

Secure IP Telephony Solution (TLS/SRTP Protocol)



TLS/sRTP Voice Recording

AddPac

AddPac Technology

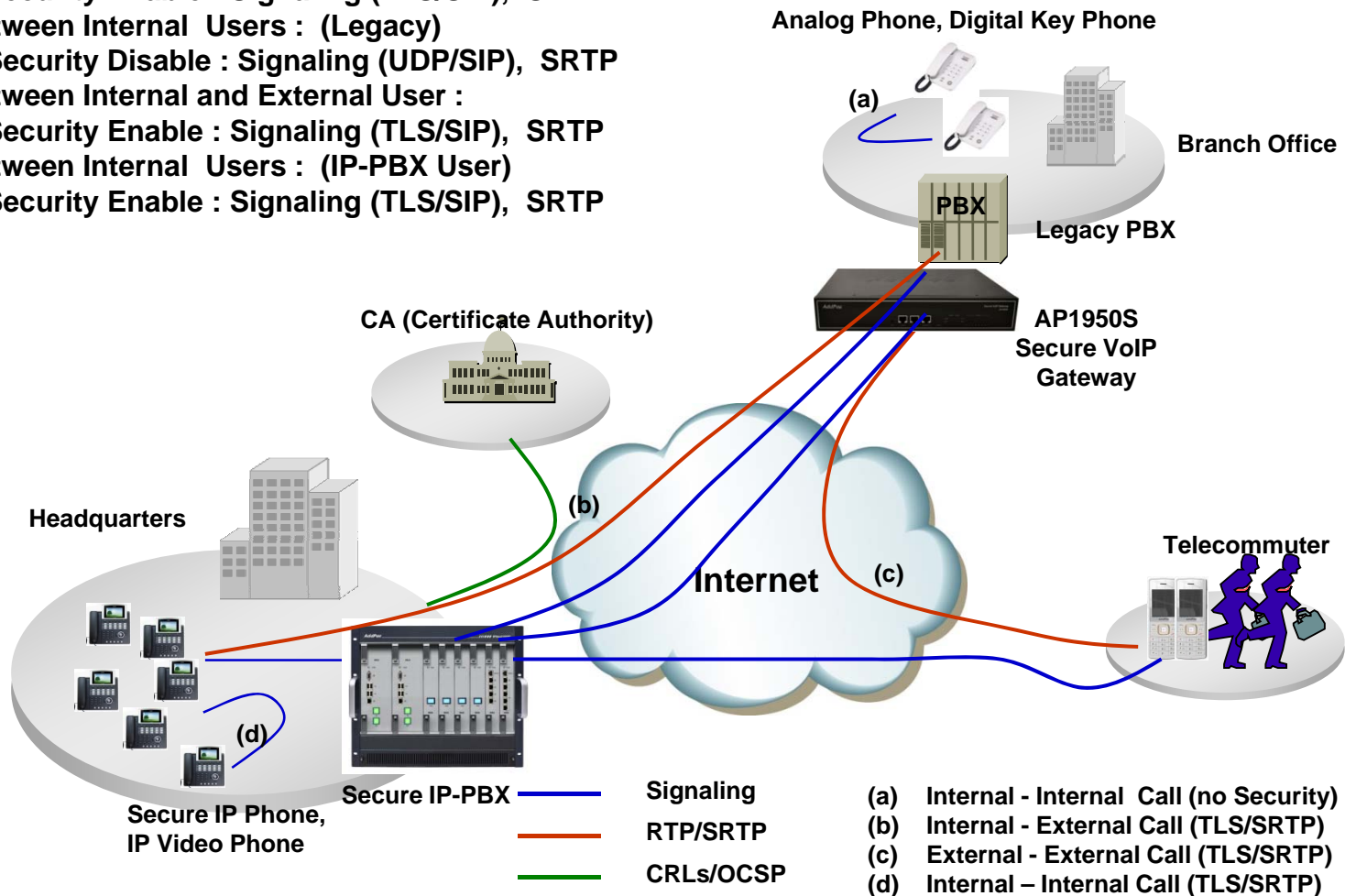
2015, Sales and Marketing

Contents

- Secure IP Telephony Service Diagram
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- TLS/SRTP based Voice Recording Schemes
 - Centralized Voice Recording Scheme
 - Distributed Voice Recording Scheme
- Smart Digital Voice Recording Program

Secure IP Telephony Network Diagram

- **Between External Users :**
 Security Enable : Signaling (TLS/SIP), SRTP
- **Between Internal Users : (Legacy)**
 Security Disable : Signaling (UDP/SIP), SRTP
- **Between Internal and External User :**
 Security Enable : Signaling (TLS/SIP), SRTP
- **Between Internal Users : (IP-PBX User)**
 Security Enable : Signaling (TLS/SIP), SRTP



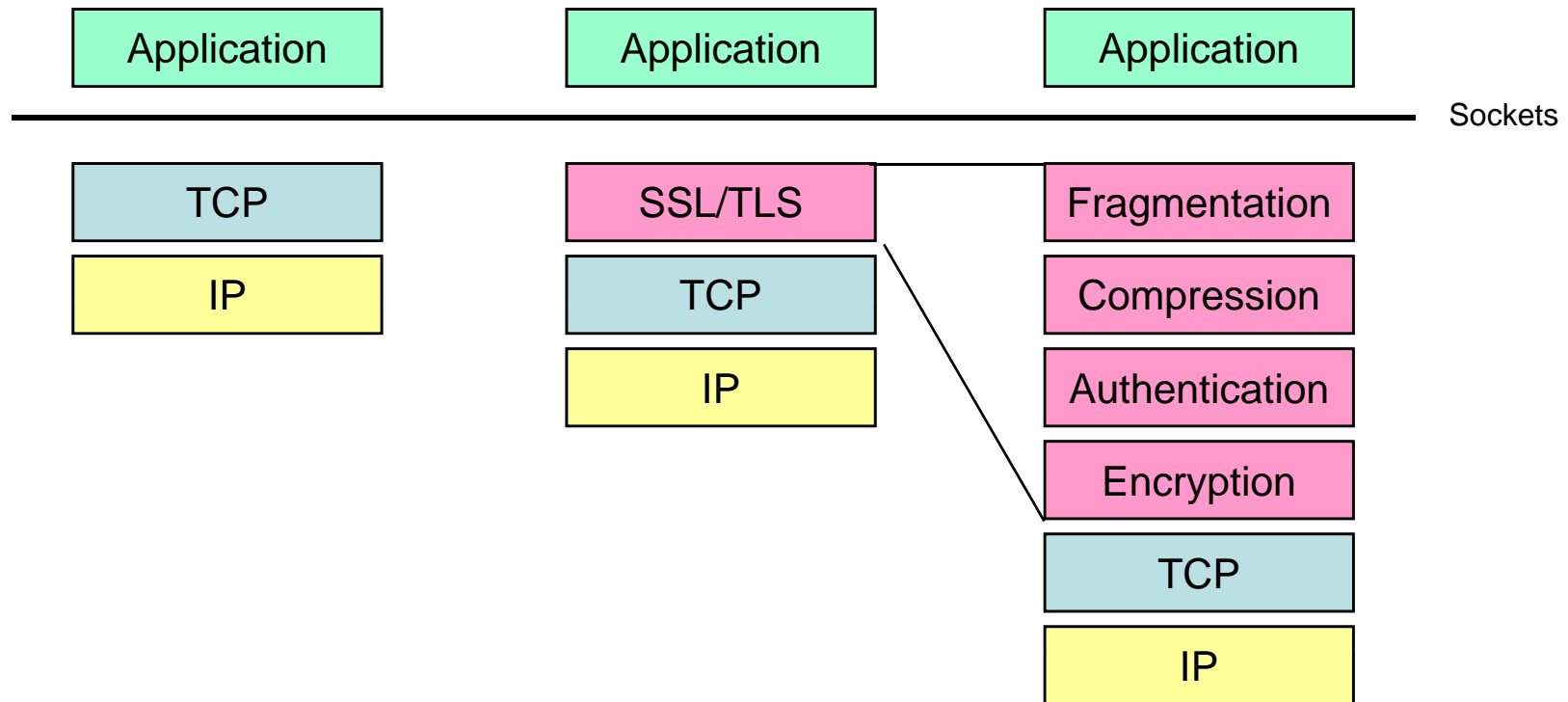


Secure IP Telephony Service Features

TLS Features for Secure VoIP Service

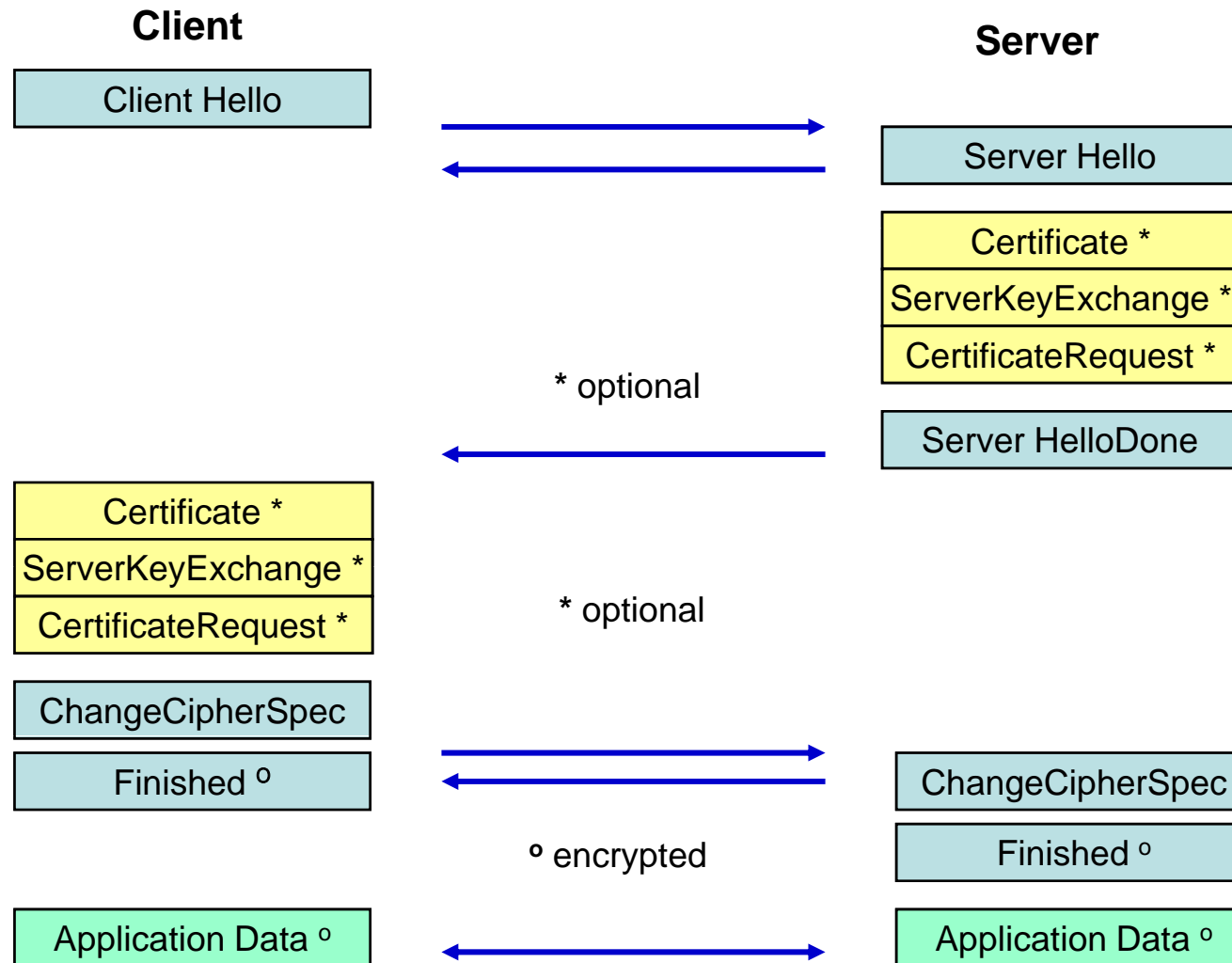
- Support for TLS 1.1, TLS 1.0 and SSL 3.0 protocols
- Since SSL 2.0 is insecure it is not supported.
- TLS 1.2 is supported but disabled by default.
- Support for TLS extensions: server name indication, max record size, opaque PRF input, etc.
- Support for authentication using the SRP protocol.
- Support for authentication using both **X.509 certificates** and OpenPGP keys.
- Support for TLS Pre-Shared-Keys (PSK) extension.
- Support for Inner Application (TLS/IA) extension.
- Support for X.509 and OpenPGP certificate handling.
- Support for X.509 Proxy Certificates (RFC 3820).
- Supports all the strong encryption algorithms (including SHA-256/384/512), including Camellia (RFC 4132).
- Supports compression (optional).
- CRLs
 - CRL (Certificate Revocation List)
 - OCSP (Online Certificate Status Protocol, RFC2560) (via HTTP)
- Hash Algorithm : SHA-1, MD5

SSL/TLS Protocol Layers



SSL/TLS Handshake

AP1950S Secure VoIP Gateway



TLS Comparison with OpenSSL

- Protocol Support

	SSLv2.0	SSLv3.0	TLSv1.0	TLSv1.1	TLSv1.2
AddPac	No	Yes	Yes	Yes	Yes
OpenSSL	Yes	Yes	Yes	No	No

- Key Exchange Algorithms

	Anon-RSA	RSA	RSA Export	DHE-RSA	DHE-DSS	SRP-DSS	SRP-RSA	SRP	PSK	ECC
AddPac	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
OpenSSL	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes

- Encryption Algorithms

(*1) 40-bit encryption is insecure

	AES-256-CBC	AES-128-CBC	3DES-CBC	DES-CBC	RC4-128-CBC	RC4-40(*1)	RC2-40(*1)	Camellia	SEED	ARIA
AddPac	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OpenSSL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

SRTP (Secure Real-time Transport Protocol) Features

- [RFC4568](#), Standards Track, Session Description Protocol (SDP) Security Descriptions for Media Streams
- [RFC 3711](#), Proposed Standard, The Secure Real-time Transport Protocol (SRTP)
- [RFC 3551](#), Standard 65, RTP Profile for Audio and Video Conferences with Minimal Control
- [RFC 3550](#), Standard 64, RTP: A Transport Protocol for Real-Time Applications
- [RFC 2104](#), Informational, HMAC: Keyed-Hashing for Message Authentication
- Cipher Algorithm : ARIA, SEED, AES, DES(*), 3DES(*)

* Support at AddPac Specific SRTP

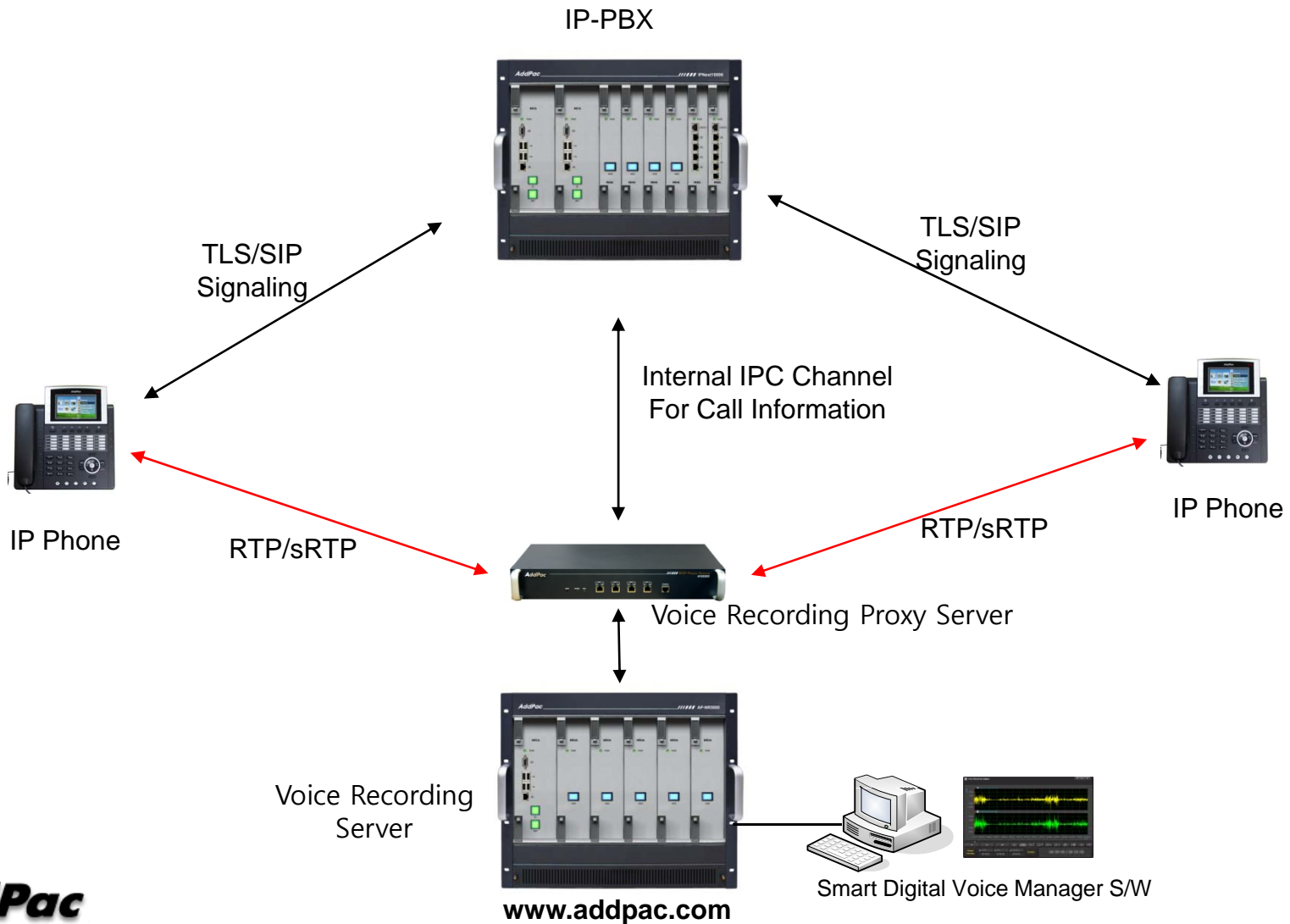


TLS/SRTP based Voice Recording Schemes

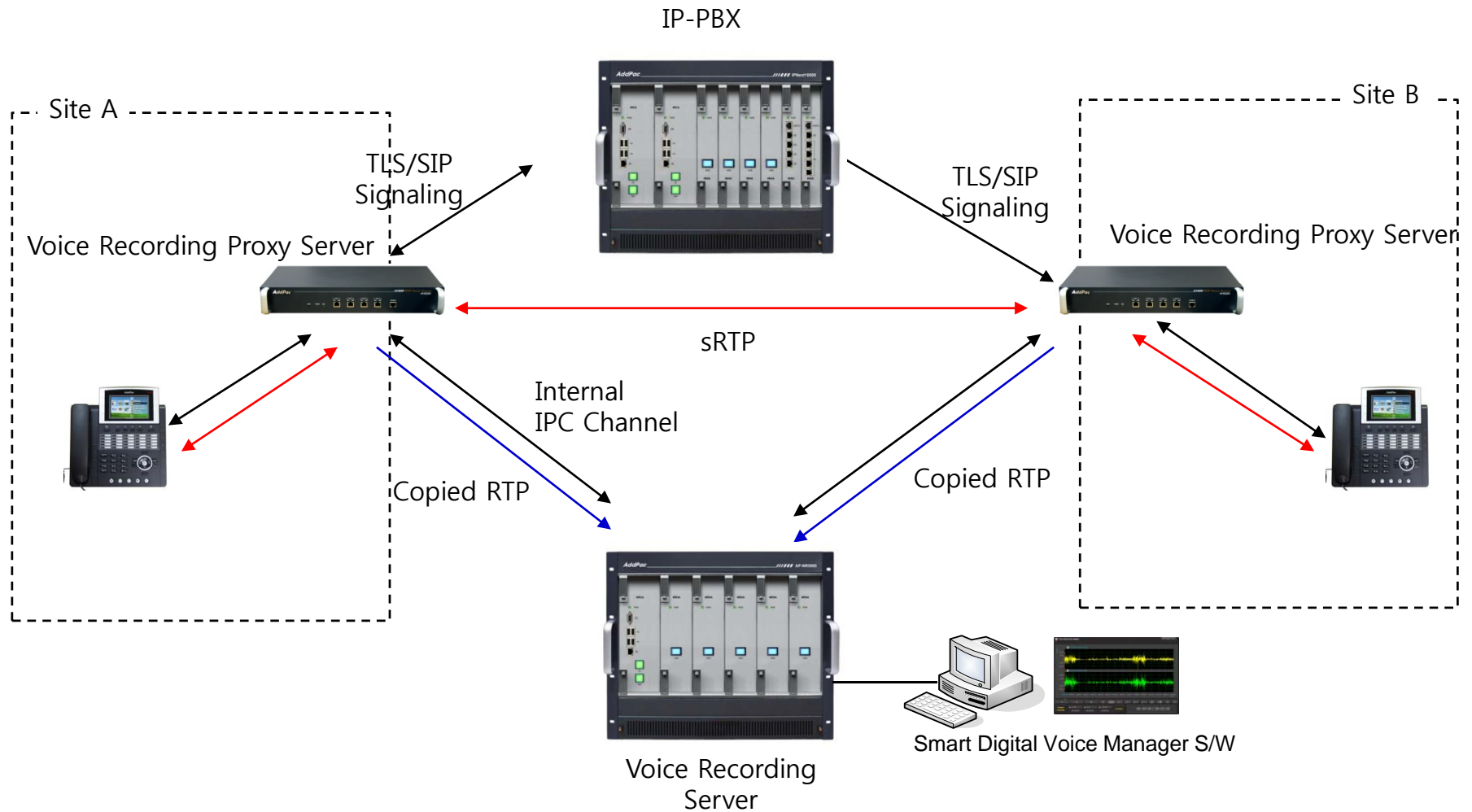
TLS/SRTP based Voice Recording Scheme

- **Centralized Voice Recording Scheme Features**
 - IP-PBX software should be modified and developed for TLS/SRTP based Voice Recording
 - Voice Recording Proxy Server is necessary and should be developed
 - Performance Issues must be considered
 - Installation and Management is easy and simple
 - Small-Scale Application
- **Distributed Voice Recording Scheme Features**
 - Large-Scale Application
 - Voice Recording Proxy Server is necessary and should be developed
 - Each site must have a voice recording proxy server
 - IP-PBX Software is no change

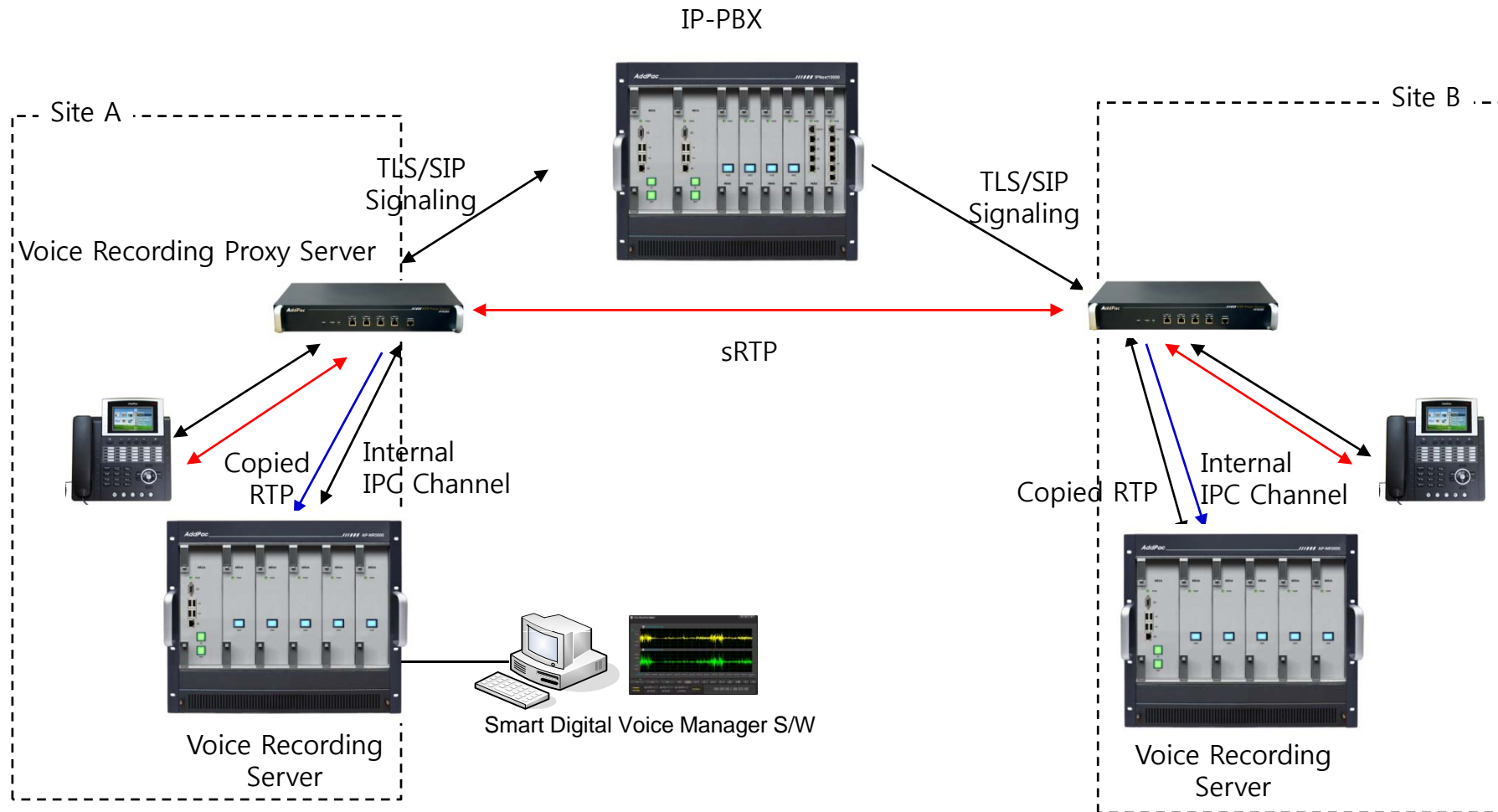
Centralized Voice Recording Scheme



Distributed Voice Recording Scheme (Case A)



Distributed Voice Recording Scheme (Case B)





Smart Digital Voice Recording Program

Contents

- Overview
- Smart Digital Voice Recorder Manager
- Smart File Manager for Secondary Backup



Overview

- Call History Management (search/modify/delete/Excel File save)
- Media Play Management (Play/Stop/Seek/Pause)
- Live Call Recording List Management
- Live Call Monitoring (Play)
- Local Backup (File Manager Support, PC HDD, DVD) and Local Play
- Event History Search
- User Management (registration/modify/delete/search)
- Server Status (CPU/Memory/HDD/Transcoding) & Event Monitoring
- Recording File Waveform Analyzing Function
- Recording Source Management (VoIP Gateway, IP Phone, etc)
- Live Call Recording Board (Recording Board Design, Live Call Status, Voice Monitoring)

Login

The image shows the 'Smart DVoiceR Manager' login screen. At the top, it says 'AddPac Technology' and 'Smart DVoiceR Manager USER LOGIN'. There are two input fields: 'I D' with the value 'root' and 'Password' with '*****'. To the right are 'Login' and 'Setting' buttons. Below the password field are two checkboxes: 'Auto login' (unchecked) and 'Save password' (checked). A 'Setting' dialog box is open in the foreground, titled 'Setting', with a 'Smart Recording Server' section containing 'IP Address' (172.16.4.22) and 'Port' (9200, default: 9200). 'OK' and 'Cancel' buttons are at the bottom of the dialog. Red arrows point from the 'Auto login' checkbox to the text 'Auto Login Configuration' and from the 'Save password' checkbox to 'Password Save'. Another red arrow points from the 'Setting' button to the dialog box.

Auto Login Configuration

Password Save

Setting

Smart Recording Server

IP Address 172.16.4.22

Port 9200 (default: 9200)

OK Cancel

User Management

The screenshot shows the Smart DVoiceR Manager application window. The main window title is "Smart DVoiceR Manager" and it has a menu bar with "File", "Advanced", "Configuration", and "Help". Below the menu bar is a toolbar with various icons. The main content area is titled "Smart DVoiceR Manager" and "AddPac Technology". On the left, there is a tree view showing the application structure, with "User Management" expanded to show "Users".

Three red arrows point to specific icons in the "Users" window:

- New Manager Registration**: Points to the "Add" icon (a person with a plus sign).
- Manager Information Modification**: Points to the "Edit" icon (a person with a pencil).
- Manager Delete**: Points to the "Delete" icon (a person with a minus sign).

The "Users" window displays a table with the following data:

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

The status bar at the bottom shows the date and time "2007-06-13 오후 1:43:49", the version "Ver. 1.0.2719", the IP address "172.16.31.14:9200", and the user "root".

Recording Server Status Monitoring

Smart DVoiceR Manager

File Advanced Configuration Help

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

Smart Recording Server Status

172.16.31
Smart Re

Configuration Client Session List

Max Session : 10

Keep Alive Interval : 15 sec

OK

Smart Recording Server Status

172.16.31,14:9200
Smart Recording Server is running.

Configuration Client Session 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

Client List

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 shows a 'Record Search' table with columns for No., Call ID, Source IP, Rec StartTime, Rec EndTime, Rec Duration, Call Duration, Calling Num, Calli..., Calling..., Called Num, Calle..., and Called S... The table contains 19 rows of recorded call data. A 'Search Filter' dialog box is open, showing search criteria for Record Time (Start Time: 2007-06-14 00:00:00, End Time: 2007-06-14 23:59:59) and Filter rules (Calling Number: IsExactly 2000, Called Number: IsExactly 3000). A playback control window is overlaid on the table, showing 'AddPac calling-3004/called-5020' with a progress bar and a 'Memo Save' button. The playback window also displays 'Record Information' and 'Call Information' details.

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

Recording File List Save (Excel File Format)

The screenshot displays the Smart DVoiceR Manager interface. The main window shows a 'Record Search' section with a table of recording data. A red arrow points from the 'Export' icon in the toolbar to a file explorer window titled '다른 이름으로 저장' (Save As). The file explorer shows the file name 'Records.xls' and the format 'Excel Files'. A progress dialog box is overlaid on the table, indicating 'Records Exporting !!!' with a 69% completion bar. Below the dialog, a Microsoft Excel spreadsheet is visible, showing the exported data with columns for Call ID, Source IP, Record Start Time, Record End Time, and various call metrics.

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 13:24:09	2007-06-12 13:24:09	00:00:00
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		
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)

The screenshot displays the 'Voice WaveForm Analyzer' interface. It features two waveform plots: the top one is yellow and the bottom one is green. Both plots have a vertical axis labeled 'smpl' ranging from -20000 to 20000 and a horizontal axis with time markers from 00:00:00 to 00:03:05. A 'Bookmark' is indicated by a yellow pushpin on the green waveform at approximately 00:01:05. A 'Bookmark List' dialog box is open, showing a table with one entry: 'my bookmark no1.' at time 00:01:05. The dialog has buttons for 'Modify', 'Bookmark Set', 'Bookmark Delete', and 'Play at Bookmark Position'. A context menu is also visible over the bottom waveform, with options: 'Play From Here', 'Set Bookmark', and 'Bookmark List'. The bottom control panel includes a 'Repeat Selection' button, 'Start', 'End', and 'Length' time fields (all set to 00:00:00), a 'Duration' field, and a large digital display showing '00:00:00 / 00:03:06'.

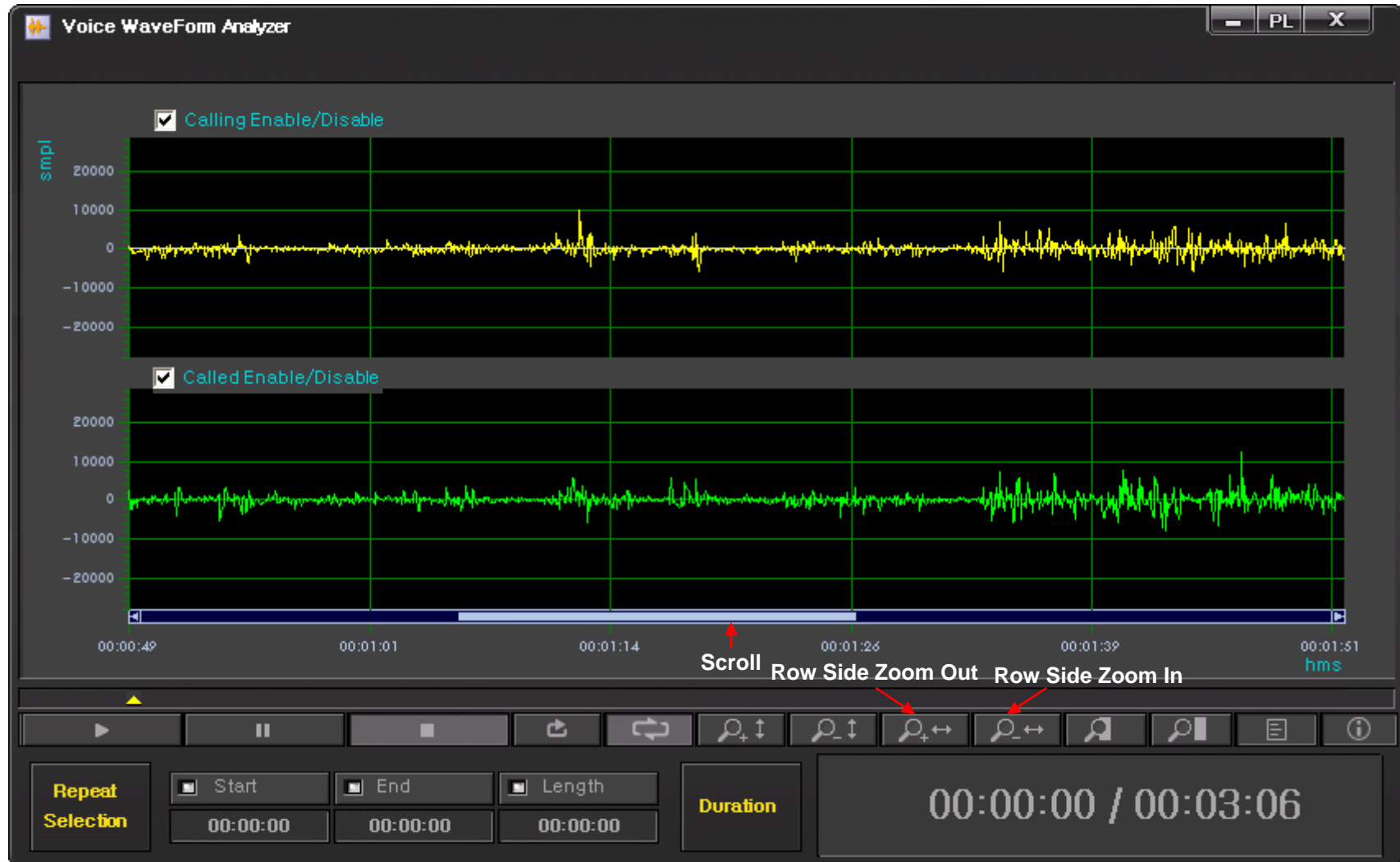
Recording File Waveform Analyzer

(Column Side Zooming)



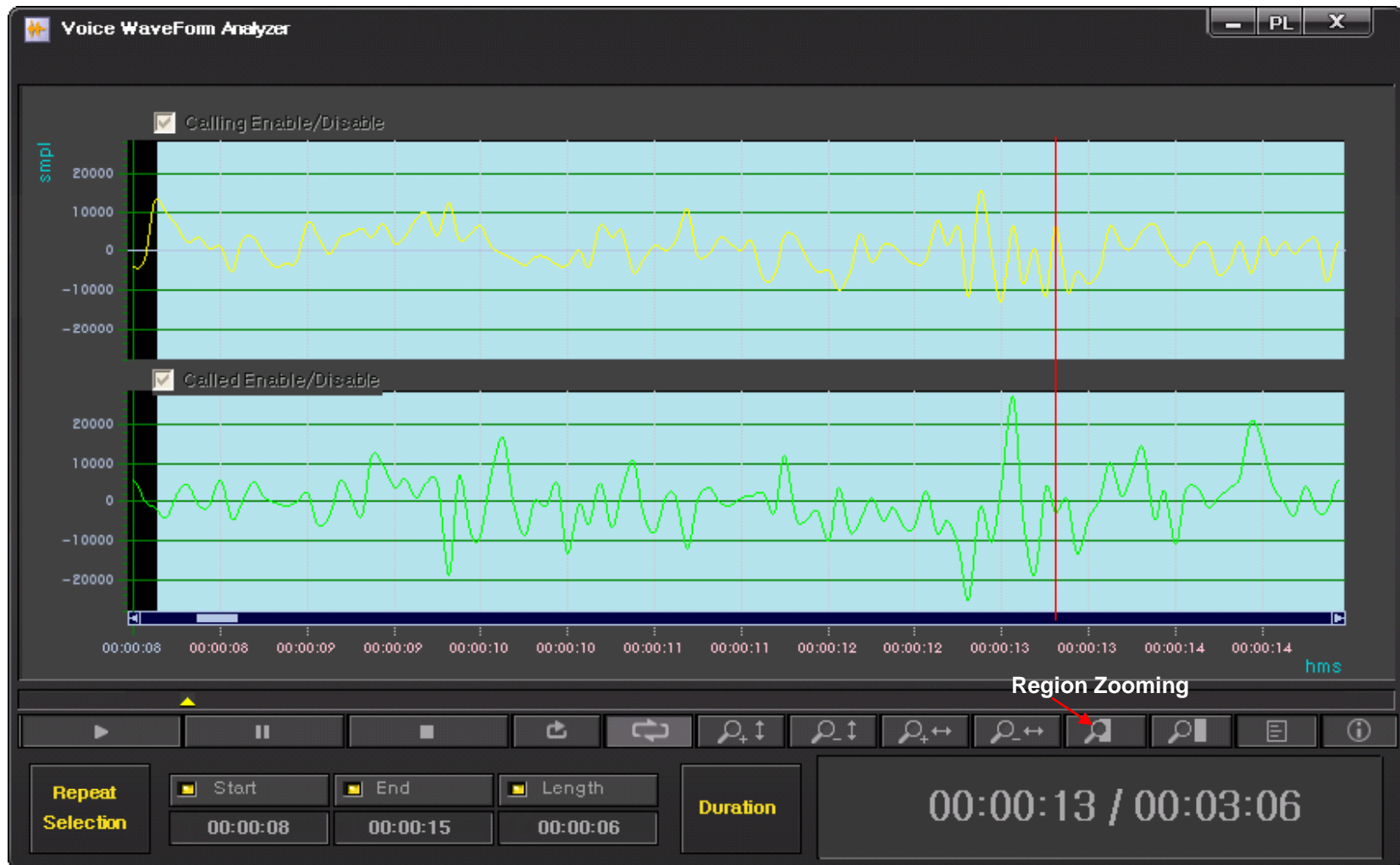
Recording File Waveform Analyzer

(Row Side Zooming)



Recording File Waveform Analyzer

(Region Zooming)



Recording File Waveform Analyzer

(Call Info. Display)

The screenshot displays the 'Voice WaveForm Analyzer' application window. The main interface features two waveform plots: a top plot with a yellow waveform and a bottom plot with a green waveform. A central 'Record Information' dialog box is open, displaying the following data:

Record Information	
Start Time	2007-06-12 10:11:28
End Time	2007-06-12 10:14:34
Record Duration	00:03:06
Record Memo	<input type="text"/>

Call Information	
Initiated Time	2007-06-12 10:13:15
Established Time	2007-06-12 10:13:16
Disconnected Time	2007-06-12 10:16:24
Call Duration	00:03:08

Calling Party	
Number	1015
User	
Codec	G711U
Directory	/mnt/hda1/callrecfiles
FileSize	1606k

Called Party	
Number	6015
User	
Codec	G711U
Directory	/mnt/hda1/callrecfiles
FileSize	1606k

At the bottom of the window, there is a control bar with playback buttons (play, pause, stop, previous, next, zoom in, zoom out, zoom in+out, zoom out+in) and a 'Call Info. Display' button. Below the control bar, a 'Repeat Selection' section shows 'Start' (00:00:10), 'End' (00:00:11), and 'Length' (00:00:01). A 'Duration' section shows '00:00:11 / 00:03:06'. The text 'Original View Mode' is displayed above the duration. A red arrow points from the 'Call Info. Display' button to the 'Call Info. Display' text in the bottom right corner of the waveform area.

Live Call Recording List and Monitoring

The screenshot displays the Smart DVoiceR Manager interface. The main window is titled "Smart DVoiceR Manager" and features a menu bar (File, Advanced, Configuration, Help) and a toolbar. The central area is labeled "Current Call List Display" and "Live Play". Below this, there is a "Record Session" section with a "Refresh Interval" set to 5 seconds and an "Apply" button. The main display is a table of 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 data. A modal window titled "AddPac" is overlaid on the table, showing "calling-3006/called-5022" with a "Live" button and a progress bar. Below the progress bar, the modal window displays "Record Information" (Start Time: 2007-06-15 14:16:46), "Call Information" (Initiated Time: 2007-06-15 14:18:56, Established Time: 2007-06-15 14:18:57), and "Calling Party" (DialNumber: 3006, User, Codec: G711U, Directory: /mnt/hda1/callrecfiles, FileSize). The "Called Party" information is also visible (DialNumber: 5022, User, Codec: G711U, Directory: /mnt/hda1/callrecfiles, FileSize). The status bar at the bottom shows the date and time (2007-06-13 3:22:47), version (Ver, 1.0.2720), and IP address (172.16.4.22:9200).

No.	Call ID	Source IP	Rec StartTime	Initiated Time	Established Time	Call Duration	Calling Num	Calling User	Calling SI...	Calling Trans...	C
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->...	2
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->...	5
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		3/3/0	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		7/2/0	G7231_63->...	5
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		0/3/0	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		7/0/0	G7231_63->...	5
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		1/0/0	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		4/3/0	G7231_63->...	5
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		6/0/0	G7231_63->...	5
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		1/2/0	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		3/0/0	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		4/0/0	G7231_63->...	5
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		5/3/0	G7231_63->...	5
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		0/2/0	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		6/2/0	G7231_63->...	5
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		1/1/0	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		4/2/0	G7231_63->...	5
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		2/0/0	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		5/2/0	G7231_63->...	5
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		6/1/0	G7231_63->...	5
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		5/0/0	G7231_63->...	5
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		0/0/0	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		4/1/0	G7231_63->...	5
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		4/2/0	G729A_8->G...	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		5/0/0	G729A_8->G...	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		1/3/0	G729A_8->G...	6
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		4/0/0	G729A_8->G...	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		4/3/0	G729A_8->G...	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		4/1/0	G729A_8->G...	2
34	6224	172.16.9.60	2007-06-13 15:20:49	2007-06-13 15:2...	2007-06-13 15:22:42	00:00:04	1006		1/2/0	G729A_8->G...	6
35	5882	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)

Smart DVoiceR Manager

File Advanced Configuration Help

Smart DVoiceR Manager AddPac Technology

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

Event Configuration

Event Source

Host : 172.16.4.22 ← **Server IP address**

Listen Port : 514 ← **Event Port Number**

1. Emergency
The presence of a condition that has either caused the system to become unstable or has crashed the system.

2. Error
Error events are warnings of conditions that will affect the performance of the MX.

← **Realtime event level Setting**

Event Filter | Event Logging Filter

+ Event filter setting for source.

Select / Deselect All

Category	Severity	Description
<input checked="" type="checkbox"/> recording	Warning	recording
<input checked="" type="checkbox"/> play	Warning	play
<input checked="" type="checkbox"/> system	Warning	system

Use Emergency Sound

OK Cancel

Event Configuration

Event Source

Host : 172.16.4.22

Listen Port : 514

1. Emergency
The presence of a condition that has either caused the system to become unstable or has crashed the system.

2. Error
Error events are warnings of conditions that will affect the performance of the MX.

← **Event logging level Setting**

Event Filter | Event Logging Filter

+ Event filter setting for logging.

Select / Deselect All

Category	Severity	Description
<input checked="" type="checkbox"/> recording	Warning	recording
<input checked="" type="checkbox"/> play	Warning	play
<input checked="" type="checkbox"/> system	Warning	system

Use Emergency Sound

OK Cancel

2007-06-14 오후 4:25:35 Ver. 1.0.2720 172.16.4.22:9200 root

Event Management (Monitoring)

The screenshot displays the Smart DVoiceR Manager interface. The main window shows a list of call records with columns for No., Call ID, Source IP, Rec StartTime, Initiated Time, Established Time, Call Duration, Calling Num, and Call... The interface includes a menu bar (File, Advanced, Configuration, Help), a toolbar, and a left-hand navigation tree. A 'Refresh Interval' of 5 seconds is set. Red arrows point to specific UI elements: 'Event Display Window' (left navigation), 'Event level Configuration Window' (top right), 'Event Display Window Clear' (bottom right), and 'Event Receiving Pause' (bottom right).

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 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 ;

Event Management

(System Monitoring)

The screenshot displays the 'System Monitoring' window of the Smart DVoiceR Manager. The interface includes a navigation tree on the left and a main performance dashboard. The dashboard features three rows of monitoring widgets, each with a current status gauge and a history line graph.

Performance Metrics:

- CPU Usage:** 40% (Gauge), CPU Usage History (Graph)
- Memory Usage:** 61 MB (Gauge), Memory Usage History (Graph)
- Trans Codec Usage:** Max 128, 54 (Gauge), Trans Codec Usage History (Graph)

System Statistics:

- CPU:** Total(%) 100, Used(%) 0
- Memory:** Total 254752 KB, Available 171860 KB, Used 82892 KB, Used(%) 32,54
- Transcoding Channel:** Max 128, Used 0
- HDD:** Total 304273 MB, Available 138124 MB, Used 166149 MB, Used(%) 54,61

Disk Space Usage:

- rootfs (/):** 2.00 GB used of 3.00 GB
- /dev/hda1 (/mnt/hda1):** 139.00 GB used of 300.00 GB

The status bar at the bottom shows the date and time (2007-06-14 오후 4:38:08), version (Ver. 1,0,2720), IP address (172.16.4.22:9200), and the current user (root).

Event Management

(Event History)

Event Search Time Setting

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

Event category

Recording : Debug
 Play : Debug
 System : Debug

Search Condition Setting

Filter Name : Event
Rule : IsExactly
Search :

Event History Table

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 15:15:01	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 :

Recording Board Management

(Call User Registration)

Smart DVoiceR Manager

File Advanced Configuration Help

Smart DVoiceR Manager Board Users

No.	User ID	Name	Phone Number
1	2002	james lee	2002
2	bmlee	bmlee	6002
3	cykim	cykim	1019
4	dhkim	dhkim	5075
5	hgyang	hgyang	2006
6	jhjeon	jhjeon	6008
7	jhkwon	jhkwon	1002
8	jhlee	jhlee	026
9	jhsong	jhsong	5
10	jschoi	jschoi	5
11	jwwoo	jwwoo	3
12	jkim	jkim	0
13	jypark	jypark	7
14	kkim	kkim	3
15	kscho	kscho	5
16	kswoo	kswoo	2004
17	kuhan	kuhan	1210
18	mhlee	mhlee	2007
19	mjlee	mjlee	1008
20	mkkim	mkkim	1212
21	mwlee	mwlee	1006
22	ohs	ohs	6015
23	phkwon	kwon young phil	6006
24	smkim	smkim	1003
25	syk	soyoung kim	1027
26	wshwang	senior manager	6005
27	yhj	yhj	1016
28	ymchoi	ymchoi(QA assistant)	6007
29	yslee	senior assistant	1015

Import Board Users

Filter: Filter Name Rule Word Advanced Search Find

Phone Number [is exactly]

User ID	Name	Phone Number
lew		1000
kslee		1001
slms		1003
sykim		1009
syyl		1011
bjang		1015
knkim		1016
weschoi		1101
kwshin		1102
ngkim		1105
weschoi		1106
shim_h...		1107
dwshin		1108

Add Board User

User

User ID: james
 User Name: james brahms
 Description: quality assurance dev.
 Group: SE

Phone Numbers

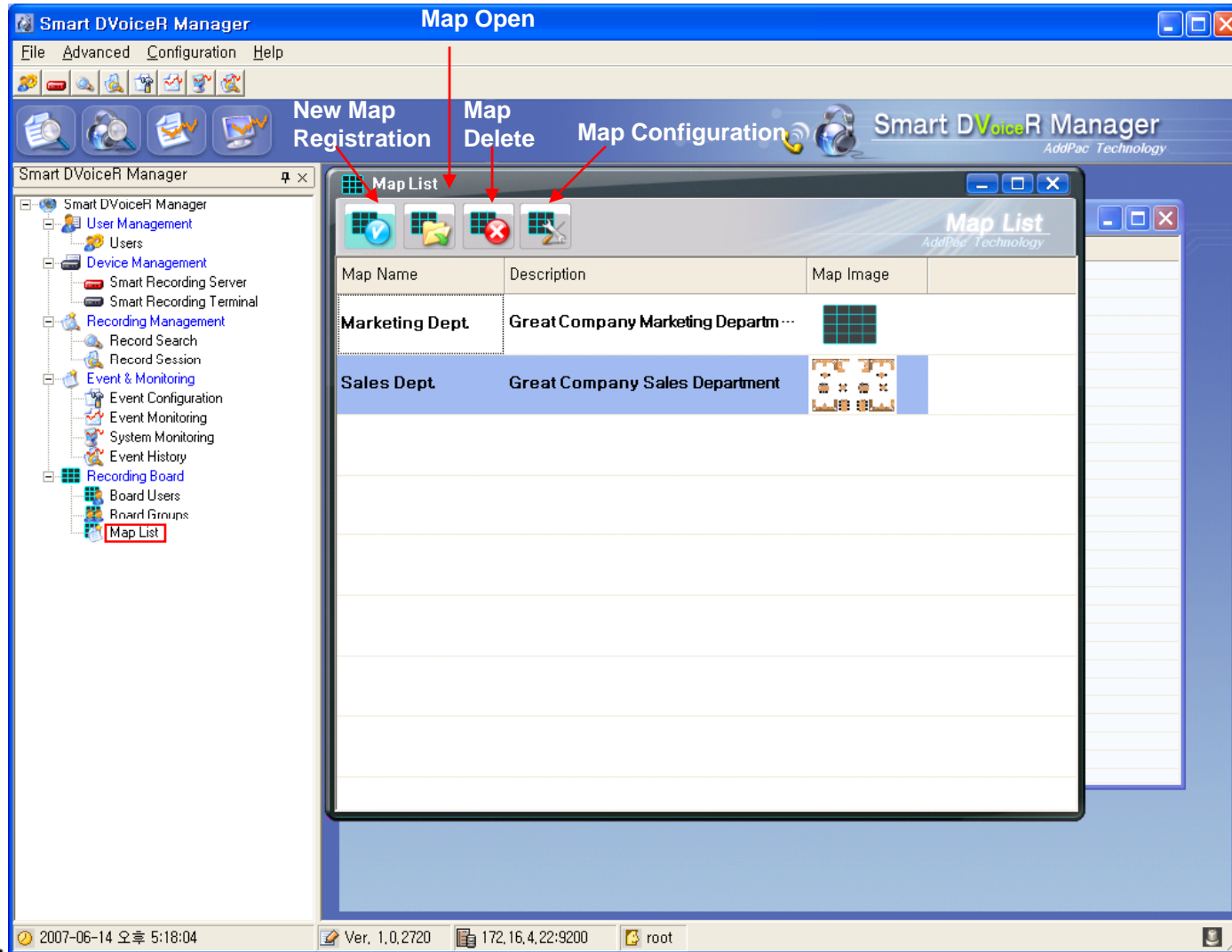
5000

6000

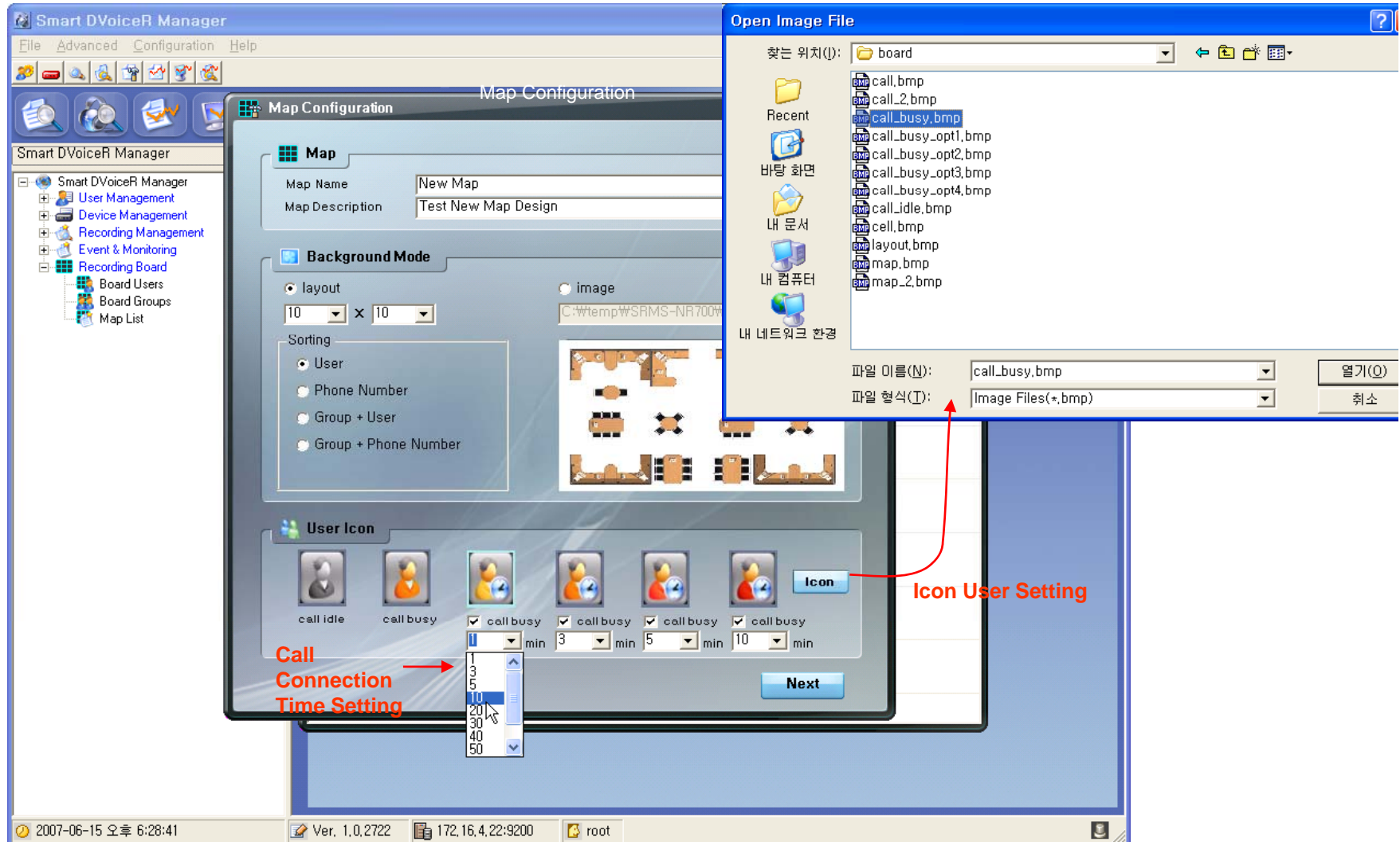
2007-06-15 오후 7:38:49 Ver. 1.0.2722 172,16,4,22:9200 root

Recording Board Management

(Background Image (MAP) Selection)



Recording Board Management (Layout Configuration)



Recording Board Management

(Live Monitoring)

Map Configuration (edit)

Map Information Save

Recording Board (Marketing Dept.)

AddPac Recording Board AddPac Technology

Save Config Auto-Insert Edit Map

kwon young p jhwon senior manage kkim dhkim smkim ohs mwlee mjlee bmllee

senior assistan jhjeon kscho jschoi

Dynamic Call Status Display (Icon Color)

Call Status Display Call Connection Time Icon Display

Map Name: Marketing Dept. Session Information: Total 14 Idle 6 Busy 8 User Icon: Call Idle Call Busy Over 1 minutes Over 3 minutes Over 5 minutes Over 10 minutes

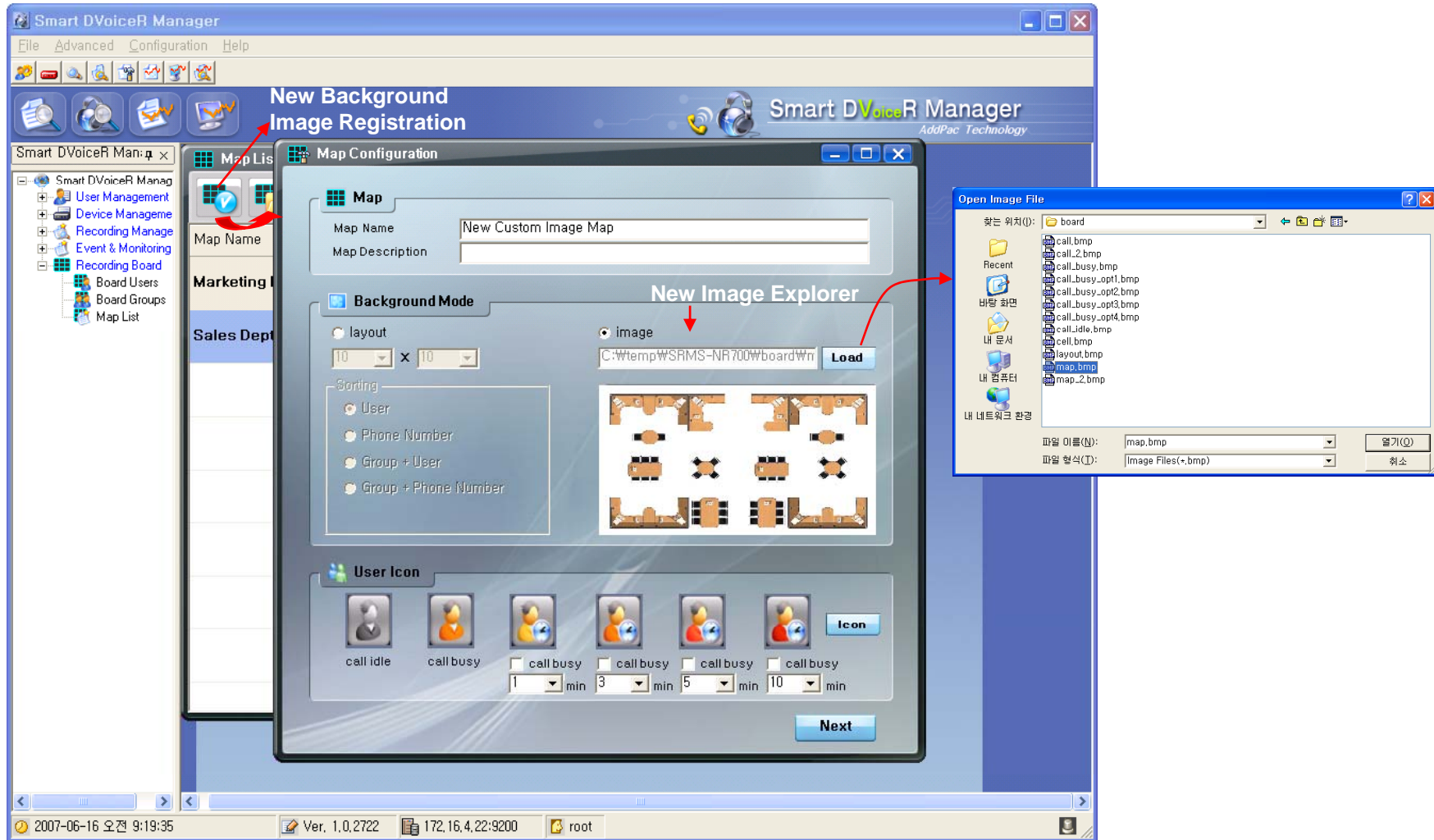
Recording Board Management

(Call User Insert/Remove in MAP)

The screenshot displays the 'Recording Board (Marketing Dept.)' interface. At the top, there is a menu bar with 'Save', 'Config', 'Auto-Insert', and 'Edit Map' options. A red arrow points to the 'Edit Map' option, labeled 'Call User List Display ON/OFF'. Below the menu is a grid of call user icons. A red dashed arrow labeled 'insert' points from the 'Board Users' list on the right to a specific icon in the grid. Another red dashed arrow labeled 'remove' points from an icon in the grid to the 'Board Users' list. The 'Board Users' list on the right is organized into folders: 'BCN' (containing jhjeon, kkim, kwon youn..., mwlee, ohs, senior assi..., senior man..., smkim), 'NMS' (containing jhkwon, jschoi, mjlee), and 'SE' (containing bmlee, dhkim, kscho). At the bottom, there is a status bar with 'Map Name' (Marketing Dept.), 'Session Information' (Total 14, Idle 4, Busy 10), and 'User Icon' settings (Call Idle, Call Busy, Over 1 minutes, Over 3 minutes, Over 5 minutes, Over 10 minutes).

Recording Board Management

(Background Image Loading)



Recoding Board Management

(Call User Registration in Background MAP image)

Recording Board(New Custom Image Map)

AddPac Recording Board
AddPac Technology

Save Config Auto-Insert Edit Map

Board Users

- BCN
 - jhjeon
 - kkim
 - kwon young ...
 - mwlee
 - ohs
 - senior ass...
 - senior mana...
 - smkim
- NMS
 - jhkwon
 - jschoi
 - mjlee
- SE
 - bmlee
 - dhkim
 - kscho

Map Name: New Custom Image Map | **Session Information:** Total 12, Idle 2, Busy 10

User Icon Legend:
Call Idle | Call Busy
Over 1 minutes | Over 5 minutes
Over 3 minutes | Over 10 minutes

Smart File Manager

(Login)



Smart File Manager

(Recorded Call List Search)

Smart File Manager
File Management Help

AddPac Smart File Manager
AddPac Technology

Search Target: Remote Database Start: 2007년 5월 4일 금요일 End: 2007년 5월 4일 금요일 Search Advanced (Total: 1255) (Page 1/2)

Start Time	End Time	Duration	Calling Number	Calling User	Called Number	Called User	Recording Source
2007-05-04 05:28:40	2007-05-04 05:29:07	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:29:26	2007-05-04 05:29:53	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:30:02	2007-05-04 05:30:29	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:30:56	2007-05-04 05:31:34	00:00:38	5000		1015		172.17.213.100
2007-05-04 05:32:09	2007-05-04 05:32:36	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:33:12	2007-05-04 05:33:39	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:34:24	2007-05-04 05:34:51	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:35:18	2007-05-04 05:35:45	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:36:21	2007-05-04 05:36:48	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:36:57	2007-05-04 05:37:24	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:37:33	2007-05-04 05:38:00	00:00:27	5000		1015		172.17.213.100

Start Time	End Time	Duration	Calling Number	Calling User	Called Number	Called User	Recording Source	Men
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2007-05-04 오후 9:16:57 version 1.0.2651 172.17.101.251:9200 Administrator Waiting Next Backup Time(2007-05-06 오전 3:00:00)

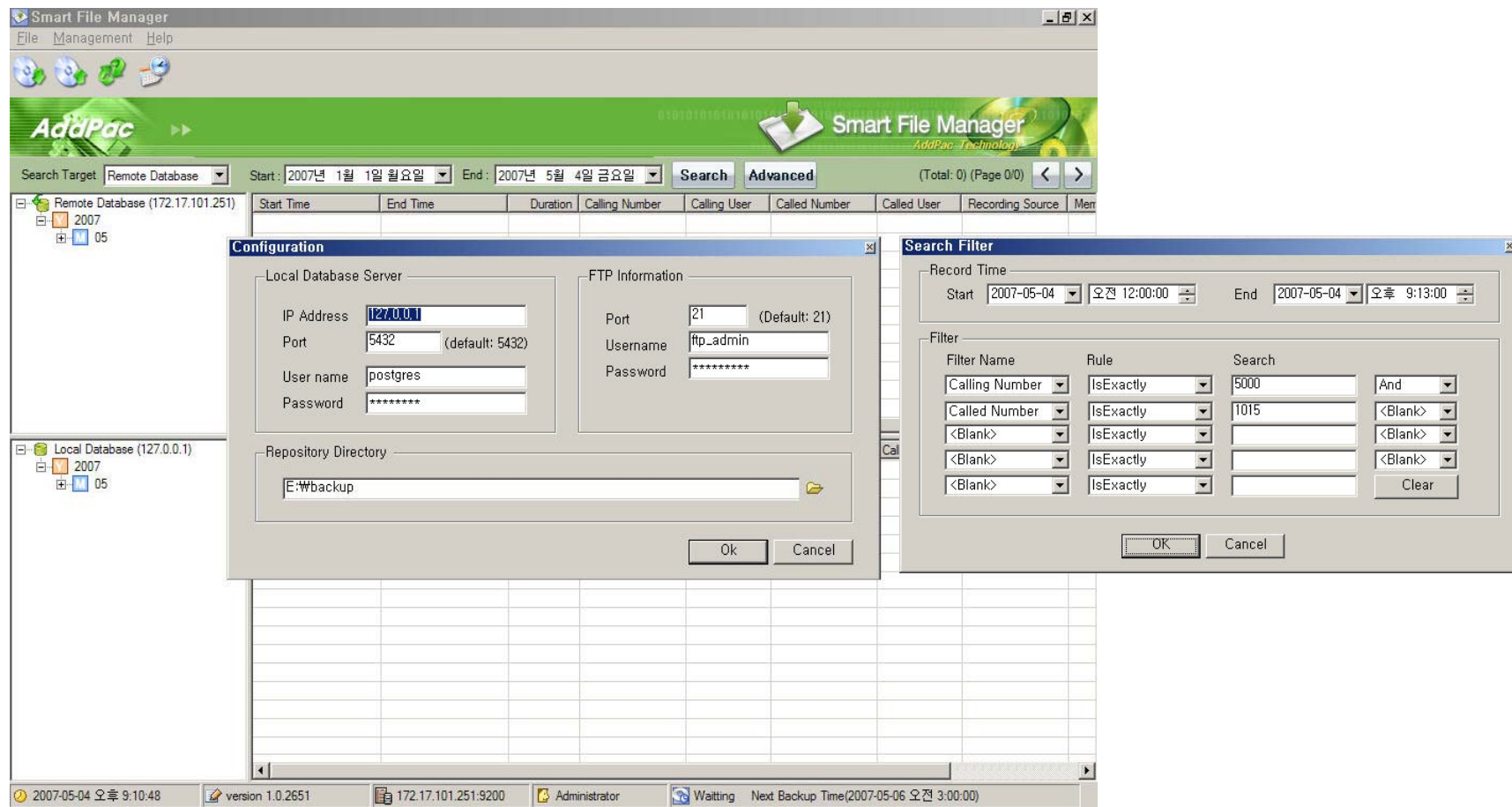
Search List (Server)

Search List (Local)

Status Display

Smart File Manager

(Configuration and Search Filter)



Smart File Manager

(Call List Properties)

The screenshot displays the Smart File Manager application window. The main interface includes a menu bar (File, Management, Help), a toolbar with icons, and a search area with filters for 'Remote Database' and date ranges. A tree view on the left shows a 'Remote Database (172.17.101.251)' containing folders for '2007' and '05'. The central pane shows a table of call records with columns for Start Time, End Time, Duration, Calling Number, Calling User, Called Number, Called User, and Recording Source. A context menu is open over a selected row, with 'Properties' highlighted. A 'Recording Session Information' dialog box is overlaid on top, showing a table with columns for Filename, Start Time, End Time, Duration, Size, and Codec. The dialog lists two recording sessions with filenames starting with '2460720070503202842...'. The status bar at the bottom shows the system clock, version number (1.0.2651), and other system information.

Start Time	End Time	Duration	Calling Number	Calling User	Called Number	Called User	Recording Source
2007-05-04 05:28:40	2007-05-04 05:29:07	00:00:27	5000		1015		172.17.213.100
2007-05-04 05:28:41	2007-05-04 05:29:08	00:00:27	5012		1027		172.17.213.100
2007-05-04 05:28:42	2007-05-04 05:29:09	00:00:27	6007		1007		172.17.213.100
2007-05-04 05:28:42	2007-05-04 05:29:09	00:00:27	6001		1001		172.17.213.100
2007-05-04 05:28:46	2007-05-04 05:29:13	00:00:27	6008		1008		172.17.213.100
2007-05-04 05:28:47	2007-05-04 05:29:14	00:00:27	5013		1028		172.17.213.100
2007-05-04 05:28:50	2007-05-04 05:29:17	00:00:27	6011		1011		172.17.213.100
2007-05-04 05:28:54	2007-05-04 05:29:21	00:00:27	5005		1020		172.17.213.100
2007-05-04 05:28:58	2007-05-04 05:29:25	00:00:27					
2007-05-04 05:28:58	2007-05-04 05:29:25	00:00:27					
2007-05-04 05:28:59	2007-05-04 05:29:26	00:00:27					

Filename	Start Time	End Time	Duration	Size	Codec
2460720070503202842...	2007-05-04 05:28:42	2007-05-04 05:29:09	00:00:27	146 KB	
2460720070503202842...	2007-05-04 05:28:42	2007-05-04 05:29:09	00:00:27	174 KB	

Smart File Manager

(Server to Local Backup)

The screenshot shows the Smart File Manager interface with a 'Download' dialog box open. The dialog displays a list of 1996 files being downloaded from a remote database to a local directory. The files are listed with their names, durations, sizes, and timestamps. A progress bar at the bottom of the dialog shows the download progress, and a status box provides details for the current file being downloaded.

File Name	Duration	Size	DateTime	Status
✓ callrecfiles/20070504/2460120070...	00:00:27	147 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2460120070...	00:00:27	178 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2461320070...	00:00:27	147 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2461320070...	00:00:27	174 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2462320070...	00:00:27	147 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2462320070...	00:00:27	178 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2462620070...	00:00:27	146 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2462620070...	00:00:27	176 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2464120070...	00:00:27	144 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2464120070...	00:00:27	176 KB	2007-05-04 05:2...	Done
✓ callrecfiles/20070504/2464320070...	00:00:27	146 KB	2007-05-04 05:2...	Done

Download Directory: E:\Wbackup

File: callrecfiles/20070504/2460220070503202840-223541-5012-S downloading.. (41/1996)
 Received Size : 146,140 / 146,140 Bytes
 Total Size : 6,599,380 / 321,517,396 Bytes Progress Time : 00:00:01

Delete files after download
 Error Log History

Buttons: Start, Cancel, Close



Thank you!

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