

AP-SIC200™ SD IP Camera

High-performance Network DVR Solution



Preliminary Product Overview

(Without notice, following described technical spec. can be changed)

AddPac

AddPac Technology

2011, Sales and Marketing

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- Product Overview
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- Hardware Specification
- Software Service
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- RTSP Message Flow Diagram
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Product Overview

AP-SIC200 SD IP Camera

- High-End Programmable DSP Hardware Architecture
- High-Performance SD IP Camera Features
- High Quality H.264 High Profile Video Encoder Support
- Speed PAN/TILT Camera Service Features
- Optical 27 x Zoom Camera
- Up to 720 x 480Resolution
- RTSP Streaming Service Protocol Support
- Powerful Management and User Friendly Features
- Fault Tolerant and Scalability Architecture
- Firmware Upgradeable Architecture
- Network Interface
 - One(1) 10/100M Fast Ethernet Interface
- MIC In Interface for Audio Recording
- Audio Out Interface for Broadcasting, Announcement
- CVBS Interface for External Video Monitoring
- SD Card Interface for Emergency Backup

Product Highlights

AP-SIC200 SD IP Camera



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Hardware Specification

AP-SIC200 SD IP Camera

High-End
RISC+
VP

- RISC + Video Processor Computing Power
- Main Chassis
 - Network Interface
 - One(1) 10/100/1000Mbps Gigabit Ethernet
 - One(1)-Port RS232C Port for CLI, Debug
 - Audio Interface
 - One(1) Audio 3.5mm Stereo Input Channel
 - Two(2) Audio RCA Output Channel (Left, Right)
 - Two-Way
 - CVBS Video Out Interface
 - Camera Features
 - NTSC : 768(H) x 494(V), PAL : 752(H) x 583 (V)
 - Auto Focus 27 x Optical Zoom
 - SD Card Slot for Emergency Backup
 - I/O Interface
 - 2 Alarm Input, 1 Relay
 - Speed PAN/TILT Features
 - PAN : 360 Degree Endless
 - TILT : 90+ Degree



Hardware Specification

AP-SIC200 SD IP Camera



Front Side

Hardware Specification

AP-SIC200 SD IP Camera

Back Side



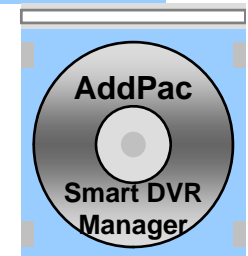
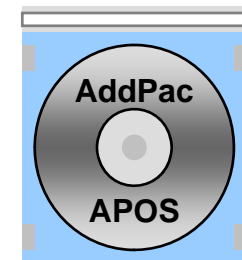
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RS232C Interface
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Software Service

AP-SIC200 SD IP Camera

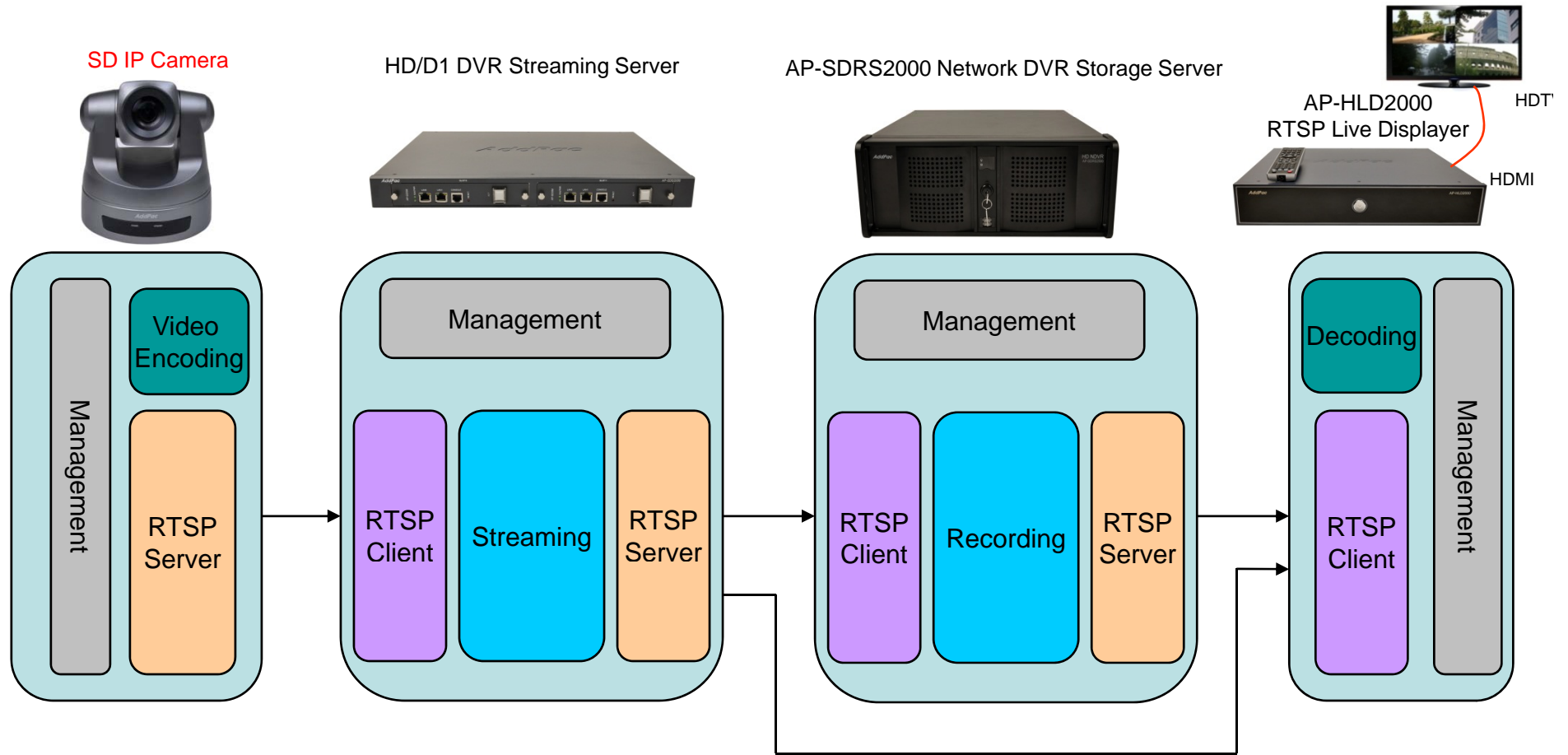
- Built-in AddPac APOS Internetworking Software
 - Scalability, Functionality, and Stability Features
 - Advanced Standalone DVR Recording & Streaming Features
 - QoS Control Features
- Firmware Upgradeable Architecture
- Industry Standard Network Protocol Features
- Highly User Friendly Management Features
 - Smart DVR Manager



NVR Storage Server Protocol Block Diagram

AP-SIC200 SD IP Camera

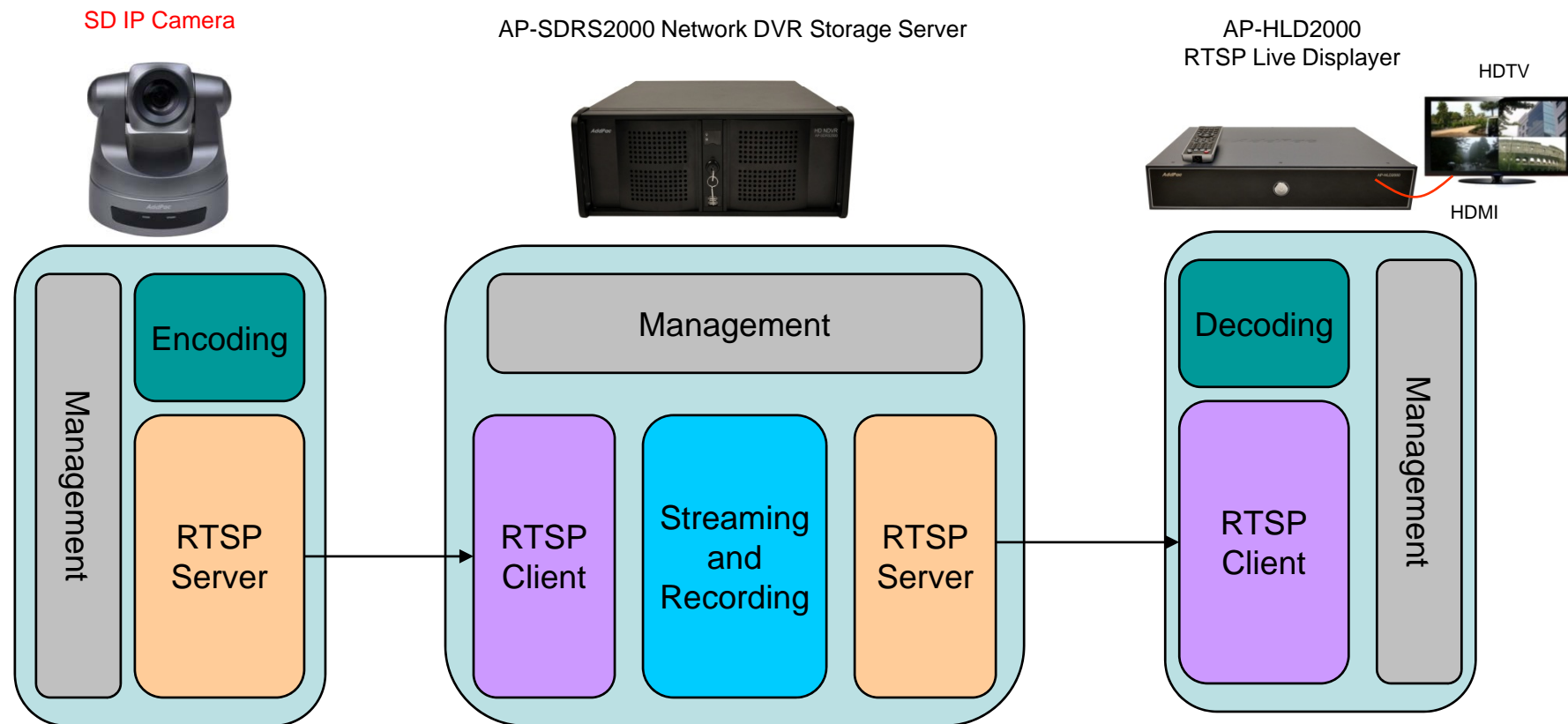
Medium & Large Scale Network DVR Solution



NVR Storage Server Protocol Block Diagram

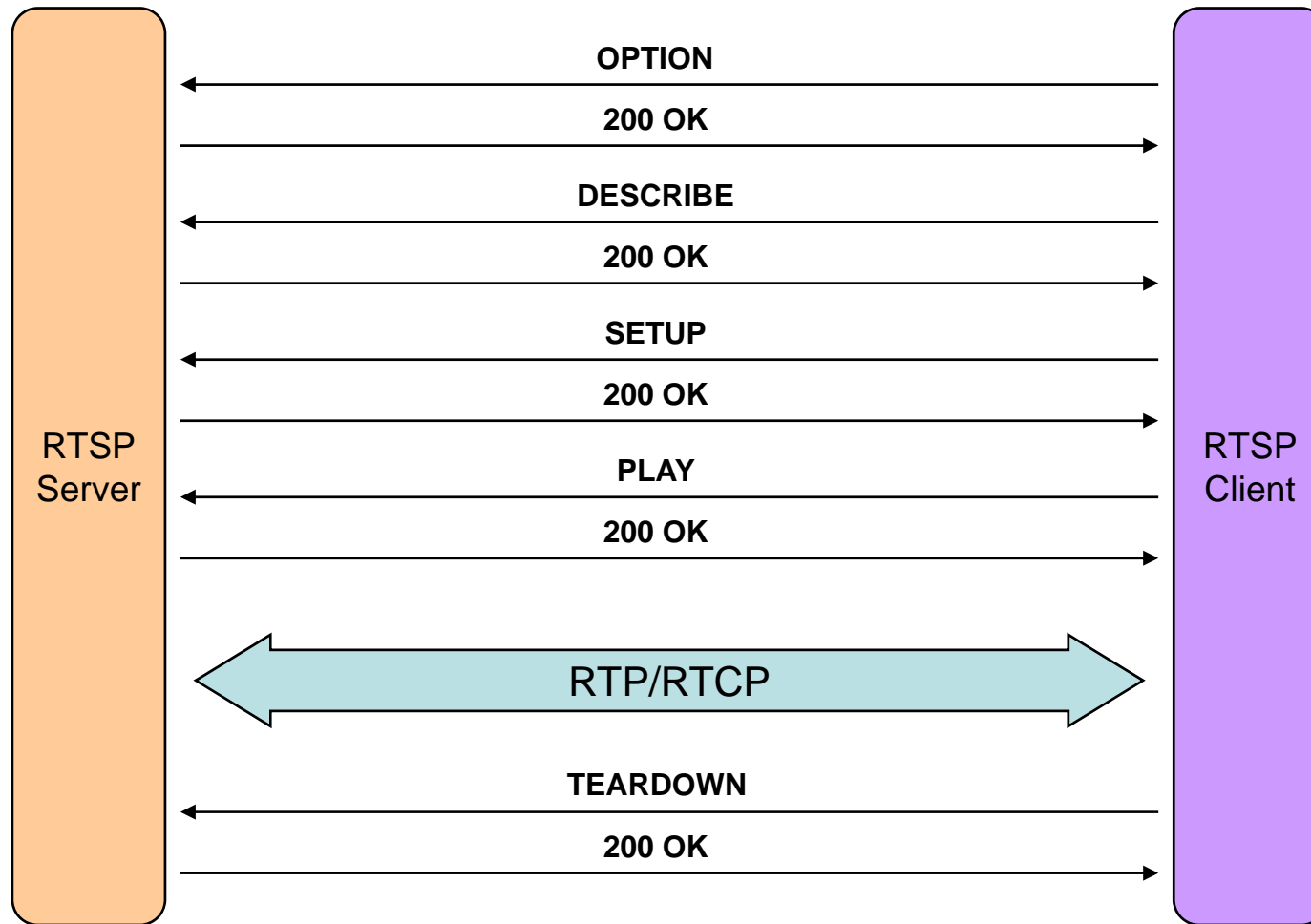
AP-SIC200 SD IP Camera

Small Scale Network DVR Solution (All in One)



Basic RTSP Message Flow

AP-SIC200 HD IP Camera

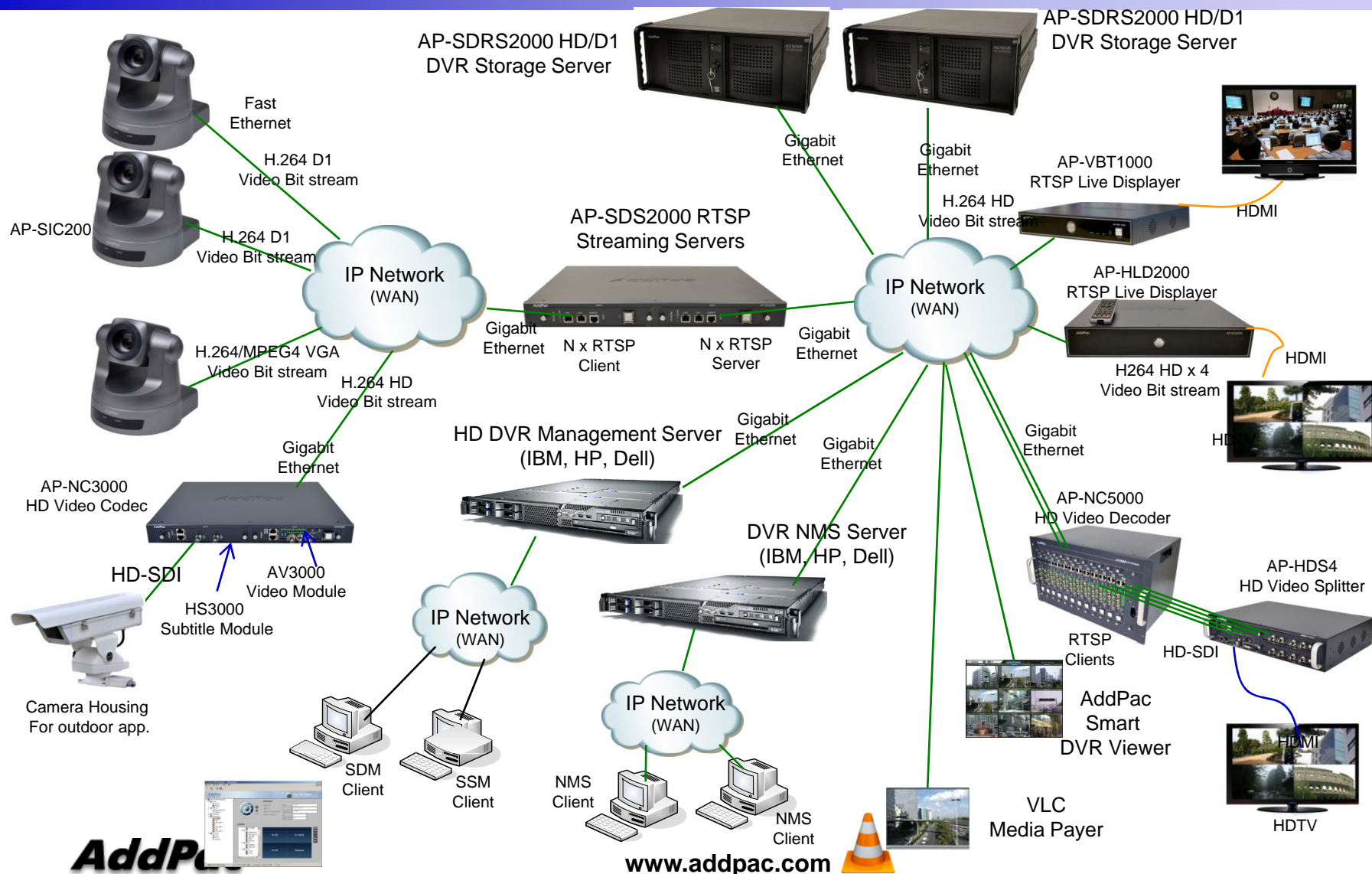




IP Camera Interworking

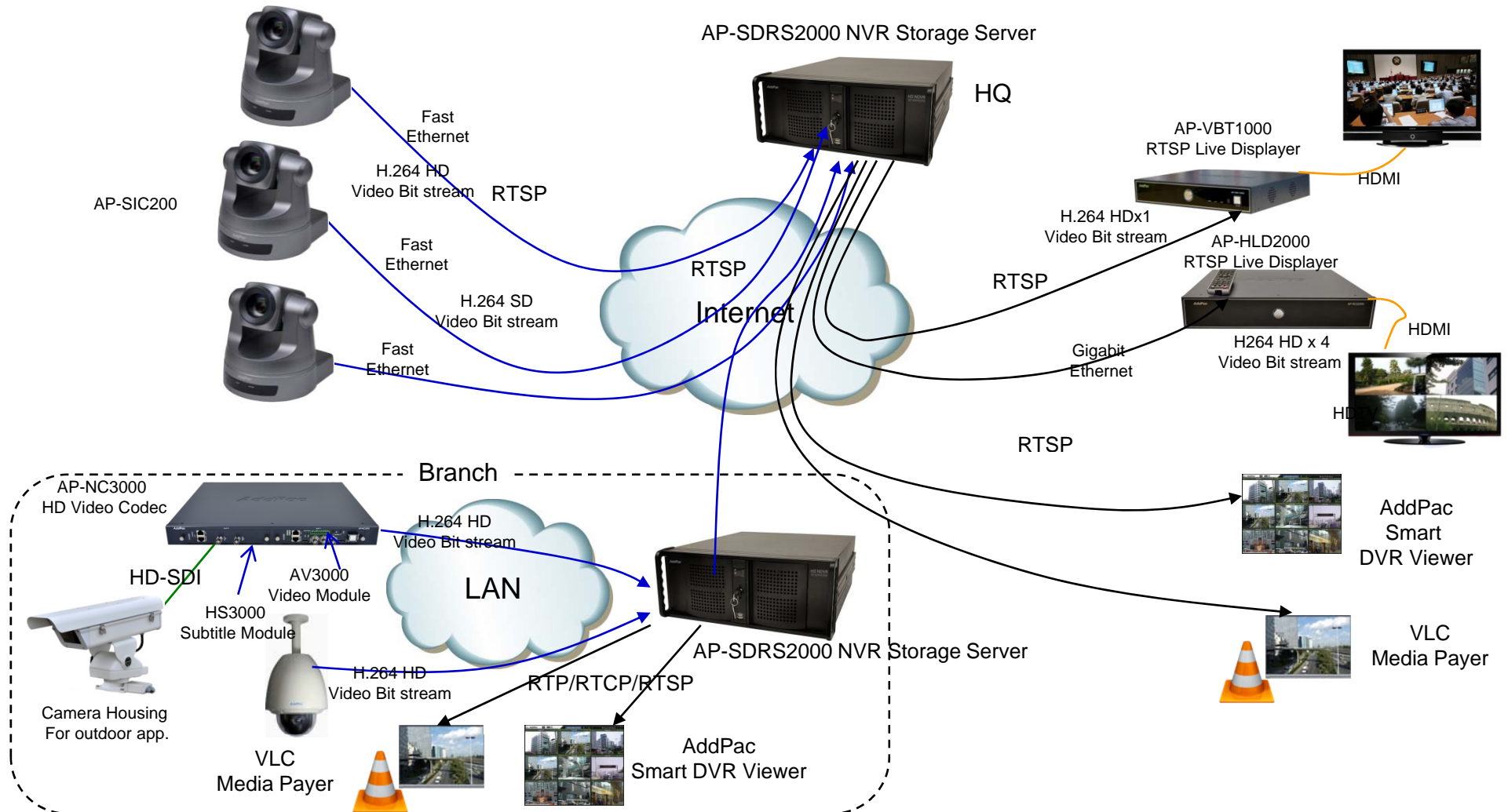
IP Camera Interworking Diagram (Large Scale)

AP-SIC200 SD IP Camera



IP Camera Interworking Diagram(Small Scale)

AP-SIC200 SD IP Camera



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HD/D1 NVR Storage Solution Component Features



AP-SDRS2000 HD/D1 NVR Storage Server

Product Overview

AP-SDRS2000 HD NVR Storage Server

- High-Performance HD/D1 Network DVR Features
- Linux Operating System (Option : Window Version)
- H.264 Video Codec BP/MP/HP
- Full HD, HD, D1 Video Resolution Support
- HD Video Recording and Streaming Service
- Smart DVR Viewer Support (MS-Window S/W)
- Smart DVR Manager Support (MS-Window S/W)
- File Back Manager Support (MS-Window S/W)
- Powerful Management and User Friendly Features
- High-performance Audio and Video Service
- Firmware Upgradeable Architecture
- Up to 4 x 3.5Inch Hard Disk (SATA Type, 2Tera Byte Support)
- One(1) DVD Writer for Video File Backup
- One(1) 10/100/1000Mbps Gigabit Ethernet Interface
- USB Interface Support (Front Side, Back Side)

Hardware Specification

AP-SDRS2000 HD NVR Storage Server

High End
Processor

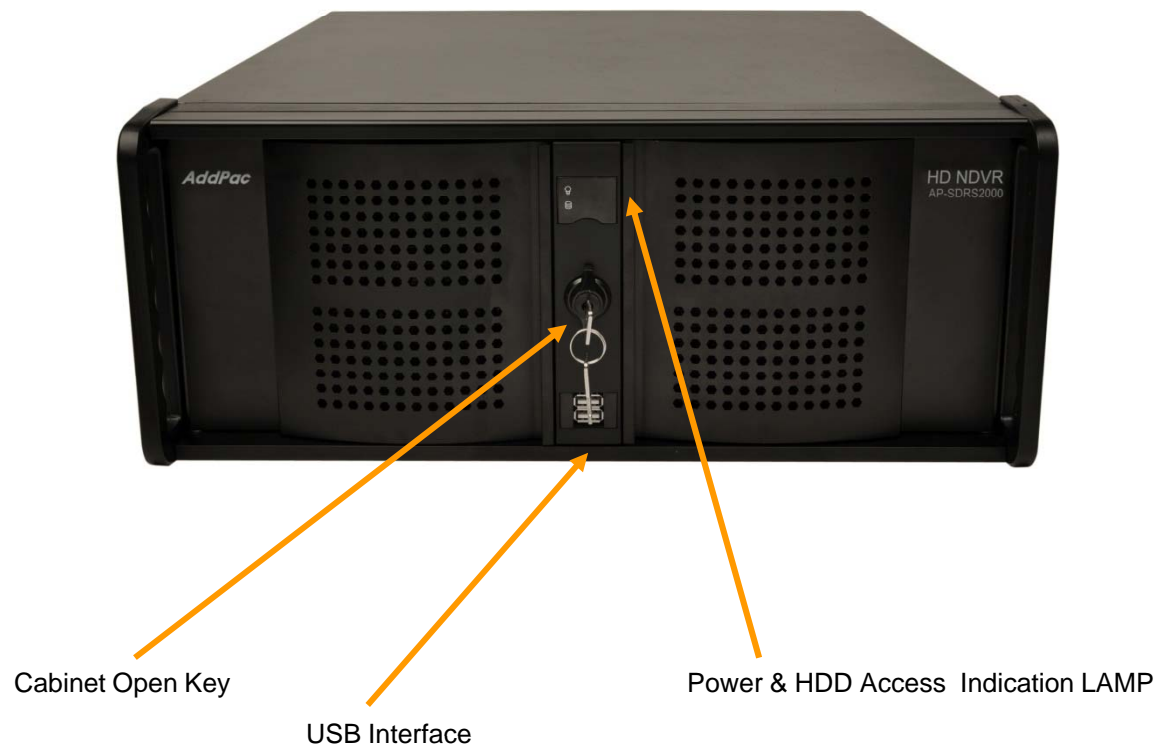
- High Performance Computing Power
- Main Chassis
 - Network Interface
 - One(1) 10/100/1000Mbps Fast Ethernet
 - Video Output Interface
 - HDMI, DVI, RGB Video Output
 - USB 2.0 Interfaces for Mouse, Keyboard, etc
 - One(1) DVD Writer for Video File Backup
 - Up to Four(4) Hard Disk

Hardware Specification

AP-SDRS2000 HD NVR Storage Server

High End
Processor

AP-SDRS2000 Front Side

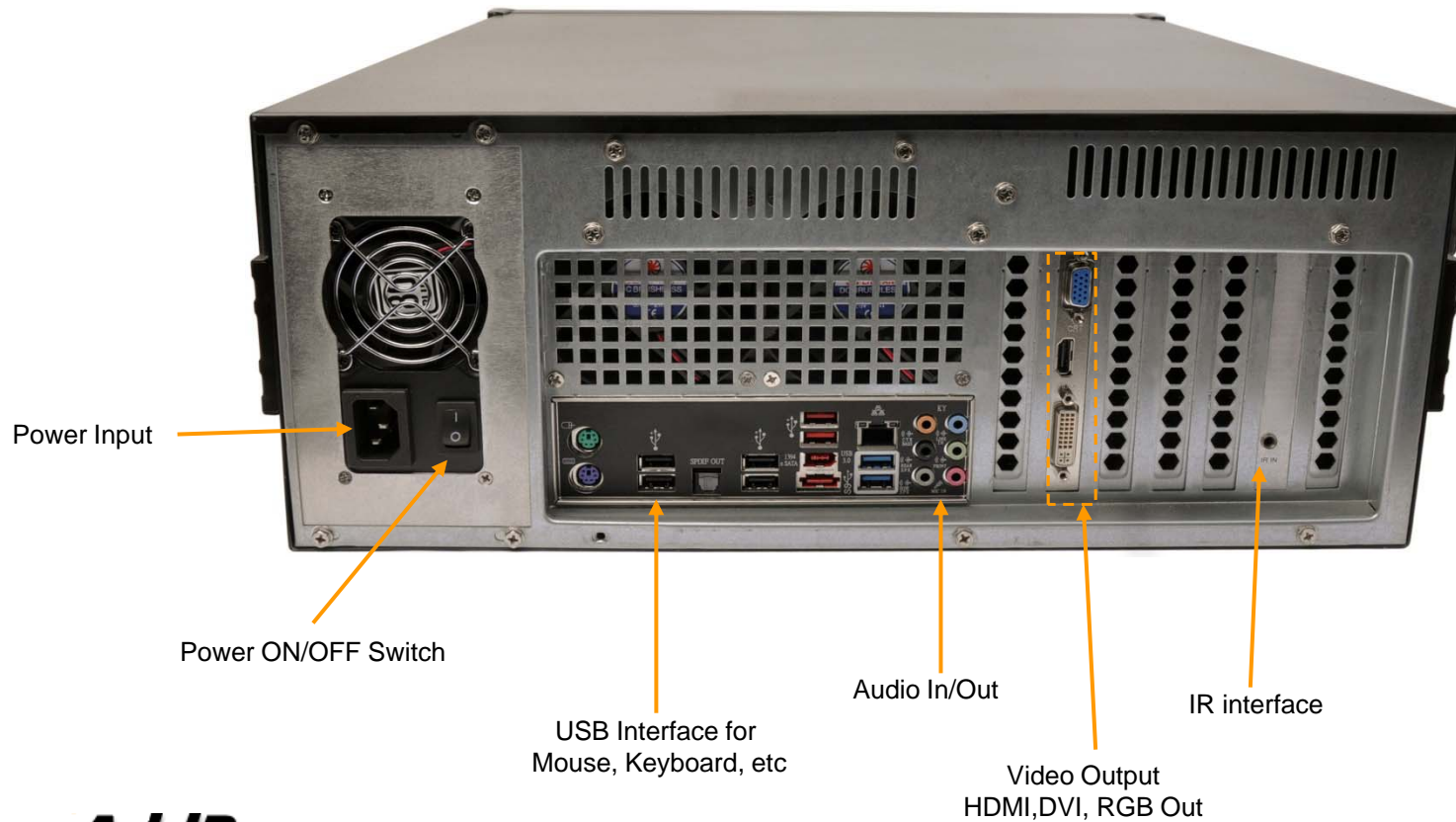


Hardware Specification

AP-SDRS2000 HD NVR Storage Server

High End
Processor

AP-SDRS2000 Back Side



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HD NVR Storage Server Features

- Encoder / Decoder Interface
 - UDP/RTP
 - RTSP (Real Time Streaming Protocol)
- Recording
 - Manual Recording
 - Schedule Based Recording
 - Recording Monitoring
 - Recording Media File Maintenance
- Management
 - Web Based Management
 - Smart DVR Manager (SDM)
 - SNMP (Simple Network Management Protocol)



Smart DVR Manager

Smart DVR Manager Features

- System Management
 - User, Group Management
 - Camera Management
 - Schedule Management
- Recording
 - Recording Start/Stop
 - Recording Media File Searching and Maintenance
 - File Download and Excel Exporting
- Monitoring
 - System Resource Monitoring (CPU, Memory, HDD and etc)
 - Live Session Monitoring
 - Media File Play Session Monitoring

Smart DVR Manager : Main Layout

The screenshot displays the Smart DVR Manager application window. The interface includes a menu bar (File, Tool, Configuration, Help), a toolbar, and a main content area with tabs for General, Configuration, Schedule, and Holiday. A left sidebar shows a tree view of the system structure. Annotations with yellow boxes and dashed blue lines highlight specific features:

- Camera Searching**: Points to the search bar at the top of the sidebar.
- System User configuration**: Points to the 'User' folder in the sidebar tree.
- Camera List**: Points to the 'Camera' folder in the sidebar tree.
- Session Monitoring**: Points to the 'Session' folder in the sidebar tree.
- Login User Monitoring**: Points to the 'Manager List' table.

The 'Manager List' table contains the following data:

User	IP
root	172.16.1.14
root	172.16.1.14
root	172.16.34.2

The status bar at the bottom shows the date and time (2010-03-12 오후 3:42:59), the server address and port (172.16.14.113 : 8020), the version (Version 2.1.3723), the current user (root), and the number of viewers and managers (Viewer : 0 Manager : 3).

Smart DVR Manager : Recording File Searching

The screenshot displays the Smart DVR Manager web interface. On the left is a tree view for '172.16.14.113' with categories like User, Group, Server, Management, Diagnostic, Record, Stream, Camera, Relay, Session, Live, Play, Record, Sequence, and Map. The 'Record' category is selected. The main area shows a 'Record History' table with columns: CameraName, StartTime, EndTime, Duration, URL, Camera Gr..., User ID, Description, Video Size, and FPS. Three rows of data are visible, all for '옥상_HD' cameras. Above the table are buttons for 'Refresh', 'Advanced Search', and 'Excel Exporting'. A status bar at the bottom indicates 'Total 3 results found.' and shows system information like date, IP, version, and user.

Smart DVR Manager

File Tool Configuration Help

Smart DVR Recording Server

Smart DVR Manager
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Recording File Download

Excel Exporting

Record History

CameraName	StartTime	EndTime	Duration	URL	Camera Gr...	User ID	Description	Video Size	FPS
옥상_HD	2010-03-1...	2010-03-1...	00:00:00	file/1001v...	/	root	no contents	1280X720	30
옥상_HD	2010-03-1...	2010-03-1...	00:00:10	file/1001v...	/	root	no contents	1280X720	30
옥상_HD	2010-03-1...	2010-03-1...	00:00:39	file/1001v...	/	root	no contents	1280X720	30

Recording Media Searching Result

Recording Media Management

Total 3 results found.

2010-03-12 오후 3:44:48 172.16.14.113 : 8020 Version 2.1.3723 root Group : 0 Camera : 2 (Active : 2) Seq : 0

Smart DVR Manager : Advanced Recording Searching

Smart DVR Manager

File Tool Configuration Help

Smart DVR Recording Server

Advanced Searching

Record History

CameraNa...	StartTime	EndTime	Duration	URL
목상_HD	2010-03-1...	2010-03-1...	00:00:00	file/100
목상_HD	2010-03-1...	2010-03-1...	00:00:10	file/100
목상_HD	2010-03-1...	2010-03-1...	00:00:39	file/100

Total 3 results found.

Advanced Search

Record Time FROM 2010-03-12 오전 12:00:00 TO 2010-03-12 오후 11:59:59

Content Relation

Camera Name like 3	AND
Time 2010-03-12 오전 12:00:00 ~ 2010-03-12 오후 11:59:59	NONE

Advanced Searching Rules

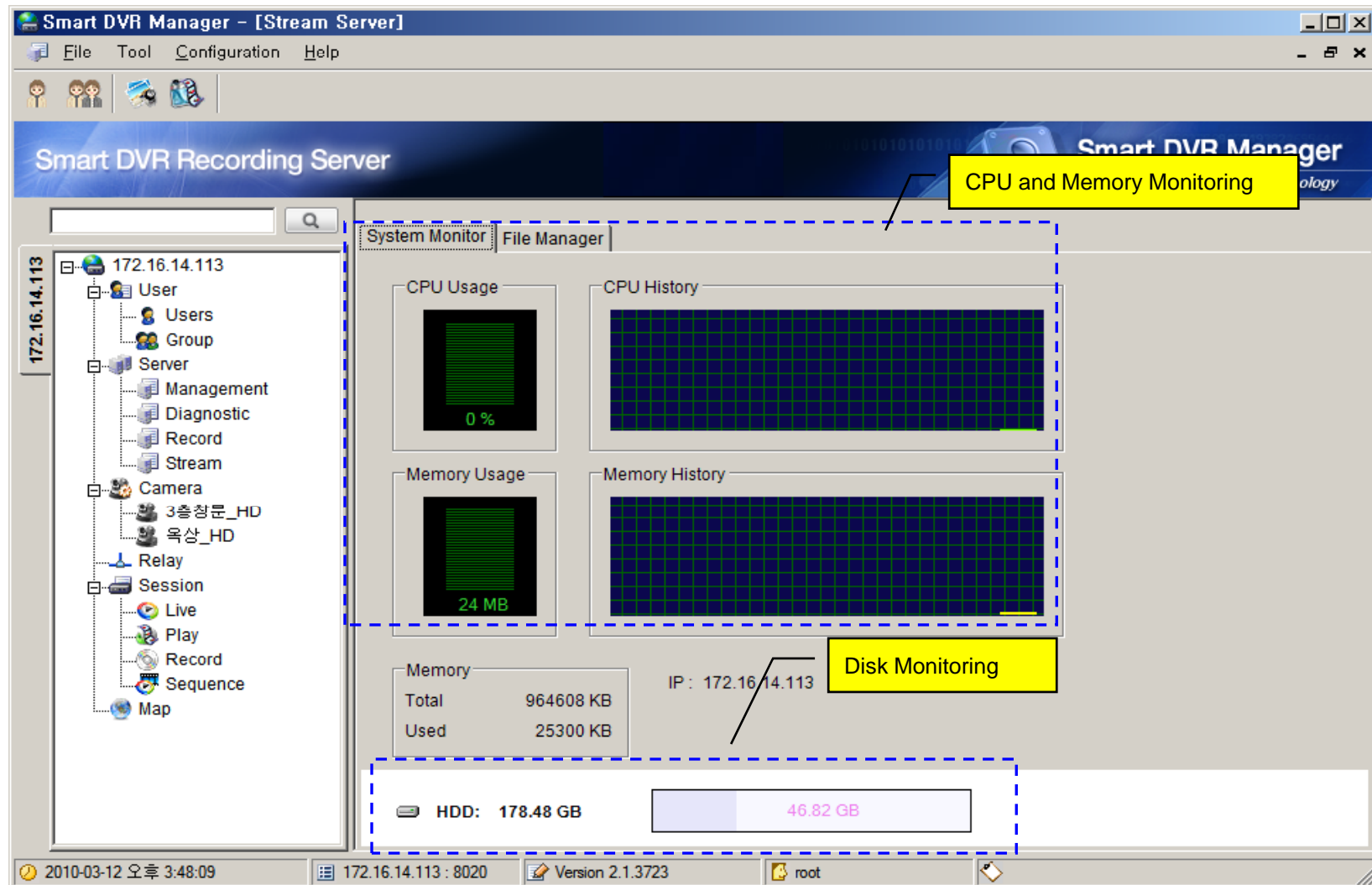
Selected Searching Rule Clear

Searching Rule All Clear

Search Cancel

2010-03-12 오후 3:44:48 172.16.14.113 : 8020 Version 2.1.3723 root Group : 0 Camera : 2 (Active : 2) Seq : 0

Smart DVR Manager : System Monitoring



Smart DVR Manager : Schedule

Smart DVR Manager

File Tool Configuration Help

Smart DVR Recording Server

Smart DVR Manager
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Configuration Schedule Holiday

User Defined Schedule Lists

Record Schedule

Schedule List

Name
Camera1 Schedule

Add Schedule

Delete Schedule

Weekly and Daily Time Schedule

General Schedule

Week	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon																								
Tue																								
Wed																								
Thu																								
Fri																								
Sat																								
Sun																								
Holiday																								

Special Day

Day

2010-03-28

2010년 3월

Special Day	Duration
2010-03-19	00:00~00:00
2010-03-28	00:00~00:00

User define Special Day

Set Special Day using calendar

Apply

2010-03-12 오후 3:54:03 172.16.14.113 : 8020 Version 2.1.3723 root Viewer : 0 Manager : 3



Smart DVR Media Manager

Smart DVR Media Manager Features

- Recording History Searching
- Recording History Management
- Recording File Upload / Download
- Play Recording Media File
- Schedule Backup
- Event History

Smart DVR Media Manager : Main Layout

*Searching and Download/Upload Function about selected Window : Camera Search, Update, File Searching, Download/Upload, Delete, Replay, etc

Recorded File Searching at Server using Group and Camera Tree

Recorded File Display at Server

Recorded File Searching at Local PC using Group and Camera Tree

Recorded File Display at Local PC

카메라 이름	IP 주소	그룹	설명	녹화시간	진행시간	파일 이름	파일 크기
3층청문_HD	172.16.23.97	/	(null)	2010-03-12 15:4...	00:00:09	2010031206474...	8,890 KB
3층청문_HD	172.16.23.97	/	(null)	2010-03-12 11:4...	00:00:00	2010031202450...	214,637 KB
3층청문_HD	172.16.23.97	/	(null)	2010-03-12 10:0...	00:24:17	2010031201065...	1,424,769 KB
3층청문_HD	172.16.23.97	/	(null)	2010-03-12 10:0...	00:00:00	2010031201025...	90,190 KB
3층청문_HD	172.16.23.97	/	(null)	2010-03-11 17:3...	00:00:00	2010031108373...	286,144 KB

카메라 이름	IP 주소	그룹	설명	녹화 시간	진행시간	파일 이름	파일 크기
--------	-------	----	----	-------	------	-------	-------

Records: 5 Search Constraints: guid=980095015124

Records: 0 Search Constraints :

2010-03-12 오후 5:21:49 version 1.0.3723 172.16.14.113 : 8020 root Scheduler waiting

Smart DVR Media Manager : Recorded File Upload / Download

The screenshot displays the 'Smart DVR Media Manager' application. A 'Download' dialog box is open, showing a list of files to be downloaded from a remote database. The dialog includes a table with columns for file name, total time, file size, recording time, and status. Below the table, there are progress bars for the download and conversion processes, along with checkboxes for file conversion and deletion after download.

Download Dialog Box Details:

- Total:** 2
- Progress Time:** 00:00:03
- Table:**

파일 이름	총 시간	파일 크기	녹화시간	상태
20100312064746.pma	00:00:09	8,890 KB	2010-03-12 15:4...	Done
20100312024507.pma	00:00:00	214,637 KB	2010-03-12 11:4...	Downlo...
- Download Progress:** 17% (980095015124/2010/03/12/20100312024507.pma downloading.. (2/2))
- Transfer Info:** 받은 크기: 38,438,428 / 219,787,909 Bytes; 전체 크기: 47,541,688 / 228,891,169 Bytes; Transfer Time: 00:00:03
- File Conversion:** ☒ 파일 변환 (*.PMA to *.AVI). Converting.. D:\work\sdv\sdrm\sdmm\bin\Debug\record\980095015124\2010\03\12\20100312064746.p. Converting Time: 00:00:03.
- Options:** ☐ 다운로드 후 파일 삭제

Background Interface:

- Left Panel:** Shows 'Remote Database (172.16.14.113)' with '3총창문_HD (5)' and '옥상_HD (3)'. Below it is 'Local Database' with '옥상_HD (3)'.
- Right Panel:** Shows a list of files with columns '파일 이름' and '파일 크기'.

파일 이름	파일 크기
010031206474...	8,890 KB
010031202450...	214,637 KB
010031201065...	1,424,769 KB
010031201025...	90,190 KB
010031108373...	286,144 KB

Yellow Callout Boxes:

- Recorded File List for File Backup:** : File Name, Recording Duration Time, File Size, File Backup Status
- Display the File Transfer Progress Status for Backup (Server to Local PC)**
- Display File Conversion Progress Status:** : PMA to AVI format (Option), etc

Status Bar: 2010-03-12 오후 5:22:47 version 1.0.3723 172.16.14.113 : 8020 root Scheduler waiting

Smart DVR Media Manager : Media Replay

The screenshot displays the AddPac Smart DVR Media Manager software interface. A yellow callout box points to the VLC media player window, which is playing a recorded file. The VLC window title is "rtsp://172.16.14.113:554/file/1001/video1/20100311054337.pma - VLC 미디어 플레이어". The video shows a street scene with cars and buildings, with the text "경인선 도화-3 (전환중)" overlaid. The VLC interface includes standard playback controls and a progress bar.

Recorded File Replay
- Recorded File Replay at Server or Local PC using media Player

스마트 DVR 미디어 관리 프로그램

파일 관리 도움말

AddPac
Smart DVR Series

서버 (Total: 3) (Page 1/1)

Remote Database (172.16.14.113:65535)

- 3층창문_HD (5)
- 옥상_HD (3)

Local Database

- 3층창문_HD (2)
- 옥상_HD (3)

카메라 이름	IP 주소	그룹	설명	녹화시간	진행시간	파일 이름	파일 크기
옥상_HD	172.17.120.99	/	(null)	2010-03-11 14:4...	00:00:39	2010031105433...	39,052 KB
옥상_HD	172.17.120.99	/	(null)	2010-03-11 14:2...	00:00:10	2010031105252...	10,298 KB
옥상_HD	172.17.120.99	/	(null)	2010-03-11 14:0...	00:00:00	2010031105015...	436 Byte

Records: 3

카메라 이름

Records: 0

2010-03-12 오후 5:25:01 version 1.0.3723 172.16.14.113

Smart DVR Media Manager : Media File Attribute

스마트 DVR 미디어 관리 프로그램

파일 관리 도움말

AddPac Smart DVR Series

서버 3총창문_HD (5) 옥상_HD (3)

카메라 이름 옥상_HD 옥상_HD 옥상_HD

Records: 3

Local Database 3총창문_HD (2) 옥상_HD (3)

카메라 이름

Records: 0 Search Constraints :

2010-03-12 오후 5:26:28 version 1.0.3723 172.16.14.113 : 8020 root Scheduler waiting

Smart DVR Manager AddPac Technology

녹화파일 속성

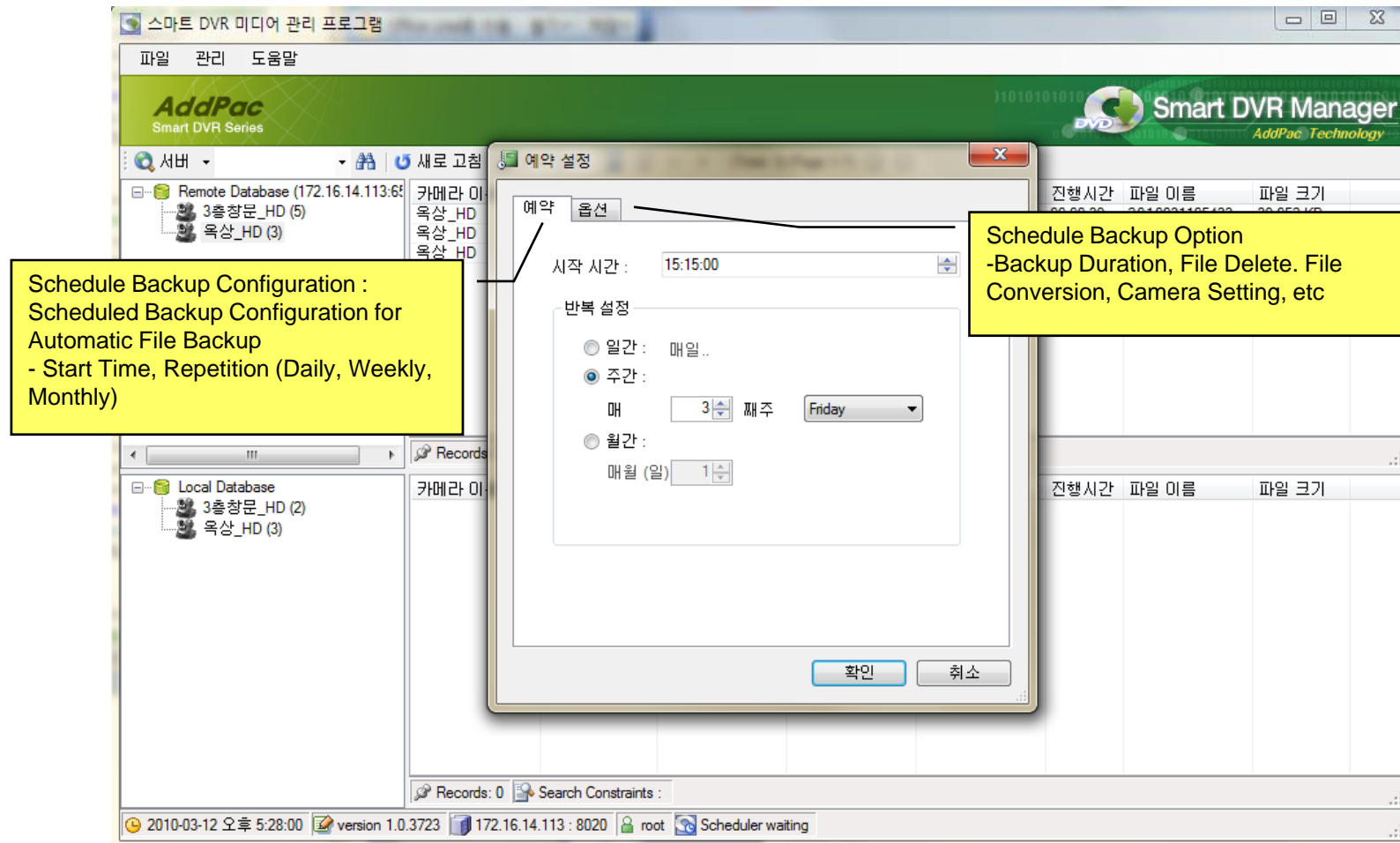
속성 이름	값
Record ID	3
Comment	No Comment
Camera GUID	745430054867
Camera Name	옥상_HD
Camera Group	/
Camera URL	rtsp://172.16.14.113/1001/video1
Camera IP Address	172.17.120.99
Description	(null)
Video Codec	H264
Video Bandwidth	8192
Resolution	1280*720
FPS	30
Audio Codec	G711A
Audio Bandwidth	8192
SDP	
Start Time	2010-03-11 14:43:37
End Time	2010-03-11 14:44:16
Duration	00:00:39
File Directory	745430054867/2010/03/11/
File Name	20100311054337.pma
File Size	39,052 KB
File URL	file://1001/video1/20100311054337.p...
User	AddPac (root)

Recorded File Attribute Display

진행시간	파일 이름	파일 크기	
14:4...	00:00:39	2010031105433...	39,052 KB
14:2...	00:00:10	2010031105252...	10,298 KB
14:0...	00:00:00	2010031105015...	436 Byte

진행시간	파일 이름	파일 크기
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Smart DVR Media Manager : Schedule



Ordering Information

- AP-SIC300 SD IP Camera Hardware
 - AP-SIC300 Main Body
 - Including Network Cable Set & Power Supply Cable, etc.
- Built-in APOS Internetworking Software for AP-SIC300
- Including 1 Year Hardware Warranty
- Product Documents
 - Install and Operation Guide (PDF)
- Pricing
 - AddPac Technology Regional Sales Manager
 - Authorized Sales and Marketing Representatives
 - Please Contact www.addpac.com



Thank you!

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Sales and Marketing

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