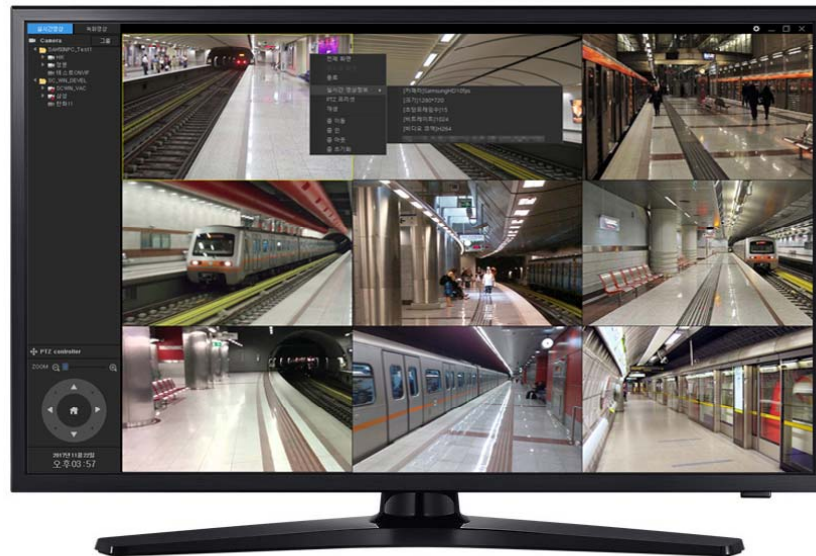


# AP-HNR2000

## Large Storage Onvif based HD NVR Solution



## Product Overview

**AddPac**

**AddPac Technology**

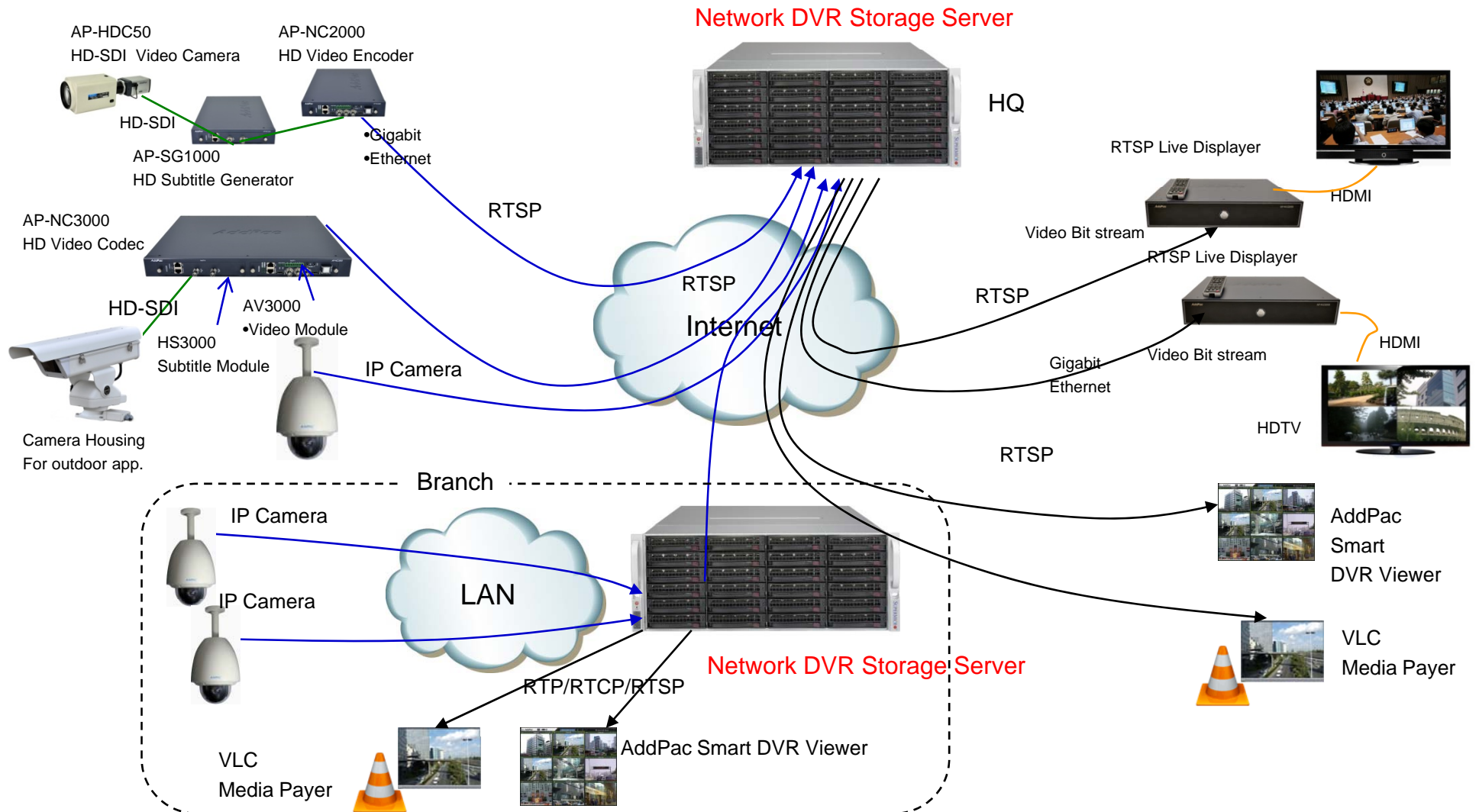
Sales and Marketing

# Contents

- Network Diagram
- Product Overview
- NVR Server S/W Block Diagram
- Hardware Specification
- Smart DVR Viewer



# NVR Storage Server Service Diagram



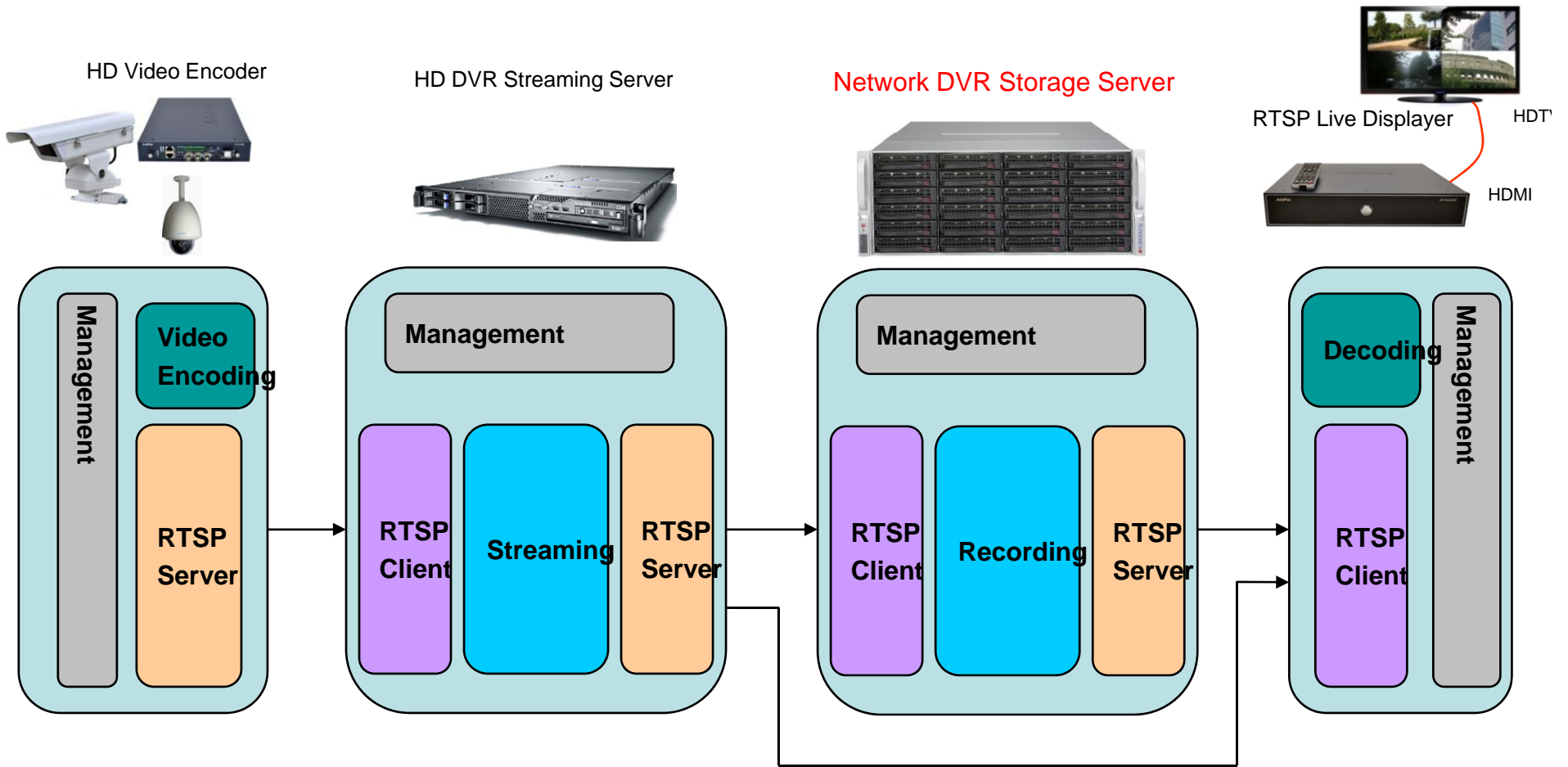
# Product Overview

## AP-HNR2000-R16 16Channel HD NVR

- CCTV NVR Service
- Window based Operating System
- High-Performance 16CH Full HD, HD, SD Network DVR
- H.264 Video Codec BP/MP/HP
- MJPEG Video Codec
- Onvif Standard based IP Camera, Video Codec Support
- RTSP Standard Video Streaming Protocol Support
- Full HD, HD, D1 Video Resolution Support
- Video Out : HDMI, DVI Interface
- HD Video Recording and Streaming Service
- Internal Streaming Server Software Package (Option)
- Internal MAP based CCTV Management Package (Option)
- Onvif based IP Voice Paging Software Package (Option)
- 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

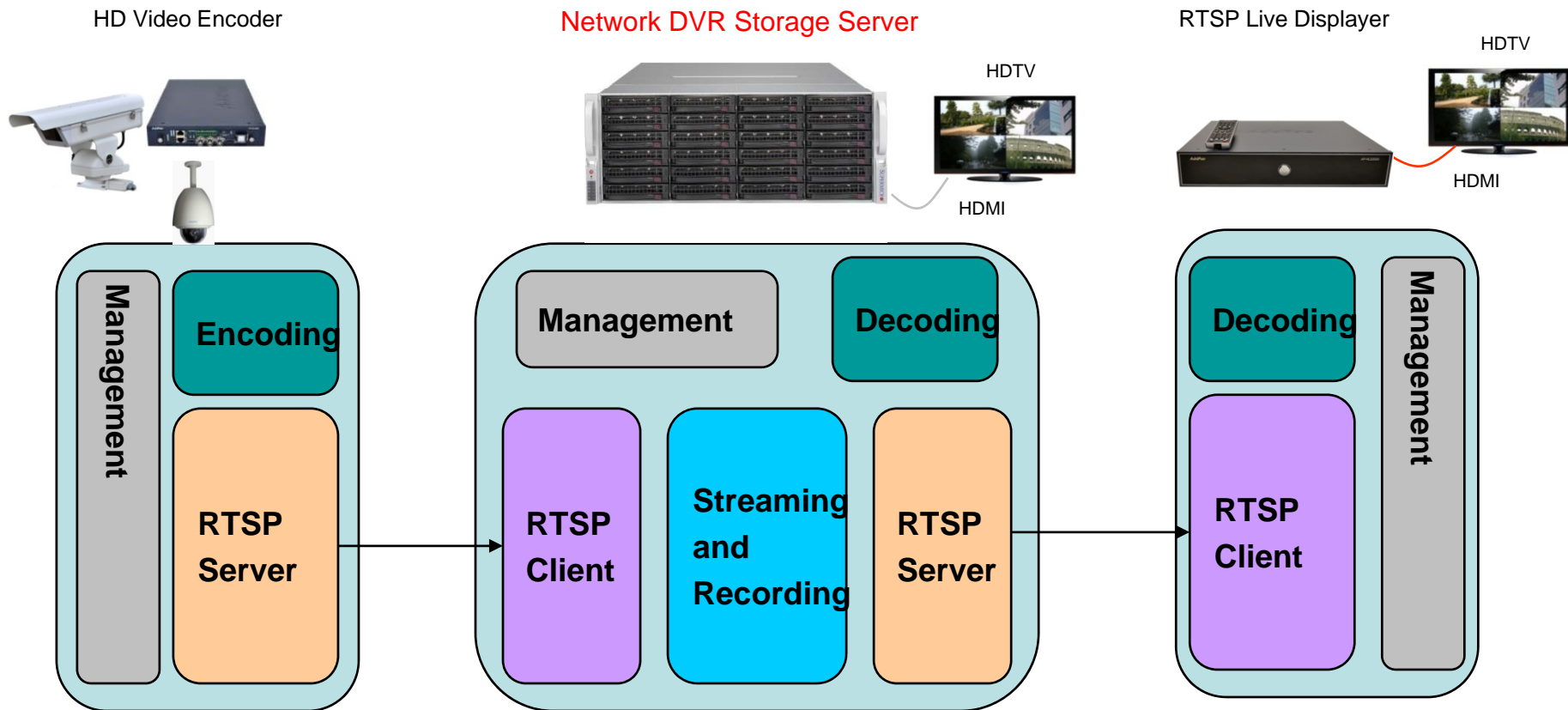
# NVR Storage Server Protocol Block Diagram

## Large Scale Network DVR Solution






# NVR Storage Server Protocol Block Diagram

## Small Scale Network DVR Solution (All in One)



# Hardware Specification (24,16,12bay System)

	24 Bay	16 Bay	12 Bay
			
System Hardware Specification	<ul style="list-style-type: none"> <li>- Up to 1TB ECC 3DS LRDIMM , up to DDR4- 2400MHz ; 8x DIMM slots</li> <li>- Intel® C612 Express PCH</li> <li>- 24-port 4U SAS2 6Gbps single-expander backplane, support up to 24x 3.5-inchSAS2/SATA3 HDD</li> <li>- 1U 920W Redundant Platinum Level Power Supply</li> <li>- 7 full-height &amp; full-length expansion slot(s)</li> <li>- 3 x 8cm hot-swap redundant PWM cooling fan(s)</li> <li>- 4x USB 3.0 ports, 8x USB 2.0 ports</li> <li>- Intel® i210 Dual port GbE LAN</li> </ul>	<ul style="list-style-type: none"> <li>Up to 1TB ECC 3DS LRDIMM , up to DDR4- 2400MHz ; 8x DIMM slots</li> <li>- Intel® C612 Express PCH</li> <li>- 16-port 3U SAS2 6Gbps single-expander backplane, support up to 16x 3.5-inchSAS2/SATA3 HDD</li> <li>- 1U 920W Redundant Platinum Level Power Supply</li> <li>- 7 full-height &amp; full-length expansion slot(s)</li> <li>- 3 x 8cm hot-swap redundant PWM cooling fan(s)</li> <li>- 4x USB 3.0 ports, 8x USB 2.0 ports</li> <li>- Intel® i210 Dual port GbE LAN</li> </ul>	<ul style="list-style-type: none"> <li>Up to 1TB ECC 3DS LRDIMM , up to DDR4- 2400MHz ; 8x DIMM slots</li> <li>- Intel® C612 Express PCH</li> <li>- 12-port 2U SAS2 6Gbps single-expander backplane, support up to 12x 3.5-inchSAS2/SATA3 HDD</li> <li>- 1U 920W Redundant Platinum Level Power Supply</li> <li>- 3 x 8cm hot-swap redundant PWM cooling fan(s)</li> <li>- 2x USB 3.0 ports, 2x USB 2.0 ports</li> <li>- Intel® i350-AM4 Quad port GbE LAN</li> </ul>
Processor	Intel® Xeon E5-2620 v4 (8 Core, 20M Cache, 2.1GHz)	Intel® Xeon E5-2620 v4 (8 Core, 20M Cache, 2.1GHz)	Intel® Xeon E5-2620 v4 (8 Core, 20M Cache, 2.1GHz)
Memory	16GB DDR4 ECC REG 2133MHz PC4-17000	16GB DDR4 ECC REG 2133MHz PC4-17000	16GB DDR4 ECC REG 2133MHz PC4-17000
Raid	AOC-S3108L-H8iR (LSISAS RAID 0,1,5,6,10,50,60)	AOC-S3108L-H8iR (LSISAS RAID 0,1,5,6,10,50,60)	AOC-S3108L-H8iR (LSISAS RAID 0,1,5,6,10,50,60)



# Hardware Specification (24bay System)

- High Performance Computing Power
- System Hardware Specification
  - Single socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4/ v3 and E5-1600 v4/ v3 family
  - Up to 1TB† ECC 3DS LRDIMM , up to DDR4- 2400MHz ; 8x DIMM slots
  - Intel® C612 Express PCH
  - 24-port 4U SAS2 6Gbps single-expander backplane, support up to 24x 3.5-inch SAS2/SATA3 HDD
  - 1U 920W Redundant Platinum Level Power Supply
  - 7 full-height & full-length expansion slot(s)
  - 3 x 8cm hot-swap redundant PWM cooling fan(s)
  - 7x PCI-E slots total: 2 PCI-E 3.0 x8, 2 PCI-E 3.0 x8 (in x16), 2 PCI-E 3.0 x4 (in x8) or 1 x8 + 1 x0 (auto-switch), & 1 PCI-E 2.0 x4 (in x8)
  - 4x USB 3.0 ports, 8x USB 2.0 ports
  - Intel® i210 Dual port GbE LAN
- Processor : Intel® Xeon E5-2620 v4 (8 Core, 20M Cache, 2.1GHz)
- Memory : 16GB DDR4 ECC REG 2133MHz PC4-17000
- Raid : AOC-S3108L-H8iR (LSISAS RAID 0,1,5,6,10,50,60)



# Hardware Specification

Front Side

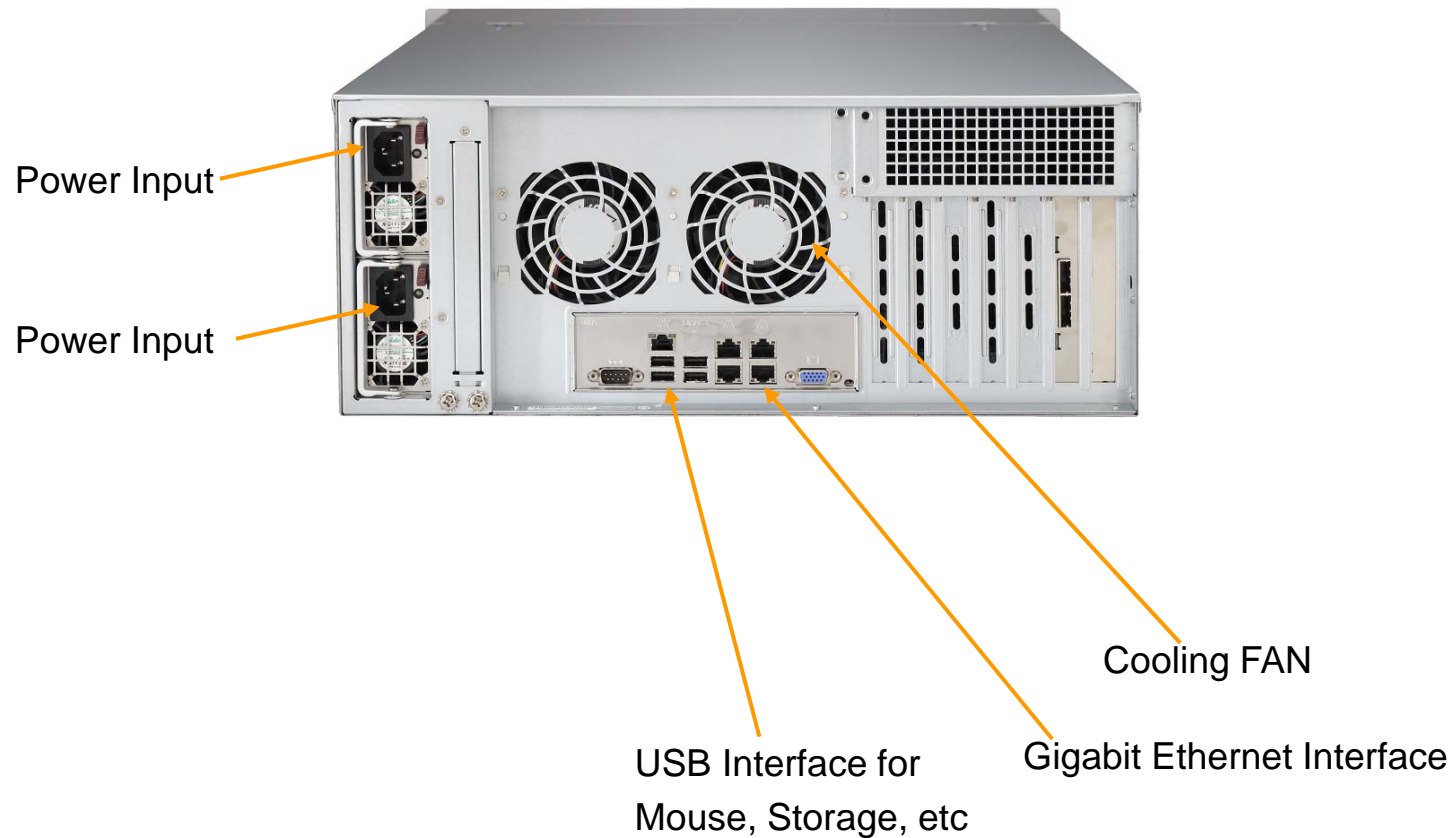


Power On/Off Switch

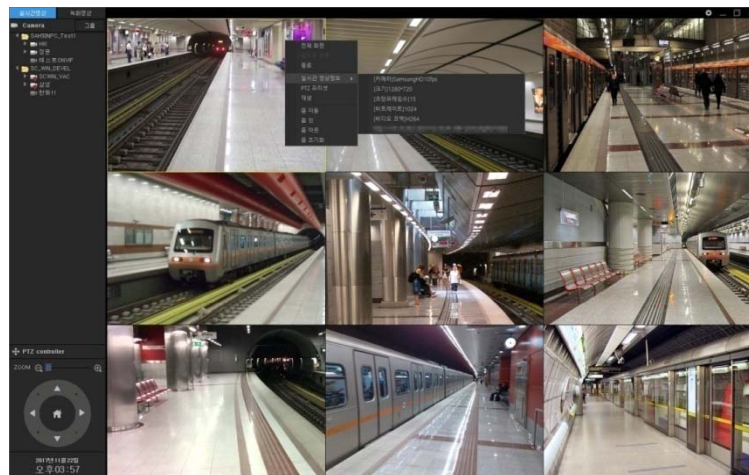
Harddisk bay

# Hardware Specification

## Back Side

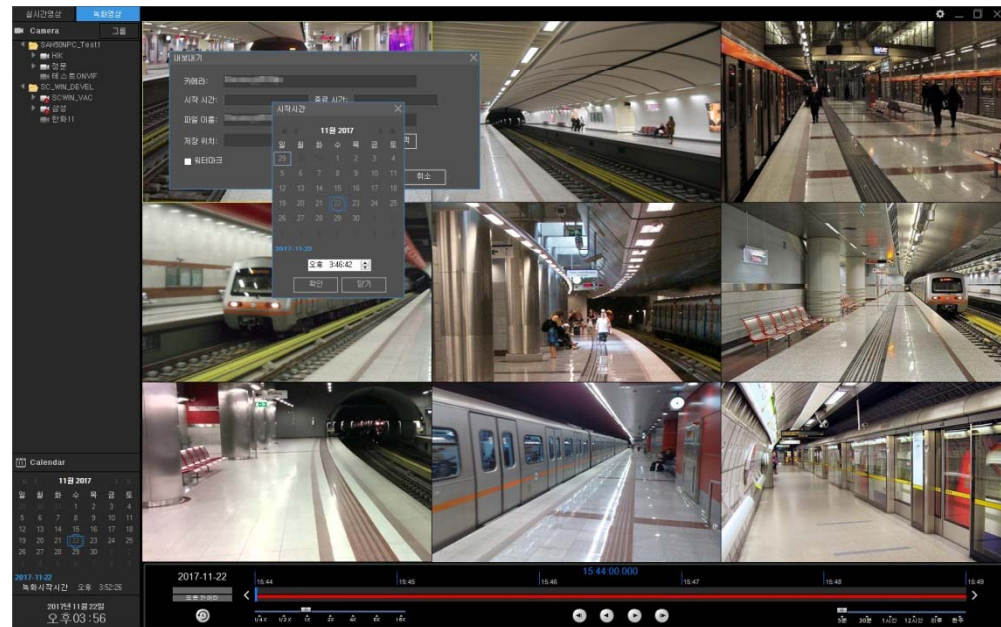


# Smart DVR Viewer



# Contents

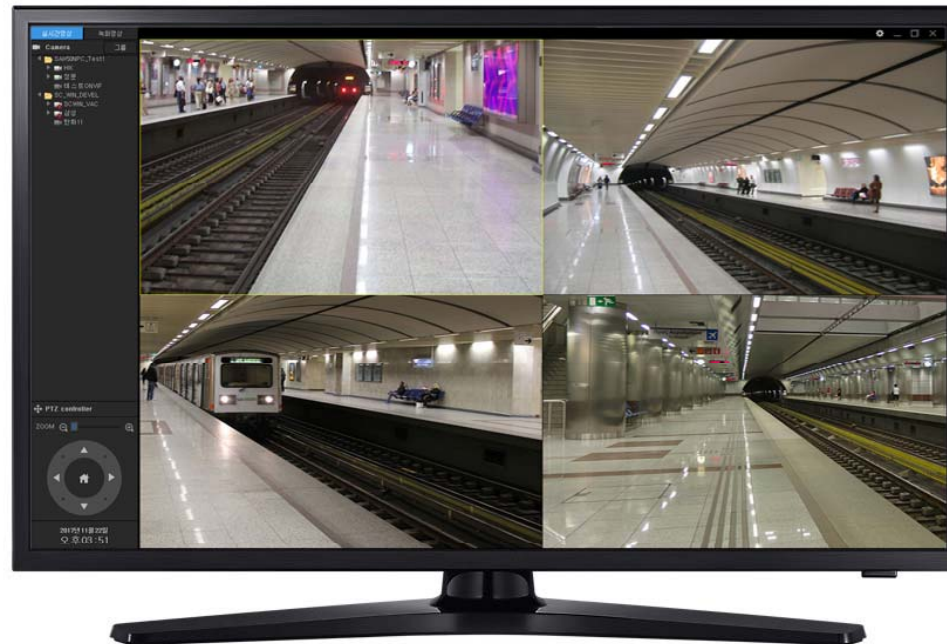
- New Smart DVR Viewer Overview
- UI Design (examples)



# New Smart DVR Viewer Overview

- IP based Multi-Channel Video Streaming Displayer (Live, Recording)
- **Onvif Protocol Support**
- RTSP/RTP Video Streaming Protocol Support
- H.264(1080P, 720P) HP/MP/BP Video Codec Support
- MPEG4, MJPEG Video Codec Support (Option)
- Full HD (1080P), HD(720P), D1 Video Resolution Support
- Four(4) or One(1) Channel Video Layout (Video Splitter)
- Option : Nine(9), Sixteen(16) Channel Video Layout (Video Splitter)
- 4ch Layout , 1ch Layout Display (Round Robin Display)
- Video Solution with Outstanding Network Service Capability
- MS-Window based Software Platform
- Dark and Black Design Concept

# UI Design & Examples

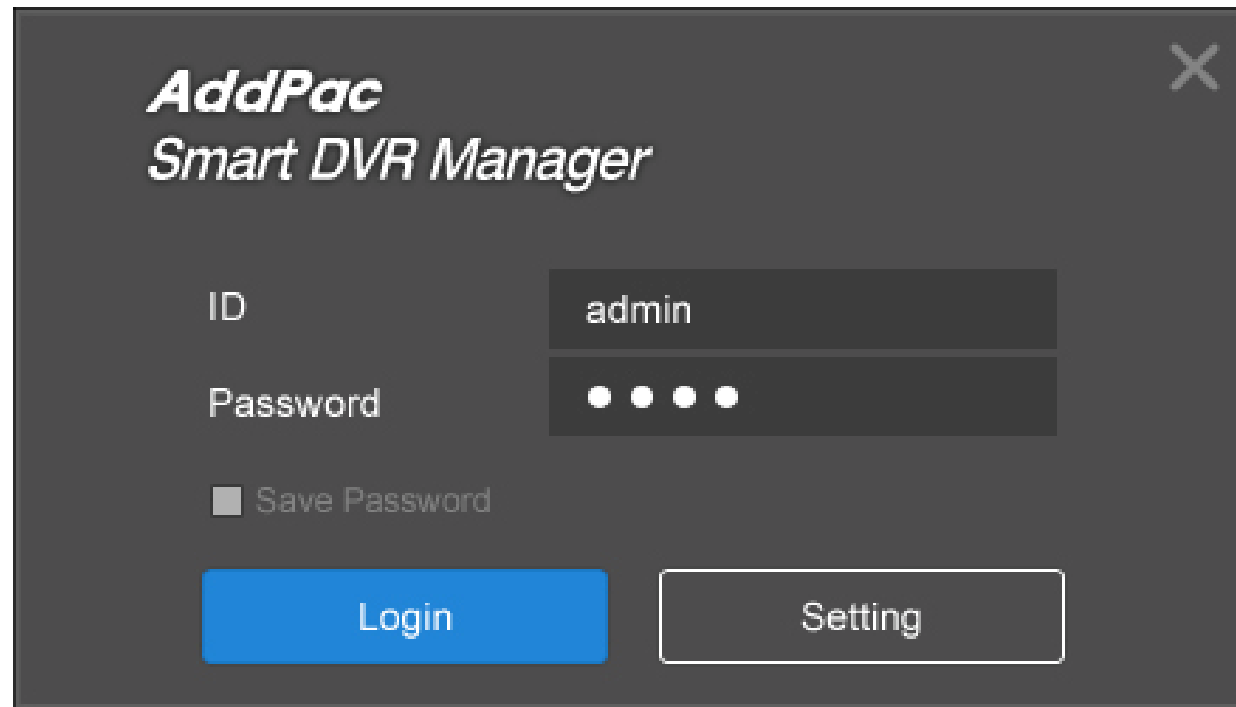


# Contents

- Login View, Main View
- Top Side Menu : Menu Bar Hidden
- Menu bar Hidden : 4channel Video Splitter (Example)
- Live View Display Channel Layout
- Display Aspect Ratio Config.
- Subtitle Display Position Config.
- Live View Camera Config.
- Live View Camera PTZ Preset, Preset Move
- Live View Camera Real-time Video Information Display
- Live View (1,4,9,16) Example
- Recording View PopMenu, Video Export Menu
- Recording View (1,4,9) Example

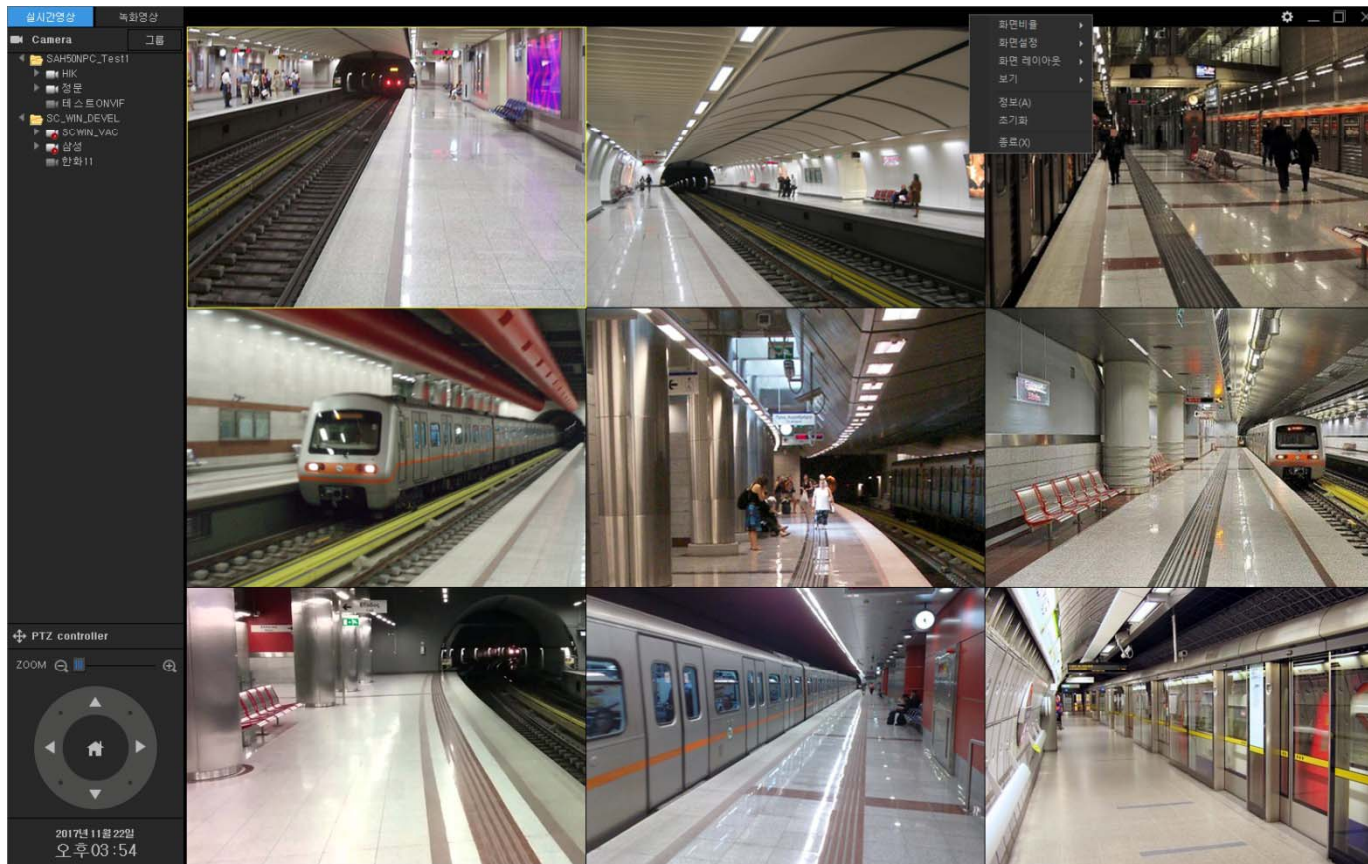


# UI examples : Login

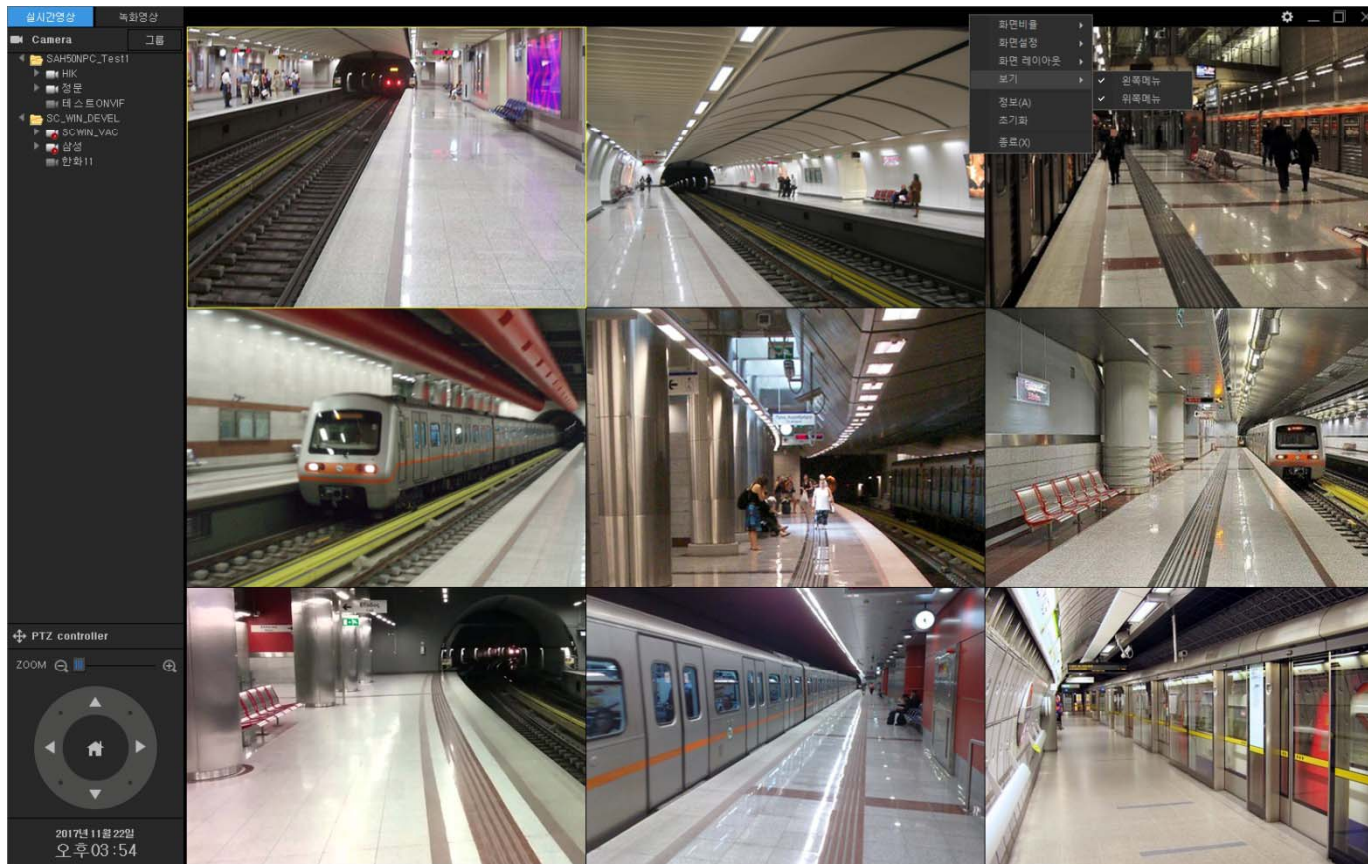


The image shows a dark-themed login window for 'AddPac Smart DVR Manager'. The window has a title bar with the text 'AddPac Smart DVR Manager' and a close button (X) in the top right corner. Below the title, there are two input fields: 'ID' with the text 'admin' and 'Password' with four dots representing a masked password. Below the password field is a checkbox labeled 'Save Password' which is currently unchecked. At the bottom of the window, there are two buttons: a solid blue 'Login' button and a white-outlined 'Setting' button.

# UI examples : Top Side Menu

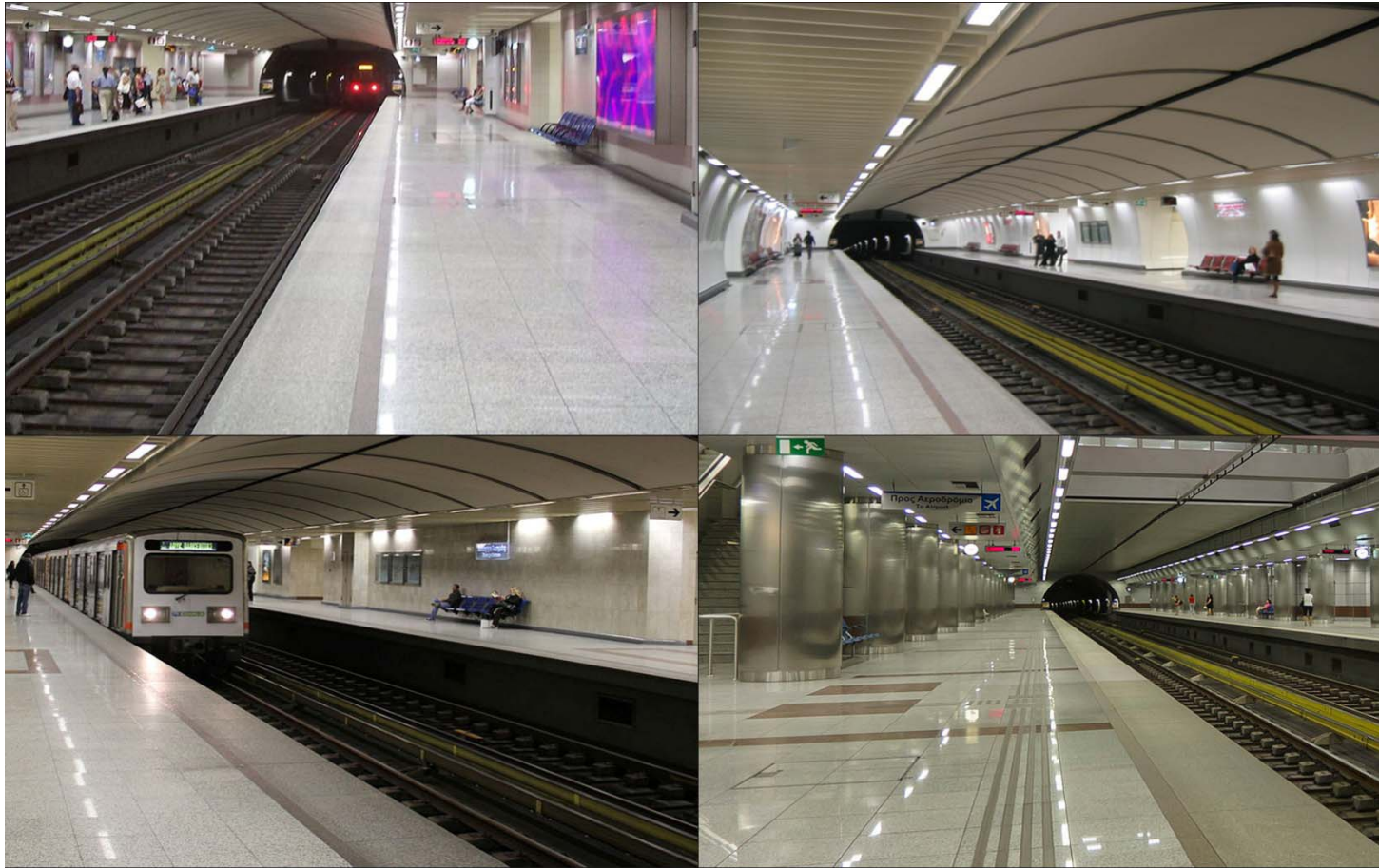


# UI examples : Top Side Menu (Hidden)

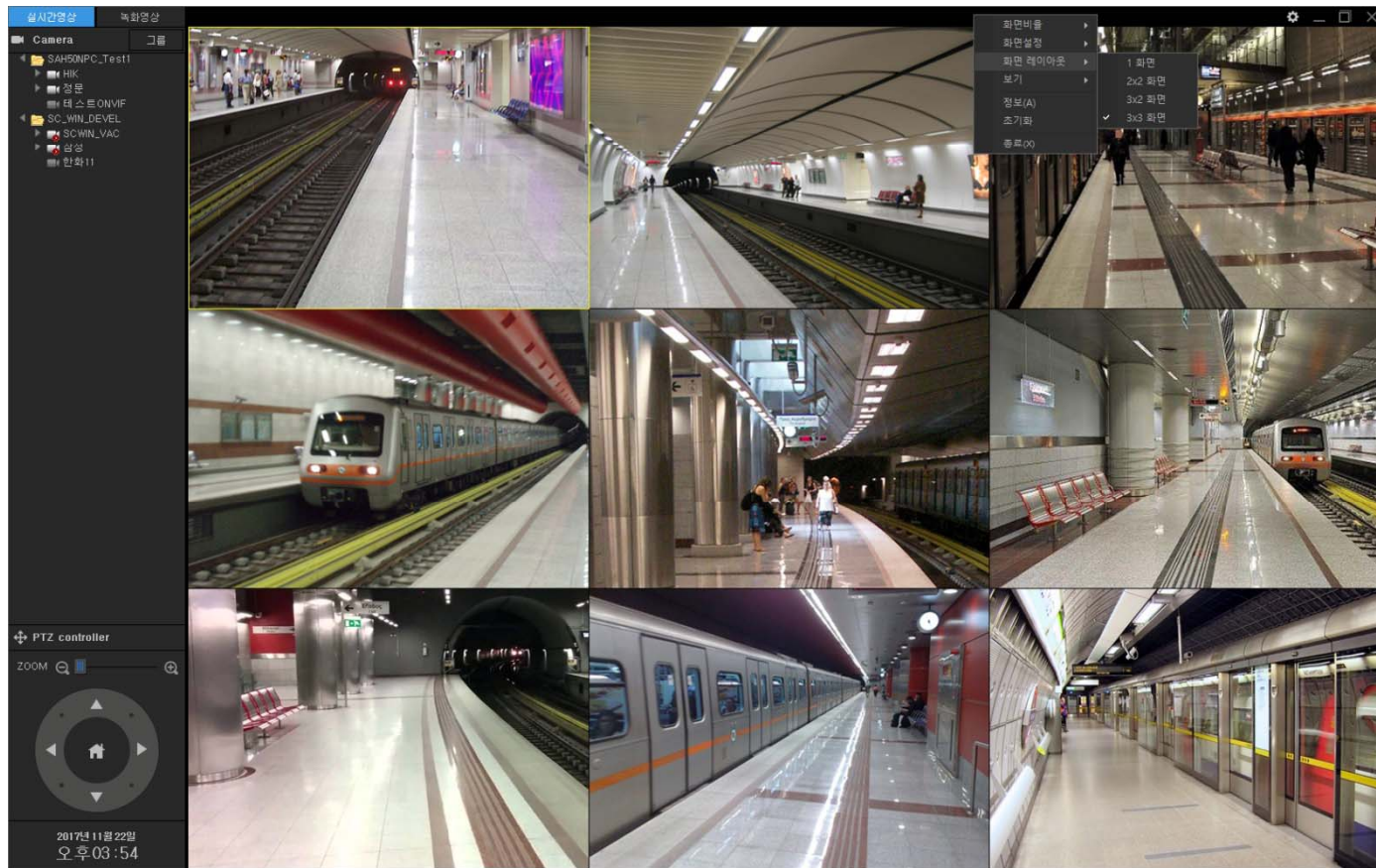




# UI examples : Top Side Menu (Hidden, 4Channel Video Splitter)

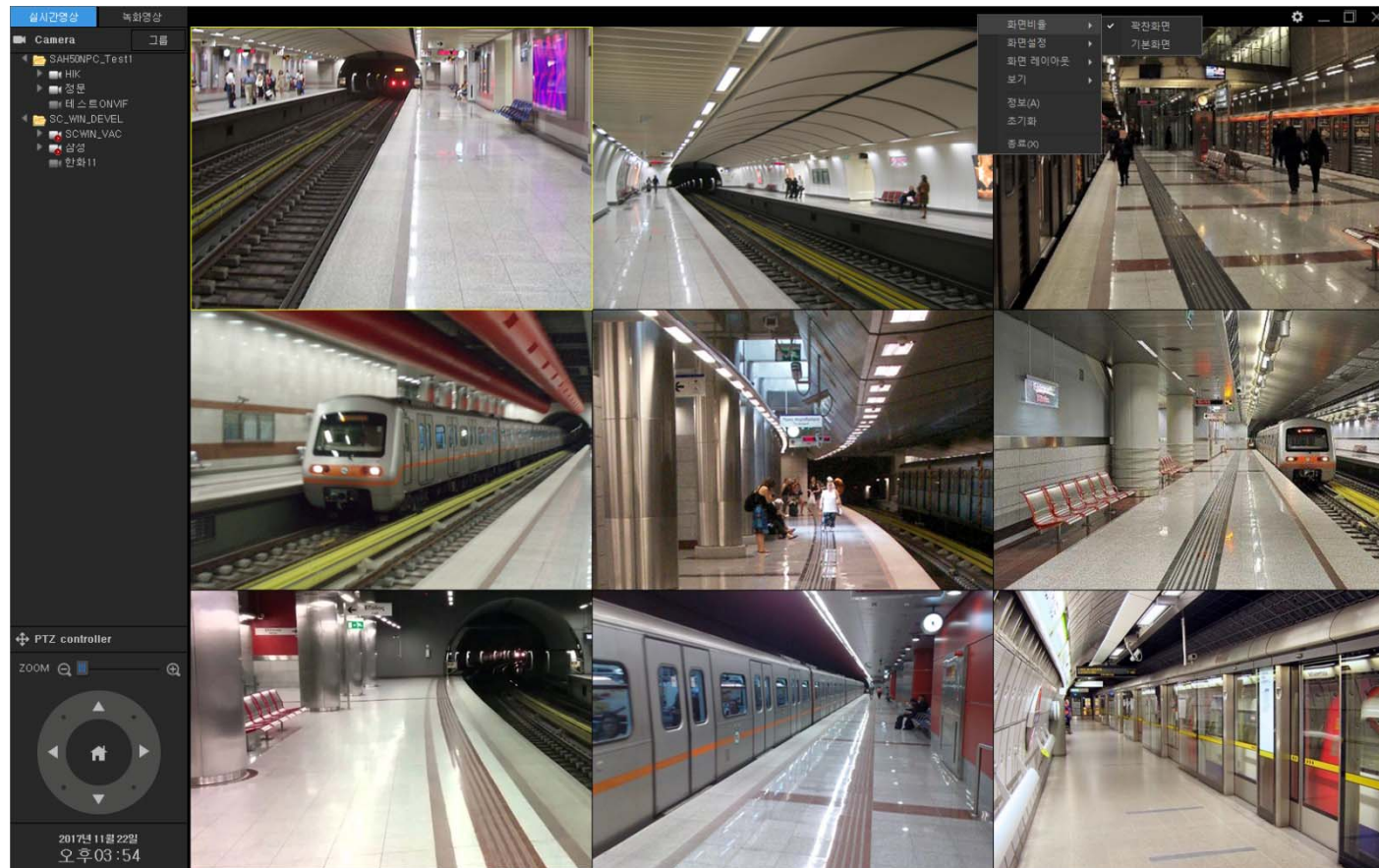


# UI examples : Top Side Menu (Layout)

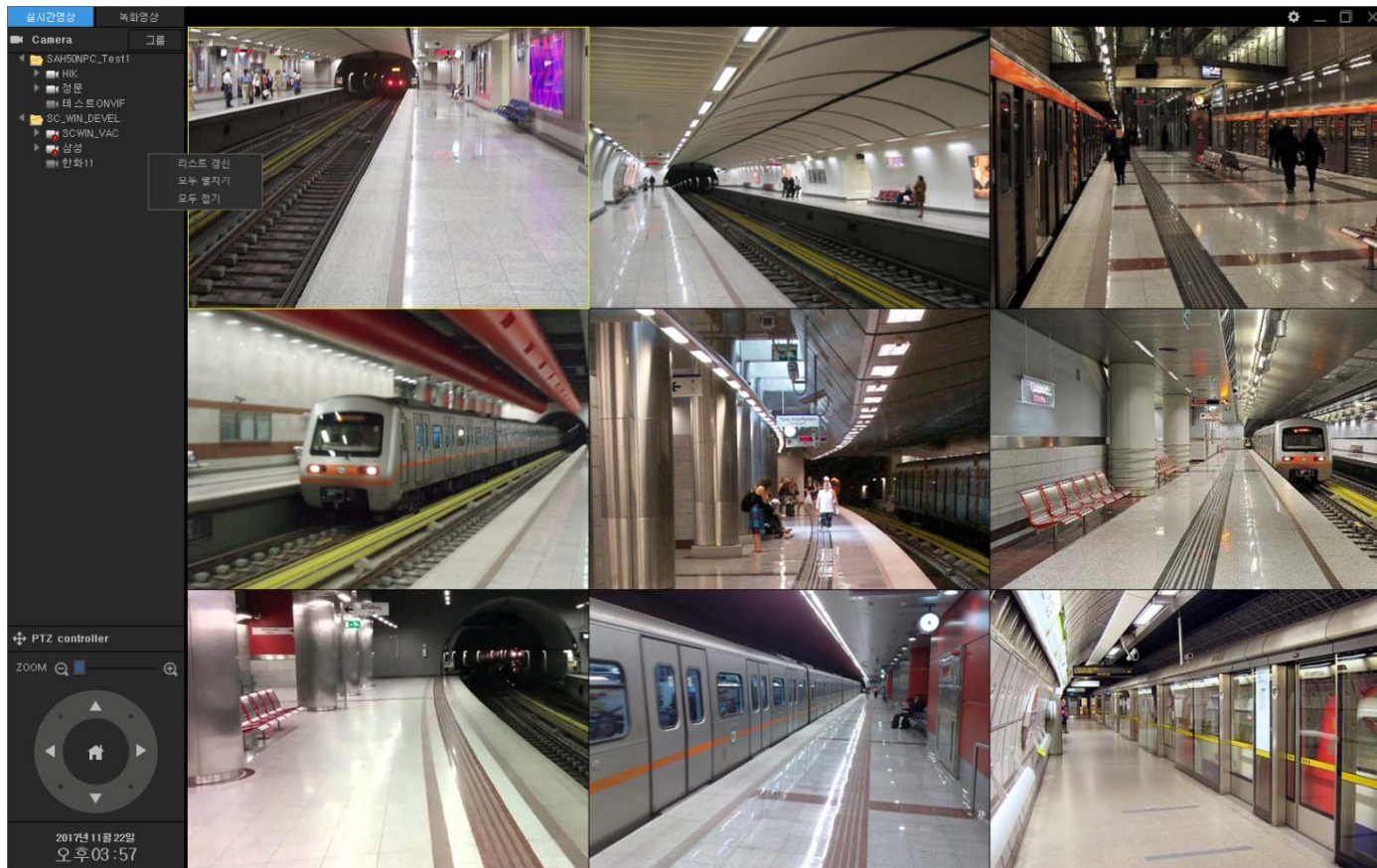




# UI examples : Top Side Menu (Aspect Ratio)

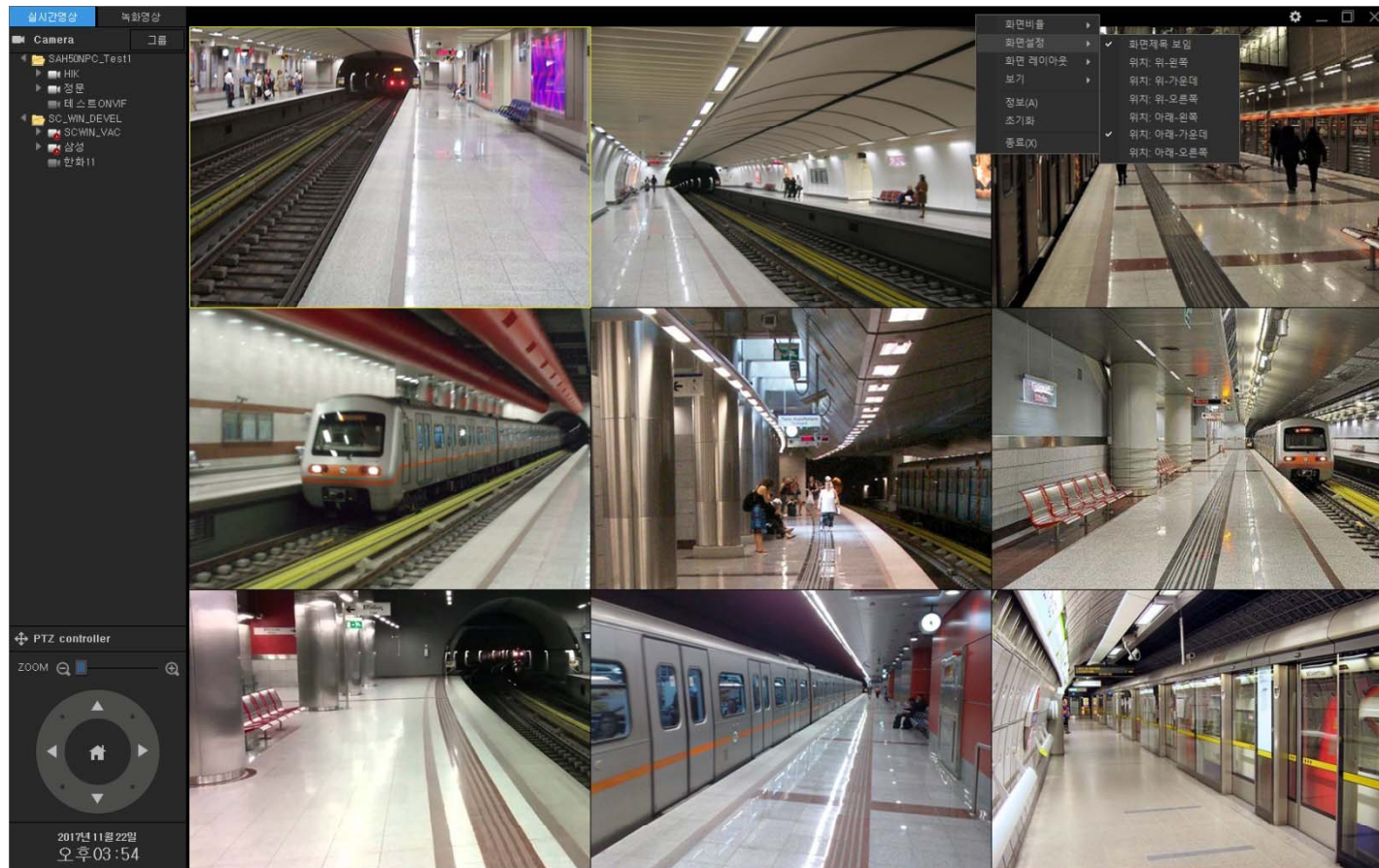


# UI examples : Top Side Menu (Aspect Ratio)

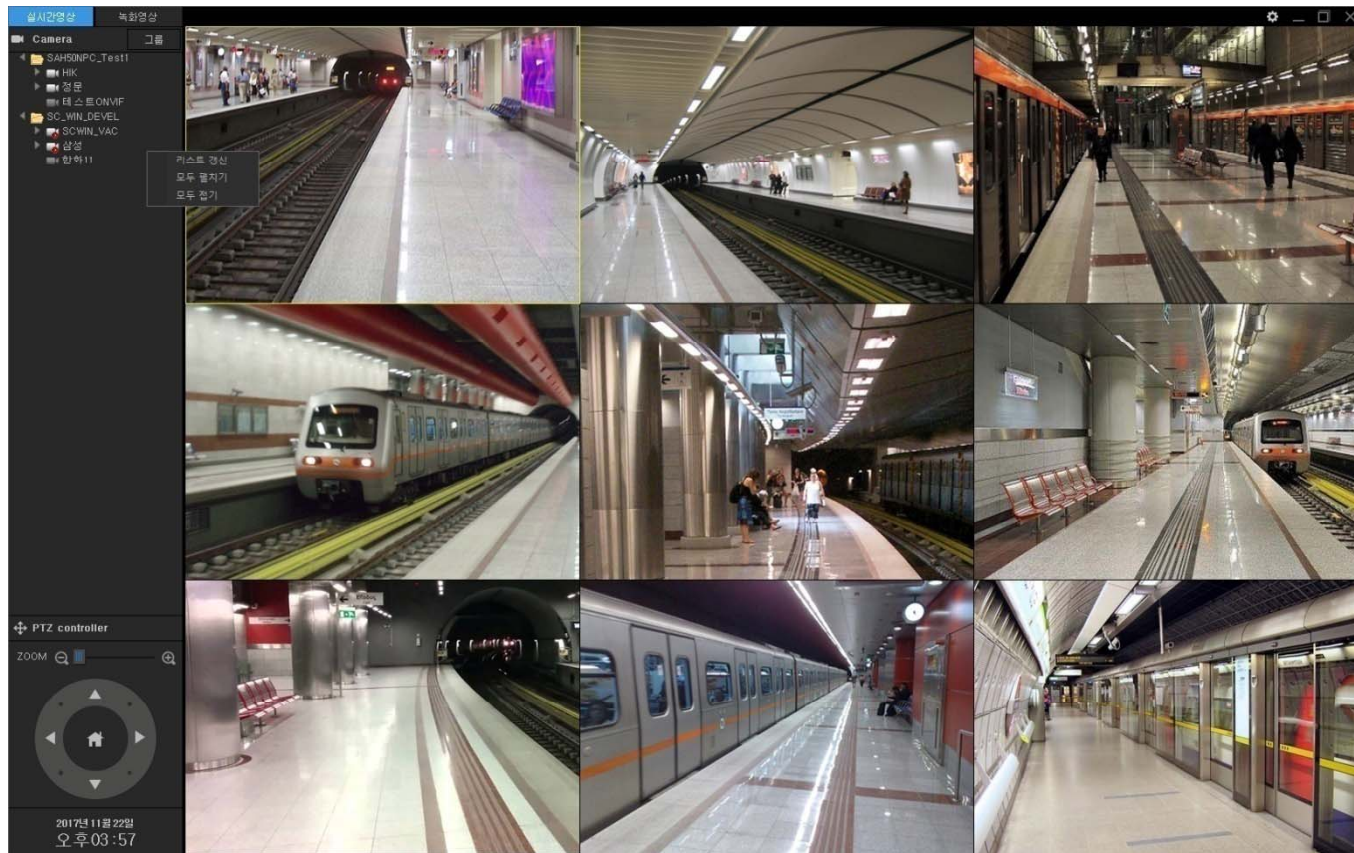




# UI examples : Top Side Menu (Title Bar Position)

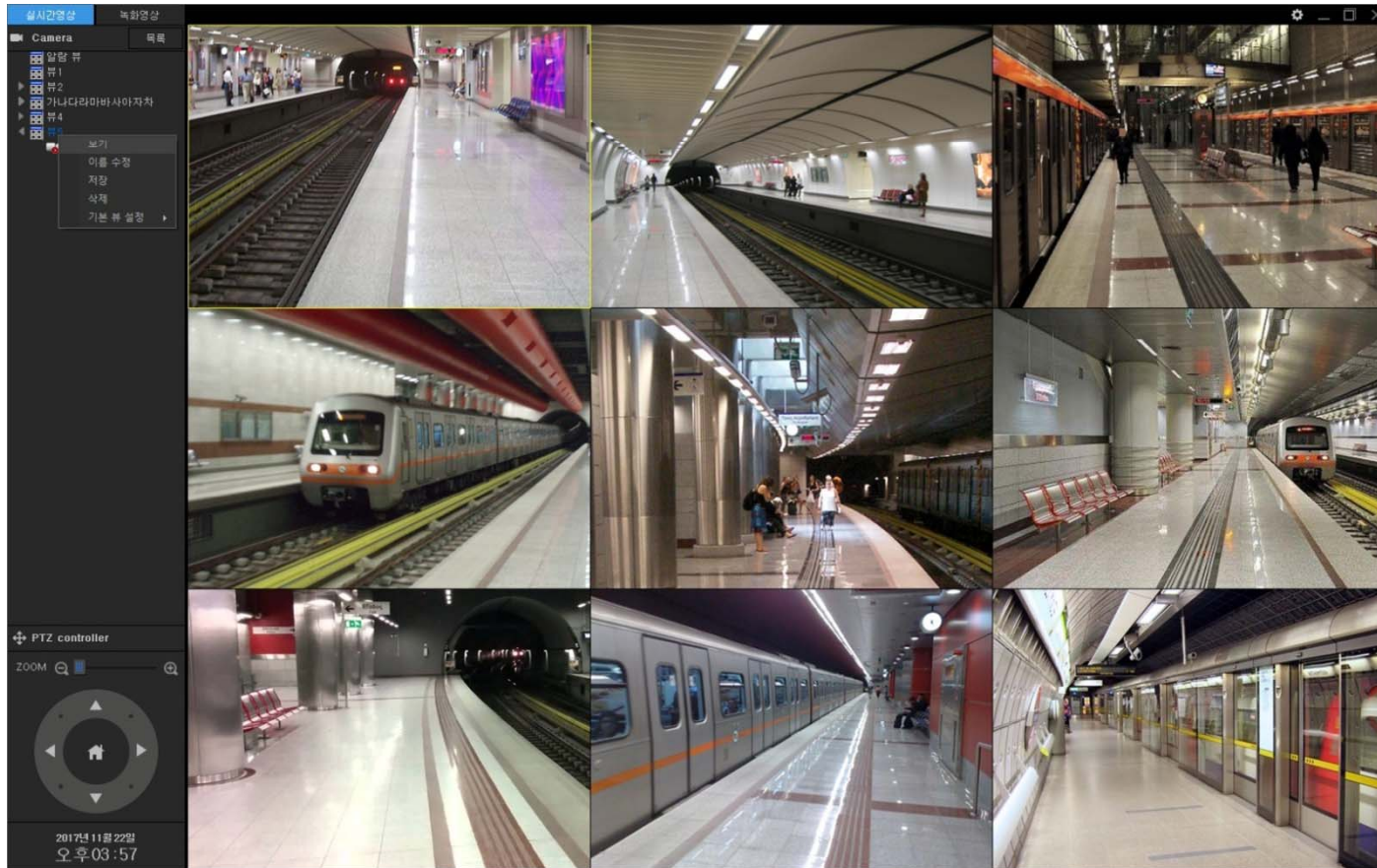


# UI examples : Live Viewer

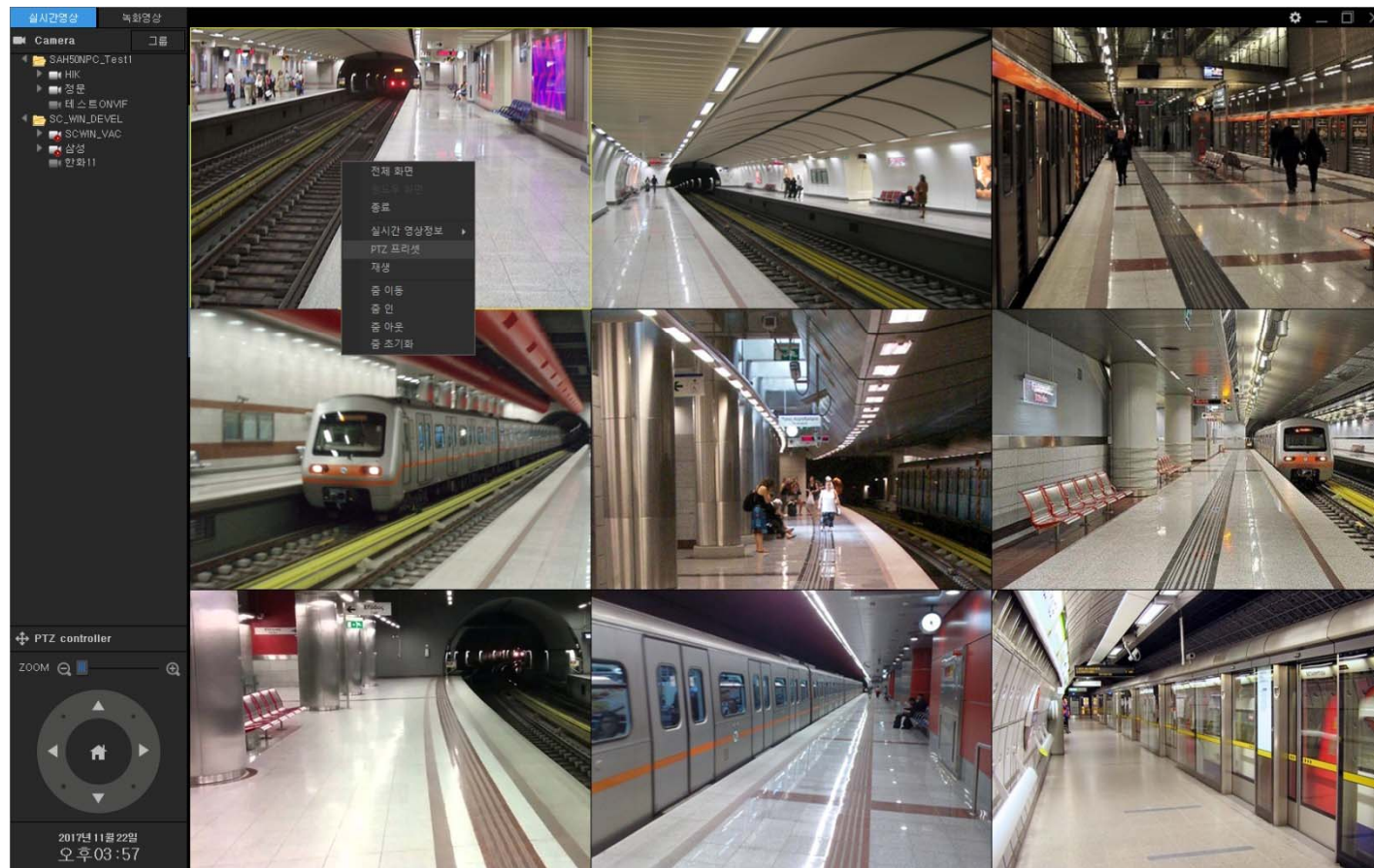




# UI examples : Live Viewer (Camera Configuration)

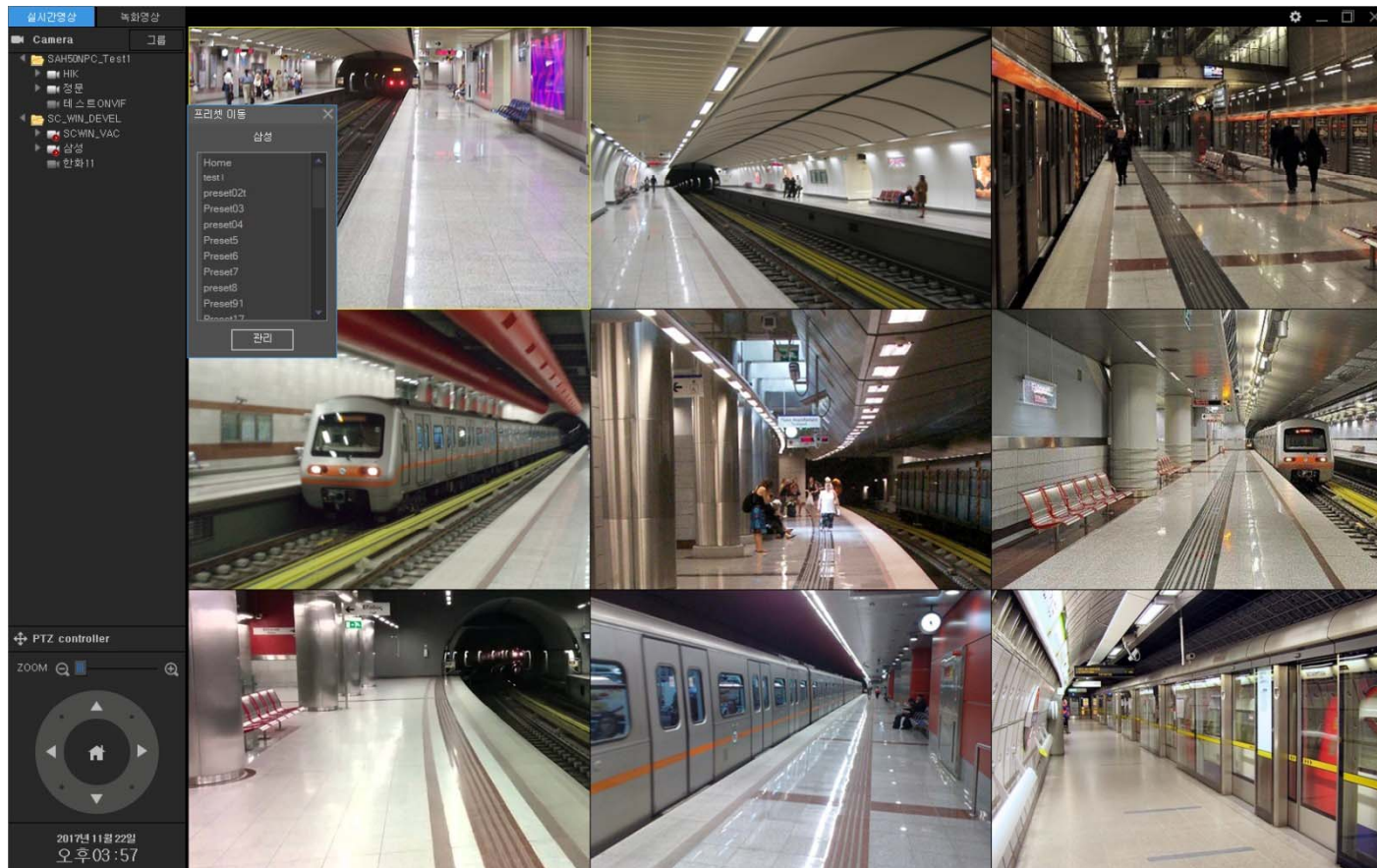


# UI examples : Live Viewer (PTZ Preset)

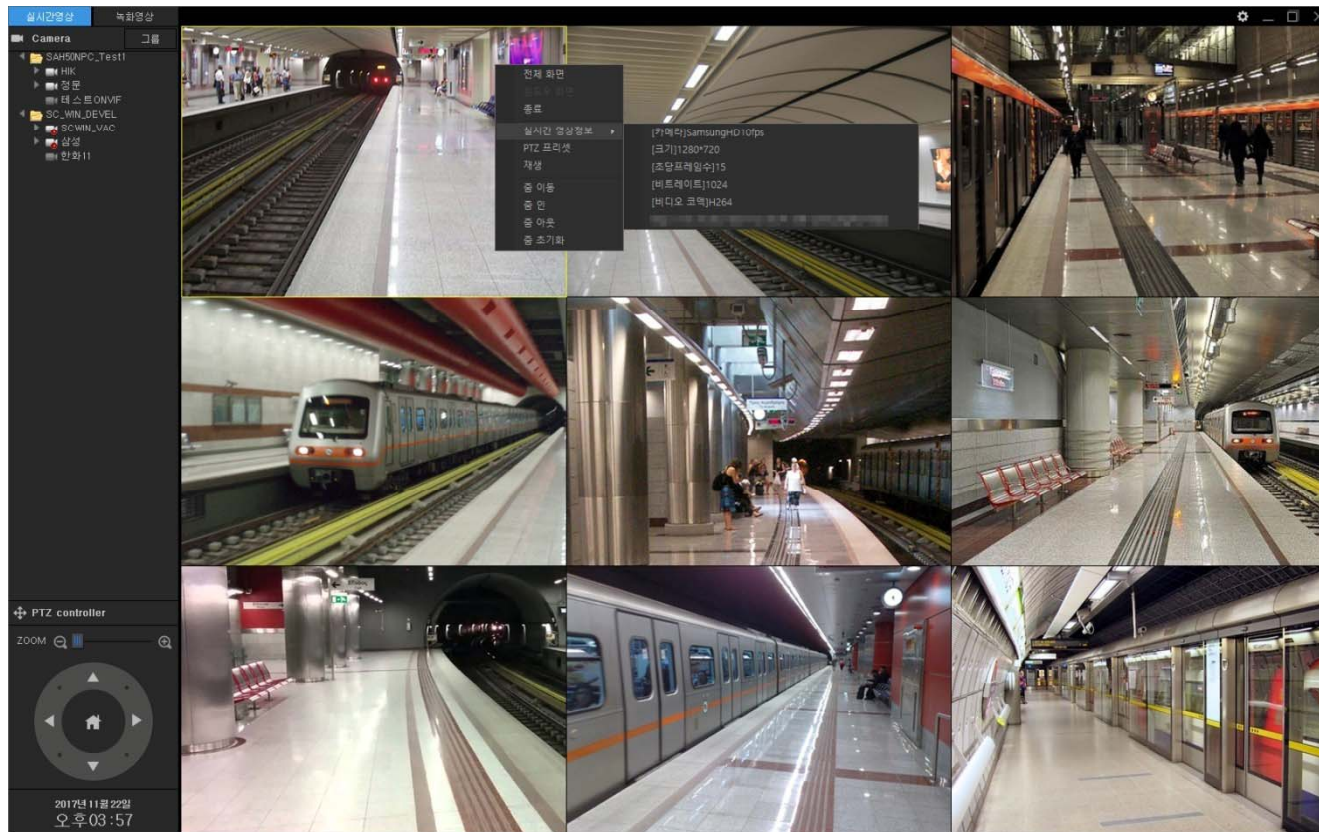




# UI examples : Live Viewer (PTZ Preset Move)

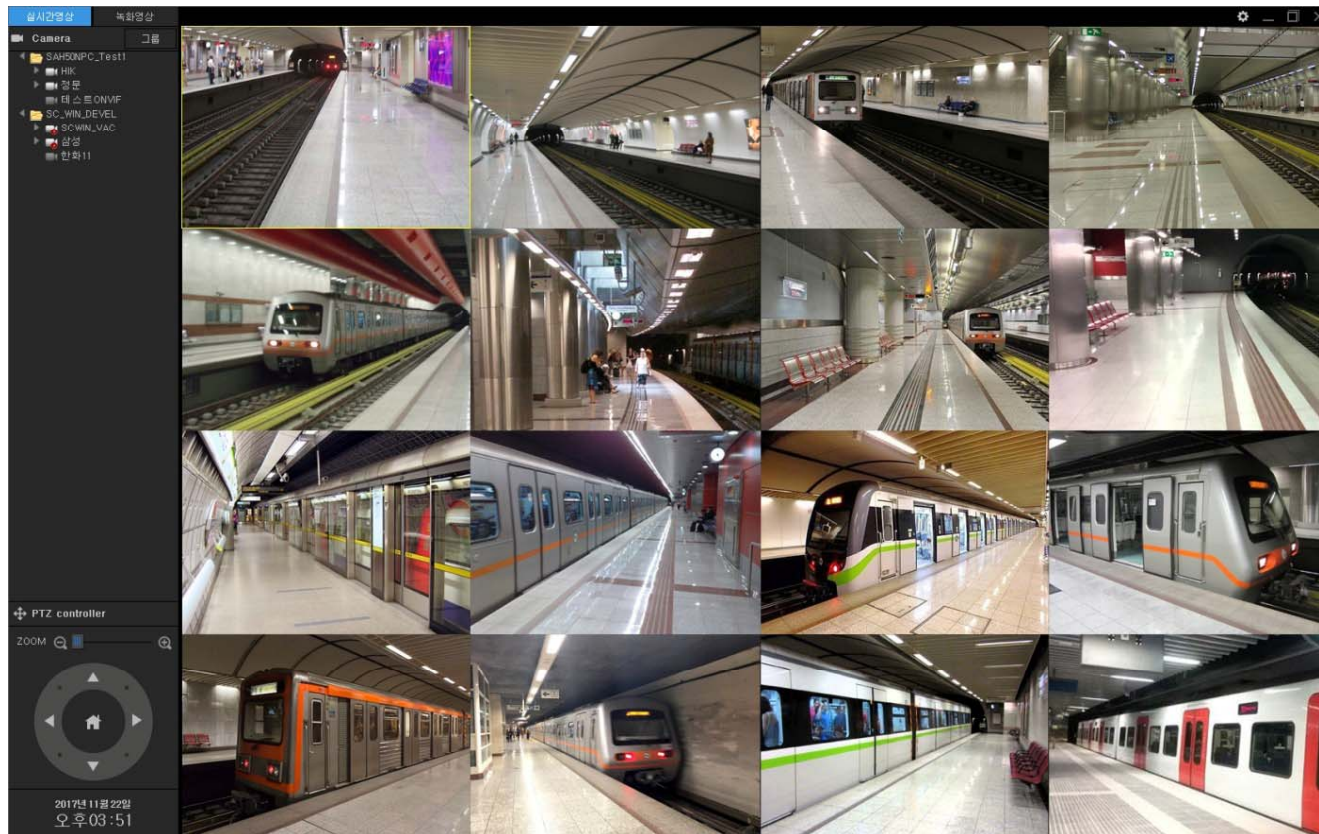


# UI examples : Live Viewer (Real-time Video Information Display)



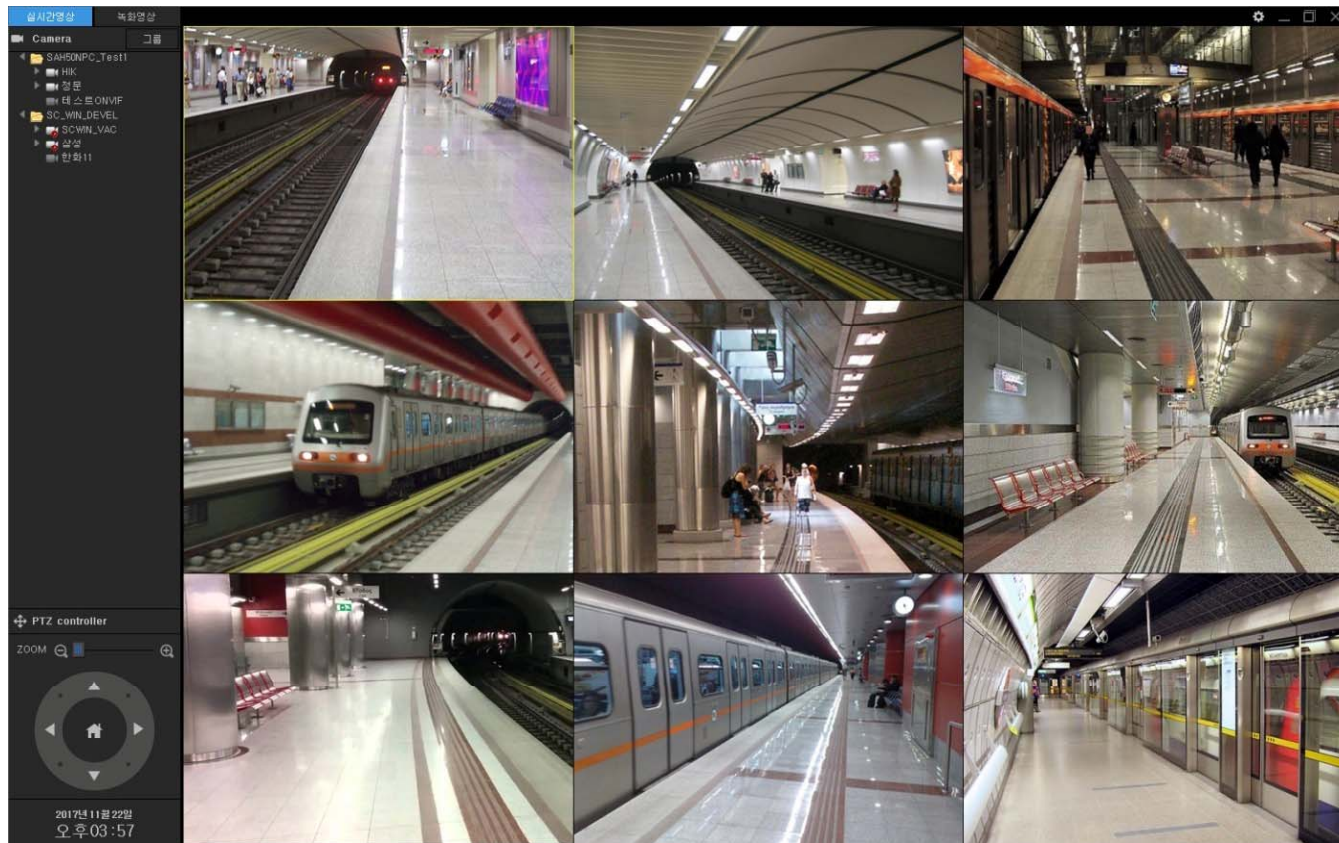


# UI examples : 16 Channel Live View

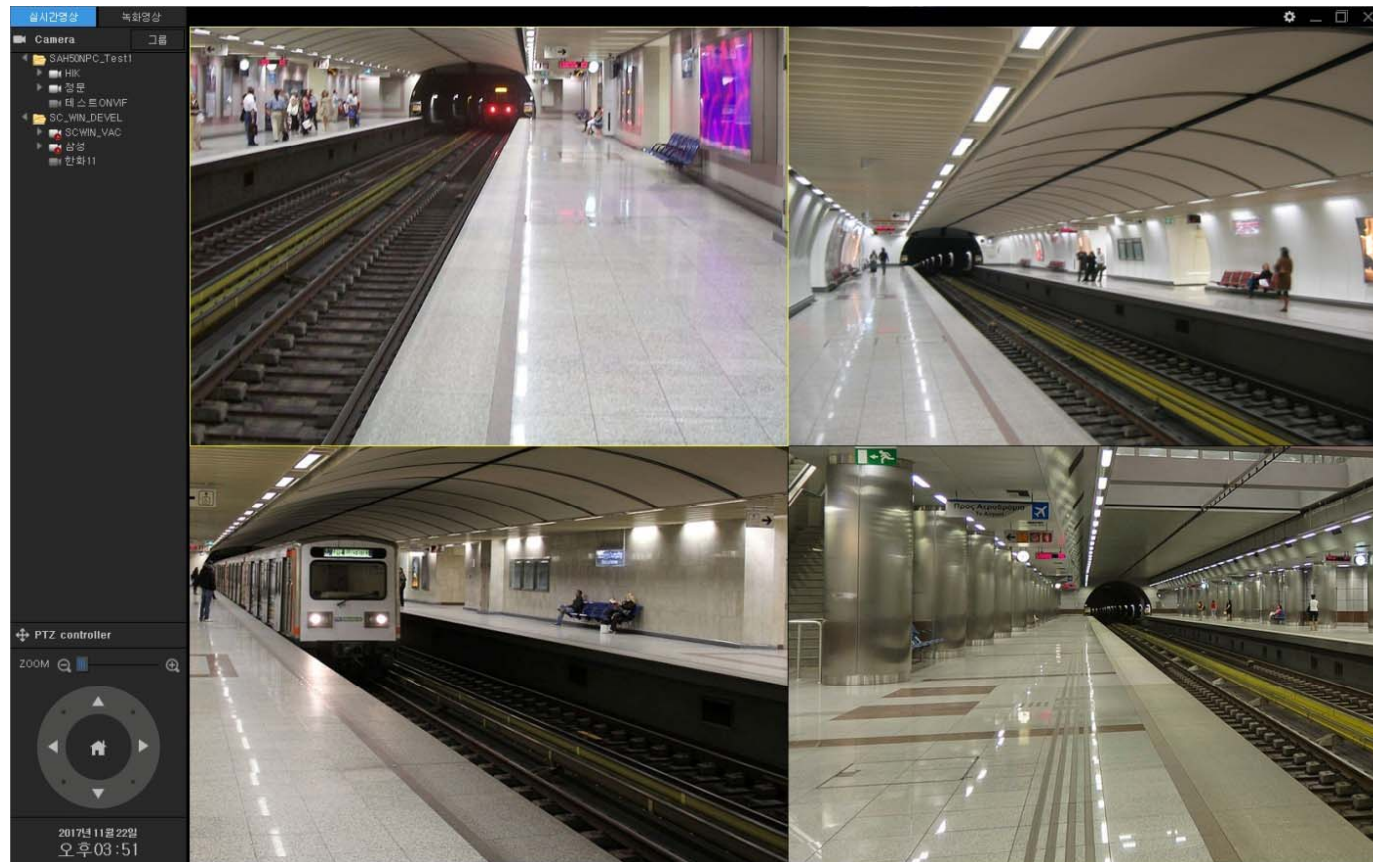




# UI examples : 9 Channel Live View



# UI examples : 4 Channel Live View

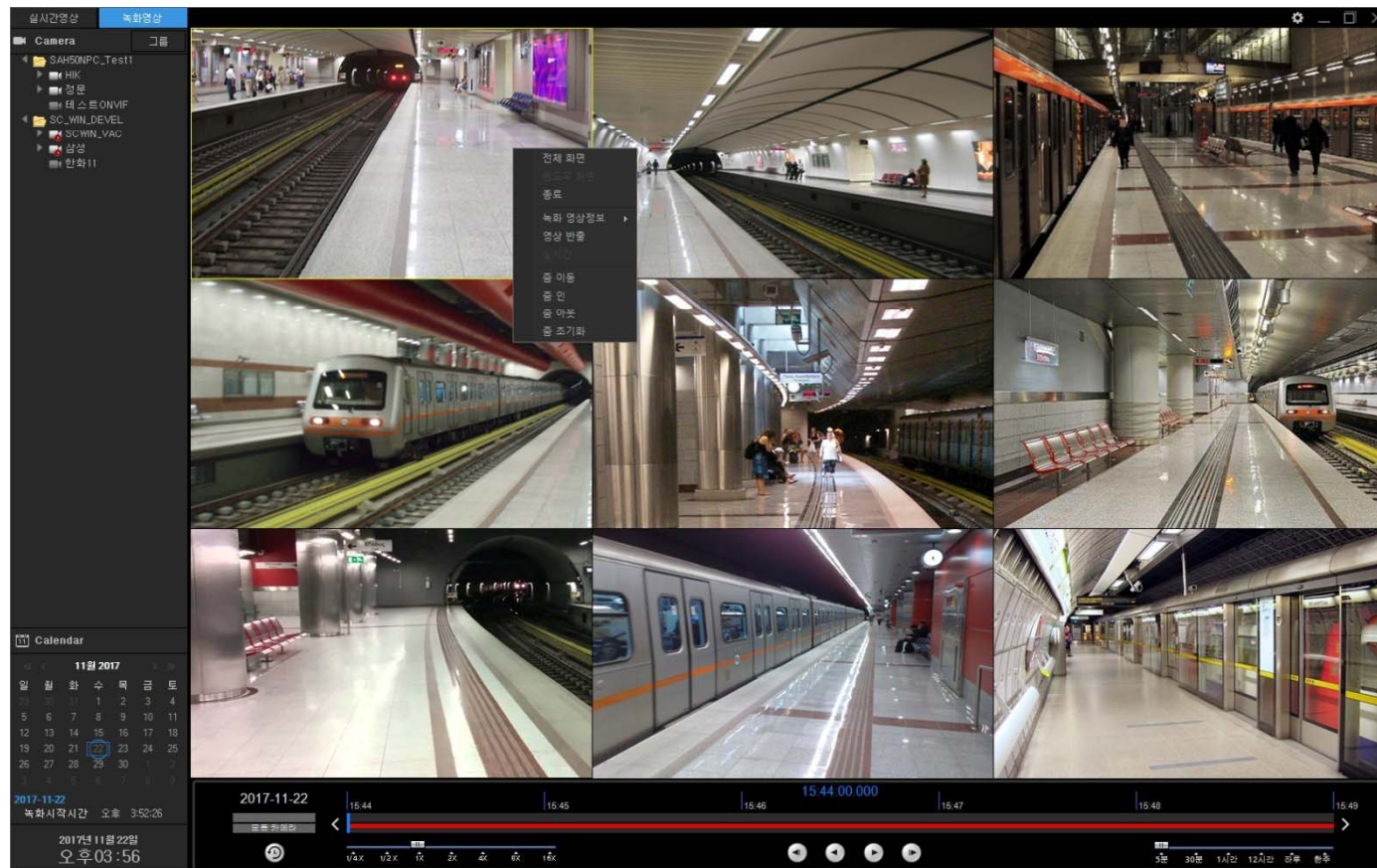


# UI examples : 1 Channel Live View

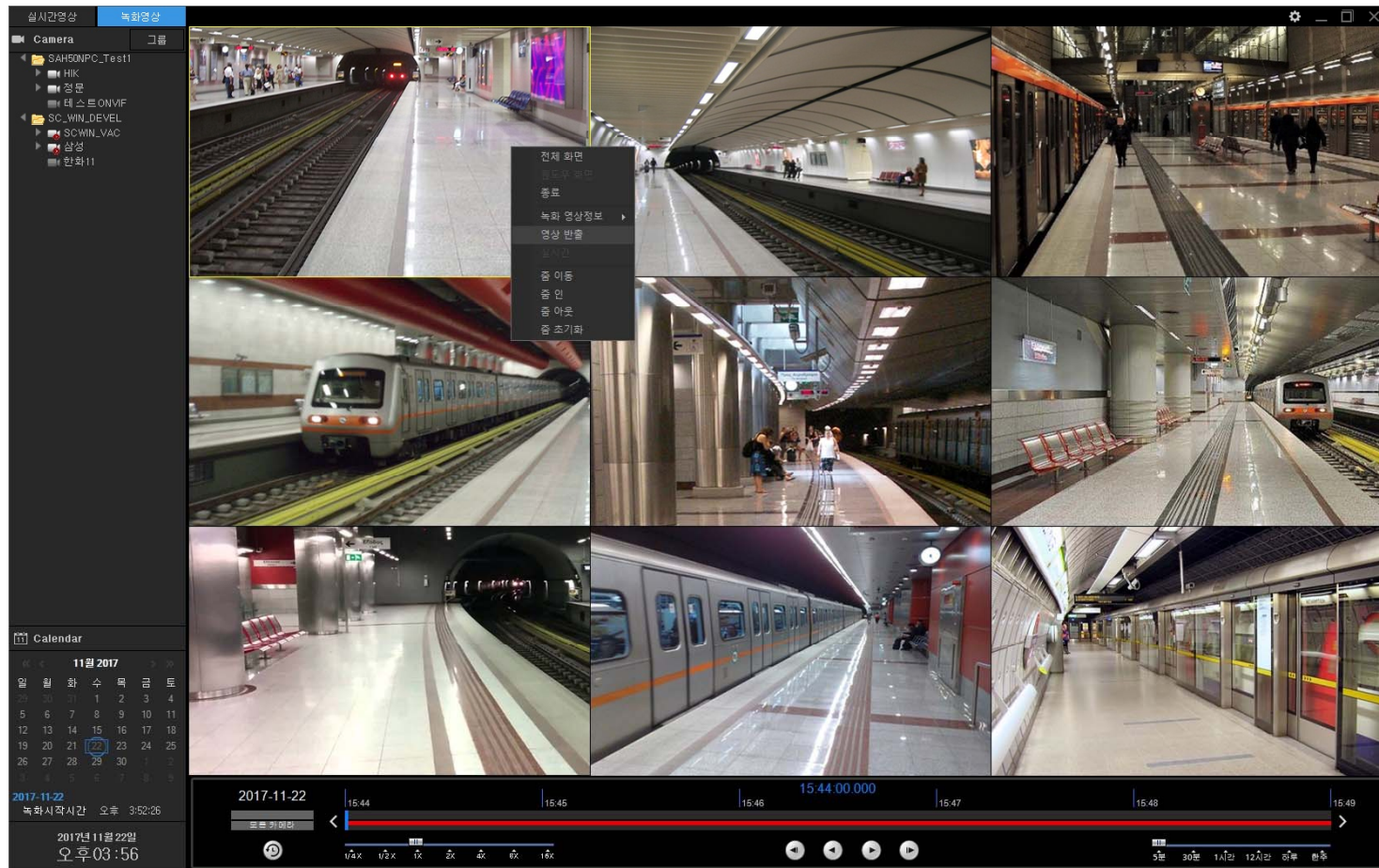




# UI examples : Recording Viewer (Popup Menu)

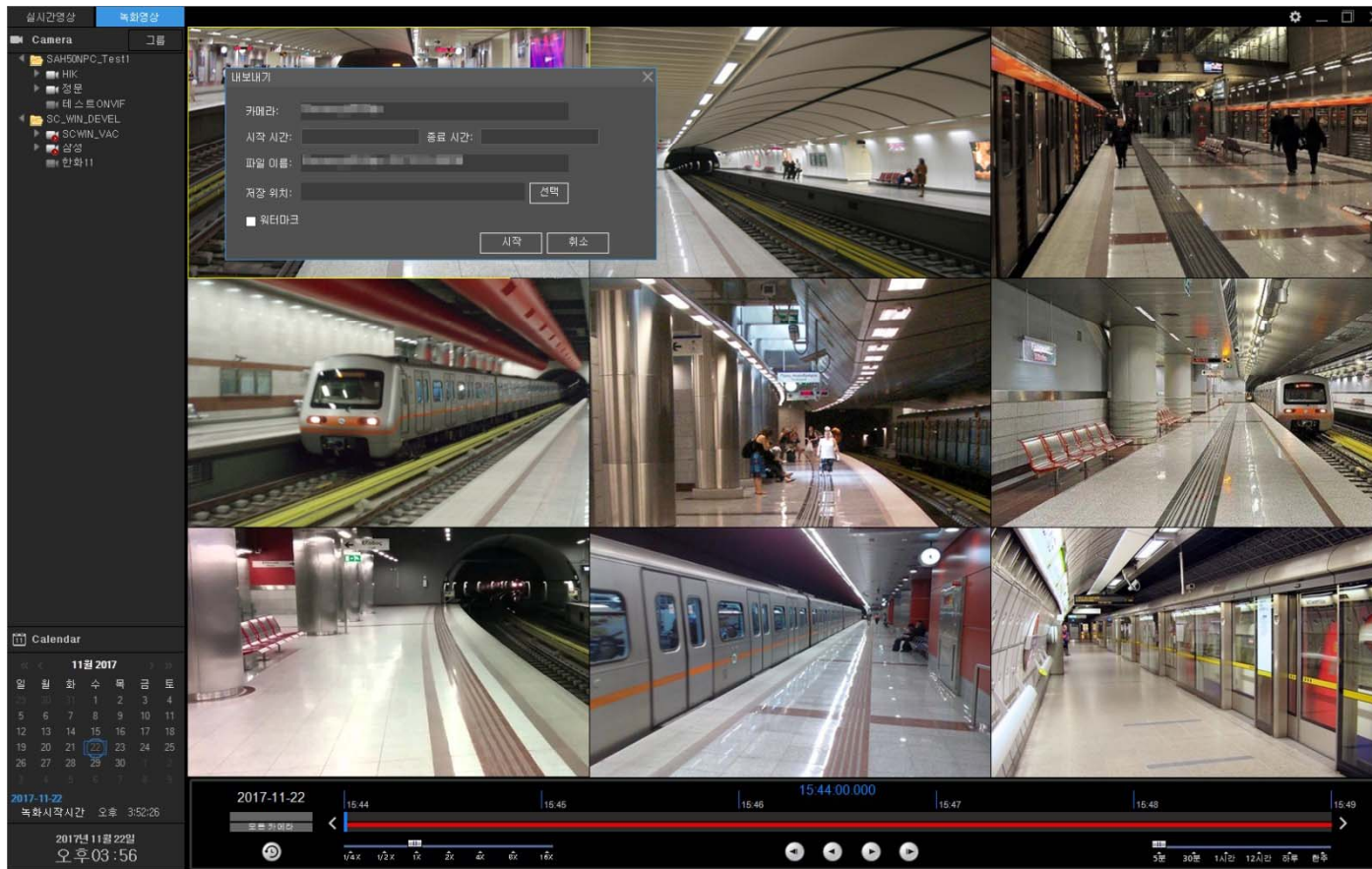


# UI examples : Recording Viewer ( Video Export)

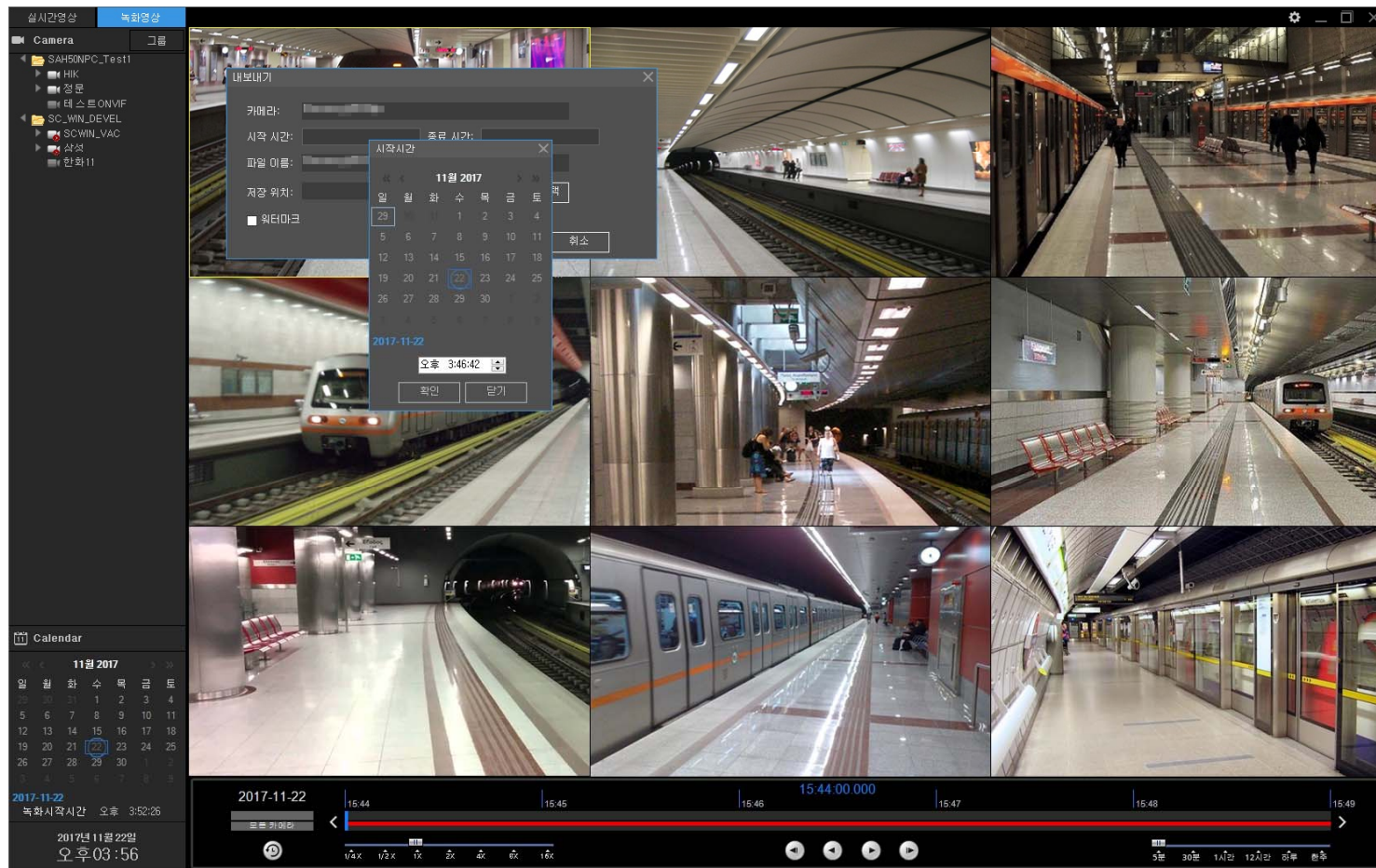




# UI examples : Recording Viewer ( Video Export)

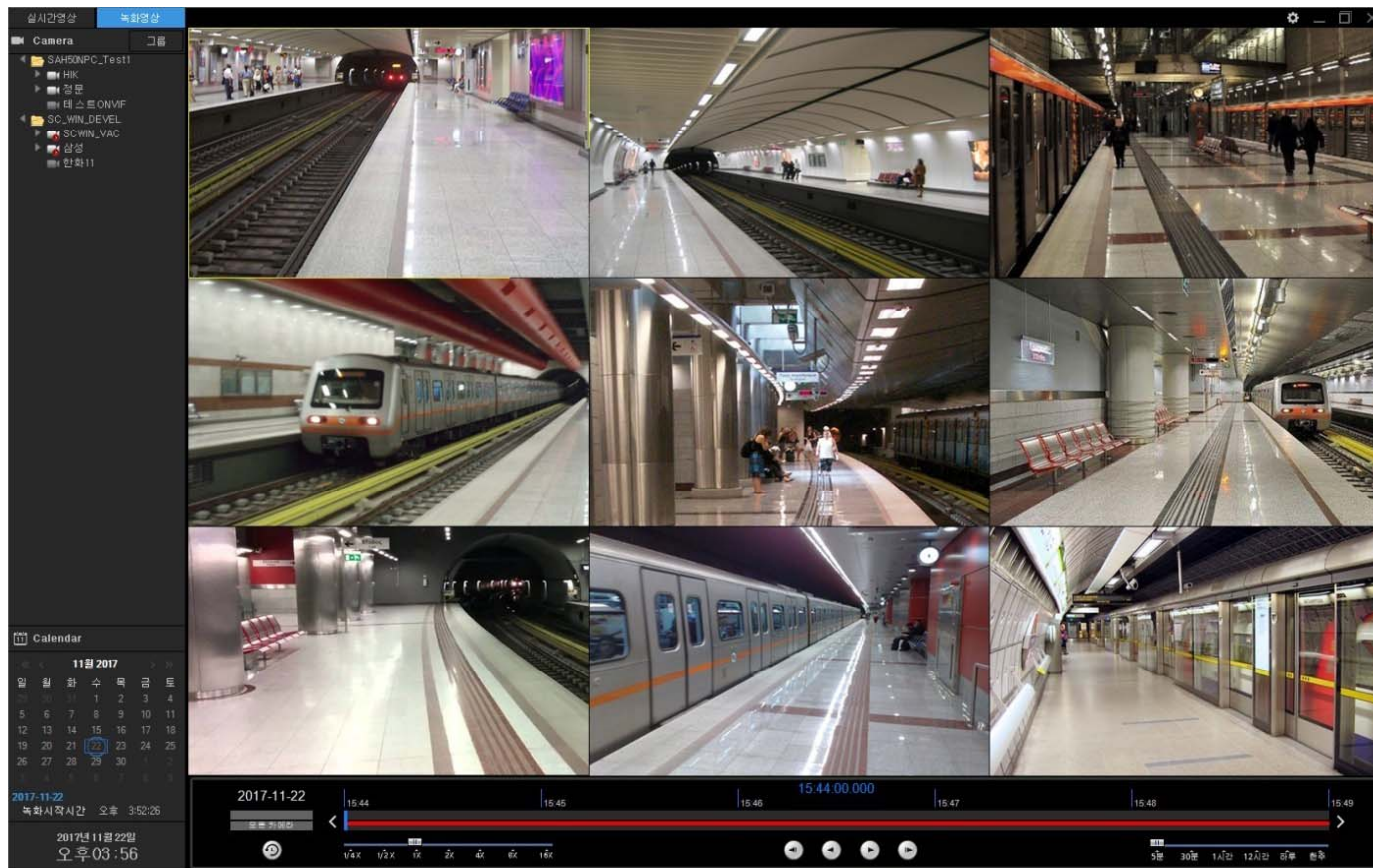


# UI examples : Recording Viewer (Video Export)

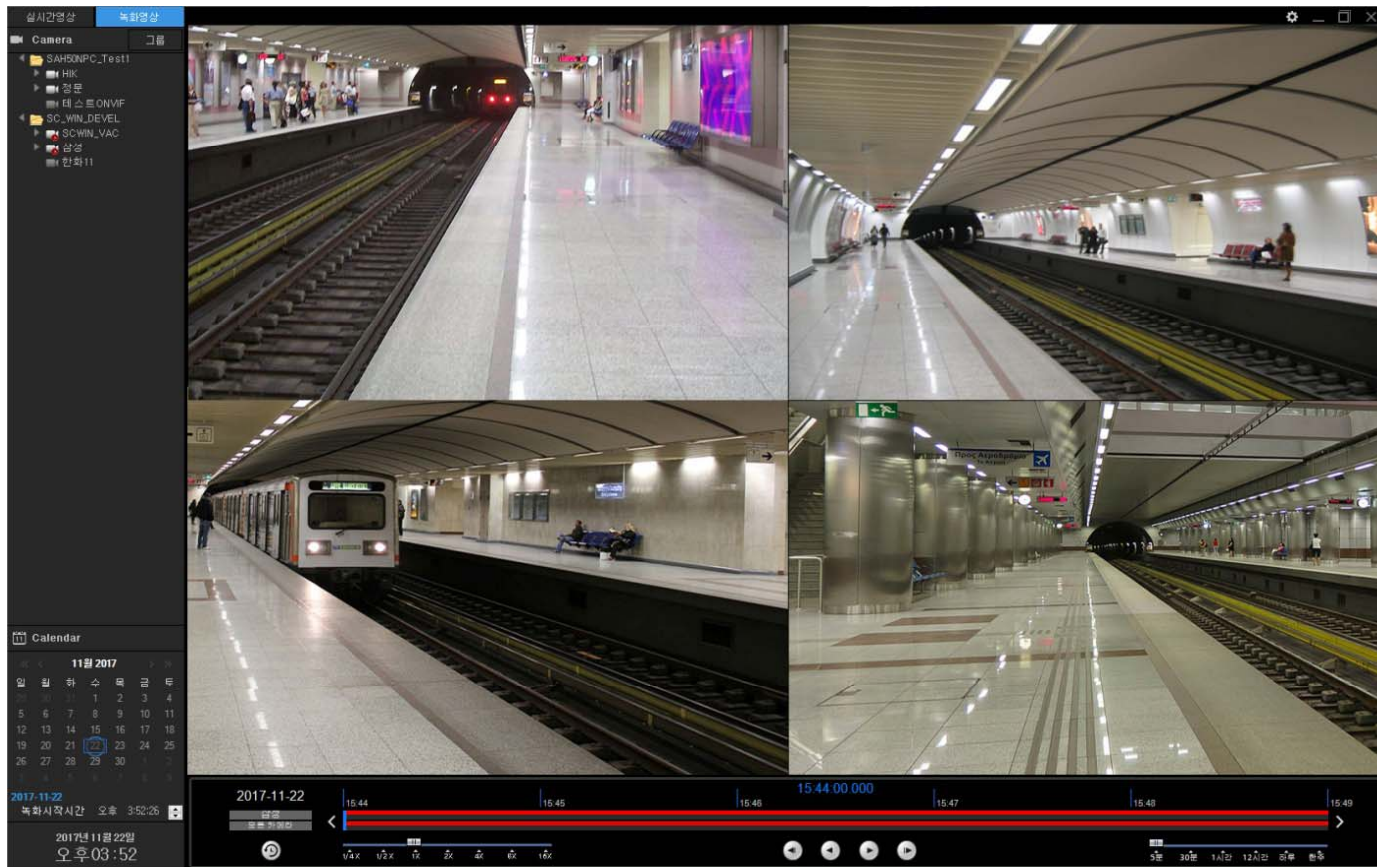




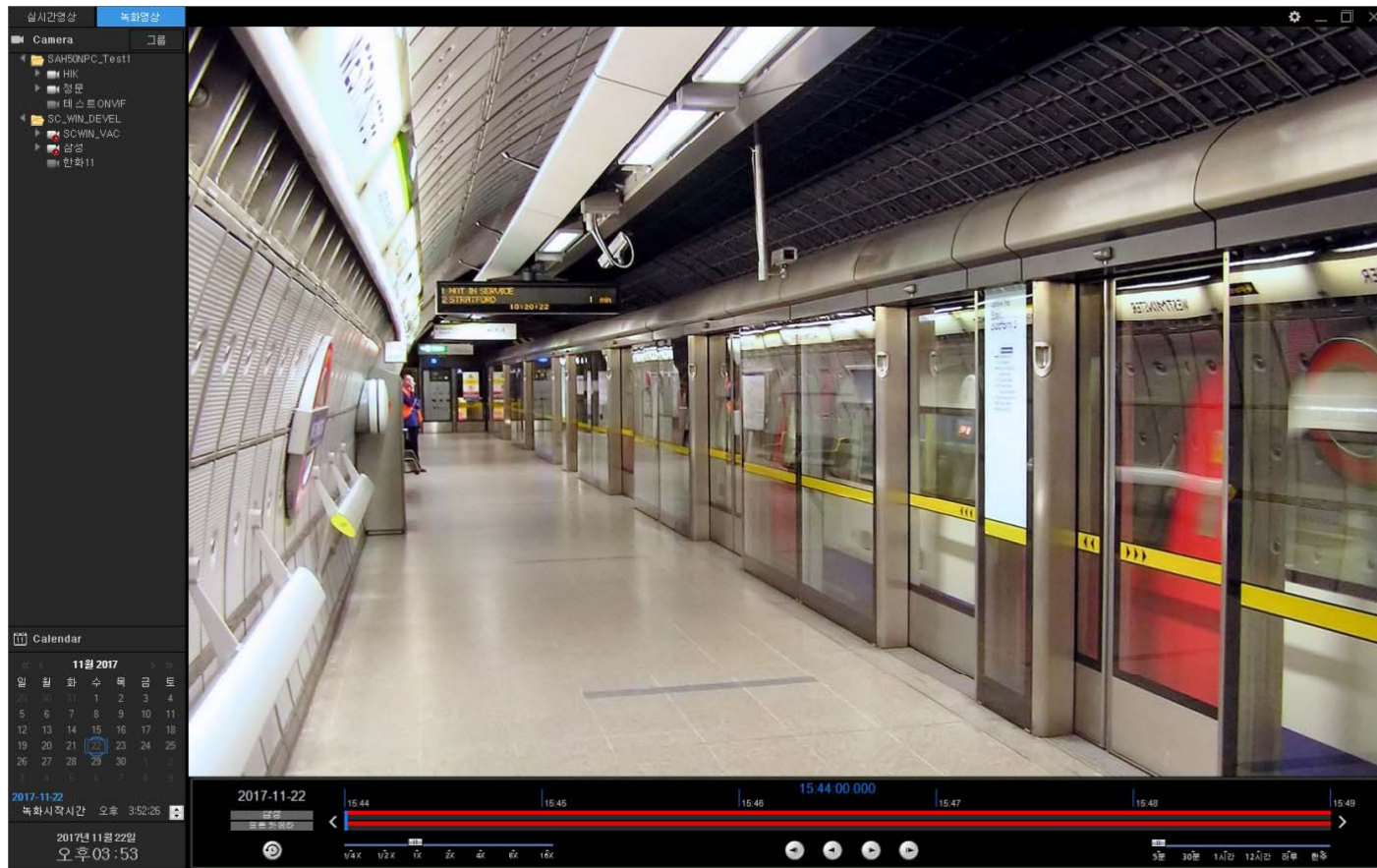
# UI examples : 9 Channel Recording View



# UI examples : 4 Channel Recording View



# UI examples : 1 Channel Recording View







# Thank you!

**AddPac Technology Co., Ltd.**  
Sales and Marketing

Phone +82.2.568.3848 (KOREA)

FAX +82.2.568.3847 (KOREA)

E-mail [sales@addpac.com](mailto:sales@addpac.com)