

Release Version 2.4.1 (2010/11/29)

New Features

1. ONVIF protocol integration¹
2. Dual stream
 - ACTi
 - Dynacolor
 - Eneo
 - SANTEC
 - Videosec

System Improvement

1. [System] Enhance the mechanism of file system check implemented on v2.3.2
2. [Event & Action] Enhancement notification for abnormal disk status
3. [Event & Action] Show camera name on the alert mail
4. [User-friendly] Show FAQ in help page
5. [User-friendly] Show current version number on the upper right of the page

Bug Fixed

1. Fixed the issue that system may be blocked as connecting Arecont cameras
2. Fixed the issue that motion detection of Sanyo cameras may malfunction during long-time running

New Camera Supported

1. **ACTi:** ACM5811, ACM7511, TCD2100, TCM1511, TCM3001, TCM3011, TCM3401, TCM3411, TCM4201, TCM5001, TCM7011
2. **Arecont:** AV10005, AV2805
3. **ARM:** MP13DDNWD, MP13VPDN
4. **Axis:** M1054, M3114-R, P8221
5. **Bosch:** NWC-0455
6. **Dynacolor:** NH061-CCD, NH221-CCD, V1-A, V1-B, V2-A, V2-B, V6-A, V6-B
7. **Eneo:** GLC-1610H, GLC-1701/IR, GLS-2104, GLS-2301H, NLC-1401, NLD-1401, NLS-1401, NXC-1301M, NXC-1302M, NXC-1401M, NXC-1402M, NXD-1301M, NXD-1302M, NXD-1401M, NXD-1402M
8. **Fine:** CDV-3V930, CDV-3V930U, CDV-3VM301, CDV-3VM501, CDV-3VWD960, CDV-3VWD960H, EP-201, EP-221, EP-221DN, EP-601, EP-601HW, EP-908, EP-908HW, EP-936, EP-936HW, EP-HTQ935, EP-Q2018H-IP, EP-Q2018HW-IP, EP-Q2026H-IP, EP-Q2026HW-IP, EP-Q2036H-IP, EP-Q2036HW-IP, MD-D1200, MD-D1612, SP-PTIR737-IP, TCMA-99, TCMP-99, TCP-670DNU, TCP-680DNU, TCP-690, TCP-690DN, TCP-690U, TCP-HP930, TCP-HP930U, TCP-IPWD690, TCP-IPWD700DN, TCP-IRV540, TCP-IRV560, TCP-M912DN, TCP-MH802, TCP-VM201, TCP-VM501, WB-8211SD, WB-8211SDU, WB-8411, WB-8412, WB-H811, WB-H814
9. **Network Camera:** GE-100-CB, GP-100-CB, WGE-100-CB, WGP-100-CB
10. **ONVIF:** Bosch NWC-0455
11. **Sony:** SNC-CH140, SNC-DH240, SNC-RH164, SNC-RS44N, SNC-RS44P, SNC-RS46N, SNC-RS46P, SNC-RS84N, SNC-RS84P, SNC-RS86N, SNC-RS86P, SNT-EP104, SNT-EP154, SNT-EX101, SNT-EX101E, SNT-EX154
12. **Vivotek:** FD8133, FD8134, IP8330, IP8332

¹ ONVIF specification must be fully implemented by camera vendors in order to be supported by NUUO software. To confirm the compatibility, it is recommended to execute testing prior to any further usage. Currently, only Bosch NWC-0455 is verified; ONVIF is not supported on NV-4080 and NV-4160

Known Issue

1. There are plenty of issues on Dynacolor NH061-CCD, NH221-CCD, V1-A, V1-B, V6-A and V6-B. Please see details in the appendix
2. Audio function on some Eneo cameras is disabled currently due to camera FW bug. Please see details in the appendix

Remark

1. Bosch/ONVIF is not supported on NV-4080 and NV-4160

Appendix

Stream profile (updated)

- Original
- Low: under 300kbps; designed for mobile client single-view
- Minimum: under 100 kbps; designed for mobile client multi-view

Brand/Series	Low Profile		Minimum Profile	
	Resolution	Framerate	Resolution	Framerate
ACTi	CIF	3~6	CIF	1~2
Dynacolor	QCIF~Full HD	0.1~10	QCIF~Full HD	0.1~10
Eneo 1	QCIF~Full D1	0.1~10	QCIF~Full D1	0.1~10
Eneo 2	QCIF~Half D1	0.1~10	QCIF~Half D1	0.1~10
Eneo 3	CIF~Full D1	0.1~10	CIF~Full D1	0.1~10
Eneo 4	CIF	5	CIF	2
Eneo 5	CIF	15	CIF	5
SANTEC (D1)	VGA	1~3	VGA	0.3~0.8
SANTEC (1.3 Mega)	VGA~D1	1~3	VGA~D1	0.3~0.8
Vidosec	QVGA	5	QQVGA	5

Eneo 1: GLS-1701/IR

Eneo 2: GLS-2104

Eneo 3: GLS-2301H

Eneo 4: NLC-1401, NLD-1401, NLS-1401

Eneo 5: NXC-1301M, NXC-1302M, NXC-1401M, NXC-1402M, NXD-1301M, NXD-1302M, NXD-1401M, NXD-1402M

See full NVRmini supported cameras on mobile clients:

http://support.nuuo.com/mediawiki/index.php/NVRmini_supported_cameras_on_mobile_clients

New Camera Support

ACTi



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Camera Search Tool	Remarks
ACM5811	A1D-220-V3 .12.13-AC	MPEG4 M-JPEG	1	720x480	1-way	1/1	-	Yes	Yes	Yes	

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

ACM7511	A1D-220-V3 .12.13-AC	MPEG4 M-JPEG	1	720x480	1-way	1/1	-	Yes	Yes	Yes	
TCD2100	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	720x480	-	1/1	Yes	Yes	Yes	Yes	
TCM1511	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	
TCM3001		H.264 MPEG4 M-JPEG	1	640x480	1-way	1/1	-	Yes	Yes	Yes	Supported by design
TCM3011	A1D-310-V4 .07.10-AC	H.264 MPEG4 M-JPEG	1	640x480	1-way	1/1	-	Yes	Yes	Yes	
TCM3401		H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	Supported by design
TCM3411	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	
TCM4201	A1D-310-V4 .07.15-AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	
TCM5001	A1D-310-V4 .07.15-AC	H.264 MPEG4 M-JPEG	1	640x480	1-way	1/1	-	Yes	Yes	Yes	
TCM7011	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	640x480	1-way	1/1	-	Yes	Yes	Yes	

Arecont



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
AV2805	65150	H.264 M-JPEG	1	1920x1080	-	1/1	-	Yes	-	Yes
AV10005	65147	H.264 M-JPEG	1	3648x2752	-	-	-	Yes	-	Yes

ARM



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
MP13DDNWD		MPEG4 M-JPEG	1	1280x960	1-way	1/1	-	Yes	-	Supported by design
MP13VPDN		MPEG4 M-JPEG	1	1280x960	1-way	1/1	-	Yes	-	Supported by design

Axis



NVRmini Release Note

NUUO version 2.4.1_release date_20101129

Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
M1054	5.15	H.264 M-JPEG	1	1024x640	1-way	1/1	-	Yes	Yes	
M3114-R	5.11	H.264 M-JPEG	1	1280x800	-	-	Yes	Yes	Yes	
P8221	5.10	H.264 MPEG4	1	-	1-way	4/4	-	-	Yes	

Bosch



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
NWC-0455	19500410	H.264 M-JPEG	1	704x576	-	-	-	-	-	

Dynacolor



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
NH061-CCD	CCD-cameraFW-100205P	H.264 MPEG4 M-JPEG	1	1280x960	1-way	1/1	-	Yes	Yes	

Note: Camera FW is not stable enough, so camera is likely disconnected after modifying parameters. Current workaround is turning off and on to reboot camera.
Remove resolution 1280x720 in H.264 codec due to broken image problem.
Known FW issue: audio may be broken in certain operation.

NH221-CCD	CCD-cameraFW-100205P	H.264 MPEG4 M-JPEG	1	1280x960	1-way	1/1	-	Yes	Yes	
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Note: Remove resolution 1280x720 in H.264 codec due to broken image problem.
The image is broken badly when configuring to the highest resolution, fps, and quality under H.264/MPEG4 with UDP protocol.
Known FW issue: audio may be broken in certain operation.

V1-A		H.264 M-JPEG	1	1920x1080	-	-	-	Yes	Yes	Supported by design
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V1-B	d20100630NS	H.264 M-JPEG	1	1920x1080	1-way	-	-	Yes	Yes	
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Note: There is high possibility to get broken image on the edge under H.264 codec with UDP protocol.

V2-A		H.264 M-JPEG	1	1920x1080	1-way	1/1	-	Yes	Yes	Supported by design
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V2-B	d20100826NS	H.264 M-JPEG	1	1920x1080	1-way	1/1	-	Yes	Yes	
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V6-A		H.264 M-JPEG	1	1920x1080	1-way	1/1	-	Yes	Yes	Supported by design
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V6-B	d20100630NS	H.264 M-JPEG	1	1920x1080	1-way	1/1	-	Yes	Yes	
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NVRmini Release Note

NUUO version 2.4.1_release date_20101129

Note:	The image is broken badly when configuring to the highest resolution, fps, quality, etc.
Note:	Model A is referred to model B, promised by the manufacturer, so model A may encounter same issues of model B.

Eneo



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
GLC-1610H		H.264 M-JPEG	1	720x480	1-way	1/1	Yes	Yes	Yes	Supported by design
GLC-1701/IR	1.45	MPEG4 M-JPEG	1	720x576	-	1/0	-	Yes	Yes	
GLS-2104	1.78	M-JPEG	4	704x272	1-way	-	Yes	Yes	Yes	
GLS-2301H	1.09	H.264 M-JPEG	1	720x480	1-way	-	-	Yes	Yes	
NLC-1401	v1.5.6	H.264 MPEG4	1	704x576	1-way	1/0	Yes	Yes	Yes	
NLD-1401	v1.5.6	H.264 MPEG4	1	704x576	1-way	1/0	-	Yes	Yes	
NLS-1401	v1.5.6	H.264 MPEG4	1	704x576	1-way	2/0	Yes	Yes	Yes	
NXC-1301M	v2.1.2	H.264	1	1280x720	-	2/0	-	Yes	Yes	
NXC-1302M	v2.1.2	H.264	1	1600x1200	-	2/0	-	Yes	Yes	
NXC-1401M	v2.1.2	H.264	1	1280x720	-	2/0	-	Yes	Yes	
NXC-1402M	v2.1.2	H.264	1	1600x1200	-	2/0	-	Yes	Yes	
NXD-1301M	v2.1.2	H.264	1	1280x720	-	2/0	-	Yes	Yes	
NXD-1302M	v2.1.2	H.264	1	1600x1200	-	2/0	-	Yes	Yes	
NXD-1401M	v2.1.2	H.264	1	1280x720	-	2/0	-	Yes	Yes	
NXD-1402M	v2.1.2	H.264	1	1600x1200	-	2/0	-	Yes	Yes	

Note:	Audio is disabled currently for camera FW bug: NXC-1301M, NXC-1302M, NXC-1401M, NXC-1402M, NXD-1301M, NXD-1302M, NXD-1401M and NXD-1402M
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Fine

NVRmini Release Note

NUUO version 2.4.1_release date_20101129



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
CDV-3V930		MPEG4 M-JPEG	1	720x480	1-way	1/1	-	Yes	-	Supported by design
CDV-3V930U		MPEG4 M-JPEG	1	720x480	1-way	1/1	-	Yes	-	Supported by design
CDV-3VM301		MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	-	Supported by design
CDV-3VM501		H.264 M-JPEG	1	1600x1200	1-way	1/1	-	Yes	-	Supported by design
CDV-3VWD960	V1.0.16_F	H.264 M-JPEG	1	720x576	1-way	1/1	-	Yes	-	
CDV-3VWD960H		H.264 M-JPEG	1	720x576	1-way	1/1	-	Yes	-	Supported by design
EP-201		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-221		MPEG4 M-JPEG	1	720x480	1-way	1/0	Yes	Yes	-	Supported by design
EP-221DN		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-601		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-601HW		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-908		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-908HW		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-936		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-936HW		MPEG4 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-HTQ935	V3.2.56_F	MPEG4 M-JPEG	1	720x480	-	0/0	Yes	Yes	-	
EP-Q2018H-IP		H.264 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-Q2018HW-IP	V1.0.8_F	H.264 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	
EP-Q2026H-IP		H.264 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

EP-Q2026HW-IP		H.264 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-Q2036H-IP		H.264 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
EP-Q2036HW-IP		H.264 M-JPEG	1	720x480	1-way	0/0	Yes	Yes	-	Supported by design
MD-D1200		MPEG4 M-JPEG	1	720x480	1-way	1/1	Yes	Yes	-	Supported by design
MD-D1612	V1.0.16_F	H.264 M-JPEG	1	720x576	1-way	1/1	Yes	Yes	-	
SP-PTIR737-IP	V1.0.16_F	H.264 M-JPEG	1	720x576	1-way	0/0	Yes	Yes	-	
TCMA-99		MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	-	Supported by design
TCMP-99		MPEG4 M-JPEG	1	640x480	1-way	1/1	-	Yes	-	Supported by design
TCP-670DNU		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-680DNU		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-690		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-690DN		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-690U	V3.2.60_F	MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	
TCP-HP930		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-HP930U		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-IPWD690		MPEG4 M-JPEG	1	720x480	1-way	2/2	-	Yes	-	Supported by design
TCP-IPWD700DN	V1.0.16_F	H.264 M-JPEG	1	720x576	1-way	1/1	-	Yes	-	
TCP-IRV540		MPEG4 M-JPEG	1	720x480	1-way	0/0	-	Yes	-	Supported by design
TCP-IRV560		MPEG4 M-JPEG	1	720x480	1-way	1/1	-	Yes	-	Supported by design
TCP-M912DN	V1.2.28_F	MPEG4 M-JPEG	1	MPEG4: 640x480 M-JPEG: 1280x960	1-way	2/2	-	Yes	-	
TCP-MH802	V1.0.8_F	H.264 M-JPEG	1	1600x1200	1-way	1/1	-	Yes	-	

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

TCP-VM201		MPEG4 M-JPEG	1	1280x1024	1-way	0/0	-	Yes	-	Supported by design
TCP-VM501	V1.0.14_F	H.264 M-JPEG	1	1600x1200	1-way	1/1	-	yes	-	
WB-8211SD		MPEG4 M-JPEG	1	720x480	1-way	2/4	-	Yes	-	Supported by design
WB-8211SDU		MPEG4 M-JPEG	1	720x480	1-way	2/4	-	Yes	-	Supported by design
WB-8411		MPEG4 M-JPEG	4	720x480	1-way	4/1	-	Yes	-	Supported by design
WB-8412	V2.2.26_F	MPEG4 M-JPEG	4	688x448	1-way	4/4	Yes	Yes	-	
WB-H811		H.264 M-JPEG	1	720x480	1-way	2/2	Yes	Yes	-	Supported by design
WB-H814	V1.0.40_F	H.264 M-JPEG	4	720x576	1-way	4/4	Yes	Yes	-	

Network Camera



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
GE-100-CB	v1.0.0.15	H.264 MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	
GP-100-CB	v1.0.0.13	H.264 MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	
WGE-100-CB	v1.0.0.13	H.264 MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	
WGP-100-CB	v1.0.0.16	H.264 MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	

Sony

Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Camera Search Tool	Remarks
SNC-CH140	1.07.00	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/2	-	Yes	-	Yes	
SNC-DH240	1.11.00	H.264 MPEG4 M-JPEG	1	1920x1440	1-way	1/2	-	Yes	-	Yes	
SNC-RH164	1.10.01	H.264 MPEG4 M-JPEG	1	1280x720	1-way	4/2	Yes	Yes	-	Yes	
SNC-RS44N		H.264 MPEG4 M-JPEG	1	720x480	1-way	4/2	Yes	Yes	-	Yes	Supported by design

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

SNC-RS44P		H.264 MPEG4 M-JPEG	1	720x576	1-way	4/2	Yes	Yes	-	Yes	Supported by design
SNC-RS46N		H.264 MPEG4 M-JPEG	1	720x480	1-way	4/2	Yes	Yes	-	Yes	Supported by design
SNC-RS46P	1.10.02	H.264 MPEG4 M-JPEG	1	720x576	1-way	4/2	Yes	Yes	-	Yes	
SNC-RS84N		H.264 MPEG4 M-JPEG	1	720x480	1-way	4/2	Yes	Yes	-	Yes	Supported by design
SNC-RS84P		H.264 MPEG4 M-JPEG	1	720x576	1-way	4/2	Yes	Yes	-	Yes	Supported by design
SNC-RS86N		H.264 MPEG4 M-JPEG	1	720x480	1-way	4/2	Yes	Yes	-	Yes	Supported by design
SNC-RS86P		H.264 MPEG4 M-JPEG	1	720x576	1-way	4/2	Yes	Yes	-	Yes	Supported by design
SNT-EP104		H.264 MPEG4 M-JPEG	4	720x480	-	-	-	Yes	-	Yes	Supported by design
SNT-EP154	1.10.01	H.264 MPEG4 M-JPEG	4	720x480	-	-	-	Yes	-	Yes	
SNT-EX101		H.264 MPEG4 M-JPEG	1	720x480	1-way	2/2	Yes	Yes	-	Yes	Supported by design
SNT-EX101E	1.10.01	H.264 MPEG4 M-JPEG	1	PAL: 720x576 NTSC: 720x480	1-way	2/2	Yes	Yes	-	Yes	
SNT-EX154	1.10.01	H.264 MPEG4 M-JPEG	4	720x480	1-way	4/4	Yes	Yes	-	Yes	

VIVOTEK



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
FD8133		H.264 MPEG4 M-JPEG	1	1280x800	-	1/0	-	Yes	Yes	Supported by design
FD8134	0100e	H.264 MPEG4 M-JPEG	1	1280x800	-	1/0	-	Yes	Yes	
IP8330	0100e	H.264 MPEG4 M-JPEG	1	640x480	-	1/0	-	Yes	Yes	
IP8332		H.264 MPEG4 M-JPEG	1	1280x800	-	1/0	-	Yes	Yes	Supported by design

Visit NUUO website for full supporting list:

<http://www.nuuo.com/download.php?node=554>

Release Version 2.4 (2010/9/2)

New Features

1. **Support NUUO mobile client²**
 - iPhone iViewer
 - Blackberry (v2.4.1)
 - Android (coming up)
 - Mobile client (coming up)
2. **Stream profile**
 - Support connecting lower kbps stream in liveview
 - Three stream profiles: original, low, minimum
 - Brands support: Axis, Arecont, Mobotix, Panasonic, Sanyo, Sony, Vivotek, Zavio
3. **Support E-map on web liveview and remote liveviewer**
 - 10 layers of map
 - Camera and I/O indicator
 - Popup E-map on event
4. **Remote I/O solution**
 - Connect SCB-C31 with I/O Box C24/26/28
 - Record on input trigger
 - Configure input as an event; configure output as an action
5. **Camera search tool integration for some brands without UPnP protocol including ACTi, Arecont, Sony**
6. **Auto port-forwarding – save time in configuring port-forwarding³**
7. **Total recording space can be up to 16TB by connecting external storage to NV-4080S/4160S⁴**
8. **2ch license for NV-2020 to upgrade to 4ch capacity**

System Improvement

1. [System] Before volume created, system will prevent users from choosing “always recording” and “Recording by schedule”. The check point is: users click the **Save** button after changing the recording mode
2. [System] Optimizing virtual memory management, which prevents memory virtual size overflow
3. [System] Extend the recycling time buffer on NV-4080S/4160S to avoid missing few seconds recording
4. [Save/Load Configuration] Support backup/restore POS and E-map configuration.

Note: If there is POS database existed in NVRmini, loading configuration with different POS application config is likely to make the original POS data unsearchable.

Note: In the condition of saved configuration is without E-map or POS settings, selecting loading configuration with E-map/POS settings will lead you get the default. The original E-map/POS settings (if any) are covered and untraceable.

5. [Camera] Support control Sanyo HD5400/HD5600 PTZ by joystick
6. [Camera] Support Panasonic BB-HCM527 PTZ function

Bug Fixed

1. Fixed PTZ function bugs on Panasonic WV-NT304
2. Fixed the connection bugs on Panasonic WV-NP472
3. Fixed parameter configuration bug on StarDot video server
4. Remove invalid Sanyo model VCC-HD3300/VCC-HD3500

² Only cameras integrated with stream profile can be connected by mobile client

³ Compatible with router with UPnP service function

⁴ Compatible with Promise DAS DS4600; when connecting to DAS, the recording bitrate should be lower to 40Mbps

New Camera Supported

1. ACTi: ACM4001, AMU9401, AMU9711, CAM5130, CAM5140, CAM5150, CAM6100, SED2100, TCM1231, TCM1232, TCM3511, TCM4101, TCM5312, TCM5601, TCM5611, TCM7411, TMU9811, TMU9911
2. Axis: P5534, Q1910, Q1910-E
3. **Basler**: BIP-640c, BIP-640c-dn, BIP-1000c, BIP-1000c-dn, BIP-1300c, BIP-1300c-dn, BIP-1600c, BIP-1600c-dn, BIP-D1000c-dn, BIP-D1300c-dn
4. Brickcom: CB-100Ae, CB-100Ap, FB-100Ae, FB-100Ap, FD-100Ae, WCB-100Ae, WFB-100Ae
5. HIKVision: DS-2CD7133-E, DS-2CD7153-E, DS-2CD733F-E, DS-2CD753F-E, DS-2CD793PFWD-E, DS-2CD863PF-E
6. Panasonic: BB-HCM547A, BL-C140A
7. Sony: SNC-CH240, SNC-DH140
8. **Videosec**: IBF-211, IDA-210, IP-206M, IS-240
9. Vivotek: FD8161, FD8361

Known Issue

1. NVRmini doesn't support instant playback yet. When CMS connect to NVRmini, it cannot playback one minute before. (will fix it in v2.5)
2. After duplicate ImmerVision camera and choose ImmerVision PTZ mode, those channels will zoom in/out in the same way.
3. Cannot add new line in POS filter if the language is Korean. (will fix it in v2.5)
4. Cannot backup selected video spanning across one day if there is POS transaction. (will fix it in v2.4.1)
5. The event & action setting of NVRmini won't synchronize if multiple users login at the same time, and one of them changes the settings. To take effect, users need to refresh the page. (will fix it in v2.5)

Example: User A is watching liveview and find motion detection/input trigger; meanwhile, User B is modifying the configuration on event & action to disable this event, but User A is still seeing event trigger in liveview. The workaround is refreshing the page.

Remark

1. HIKVision: for old-platform models, only FW 20100320 is acceptable; for new-platform models, FW 20100628 is compatible
2. Language Polish is removed from NV-4080 and NV-4160

Appendix

Stream profile

- Original
- Low: under 300kbps; designed for mobile client single-view
- Minimum: under 100 kbps; designed for mobile client multi-view

Brand/Series	Low Profile		Minimum Profile	
	Resolution	Framerate	Resolution	Framerate
Arecont	half	3	half	1
Axis	CIF	5	QCIF	5
Mobotix	CIF	3	QCIF	2
Panasonic BB/BL	CIF	4	QCIF	2
Panasonic i-pro 3 megapixel	VGA	1	VGA	0.5
Panasonic i-pro others	CIF	2	CIF	1
Sanyo HD1, HD3, HD4	CIF~VGA	3	CIF~VGA	1

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

Sanyo HD2	CIF~4 Mega	0.1~3	CIF~4 Mega	0.1~3
Sony	QCIF~Full HD	0.1~10	QCIF~Full HD	0.1~10
Vivotek 7000v2/8000	CIF	5	QCIF	2
Vivotek 7000v2/8000 (megapixel)	CIF	3	QCIF	3
Zavio	CIF	5	QCIF	3
Zavio (megapixel)	CIF	7	CIF	2

HD1: VCC-HD2500, VDC-HD3500

HD2: VCC-HD2100, VCC-HD2300, VDC-HD3100, VDC-HD3300

HD3: VCC-HD5400, VCC-HD5600

HD4: VCC-HD4600

New Camera Support

ACTi



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Camera Search Tool	Remarks
ACM4001		MPEG4 M-JPEG	1	640x480	1-way	-	-	Yes	-	Yes	Supported by design
AMU9401	A1D-220-V3 .10.22-NB	MPEG4 M-JPEG	1	1280x1024	1-way	0/0	-	Yes	-	Yes	
AMU9711	A1D-220-V3 .10.22-NB	MPEG4 M-JPEG	1	1280x1024	1-way	0/0	-	Yes	-	Yes	Supported by design
CAM5130		MPEG4	1	720x480	1-way	1/1	-	Yes	-	Yes	Supported by design
CAM5140		MPEG4	1	720x480	1-way	1/1	-	Yes	-	Yes	Supported by design
CAM5150		MPEG4	1	720x480	1-way	1/1	-	Yes	-	Yes	Supported by design
CAM6100		MPEG4	1	720x480	-	2/2	Yes	Yes	-	Yes	Supported by design
SED2100		MPEG4	1	720x480	1-way	2/2	-	Yes	-	Yes	Supported by design
TCM1231	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	
TCM1232		H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	Supported by design
TCM3511	A1D-310-V4.06.00 - AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	Yes	Yes	Yes	
TCM4101		H.264 MPEG4 M-JPEG	1	640x480	1-way	-	-	Yes	Yes	Yes	Supported by design
TCM5312		H.264 MPEG4 M-JPEG	1	1280x960	1-way	1/1	-	Yes	Yes	Yes	Supported by design

12/10

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

TCM5601	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	-	Yes	Yes	Supported by design
TCM5611	A1D-310-V4 .06.09-AC	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	-	Yes	Yes	
TCM7411		H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	-	Yes	Yes	Supported by design
TMU9811	A1D-310-V4 .07.10-NB	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	-	-	Yes	
TMU9911	A1D-310-V4 .07.10-NB	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	-	-	-	Yes	Supported by design

AXIS



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
P5534	5.15.1	H.264 M-JPEG	1	1280x720	1-way	2/2	Yes	Yes	Yes	Supported by design
Q1910	5.06	H.264 M-JPEG	1	720x576	1-way	1/1	Yes	Yes	Yes	
Q1910-E		H.264 M-JPEG	1	720x576	1-way	1/1	Yes	Yes	Yes	Supported by design

Basler



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
BIP-640c		H.264 MPEG4 M-JPEG	1	640x480	-	1/1	-	-	-	Tested by manufacturer
BIP-640c-dn		H.264 MPEG4 M-JPEG	1	640x480	-	1/1	-	-	-	Tested by manufacturer
BIP-1000c		H.264 MPEG4 M-JPEG	1	1024x768	-	1/1	-	-	-	Tested by manufacturer
BIP-1000c-dn		H.264 MPEG4 M-JPEG	1	1024x768	-	1/1	-	-	-	Tested by manufacturer
BIP-1300c		H.264 MPEG4 M-JPEG	1	1280x960	-	1/1	-	-	-	Tested by manufacturer
BIP-1300c-dn	BIP-1300c-dn-1.6-2	H.264 MPEG4 M-JPEG	1	1280x960	-	1/1	-	Yes	-	
Note:	On-Edge Motion: H.264 and M-JPEG.									
BIP-1600c		H.264 MPEG4 M-JPEG	1	1600x1200	-	1/1	-	-	-	Tested by manufacturer
BIP-1600c-dn		H.264 MPEG4 M-JPEG	1	1600x1200	-	1/1	-	-	-	Tested by manufacturer

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

BIP-D1000c-dn		H.264 MPEG4 M-JPEG	1	1024x768	-	1/1	-	-	-	Tested by manufacturer
BIP-D1300c-dn	BIP-D1300c-dn-1.6-1	H.264 MPEG4 M-JPEG	1	1280x960	-	1/1	-	Yes	-	

Note: On-Edge Motion: H.264 and M-JPEG.

Brickcom



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
CB-100Ae	v3.0.2.4	MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	Tested by manufacturer
CB-100Ap	v3.0.2.4	H.264 MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	Tested by manufacturer
FB-100Ae	v3.0.2.3	MPEG4 M-JPEG	1	1280x800	1-way	1/0	-	-	Yes	Tested by manufacturer
FB-100Ap	v3.0.2.3	H.264 MPEG4 M-JPEG	1	1280x800	1-way	1/0	-	-	Yes	Tested by manufacturer
FD-100Ae	v3.0.2.3	MPEG4 M-JPEG	1	1280x800	1-way	1/0	-	-	Yes	Tested by manufacturer
WCB-100Ae	v3.0.2.4	MPEG4 M-JPEG	1	1280x800	1-way	-	-	-	Yes	Tested by manufacturer
WFB-100Ae	v3.0.2.3	MPEG4 M-JPEG	1	1280x800	1-way	1/0	-	-	Yes	Tested by manufacturer

HIKVISION



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
DS-2CD7133-E	V2.0 100628	H.264	1	640x480	-	-	-	Yes	-	
DS-2CD7153-E	V2.0 100628	H.264	1	1600x1200	-	-	-	Yes	-	
DS-2CD733F-E	V2.0 100716	H.264	1	640x480	1-way	2/2	Yes	Yes	-	Tested by manufacturer
DS-2CD753F-E	V2.0 100628	H.264	1	1600x1200	1-way	2/2	Yes	Yes	-	Tested by manufacturer
DS-2CD793P FWD-E	V2.0 100628	H.264	1	704x576	1-way	2/2	Yes	Yes	No	Tested by manufacturer
DS-2CD863P F-E	V2.0 100628	H.264	1	1280x960	1-way	1/1	Yes	Yes	-	Tested by manufacturer

Panasonic

NVRmini Release Note

NUUO version 2.4.1_release date_20101129



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
BB-HCM547A	3.60R00	MPEG4 M-JPEG	1	640x480	1-way	2/1	Yes	Yes	Yes	
Note: The camera is tested by link, so some functions can't be verified.										
BL-C140A	3.51R01	MPEG4 M-JPEG	1	640x480	-	-	-	Yes	Yes	

Sony



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Camera Search Tool	Remarks
SNC-CH240	1.10.01	H.264 MPEG4 M-JPEG	1	1920x1440	1-way	1/2	-	Yes	Yes	Yes	
SNC-DH140	1.07.00	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/2	-	Yes	Yes	Yes	
Note: Motion detection will be turned off upon changing to maximum resolution. Remember to enable it in camera web.											

Vidosec



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
IBF-211	5.0.2.3874	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	Yes	Yes	Yes	
IDA-210		H.264 MPEG4 M-JPEG	1	1280x1024	1-way	1/1	Yes	Yes	Yes	Tested by manufacturer
IP-206M	5.a.2.4031	H.264 MPEG4 M-JPEG	1	1280x1024	1-way	-	-	Yes	Yes	
IS-240		H.264 MPEG4 M-JPEG	1	704x576	1-way	1/1	Yes	Yes	Yes	Tested by manufacturer
Note: To solve the disconnection problems on SXGA resolution with quality 99 and 100, please upgrade to the following FW, which is certified by manufacturer. IBP-211 and IDA-210: 5.0.2.4437; IP-206M and IS-240: 5.a.2.4441										

VIVOTEK



Device Name	Tested Firmware	Video Format	Video Ch	Max Resolution	Audio	I/O Ch	PTZ	On-Edge Motion	UPnP	Remarks
FD8161	0100h	H.264 MPEG4 M-JPEG	1	1600x1200	1-way	1/1	-	Yes	Yes	Supported by design

NVRmini Release Note

NUUO version 2.4.1_release date_20101129

FD8361	0100d1	H.264 MPEG5 M-JPEG	1	1600x1200	1-way	1/1	-	Yes	Yes	
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