2007-06-13 15:20:49	2007-06-13 15:2...	2007-06-13 15:22:39	00:00:09	5014		3/2/0	G7231_63-> ... 2
35	5682	172.16.9.60	2007-06-13 15:08:56	2007-06-13 15:1...	2007-06-13 15:10:48	00:11:57	1015		3/3/0	G729A_8-> G... 6
36	6220	172.16.9.60	2007-06-13 15:20:41	2007-06-13 15:2...	2007-06-13 15:22:35	00:00:12	1004		1/0/0	G729A_8-> G... 6
37	6221	172.16.9.60	2007-06-13 15:20:42	2007-06-13 15:2...	2007-06-13 15:22:35	00:00:11	1005		1/1/0	G729A_8-> G... 6

# Event Management

## (Configuration)



# Event Management

## (Monitoring)

Smart DVoiceR Manager - [Record Session]

File Advanced Configuration Help

Smart DVoiceR Manager

Refresh Interval : 5 sec Apply

Smart DVoiceR Manager

- Smart DVoiceR Manager
  - User Management
    - Users
    - Device Management
      - Smart Recording Server
      - Smart Recording Terminal
    - Recording Management
      - Record Search
      - Record Session
      - Event & Monitoring
        - Event Configuration
        - Event Monitoring
        - System Monitoring
        - Event History
      - Recording Board
        - Board Users
        - Board Groups
        - Map List

No.	Call ID	Source IP	Rec StartTime	Initiated Time	Established Time	Call Duration	Calling Num	Calli...
1	690	172.17.213.100	2007-06-14 16:25:24	2007-06-14 16:27:25	2007-06-14 16:27:29	00:00:20	5012	
2	693	172.17.213.100	2007-06-14 16:25:24	2007-06-14 16:27:28	2007-06-14 16:27:29	00:00:20	5005	
3	694	172.17.213.100	2007-06-14 16:25:25	2007-06-14 16:27:29	2007-06-14 16:27:30	00:00:19	5001	
4	695	172.17.213.100	2007-06-14 16:25:26	2007-06-14 16:27:29	2007-06-14 16:27:31	00:00:18	5006	
5	696	172.17.213.100	2007-06-14 16:25:26	2007-06-14 16:27:30	2007-06-14 16:27:31	00:00:18	5007	
6	697	172.17.213.100	2007-06-14 16:25:27	2007-06-14 16:27:31	2007-06-14 16:27:32	00:00:17	5008	
7	698	172.17.213.100	2007-06-14 16:25:28	2007-06-14 16:27:32	2007-06-14 16:27:33	00:00:16	5009	
8	699	172.17.213.100	2007-06-14 16:25:30	2007-06-14 16:27:34	2007-06-14 16:27:35	00:00:14	5011	
9	700	172.17.213.100	2007-06-14 16:25:31	2007-06-14 16:27:34	2007-06-14 16:27:36	00:00:13	5010	
10	701	172.17.213.100	2007-06-14 16:25:32	2007-06-14 16:27:36	2007-06-14 16:27:37	00:00:12	5013	
11	702	172.17.213.100	2007-06-14 16:25:34	2007-06-14 16:27:37	2007-06-14 16:27:38	00:00:10	5014	
12	703	172.17.213.100	2007-06-14 16:25:38	2007-06-14 16:27:42	2007-06-14 16:27:43	00:00:06	5015	
13	704	172.17.213.100	2007-06-14 16:25:39	2007-06-14 16:27:43	2007-06-14 16:27:44	00:00:05	3000	
14	705	172.17.213.100	2007-06-14 16:25:40	2007-06-14 16:27:44	2007-06-14 16:27:45	00:00:04	3001	
15	706	172.17.213.100	2007-06-14 16:25:42	2007-06-14 16:27:45	2007-06-14 16:27:46	00:00:02	3002	
16	684	172.17.213.100	2007-06-14 16:25:17	2007-06-14 16:27:20	2007-06-14 16:27:21	00:00:27	3012	
17	707	172.17.213.100	2007-06-14 16:25:43	2007-06-14 16:27:46	2007-06-14 16:27:47	00:00:01	3003	
18	686	172.17.213.100	2007-06-14 16:25:18	2007-06-14 16:27:21	2007-06-14 16:27:22	00:00:26	3013	
19	708	172.17.213.100	2007-06-14 16:25:44	2007-06-14 16:27:47	2007-06-14 16:27:49	00:00:00	3004	
20	687	172.17.213.100	2007-06-14 16:25:18	2007-06-14 16:27:22	2007-06-14 16:27:23	00:00:26	3014	
21	685	172.17.213.100	2007-06-14 16:25:19	2007-06-14 16:27:23	2007-06-14 16:27:24	00:00:25	5000	
22	689	172.17.213.100	2007-06-14 16:25:20	2007-06-14 16:27:23	2007-06-14 16:27:24	00:00:24	3015	

Event level Configuration Window

Event Display Window Clear

Event Receiving Pause

Event Monitoring

Event count : 276 Pause

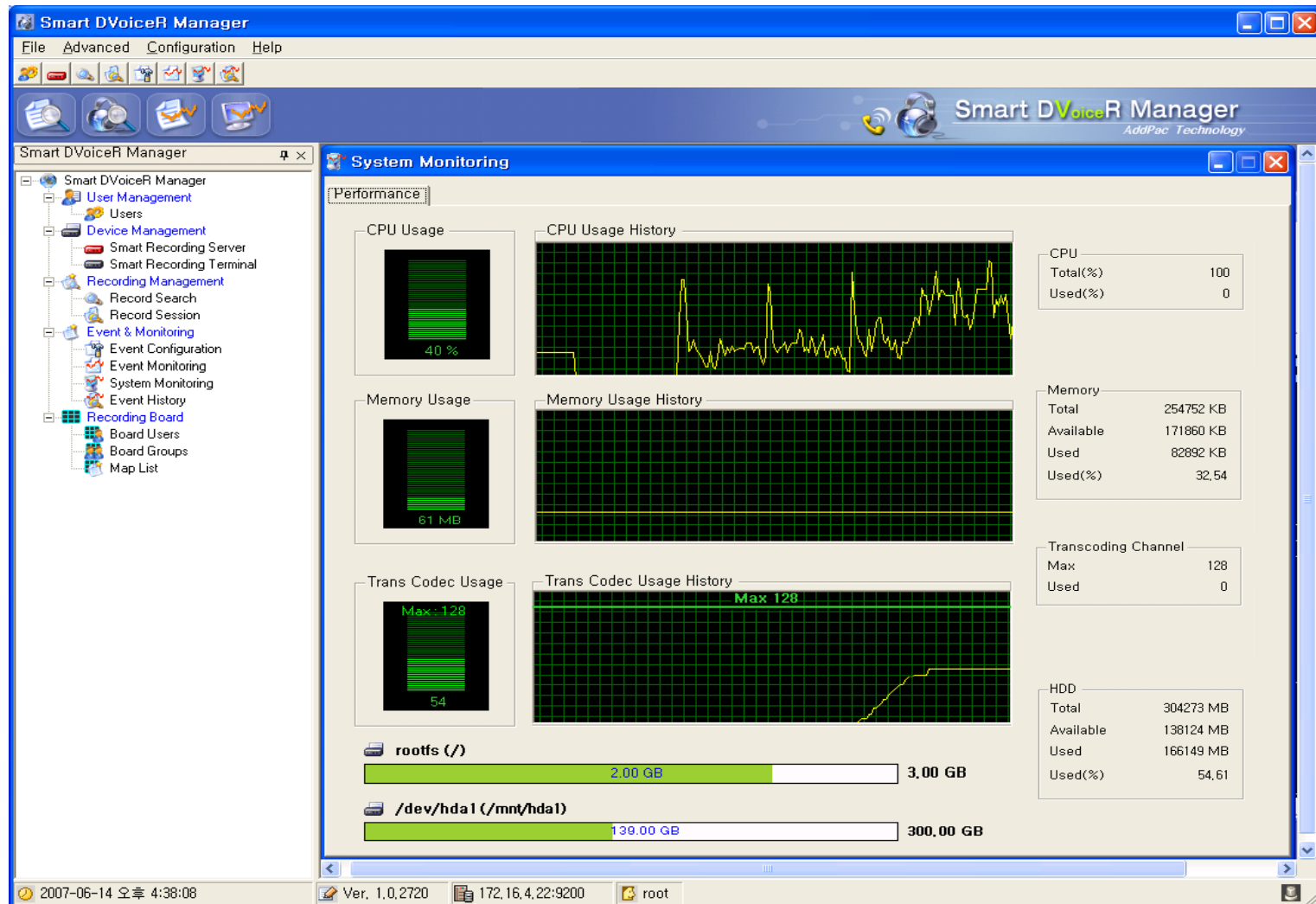
DateTime	Host	Severity	Module	Description
Jun 14 07:25:43	172.16.4.22	Informational	recording	recording stopping : call_id = 682, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:43	172.16.4.22	Informational	recording	Stop Recording, bind id:2003
Jun 14 07:25:43	172.16.4.22	Informational	recording	new recording starting : call_id = 707, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:43	172.16.4.22	Informational	recording	Start Recording, bind id:2003
Jun 14 07:25:44	172.16.4.22	Informational	recording	recording stopping : call_id = 683, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:44	172.16.4.22	Informational	recording	Stop Recording, bind id:2003
Jun 14 07:25:44	172.16.4.22	Informational	recording	new recording starting : call_id = 708, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:44	172.16.4.22	Informational	recording	Start Recording, bind id:2003
Jun 14 07:25:44	172.16.4.22	Debug	system	get current recording session :
Jun 14 07:25:44	172.16.4.22	Informational	recording	new recording starting : call_id = 709, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:44	172.16.4.22	Informational	recording	Start Recording, bind id:2003
Jun 14 07:25:45	172.16.4.22	Informational	recording	recording stopping : call_id = 684, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:45	172.16.4.22	Informational	recording	Stop Recording, bind id:2003
Jun 14 07:25:45	172.16.4.22	Informational	recording	new recording starting : call_id = 710, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:45	172.16.4.22	Informational	recording	Start Recording, bind id:2003
Jun 14 07:25:46	172.16.4.22	Informational	recording	recording stopping : call_id = 686, ip = 172.17.213.100, mac_addr = 0002,a403,cc82
Jun 14 07:25:46	172.16.4.22	Informational	recording	Stop Recording, bind id:2003
Jun 14 07:25:46	172.16.4.22	Debug	system	get current recording session :

2007-06-14 오후 4:28:57 Ver. 1.0.2720 172.16.4.22:9200 root



# Event Management

## (System Monitoring)



# Event Management

## (Event History)

Smart DVoiceR Manager - [Event History]

File Advanced Configuration Help

Event Search Time Setting Event category Search Condition Setting

Smart DVoiceR Manager

Smart DVoiceR Manager

- Smart DVoiceR Manager
  - User Management
  - Device Management
    - Smart Recording Server
    - Smart Recording Terminal
  - Recording Management
    - Record Search
    - Record Session
  - Event & Monitoring
    - Event Configuration
    - Event Monitoring
    - System Monitoring
    - Event History
  - Recording Board
    - Board Users
    - Board Groups
    - Map List

Event Time

Start : 2007-06-14 00:00:00

End : 2007-06-14 23:59:59

Category

☒ Recording : Debug

☒ Play : Debug

☒ System : Debug

Filter

Filter Name : Event

Rule : IsExactly

Search :

Load

No.	Event Time	Host	Category	Severity	Event
22	2007-06-14 15:14:21	172.16.4.22	recording	Informational	recording stopping : call_id = 0, ip = , mac_addr =
23	2007-06-14 15:14:21	172.16.4.22	recording	Informational	recording stopping : call_id = 0, ip = , mac_addr =
24	2007-06-14 15:15:31	172.16.4.22	recording	Informational	new recording starting : call_id = 9702, ip = 172.16.9...
25	2007-06-14 15:15:32	172.16.4.22	recording	Informational	new recording starting : call_id = 9784, ip = 172.16.9...
26	2007-06-14 15:15:32	172.16.4.22	recording	Informational	new recording starting : call_id = 9788, ip = 172.16.9...
27	2007-06-14 15:15:33	172.16.4.22	recording	Informational	new recording starting : call_id = 9790, ip = 172.16.9...
28	2007-06-14 15:15:35	172.16.4.22	recording	Informational	new recording starting : call_id = 9792, ip = 172.16.9...
29	2007-06-14 15:15:37	172.16.4.22	recording	Informational	new recording starting : call_id = 9794, ip = 172.16.9...
30	2007-06-14 15:15:39	172.16.4.22	recording	Informational	new recording starting : call_id = 9797, ip = 172.16.9...
31	2007-06-14 15:15:40	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
32	2007-06-14 15:15:43	172.16.1.48	system	Debug	get system information requested : cpu = 15%, mem...
33	2007-06-14 15:15:44	172.16.1.48	system	Debug	get system information requested : cpu = 20%, mem...
34	2007-06-14 15:15:45	172.16.1.48	system	Debug	get system information requested : cpu = 20%, mem...
35	2007-06-14 15:15:45	172.16.1.48	system	Debug	get transcoding channel usage :
36	2007-06-14 15:15:46	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
37	2007-06-14 15:15:47	172.16.1.48	system	Debug	get system information requested : cpu = 1%, memor...
38	2007-06-14 15:15:47	172.16.1.48	system	Debug	get transcoding channel usage :
39	2007-06-14 15:15:48	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
40	2007-06-14 15:15:49	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
41	2007-06-14 15:15:50	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
42	2007-06-14 15:15:51	172.16.1.48	system	Debug	get system information requested : cpu = 16%, mem...
43	2007-06-14 15:15:51	172.16.1.48	system	Debug	get transcoding channel usage :
44	2007-06-14 15:15:52	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
45	2007-06-14 15:15:53	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
46	2007-06-14 15:15:54	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
47	2007-06-14 15:15:55	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
48	2007-06-14 15:15:56	172.16.1.48	system	Debug	getChannelUsage : client ip = 172.16.1.48, port = 1824
49	2007-06-14 15:15:57	172.16.1.48	system	Debug	get system information requested : cpu = 16%, mem...
50	2007-06-14 15:15:57	172.16.1.48	system	Debug	get transcoding channel usage :
51	2007-06-14 15:15:58	172.16.4.22	recording	Informational	recording stopping : call_id = 9785, ip = 172.16.9.60, ...
52	2007-06-14 15:15:58	172.16.1.48	system	Debug	get system information requested : cpu = 8%, memor...
53	2007-06-14 15:15:58	172.16.1.48	system	Debug	get transcoding channel usage :

2007-06-14 오후 4:33:05 Ver. 1.0.2720 172.16.4.22:9200 root



# Contents

- Network Diagram
- Product Solution Table
- IP Emergency Call Phone Comparison Table
- GPS based Embedded NTP Server for Time Sync.
- IPNext600 IP-PBX Solution for Call Center
- IP Phone Solution for Call Center
- IP Voice Recording Solution (Option)
- AP-MSCS MAP based IP Emergency Call Center System (Option)

# 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)

Smart Security Manager

PM 12:13

상황판 관리소 장치 알람 \$ 작업 이력

수원시 지도

구운사거리  
상태 : 비상통화 연결중  
Link : linked  
Last : 2017/02/09 15:20:37

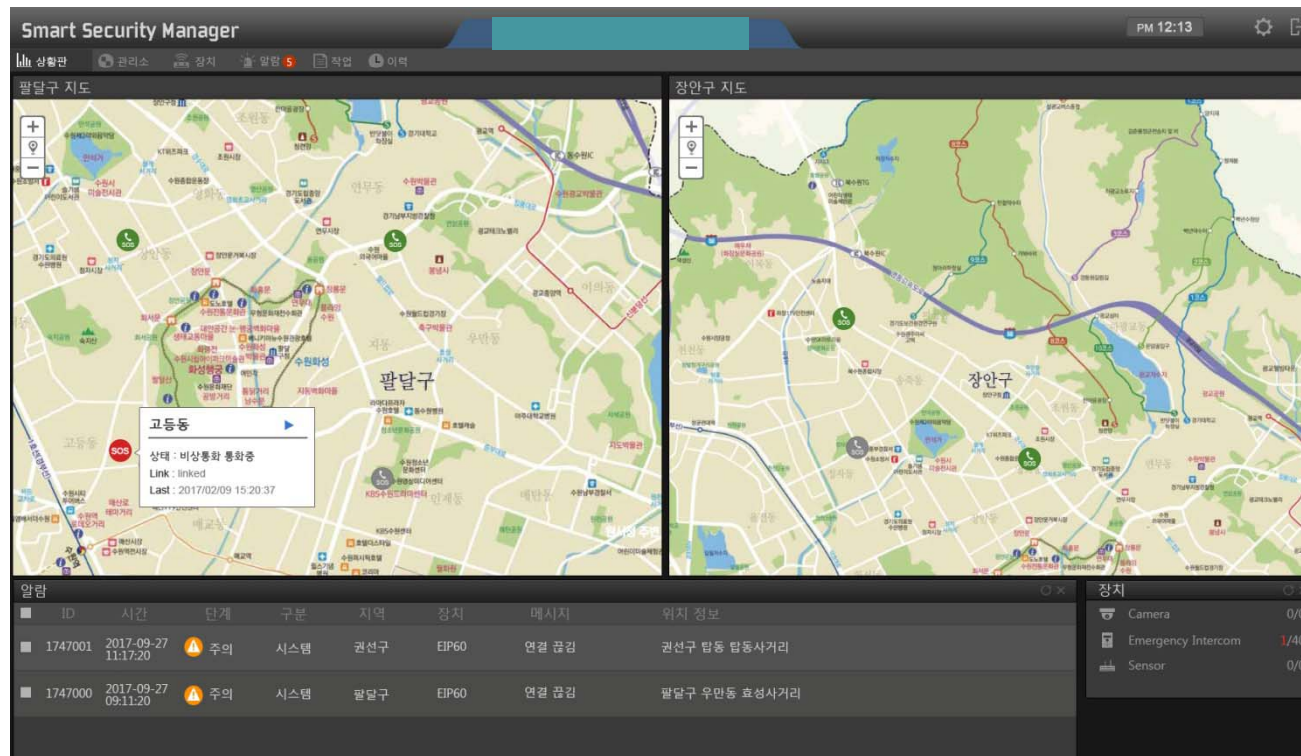
알람

ID	시간	단계	구분	지역	장치	메시지	위치 정보
1747001	2017-09-27 11:17:20	주의	시스템	권선구	ETP60	연결 끊김	권선구 달동 달동사거리
1747000	2017-09-27 09:11:20	주의	시스템	관달구	ETP60	연결 끊김	관달구 우만동 효성사거리

장치

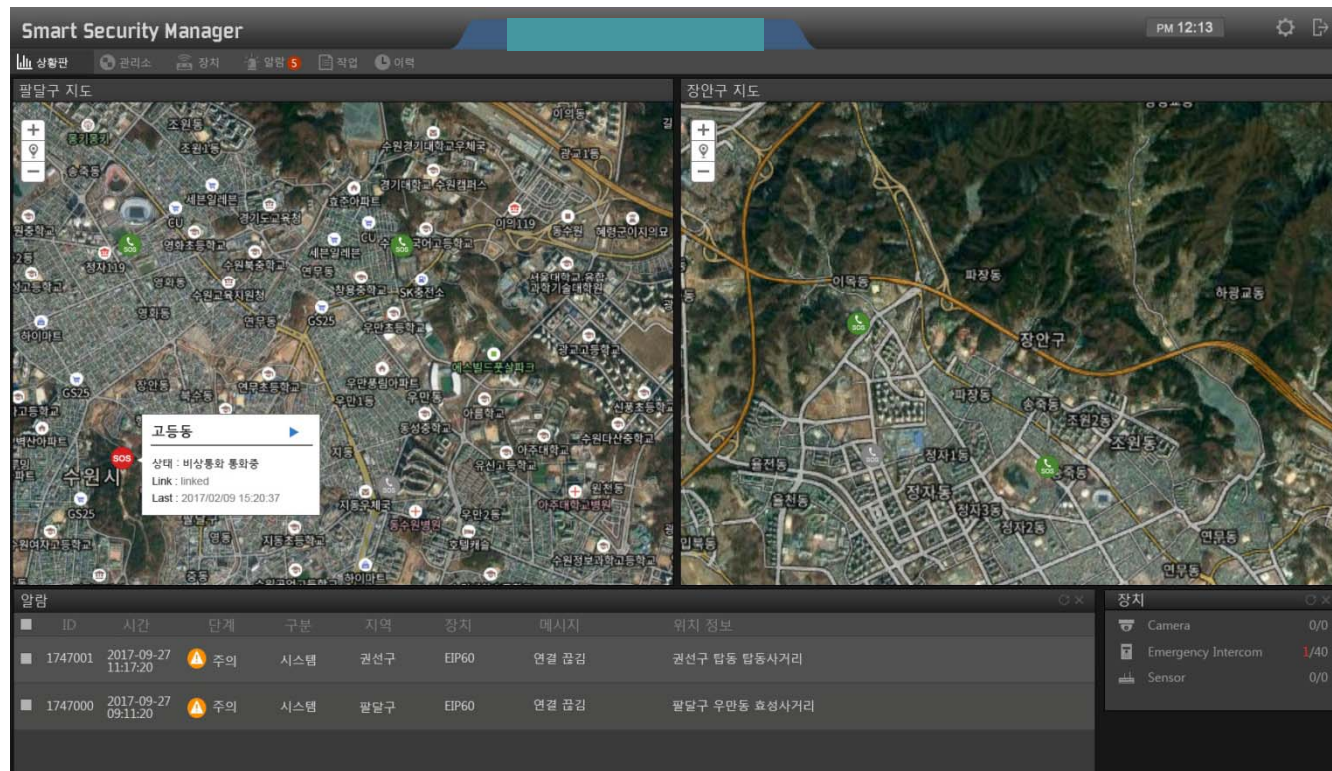
장치	상태
Camera	0/0
Emergency Intercom	1/40
Sensor	0/0

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

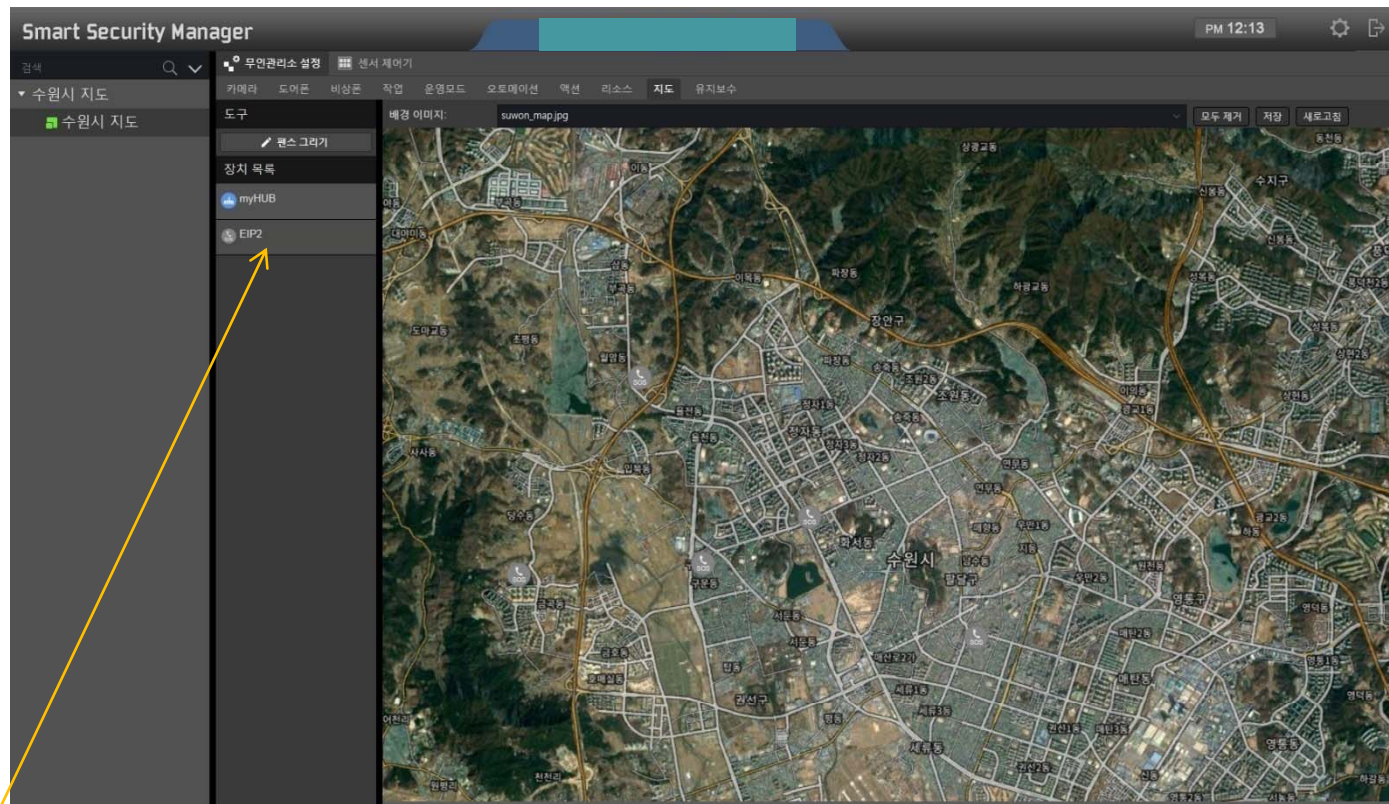




# MAP based SIP Emergency Call Service Overview (Tile Layer Example)



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

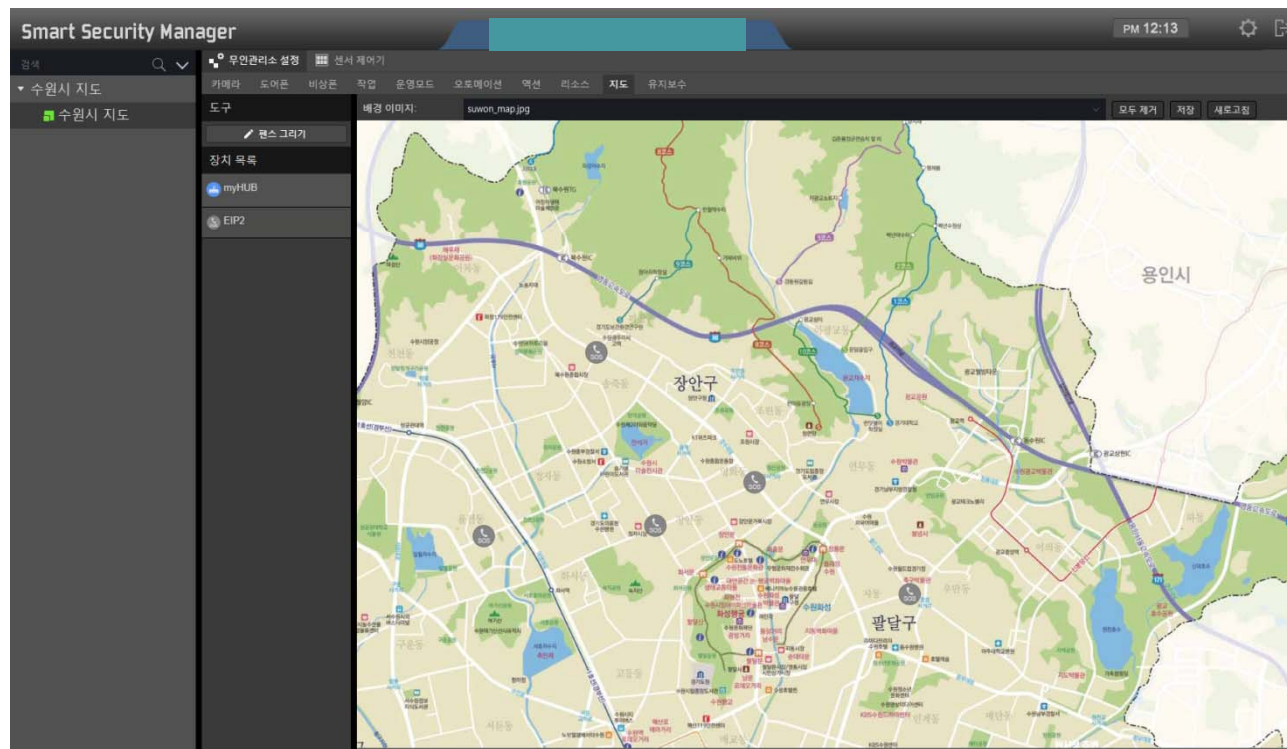


Device Lists : IP  
Emergency Call Phone, IP  
paging terminal etc

**AddPac**

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

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







# Thank you!

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