

NUUO version 3.9.1 Release date_2018.09

Release Version 3.9.1 (2018/09)

Modules

Item			Version
FW		NS-2040	
		NS-2080	
		NS-2160	
	NVR	NS-8060	03.09.0001.0002
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v18.9.0
Application	Install Wizard		6.1.705.18
	Remote Live Viewer		6.1.705.18
	Playback System		6.1.705.18
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline Lic	ense Tool	1.0
Document	Local User manual		3.1
	Remote U	ser manual	3.1
	QSG		3.1

Bugs Fixed

- 1. Fix vulnerability issues
 - i. CVE-2018-1149
 - ii. CVE-2018-1150
 - iii. CVE-2018-11523
- 2. #4412: EHLO failed when any non-alphabet is inside host name (server name)

Special Notice:

1. DtDNS had ceased operations as of August 1, 2018.



NUUO version 3.8.0 Release date_2018.05

Release Version 3.8.0 (2018/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.08.0000.0005
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v18.5.0
Application	Install Wizard		6.1.705.18
	Remote Live Viewer		6.1.705.18
	Playback S	System	6.1.705.18
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline Lic	ense Tool	1.0
Document	Local User	manual	3.1
	Remote User manual		3.1
	QSG		3.1

New Feature

1. Compliance with Europe GDPR Regulation of User Privilege Export Encryption

Enhancement

- 1. Update Japanese Language
- 2. Update DP to v18.5.0.18

Bugs Fixed

1. Fix FAE#4323 : User password's characters issue.



NUUO version 3.7.0 Release date_2018.04

Release Version 3.7.0 (2018/04)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.07.0000.0011
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v18.4.0
Application	Install Wizard		6.1.705.18
	Remote Live Viewer		6.1.705.18
	Playback System		6.1.705.18
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline Lic	ense Tool	1.0
Document	Local User	manual	3.1
	Remote User manual		3.1
	QSG		3.1

Enhancement

- 1. Update ActiveX to 6.1.705.18
- 2. Update DP to v18.4.0.33
- 3. Export / Import add more configs information
 - User account
 - Date/time setting
 - Network setting
- 4. Enhance for NuClient interconnect Solo
 - Supports sending Time Zone
 - Server Name Issue
- 5. Enhance diagnostic tool
 - md5check.txt : md5 check result
 - netstat : netstat -plnt
 - /NUUO/lib/ipcampack.conf : device pack version

Bugs Fixed

- 1. Fix FAE#4222 : Daily report didn't show as html.
- 2. Fix FAE#4247: Local menu can't create volume, even the size is under 16TB.



NUUO version 3.6.5 Release date_2018.02

Release Version 3.6.5 (2018/02)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.06.0005.0002
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v18.2.0.25
Application	Install Wizard		6.1.705.17
	Remote Live Viewer		6.1.705.17
	Playback S	System	6.1.705.17
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline License Tool		1.0
Document	Local User	manual	3.1
	Remote U	ser manual	3.1
	QSG		3.1

Enhancement

- 1. Supports local privilege for video backup function
- 2. Supports SMTP service via TLS
- 3. Add a switch on local motion setting
- 4. Modify the default setting of "Enable built-in DHCP" to off

Bugs Fixed

1. Fix FAE# Enhance configures while doing backup



NUUO version 3.6.2 Release date_2017.12

Release Version 3.6.2 (2017/12)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.06.0002.0006
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.13.0
Application	Install Wizard		6.1.705.17
	Remote Live Viewer		6.1.705.17
	Playback System		6.1.705.17
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline Lic	ense Tool	1.0
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

Enhancement

- 1. Upgrade PHP to 5.6.32
- 2. Update ActiveX to 6.1.705.17
- 3. Enhance HDD S.M.A.R.T information
- 4. Enhance embedded motion log for troubleshooting
- 5. (FAE #3928) Enhance volume recycle mechanism
- 6. (FAE #3912) Support to send e-mail by sever with non-English server name
- 7. Enhance backup configurations
- 8. (FAE#4056) Upgrade lighttpd from 1.4.43 to 1.4.48

Bugs Fixed

- Fix FAE#3920, 3953 :Unable to playback recordings of Vivotek cameras VS3100 and IP3132 in Remote Playback.
- 2. Fix FAE#3997 : FW 3.4.0 or above unable to apply imported configuration in local menu
- 3. Fix FAE#4026: Auto backup to ftp failed



NUUO version 3.6.2 Release date_2017.12

Release Version 3.6.2 (2017/12)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.06.0002.0006
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.13.0
Application	Install Wizard		6.1.705.17
	Remote Live Viewer		6.1.705.17
	Playback System		6.1.705.17
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline Lic	ense Tool	1.0
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

Enhancement

- 1. Upgrade PHP to 5.6.32
- 2. Update ActiveX to 6.1.705.17
- 3. Enhance HDD S.M.A.R.T information
- 4. Enhance embedded motion log for troubleshooting
- 5. (FAE #3928) Enhance volume recycle mechanism
- 6. (FAE #3912) Support to send e-mail by sever with non-English server name
- 7. Enhance backup configurations
- 8. (FAE#4056) Upgrade lighttpd from 1.4.43 to 1.4.48

Bugs Fixed

- Fix FAE#3920, 3953 :Unable to playback recordings of Vivotek cameras VS3100 and IP3132 in Remote Playback.
- 2. Fix FAE#3997 : FW 3.4.0 or above unable to apply imported configuration in local menu
- 3. Fix FAE#4026: Auto backup to ftp failed



NUUO version 3.5.0 Release date_2017.08

Release Version 3.5.0 (2017/08)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.05.0000.0016
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.9.0
Application	Install Wizard		6.1.705.15
	Remote Live Viewer		6.1.705.15
	Playback 9	System	6.1.705.15
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline License Tool		1.0
Document	Local User manual		3.1
	Remote U	ser manual	3.1
	QSG		3.1

New Features

- 1. Prevent manual record when local screen at playback
- 2. Add diagnostic Tool
- 3. Update Activex to 6.1.705.15

Bugs Fixed

- 1. Axis physical ptz panel issue
- 2. Web Liveview / Remote Liveview can distinguish from NVR motion or Edge motion
- 3. Fix abnormal manual record status issue



NUUO version 3.4.0 Release date 2017.05

Release Version 3.4.0 (2017/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.04.0000.0019
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.7.0
Application	Install Wizard		6.1.705.13
	Remote Live Viewer		6.1.705.13
	Playback S	System	6.1.705.13
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline License Tool		1.0
Document	Local User manual		3.1
	Remote Us	ser manual	3.1
	QSG		3.1

New Features

- 1. Enhance the strategy of setting backup
- 2. Add "Inactive notification" of P2P service
- 3. Add Calendar feature in local playback
- 4. Add "Always connected" for improving APP experience
- 5. Support Axis Generic with real model name
- 6. Support patrol setting in local display
- 7. Support Java web for Firefox on RedHat & Ubuntu

Bugs Fixed

- 1. Fix HDMI audio out issue
- 2. CMS playback issue
- 3. Enable symbol:'_', '&', '?', '=', '@' in IP address for Generic / RTSP
- 4. 2nd monitor on screen display issue
- 5. Multi-Language patrol setting group name issue
- 6. Default setting not pop up installation wiazard on 4K monitor issue
- 7. Camera dual stream reconnecting issue
- 8. Fix Autoscan out of resolution issue

Known Issues

1. After disable "Always connect" , 2nd & 3rd streaming might not be disconnected



NUUO version 3.3.0 release date_2017.2

Release Version 3.3.0 (2017/2)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.03.0000.009
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.4.0
Application	Install Wizard		6.1.705.13
	Remote Live Viewer		6.1.705.13
	Playback System		6.1.705.13
	Backup Sy	/stem	6.1.705.13
	Verificatio	n Tool	6.1.705.13
	Offline Lic	ense Tool	6.1.705.13
Document	Local User	manual	3.1
	Remote User manual		3.1
	QSG		3.1

New Features

- 1. Support Joystick function
- 2. Pack latest Device Pack v 5.4.0

Bugs Fixed

N/A



NUUO version 3.2.0 release date_2016.12

Release Version 3.2.0 (2016/12)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.02.0000.0014
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.2.0
Application	Install Wizard		6.1.705.13
	Remote Live Viewer		6.1.705.13
	Playback System		6.1.705.13
	Backup Sy	/stem	6.1.705.13
	Verificatio	n Tool	6.1.705.13
	Offline Lic	ense Tool	6.1.705.13
Document	Local User	manual	3.1
	Remote User manual		3.1
	QSG		3.1

New Features

- 1. Update Activex to 6.1.705.13
- 2. Pack latest Device Pack v 5.2.0
- 3. Upgrade Dropbear SSH to v2016.74
- 4. Upgrade Lighttpd to 1.4.42
- 5. Upgrade SSL to 0.9.8zh

Bugs Fixed

- 1. Fix FTP Username and Password length limitation to 32
- 2. Fix Disk S.M.A.R.T status
- 3. Fix Playback icon for event log
- 4. Fix Reset Button failure



NUUO version 3.1.0.73 release date_2016.09

Release Version 3.1.0.73 (2016/09)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.01.0000.0073
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.16
Application	Install Wizard		6.1.705.9
	Remote Live Viewer		6.1.705.9
	Playback S	System	6.1.705.9
	Backup Sy	/stem	N/A
	Verificatio	n Tool	N/A
	Offline Lic	ense Tool	1.0
Document	Local User	manual	3.1
	Remote User manual		3.1
	QSG		3.1

New Features

1. Update Activex to 6.1.705.9

Bugs Fixed

- 1. Fix Linux vulnerability issues
- 2. Fix remote controller issue



NUUO version 3.0.0.63 release date_2016.05

Release Version 3.0.0.63 Hotfix (2016/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.00.0000.0063
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.11
Application	Install Wizard		2.3
	Remote Live Viewer		2.3
	Playback S	System	2.3
	Backup Sy	/stem	2.3
	Verificatio	n Tool	2.3
	Offline Lic	ense Tool	2.3
Document	Local User	manual	3.0
	Remote User manual		3.0
	QSG		3.0

New Features

> 2nd stream record - Dual record

Allow system to operate dual record with both streams.

> H.265 Support

Remote client only with supported cameras

- Support Hungarian
- Dual Monitor

User can enjoy dual monitors with different layout on local client.

> Local IPC image preview

Allow user to manage camera easily.

Local IPC Motion

New Motion detection added.

- > Local IPC firmware upgrade, IPC reboot and reset to default
- > UPnP Support

User can mass upgrade SNVRs/ IPCs in one time by IPInstaller in remote PC.



NUUO version 3.0.0.63 release date_2016.05

Bugs Fixed

- 1. Emergency record will start when stop at first time login and switch to playback.
- 2. WAN file backup timeout when transferring large files is fixed.
- 3. WAN playback performance is enhanced by adding new NUPP command "NEXTGOP".
- 4. Local joystick support is merged back.
- 5. Local audio support in 2nd stream.
- 6. Fix local display "splash" issue that happens sometimes.
- 7. Fix local display showing FPS without decoded issue that happens sometimes.
- 8. Fix local backup POS sometimes can't show Chinese.
- 9. Fix remote playback can't use "select folder" to show POS.
- 10. Local audio will disappear when monitor "unplug and plug" in solo is fixed.
- 11. Drag and Drop will sometime malfunction during high CPU usage is fixed.
- 12. Fix local backup issue, record operation sequence.

- 1. User needs to use client pack 6.1.705.5 for new features to avoid failure.
- 2. To change camera order in liveview, user needs to click grid more than 2 seconds until mouse cursor change icon for drag and drop.



NUUO version 2.3.7.9 release date_2015.11

Release Version 2.3.7.9 (2015/11)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	02.03.0007.0009
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.6
Application	Install Wizard		2.3
	Remote Live Viewer		2.3
	Playback System		2.3
	Backup Sy	/stem	2.3
	Verificatio	n Tool	2.3
	Offline License Tool		2.3
Document	Local User manual		2.3
	Remote User manual		2.3
	QSG		2.2.2

New Features

- > Silent install
- Camera drag and drop

Bugs Fixed

- 1. Optimize WAN playback & pnp performance.
- 2. 2nd profile support audio.
- 3. Camera repeat adding when exchange POE port.
- 4. Optimize WAN audio performance on AP & web.
- 5. Language issue on live view and playback.
- 6. Onbox input and output trigger issue.
- 7. Production issues.

- 1. 16ch, CPU loading > 70%, still has chance auto-exchange if click grid only.
- 2. Local 2nd profile audio abnormal at 4x4.
- 3. When LAN1 not connecting, system need more time to reconnect camera if exchange POE port.



NUUO version 2.2.2 release date_2015.05

Release Version 2.2.2 (2015/5/7)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	02.02.0002.0004
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.0
Application	Install Wizard		2.2.2
	Remote Live Viewer		2.2.2
	Playback System		2.2.2
	Backup Sy	/stem	2.2.2
	Verificatio	n Tool	2.2.2
	Offline License Tool		2.2.2
Document	Local User manual		2.2.2
	Remote User manual		2.2.2
	QSG		2.2.2

New Features

- 1. New Action: PTZ preset go Supported by Events below:
 - Motion
 - Input
 - Recurrent Event

- 1. When naming prohibit character for camera preset point or patrol group (ex: √:*?"|), the Camera preset & group list can't be displayed on web setting .
- 2. When connect to Sony Camera model :SNC-ER580 , proceed "clear all" for all the preset points ,the preset point 1 will be cleared only .
- 3. The PTZ panel may not be used after connecting to PTZ camera , which will be improved in the next version.



NUUO version 2.1.5 release date_2015.02

Release Version 2.1.5 (2015/2/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	02.01.0005.0014
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v3.11
Application	Install Wizard		2.1.5
	Remote Live Viewer		2.1.5
	Playback System		2.1.5
	Backup Sy	/stem	2.1.5
	Verificatio	n Tool	2.1.5
	Offline License Tool		2.1.5
Document	Local User manual		2.1.5
	Remote U	ser manual	2.1.5
	QSG		2.1.5

New Features

- 1. Support Axis Joystick T8311 and Urment Joystick MIW.
- 2. Support new event: recurrent event

Bug Fixed

- 1. Fixed server failed to send out email when DI triggered.
- 2. Fixed 2-way audio failed to work on CMS under some condition.
- 3. Fixed that color of video is distorted when using fisheye dewarp.
- 4. Fixed the issue that server is unable to mute when connecting HDMI monitor.
- 5. Fix the bug that unable to support non-standard 1080P monitor.
- 6. Fix the bug that unable to support touch screen under specific circumstances.
- 7. Fix video hang when using specific camera model.

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ⁱ Please refer to compatible touch screen list.



NUUO version 2.0.1 release date_2014.09

Release Version 2.0.1 (2014/9/16)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	02.00.0001.0004
		NS-2080	02.00.0001.0004
	NVR	NS-8060	
		NS-8065	
		NS-2160	
		NS-8160	02.00.0001.0006
		NS-8165	
	Camera Package		DP v3.4
Application	Install Wizard		2.0.1
	Remote Live Viewer		2.0.1
	Playback System		2.0.1
	Backup Sy	/stem	2.0.1
	Verificatio	n Tool	2.0.1
	Offline License Tool		2.0.1
Document	Local User manual		2.0.1
	Remote User manual		2.0.1
	QSG		2.0.1

Bug Fixed

- 1. Fix fisheye dewarp issue
- 2. Fix issue for specific camera's display status

Known Issues

- 1. Some functions may not work properly on Internet Explorer 11. Internet Explorer 8, 9, 10, Windows Chrome or Mac Safari v7.0 is recommended. IE11 will be officially supported in the coming version.
- 2. Unable to adjust audio volume on HDMI monitor. It will be fixed in later version.
- 3. V1.1.2 is the minimum version for upgrade to v2.0. Please upgrade to v1.1.2 before upgrade to v2.0.
- 4. NS-8065 does not support disk hot swap on some external storages (eSATA DAS) currently. The RAID status maybe incorrect. Please reboot NVRsolo after installation, or install the external storage while NVRsolo is off. It will be fixed in later version.

Please find DP 3.4 release note for camera integration, bug fixed and known issue.

Warning: Please be noted that once upgraded to 2.0.1, the firmware cannot be downgraded.



NUUO version 2.0.0 release date_2014.03

Release Version 2.0.0 (2014/3/3)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	02.00.0000.0094
	INVK	NS-8060	02.00.0000.0094
		NS-8065	
	Camera Pa	ackado	DP v3.1
	Calliela Pa	ackage	03. 01.0000.0032
Application	Install Wiz	zard	2.0.0
	Remote Live Viewer		2.0.0
	Playback S	System	2.0.0
	Backup Sy	/stem	2.0.0
	Verification Tool		2.0.0
	Offline License Tool		2.0.0
Document	Local User manual		2.0.0
	Remote U	ser manual	2.0.0
	QSG		2.0.0

New Features

- 1. Support camera multi-stream setting for saving remote bandwidth and local decoding loading¹.
- 2. Support camera two-way audio²(Local and Internet Explore only).
- 3. New action supported³:
 - Camera snapshot to FTP.
 - E-mail with snapshot.
 - Send to CMS with snapshot.
- 4. Execute HDD S.M.A.R.T self-test on server. Monitor hard dives health easily.
- 5. Support A08 I/O Box.
- 6. Enhance event log: click and play (Local and Internet Explore only)
- 7. RAID 0, 1, 5, and 10 for maximum capacity or data protection on NS-8065.
- 8. Compatible with Windows Chrome and Mac safari v7.0.

Bug Fixed

- 1. Fix the issue that when backup a video footage from local on USB drive, it overwrites the previous backup.
- 2. Fix the issue that transferring camera or POS license may pop up "error code: 268435468" in License Management page.
- 3. Fix the issue that camera DO duration configuration may not be saved under Japanese and Chinese
- 4. Fix the issue about digital PTZ in live view and playback.
- 5. Other minor bugs.

- 1. Some functions may not work properly on Internet Explorer 11. Internet Explorer 8, 9, 10, Windows Chrome or Mac Safari v7.0 is recommended. IE11 will be officially supported in the coming version.
- 2. Unable to adjust audio volume on HDMI monitor. It will be fixed in later version.
- 3. V1.1.2 is the minimum version for upgrade to v2.0. Please upgrade to v1.1.2 before upgrade to v2.0.

¹ DP 3.1 and above

² DP 3.1 and above

³ DP 3.1 and above



NUUO version 2.0.0 release date_2014.03

4. NS-8065 does not support disk hot swap on some external storages (eSATA DAS) currently. The RAID status maybe incorrect. Please reboot NVRsolo after installation, or install the external storage while NVRsolo is off. It will be fixed in later version.

Please find DP 3.1 release note for camera integration, bug fixed and known issue.



NUUO version 1.3.0 release date_2013.12

Release Version 1.3.0 (2013/12/23)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	01.03.0000.0009
		NS-8060	
	Camera Pa	ackado	DP v2.19
	Calliela Pa	ackage	02.19.0000.0028
Application	Install Wiz	zard	1.3.0
	Remote Li	ve Viewer	1.3.0
	Playback System		1.3.0
	Backup System		1.3.0
	Verification Tool		1.3.0
	Offline License Tool		1.3.0
Document	Local User manual		1.3
	Remote User manual		1.3
	QSG		1.1

Bug Fixed

- 1. Pausing and operating digital PTZ on local playback shouldn't lead to black videos.
- 2. Fixed the issue that audio stops playing when unplugging the monitor cable and the audio won't resume after the monitor cable is plugged back. Every action of monitor cable should not have impact on audio playing.
- 3. Enhance the file system to improve recording stability.
- 4. Fixed the communication issue between CMS and NVR to be able to view the videos of the associated camera of digital input.
- 5. Fine tune the jog shuttle behavior on NS-8060.

Please find DP 2.19 release note for camera integration, bug fixed and known issue.



NUUO version 1.2.0 release date_2013.10

Release Version 1.2.0 (2013/10/24)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	01.02.0000.0005
		NS-8060	
	Camora Pr	ackago	DP v2.17
	Camera Pa	аскауе	02.17.0000.0032
Application	Install Wiz	ard	1.2.0
	Remote Li	ve Viewer	1.2.0
	Playback System		1.2.0
	Backup System		1.2.0
	Verification Tool		1.2.0
	Offline License Tool		1.2.0
Document	Local User manual		1.2
	Remote Us	ser manual	1.2
	QSG		1.1

Enhancement

- Support to display images with H.264 codec over 4 megapixels on local monitor.
 - **H.264**: no resolution limitation on single channel, the total capacity is around:
 - 8 channels: 5M / others: 2M
 - 6 channels: 8M / others: 2M

No change on MPEG4/MJPEG:

- MPEG4: Up to 2M (1920x1080) per channel
- MJPEG: Up to 4M (2560x1600) per channel but with limited fps support
 - *The local display won't work if either one side is over the limit.
- 2. Improve the backup mechanism to be able to backup videos via WAN with stable 2M bandwidth. 1

Bug Fixed

- 1. Fixed the issue that recording mode will be changed from motion recording to always recording under certain conditions.
- 2. Fixed the issue that no video images show when clicking to playback as receiving push notification on mobile.
- 3. Fixed the issue that it requires users to manually select video files to play the backup videos, instead of executing Playback.exe to play videos directly.
- 4. Fixed Korean characters display issue on local monitor. 2
- 5. Volume status is shown correctly on the daily system report.

Known Issue

- 1. Transferring camera or POS license and rebooting system within 30 days after activation may pop up "error code: 268435468" in License Management page. This error won't impact any normal operation, please close the error dialog to continue. This issue will be fixed in v2.0.
- 2. If you got an error message with "error code 10006" when trying to logging in NVR system via ezNUUO, please uninstall this program and restart PC to try again.

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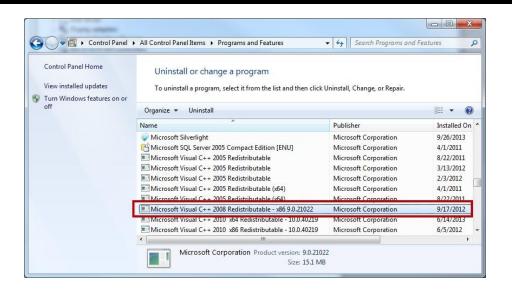
^{*}The actual performance depends on the type of cameras.

 $^{^{}f 1}$ The bit rate of the camera to backup is 4Mbps. If the bit rate is higher, the more stable bandwidth is needed.

We designed different fonts for different languages, to display correctly, please choose the right language on local UI.



NUUO version 1.2.0 release date_2013.10



Please find DP 2.17 release note for camera integration, bug fixed and known issue.



NUUO version 1.1.2 release date 2013.9

Release Version 1.1.2 (2013/9/6)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	01.01.0002.0009
		NS-8060	
	Camera Pa	ackado	DP v2.16
	Calliela Pa	ackage	02.16.0000.0025
Application	Install Wiz	zard	1.1.2
	Remote Li	ve Viewer	1.1.2
	Playback System		1.1.2
	Backup System		1.1.2
	Verification Tool		1.1.2
	Offline Lic	ense Tool	1.1.2
Document	Local User manual		1.1
	Remote U	ser manual	1.1
	QSG	·	1.1

New Features

[General]

1. New language: Hebrew

The total language support is up to 19, including English, Croatian, Czech, Deutsch, Finnish, French, Hebrew, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Simplified Chinese, Traditional Chinese, Spanish, Swedish, Thai, and Turkish...

Enhancement

- 1. Improve the HDMI monitor compatibility
 - Remarks for better display quality:
 - ■Monitor: the monitors with "1080" resolution support
 - ■Cable: HDMI cable should be with HDMI certificate, and the cord spec should be AWG 16 (better than AWG 18, 20,...) depending on the cord length. If the length of your HDMI/VGA is over 1M, add a "repeater" to strengthen the signal.
 - ■If you still can't get any signals, please try to switch the display resolution by pressing the "10+" button on the remote controller, releasing it and pressing the "." button to see if there is image. (switching sequence: auto (default) → 1024x768 → 1280x720 → 1280x1024 → 1920x1080)
- 2. Improve the quality of mouse cursor moving.
- 3. Install ActiveX for web liveview / playback via Install Shield (setup.exe).

Bug Fixed

1. Fixed the issue that model lists of some brands are not available on local settings, including 3M, D-Link and TP-LINK.

Known Issues

1. Incorrect input status of remote I/O box C26 and C28 on input panel in Live View. This issue will be fixed in v1.2.

Please find DP 2.16 release note for camera integration, bug fixed and known issue.



NUUO version 1.1.2 release date_2013.9

Release Version 1.1.1 (2013/8/12)

Modules

Item			Version
FW	NVR	NS-1040	01.01.0001.0008
	Camera Pa	ackage	DP v2.15
			02.15.0000.0033
Application	Install Wiz	zard	1.1.0
	Remote Li	ve Viewer	1.1.0
	Playback System		1.1.0
	Backup System		1.1.0
	Verification Tool		1.1.0
	Offline Lic	ense Tool	1.1.0
Document	Local User	r manual	1.1
	Remote U	ser manual	1.1
	QSG		1.1

Bug Fixed

2. Fixed the issue that recorded videos may become black sometimes after <u>watching live videos on</u> <u>mobile client or switching to multi stream to view on web/remote live viewer.</u>

Please find DP 2.15 release note for camera integration, bug fixed and known issue.

^{*}Upgrading FW cannot repair those videos which have became black already, but we have a solution to fix the videos without any problem. Please submit the request on http://www.nuuo.com/eHelpdesk.php.



NUUO version 1.1.2 release date_2013.9

Release Version 1.1.0* (2013/8/2)

Modules

Item			Version
FW	NVR	NS-1040	01.01.0000.0124
	Camera Pa	ackage	DP v2.14
			02.14.0000.0029
Application	Install Wiz	zard	1.1.0
	Remote Li	ve Viewer	1.1.0
	Playback S	System	1.1.0
	Backup System		1.1.0
	Verification Tool		1.1.0
	Offline Lic	ense Tool	1.1.0
Document	Local User manual		1.1
	Remote Us	ser manual	1.1
	QSG	·	1.1

Bug Fixed

1. Fixed the issue that users can't playback the videos backed up of the day.



NUUO version 1.1.2 release date_2013.9

Release Version 1.1.0 (2013/7/10)

Modules

Item			Version
FW	NVR	NS-1040	01.01.0000.0117
	Camera Pa	ackage	DP v2.14
			02.14.0000.0029
Application	Install Wiz	zard	1.1.0
	Remote Li	ve Viewer	1.1.0
	Playback System		1.1.0
	Backup System		1.1.0
	Verificatio	n Tool	1.1.0
	Offline Lic	ense Tool	1.1.0
Document	Local User	r manual	1.1
	Remote U	ser manual	1.1
	QSG	_	1.1

New Features

[General]

- 1. Push notification support on NUUO mobile client to receive instant notification as an event occurs.
- 2. One-way audio playing is supported on local side.
- 3. Remote I/O solution:
 - Record on input trigger
 - Configure input trigger as an event and output as an action
- 4. Compatible with touch panel:
 - Acer T232HL
 - ViewSonic TD2220
- 5. License is transferrable.
- 6. Support to associate a camera with input pin, which will be the communication media for server and client. (e.g. when an input was triggered and pushed a notification to mobile, users can playback the videos of its associated camera.)
- 7. Control multiple NVR servers separately by single IR remote control
 - When there are multiple NVR devices aligned together, the operator can give each device server ID from 1 to 9, and switch ID on remote control to control different NVR servers separately. There won't be any signal conflict.
- 8. New language: Thai, Turkish
 - The total language support is up to 18, including English, Croatian, Czech, Deutsch, Finnish, French, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Simplified Chinese, Traditional Chinese, Spanish, Swedish, Thai, and Turkish.

[Special on Remote Operation]

- 1. Compatible with Windows 8 32/64-bit.
- 2. Compatible with IE 10 (32-bit).
- 3. Generic fisheye dewarp function to support 360° fisheye camera.¹
- 4. New skin 1366x768 (TV standard).

Enhancement

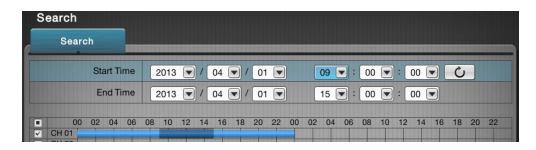
1. Improve video search page. Indicate recorded video footages on time table.

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¹ Axis P5544 and Vivotek CC8130 are excluded.



NUUO version 1.1.2 release date_2013.9



- 2. Enhance the speed of file system check, and add a mechanism to execute file system check at boot time.
- 3. Internet interface selection to choose which LAN is connected to the internet.
- 4. Modify RAID Management page to separate embedded disk(s) and external disk (DAS) from two groups, which implies there is no way to create a single volume with both embedded and external disks inside.2
- 5. Enlarge password limitation from 1~8 to 1~20.

Bug Fixed

- 1. Enlarge the maximum size of single volume to 16TB.
- 2. Fixed the issue that the configurations of recording schedule and user account weren't applied to system after restoring from abnormal shutdown.
- 3. Optimize the audio quality of cameras with GSM-AMR codec.
- 4. Fixed the issue that users are unable to back videos through Playback AP if the route of file is root directory, e.g. D:\\.
- 5. Fixed the issue that local live view image freezes after switching live view and playback back and forth many times.
- 6. System won't stop after the long-time playback (over 6 hours).
- 7. Fixed the issues that error message pops up while doing ezNUUO registration.

Known Issues

- 1. [IE 10] Some functions may not work properly, e.g. unable to drag and drop schedule bar on recording timeline. When encounter this kind of issue, please add this site in Compatibility View Settings of Internet Explorer. This issue will be fixed in the coming version.
- 2. If the Menu Authentication is enabled, system will ask you to log in again when applying configurations on the page of Display/Status Bar. This issue will be fixed in v1.2.

Please find DP 2.14 release note for camera integration, bug fixed and known issue.

² It's still functional for the current NVR which has created a single volume with both embedded and external disks after upgrading. However, if users delete this volume, there is no way to create the same volume back. Please do the backup before upgrad



NUUO version 1.0.1 release date 2013.3

Release Version 1.0.1 (2013/3/19)

Modules

Item			Version
FW	NVR	NS-1040	01.00.0004.0219
	Camera Pa	ackage	DP v2.8.2
			02.08.0000.0011
Application	Install Wiz	zard	1.0.0
	Remote Li	ve Viewer	1.0.0
	Playback S	System	1.0.0
	Backup Sy	/stem	1.0.0
	Verificatio	n Tool	1.0.0
	Offline Lic	ense Tool	1.0.0
Document	Local User	r manual	1.0
	Remote U	ser manual	1.0
	QSG		1.0

New Features

1. Tooltip support in Local Live View and Playback

The DP version we packaged in v1.0.1 is v2.8.2, if you have new camera demands in DP v2.9 or v2.10. Please download it from NUUO website. http://www.nuuo.com/EmptyNode.php?node id=2

Release Version 1.0.0 (2013/1/23)

Modules

Item			Version
FW	NVR	NS-1040	01.00.0004.0212
	Camera Pa	ackage	DP v2.8.2
			02.08.0000.0011
Application	Install Wizard		1.0.0
	Remote Live Viewer		1.0.0
	Playback System		1.0.0
	Backup System		1.0.0
	Verification Tool		1.0.0
	Offline Lice	ense Tool	1.0.0
Document	Local User manual		1.0
	Remote User manual QSG		1.0
			1.0

Key Selling Point

- 1. High quality of local display
 - 120fps @1080p, H.264, MPEG4
 - 240fps @720p, H.264, MPEG4
- 2. One-click setup for more than 70 brands of IP cameras



NUUO version 1.0.1 release date 2013.3

- 3. ezNUUO free from router settings for remote/mobile viewing
- 4. POS support
- 5. Alarm source of NUUO Central Management System

Known Issues

- 1. When connecting two 2.5" hard disk to run Install Wizard, the system will create one RAID 0 volume, which will be corrected as one RAID 1 volume in the next version.
- 2. When use local IP for SMTP server, it will fail to send test mail. We will fix in the next version.
- 3. The system will restart after activating license successfully, which will be fixed in the next version.
- 4. Some words can't be displayed well due to current design, which will be kept improving in the future version.
- 5. Under the condition that there is no need to auto scan to view all channels of videos (e.g. watch 4 channels in 2x2 grid), the auto scan will cause screen flash regularly. We will fix it in next version.
- 6. There is an extra vendor "NUUO" in camera brand, which is not effective and will be removed in the next version.
- 7. The camera models are not in sequence, which will be improved in the next version.
- 8. The system may be freezed as trying to automatically detect Mobotix cameras. We will fix in the future version.

Current Limitations

- 1. Monitor-related
 - Please use the monitor with HDMI or VGA output source and with any of the following resolution support: 1024x768, 1280x720, 1280x1024, 1920x1080.
 - As connecting two monitors, the system will choose the highest resolution to duplicate the displays, which implies that it's possible that no images are shown on one monitor if the supporting resolutions of two monitors are different.
 - If the length of your HDMI/VGA is over 1M, add a "repeater" to strengthen the signal.
 - When the UI/video image isn't at the correct location, correct it by the "auto adjust" function on the monitor or adjust it manually.
- 2. To use ezNUUO service, please make sure the network is stable and the bandwidth is enough.
- 3. Continuous PTZ is not supported in Local Live View.
- 4. The mechanism of auto recycle is recycling a day of videos at 00:00. Please make sure the storage size is large enough.

Please find DP 2.8.2 release note for camera integration, bug fixed and known issue.



NUUO version 1.0.0 release date 2013.1

Release Version 1.0.0 (2013/1/23)

Modules

Item			Version
FW	NVR	NS-1040	01.00.0004.0212
	Camera Pa	ackage	DP v2.8.2
			02.08.0000.0011
Application	Install Wizard		1.0.0
	Remote Live Viewer		1.0.0
	Playback System		1.0.0
	Backup System		1.0.0
	Verification Tool		1.0.0
	Offline Lic	ense Tool	1.0.0
Document	Local User manual		1.0
	Remote User manual		1.0
	QSG		1.0

Key Selling Point

- 1. High quality of local display
 - 120fps @1080p, H.264, MPEG4
 - 240fps @720p, H.264, MPEG4
- 2. One-click setup for more than 70 brands of IP cameras
- 3. ezNUUO free from router settings for remote/mobile viewing
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Known Issues

- 1. When connecting two 2.5" hard disk to run Install Wizard, the system will create one RAID 0 volume, which will be corrected as one RAID 1 volume in the next version.
- 2. When use local IP for SMTP server, it will fail to send test mail. We will fix in the next version.
- 3. The system will restart after activating license successfully, which will be fixed in the next version.
- 4. Some words can't be displayed well due to current design, which will be kept improving in the future version.
- 5. Under the condition that there is no need to auto scan to view all channels of videos (e.g. watch 4 channels in 2x2 grid), the auto scan will cause screen flash regularly. We will fix it in next version
- 6. There is an extra vendor "NUUO" in camera brand, which is not effective and will be removed in the next version.
- 7. The camera models are not in sequence, which will be improved in the next version.
- 8. The system may be freezed as trying to automatically detect Mobotix cameras. We will fix in the future version.

Current Limitations

- 1. Monitor-related
 - Please use the monitor with HDMI or VGA output source and with any of the following resolution support: 1024x768, 1280x720, 1280x1024, 1920x1080.
 - As connecting two monitors, the system will choose the highest resolution to duplicate the displays, which implies that it's possible that no images are shown on one monitor if the supporting resolutions of two monitors are different.
 - If the length of your HDMI/VGA is over 1M, add a "repeater" to strengthen the signal.
 - When the UI/video image isn't at the correct location, correct it by the "auto adjust" function



NUUO version 1.0.0 release date 2013.1

on the monitor or adjust it manually.

- 2. To use ezNUUO service, please make sure the network is stable and the bandwidth is enough.
- 3. Continuous PTZ is not supported in Local Live View.
- 4. The mechanism of auto recycle is recycling a day of videos at 00:00. Please make sure the storage size is large enough.

Please find DP 2.8.2 release note for camera integration, bug fixed and known issue.



NUUO version 3.5.0 Release date_2017.08

Release Version 3.5.0 (2017/08)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.05.0000.0016
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.9.0
Application	Install Wizard		6.1.705.15
	Remote Live Viewer		6.1.705.15
	Playback S	System	6.1.705.15
	Backup System		N/A
	Verification Tool		N/A
	Offline License Tool		1.0
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

New Features

- 1. Prevent manual record when local screen at playback
- 2. Add diagnostic Tool
- 3. Update Activex to 6.1.705.15

Bugs Fixed

- 1. Axis physical ptz panel issue
- 2. Web Liveview / Remote Liveview can distinguish from NVR motion or Edge motion
- 3. Fix abnormal manual record status issue



NUUO version 3.4.0 Release date 2017.05

Release Version 3.4.0 (2017/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.04.0000.0019
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.7.0
Application	Install Wizard		6.1.705.13
	Remote Live Viewer		6.1.705.13
	Playback 9	System	6.1.705.13
	Backup System		N/A
	Verification Tool Offline License Tool		N/A
			1.0
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

New Features

- 1. Enhance the strategy of setting backup
- 2. Add "Inactive notification" of P2P service
- 3. Add Calendar feature in local playback
- 4. Add "Always connected" for improving APP experience
- 5. Support Axis Generic with real model name
- 6. Support patrol setting in local display
- 7. Support Java web for Firefox on RedHat & Ubuntu

Bugs Fixed

- 1. Fix HDMI audio out issue
- 2. CMS playback issue
- 3. Enable symbol:'_', '&', '?', '=', '@' in IP address for Generic / RTSP
- 4. 2nd monitor on screen display issue
- 5. Multi-Language patrol setting group name issue
- 6. Default setting not pop up installation wiazard on 4K monitor issue
- 7. Camera dual stream reconnecting issue
- 8. Fix Autoscan out of resolution issue

Known Issues

1. After disable "Always connect" , 2nd & 3rd streaming might not be disconnected



NUUO version 3.3.0 release date_2017.2

Release Version 3.3.0 (2017/2)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.03.0000.009
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.4.0
Application	Install Wizard		6.1.705.13
	Remote Live Viewer		6.1.705.13
	Playback System		6.1.705.13
	Backup System		6.1.705.13
	Verificatio	n Tool	6.1.705.13
	Offline Lic	ense Tool	6.1.705.13
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

New Features

- 1. Support Joystick function
- 2. Pack latest Device Pack v 5.4.0

Bugs Fixed

N/A



NUUO version 3.2.0 release date_2016.12

Release Version 3.2.0 (2016/12)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.02.0000.0014
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v5.2.0
Application	Install Wizard		6.1.705.13
	Remote Live Viewer		6.1.705.13
	Playback System		6.1.705.13
	Backup System		6.1.705.13
	Verificatio	n Tool	6.1.705.13
	Offline License Tool		6.1.705.13
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

New Features

- 1. Update Activex to 6.1.705.13
- 2. Pack latest Device Pack v 5.2.0
- 3. Upgrade Dropbear SSH to v2016.74
- 4. Upgrade Lighttpd to 1.4.42
- 5. Upgrade SSL to 0.9.8zh

Bugs Fixed

- 1. Fix FTP Username and Password length limitation to 32
- 2. Fix Disk S.M.A.R.T status
- 3. Fix Playback icon for event log
- 4. Fix Reset Button failure



NUUO version 3.1.0.73 release date_2016.09

Release Version 3.1.0.73 (2016/09)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.01.0000.0073
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.16
Application	Install Wizard		6.1.705.9
	Remote Live Viewer		6.1.705.9
	Playback S	System	6.1.705.9
	Backup System		N/A
	Verification Tool		N/A
	Offline License Tool		1.0
Document	Local User manual		3.1
	Remote User manual		3.1
	QSG		3.1

New Features

1. Update Activex to 6.1.705.9

Bugs Fixed

- 1. Fix Linux vulnerability issues
- 2. Fix remote controller issue



NUUO version 3.0.0.63 release date_2016.05

Release Version 3.0.0.63 Hotfix (2016/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	03.00.0000.0063
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.11
Application	Install Wizard		2.3
	Remote Li	ve Viewer	2.3
	Playback S	System	2.3
	Backup Sy	/stem	2.3
	Verificatio	n Tool	2.3
	Offline License Tool		2.3
Document	Local User manual		3.0
	Remote User manual		3.0
	QSG		3.0

New Features

> 2nd stream record - Dual record

Allow system to operate dual record with both streams.

> H.265 Support

Remote client only with supported cameras

- Support Hungarian
- Dual Monitor

User can enjoy dual monitors with different layout on local client.

> Local IPC image preview

Allow user to manage camera easily.

Local IPC Motion

New Motion detection added.

- > Local IPC firmware upgrade, IPC reboot and reset to default
- > UPnP Support

User can mass upgrade SNVRs/ IPCs in one time by IPInstaller in remote PC.



NUUO version 3.0.0.63 release date_2016.05

Bugs Fixed

- 1. Emergency record will start when stop at first time login and switch to playback.
- 2. WAN file backup timeout when transferring large files is fixed.
- 3. WAN playback performance is enhanced by adding new NUPP command "NEXTGOP".
- 4. Local joystick support is merged back.
- 5. Local audio support in 2nd stream.
- 6. Fix local display "splash" issue that happens sometimes.
- 7. Fix local display showing FPS without decoded issue that happens sometimes.
- 8. Fix local backup POS sometimes can't show Chinese.
- 9. Fix remote playback can't use "select folder" to show POS.
- 10. Local audio will disappear when monitor "unplug and plug" in solo is fixed.
- 11. Drag and Drop will sometime malfunction during high CPU usage is fixed.
- 12. Fix local backup issue, record operation sequence.

- 1. User needs to use client pack 6.1.705.5 for new features to avoid failure.
- 2. To change camera order in liveview, user needs to click grid more than 2 seconds until mouse cursor change icon for drag and drop.



NUUO version 2.3.7.9 release date_2015.11

Release Version 2.3.7.9 (2015/11)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	02.03.0007.0009
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.6
Application	Install Wizard		2.3
	Remote Li	ve Viewer	2.3
	Playback S	System	2.3
	Backup Sy	/stem	2.3
	Verificatio	n Tool	2.3
	Offline Lic	ense Tool	2.3
Document	Local User manual		2.3
	Remote User manual		2.3
	QSG		2.2.2

New Features

- > Silent install
- Camera drag and drop

Bugs Fixed

- 1. Optimize WAN playback & pnp performance.
- 2. 2nd profile support audio.
- 3. Camera repeat adding when exchange POE port.
- 4. Optimize WAN audio performance on AP & web.
- 5. Language issue on live view and playback.
- 6. Onbox input and output trigger issue.
- 7. Production issues.

- 1. 16ch, CPU loading > 70%, still has chance auto-exchange if click grid only.
- 2. Local 2nd profile audio abnormal at 4x4.
- 3. When LAN1 not connecting, system need more time to reconnect camera if exchange POE port.



NUUO version 2.2.2 release date_2015.05

Release Version 2.2.2 (2015/5/7)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	02.02.0002.0004
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v4.0
Application	Install Wizard		2.2.2
	Remote Live Viewer		2.2.2
	Playback S	System	2.2.2
	Backup Sy	/stem	2.2.2
	Verificatio	n Tool	2.2.2
	Offline Lic	ense Tool	2.2.2
Document	Local User	manual	2.2.2
	Remote User manual		2.2.2
	QSG		2.2.2

New Features

- 1. New Action: PTZ preset go Supported by Events below:
 - Motion
 - Input
 - Recurrent Event

- 1. When naming prohibit character for camera preset point or patrol group (ex: √:*?"|), the Camera preset & group list can't be displayed on web setting .
- 2. When connect to Sony Camera model :SNC-ER580 , proceed "clear all" for all the preset points ,the preset point 1 will be cleared only .
- 3. The PTZ panel may not be used after connecting to PTZ camera , which will be improved in the next version.



NUUO version 2.1.5 release date_2015.02

Release Version 2.1.5 (2015/2/05)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	
		NS-2080	
	NVR	NS-2160	02.01.0005.0014
		NS-8060	
		NS-8160	
		NS-8065	
		NS-8165	
	Camera Pa	ackage	DP v3.11
Application	Install Wizard		2.1.5
	Remote Live Viewer		2.1.5
	Playback S	System	2.1.5
	Backup Sy	/stem	2.1.5
	Verificatio	n Tool	2.1.5
	Offline License Tool		2.1.5
Document	Local User	manual	2.1.5
	Remote U	ser manual	2.1.5
	QSG		2.1.5

New Features

- 1. Support Axis Joystick T8311 and Urment Joystick MIW.
- 2. Support new event: recurrent event

Bug Fixed

- 1. Fixed server failed to send out email when DI triggered.
- 2. Fixed 2-way audio failed to work on CMS under some condition.
- 3. Fixed that color of video is distorted when using fisheye dewarp.
- 4. Fixed the issue that server is unable to mute when connecting HDMI monitor.
- 5. Fix the bug that unable to support non-standard 1080P monitor.
- 6. Fix the bug that unable to support touch screen under specific circumstances.
- 7. Fix video hang when using specific camera model.

-

ⁱ Please refer to compatible touch screen list.



NUUO version 2.0.1 release date_2014.09

Release Version 2.0.1 (2014/9/16)

Modules

Item			Version
FW		NS-1040	
		NS-1080	
		NS-2040	02.00.0001.0004
		NS-2080	02.00.0001.0004
	NVR	NS-8060	
		NS-8065	
		NS-2160	
		NS-8160	02.00.0001.0006
		NS-8165	
	Camera Pa	ackage	DP v3.4
Application	Install Wizard		2.0.1
	Remote Live Viewer		2.0.1
	Playback S	System	2.0.1
	Backup Sy	/stem	2.0.1
	Verificatio	n Tool	2.0.1
	Offline License Tool		2.0.1
Document	Local User manual		2.0.1
	Remote User manual		2.0.1
	QSG		2.0.1

Bug Fixed

- 1. Fix fisheye dewarp issue
- 2. Fix issue for specific camera's display status

Known Issues

- 1. Some functions may not work properly on Internet Explorer 11. Internet Explorer 8, 9, 10, Windows Chrome or Mac Safari v7.0 is recommended. IE11 will be officially supported in the coming version.
- 2. Unable to adjust audio volume on HDMI monitor. It will be fixed in later version.
- 3. V1.1.2 is the minimum version for upgrade to v2.0. Please upgrade to v1.1.2 before upgrade to v2.0.
- 4. NS-8065 does not support disk hot swap on some external storages (eSATA DAS) currently. The RAID status maybe incorrect. Please reboot NVRsolo after installation, or install the external storage while NVRsolo is off. It will be fixed in later version.

Please find DP 3.4 release note for camera integration, bug fixed and known issue.

Warning: Please be noted that once upgraded to 2.0.1, the firmware cannot be downgraded.



NUUO version 2.0.0 release date_2014.03

Release Version 2.0.0 (2014/3/3)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	02.00.0000.0094
	INVK	NS-8060	02.00.0000.0094
		NS-8065	
	Camera Pa	ackado	DP v3.1
	Calliela Pa	ackage	03. 01.0000.0032
Application	Install Wiz	zard	2.0.0
	Remote Live Viewer		2.0.0
	Playback S	System	2.0.0
	Backup Sy	/stem	2.0.0
	Verification Tool		2.0.0
	Offline License Tool		2.0.0
Document	Local User manual		2.0.0
	Remote U	ser manual	2.0.0
	QSG		2.0.0

New Features

- 1. Support camera multi-stream setting for saving remote bandwidth and local decoding loading¹.
- 2. Support camera two-way audio²(Local and Internet Explore only).
- 3. New action supported³:
 - Camera snapshot to FTP.
 - E-mail with snapshot.
 - Send to CMS with snapshot.
- 4. Execute HDD S.M.A.R.T self-test on server. Monitor hard dives health easily.
- 5. Support A08 I/O Box.
- 6. Enhance event log: click and play (Local and Internet Explore only)
- 7. RAID 0, 1, 5, and 10 for maximum capacity or data protection on NS-8065.
- 8. Compatible with Windows Chrome and Mac safari v7.0.

Bug Fixed

- 1. Fix the issue that when backup a video footage from local on USB drive, it overwrites the previous backup.
- 2. Fix the issue that transferring camera or POS license may pop up "error code: 268435468" in License Management page.
- 3. Fix the issue that camera DO duration configuration may not be saved under Japanese and Chinese
- 4. Fix the issue about digital PTZ in live view and playback.
- 5. Other minor bugs.

- 1. Some functions may not work properly on Internet Explorer 11. Internet Explorer 8, 9, 10, Windows Chrome or Mac Safari v7.0 is recommended. IE11 will be officially supported in the coming version.
- 2. Unable to adjust audio volume on HDMI monitor. It will be fixed in later version.
- 3. V1.1.2 is the minimum version for upgrade to v2.0. Please upgrade to v1.1.2 before upgrade to v2.0.

¹ DP 3.1 and above

² DP 3.1 and above

³ DP 3.1 and above



NUUO version 2.0.0 release date_2014.03

4. NS-8065 does not support disk hot swap on some external storages (eSATA DAS) currently. The RAID status maybe incorrect. Please reboot NVRsolo after installation, or install the external storage while NVRsolo is off. It will be fixed in later version.

Please find DP 3.1 release note for camera integration, bug fixed and known issue.



NUUO version 1.3.0 release date_2013.12

Release Version 1.3.0 (2013/12/23)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	01.03.0000.0009
		NS-8060	
	Camera Pa	ackado	DP v2.19
	Calliela Pa	ackage	02.19.0000.0028
Application	Install Wiz	zard	1.3.0
	Remote Li	ve Viewer	1.3.0
	Playback System		1.3.0
	Backup System		1.3.0
	Verificatio	n Tool	1.3.0
	Offline License Tool		1.3.0
Document	Local User manual		1.3
	Remote User manual		1.3
	QSG		1.1

Bug Fixed

- 1. Pausing and operating digital PTZ on local playback shouldn't lead to black videos.
- 2. Fixed the issue that audio stops playing when unplugging the monitor cable and the audio won't resume after the monitor cable is plugged back. Every action of monitor cable should not have impact on audio playing.
- 3. Enhance the file system to improve recording stability.
- 4. Fixed the communication issue between CMS and NVR to be able to view the videos of the associated camera of digital input.
- 5. Fine tune the jog shuttle behavior on NS-8060.

Please find DP 2.19 release note for camera integration, bug fixed and known issue.



NUUO version 1.2.0 release date_2013.10

Release Version 1.2.0 (2013/10/24)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	01.02.0000.0005
		NS-8060	
	Camora Pr	ackago	DP v2.17
	Camera Pa	аскауе	02.17.0000.0032
Application	Install Wiz	ard	1.2.0
	Remote Li	ve Viewer	1.2.0
	Playback System		1.2.0
	Backup System		1.2.0
	Verification Tool		1.2.0
	Offline Lic	ense Tool	1.2.0
Document	Local User manual		1.2
	Remote User manual		1.2
	QSG		1.1

Enhancement

- Support to display images with H.264 codec over 4 megapixels on local monitor.
 - **H.264**: no resolution limitation on single channel, the total capacity is around:
 - 8 channels: 5M / others: 2M
 - 6 channels: 8M / others: 2M

No change on MPEG4/MJPEG:

- MPEG4: Up to 2M (1920x1080) per channel
- MJPEG: Up to 4M (2560x1600) per channel but with limited fps support
 - *The local display won't work if either one side is over the limit.
- 2. Improve the backup mechanism to be able to backup videos via WAN with stable 2M bandwidth. 1

Bug Fixed

- 1. Fixed the issue that recording mode will be changed from motion recording to always recording under certain conditions.
- 2. Fixed the issue that no video images show when clicking to playback as receiving push notification on mobile.
- 3. Fixed the issue that it requires users to manually select video files to play the backup videos, instead of executing Playback.exe to play videos directly.
- 4. Fixed Korean characters display issue on local monitor. 2
- 5. Volume status is shown correctly on the daily system report.

Known Issue

- 1. Transferring camera or POS license and rebooting system within 30 days after activation may pop up "error code: 268435468" in License Management page. This error won't impact any normal operation, please close the error dialog to continue. This issue will be fixed in v2.0.
- 2. If you got an error message with "error code 10006" when trying to logging in NVR system via ezNUUO, please uninstall this program and restart PC to try again.

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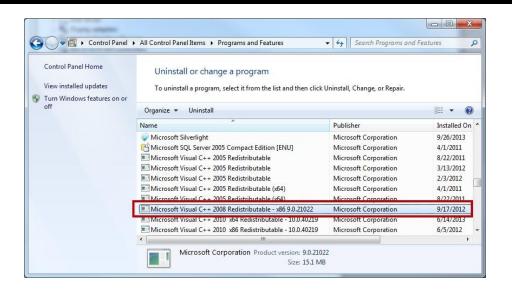
^{*}The actual performance depends on the type of cameras.

 $^{^{}f 1}$ The bit rate of the camera to backup is 4Mbps. If the bit rate is higher, the more stable bandwidth is needed.

We designed different fonts for different languages, to display correctly, please choose the right language on local UI.



NUUO version 1.2.0 release date_2013.10



Please find DP 2.17 release note for camera integration, bug fixed and known issue.



NUUO version 1.1.2 release date 2013.9

Release Version 1.1.2 (2013/9/6)

Modules

Item			Version
FW		NS-1040	
	NVR	NS-1080	01.01.0002.0009
		NS-8060	
	Camera Pa	ackado	DP v2.16
	Calliela Pa	ackage	02.16.0000.0025
Application	Install Wiz	zard	1.1.2
	Remote Li	ve Viewer	1.1.2
	Playback System		1.1.2
	Backup System		1.1.2
	Verification Tool		1.1.2
	Offline Lic	ense Tool	1.1.2
Document	Local User manual		1.1
	Remote U	ser manual	1.1
	QSG		1.1

New Features

[General]

1. New language: Hebrew

The total language support is up to 19, including English, Croatian, Czech, Deutsch, Finnish, French, Hebrew, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Simplified Chinese, Traditional Chinese, Spanish, Swedish, Thai, and Turkish...

Enhancement

- 1. Improve the HDMI monitor compatibility
 - Remarks for better display quality:
 - ■Monitor: the monitors with "1080" resolution support
 - ■Cable: HDMI cable should be with HDMI certificate, and the cord spec should be AWG 16 (better than AWG 18, 20,...) depending on the cord length. If the length of your HDMI/VGA is over 1M, add a "repeater" to strengthen the signal.
 - ■If you still can't get any signals, please try to switch the display resolution by pressing the "10+" button on the remote controller, releasing it and pressing the "." button to see if there is image. (switching sequence: auto (default) → 1024x768 → 1280x720 → 1280x1024 → 1920x1080)
- 2. Improve the quality of mouse cursor moving.
- 3. Install ActiveX for web liveview / playback via Install Shield (setup.exe).

Bug Fixed

1. Fixed the issue that model lists of some brands are not available on local settings, including 3M, D-Link and TP-LINK.

Known Issues

1. Incorrect input status of remote I/O box C26 and C28 on input panel in Live View. This issue will be fixed in v1.2.

Please find DP 2.16 release note for camera integration, bug fixed and known issue.



NUUO version 1.1.2 release date_2013.9

Release Version 1.1.1 (2013/8/12)

Modules

Item			Version
FW	NVR	NS-1040	01.01.0001.0008
	Camera Pa	ackage	DP v2.15
			02.15.0000.0033
Application	Install Wiz	zard	1.1.0
	Remote Li	ve Viewer	1.1.0
	Playback S	System	1.1.0
	Backup System		1.1.0
	Verification Tool		1.1.0
	Offline Lic	ense Tool	1.1.0
Document	Local User	r manual	1.1
	Remote User manual		1.1
	QSG		1.1

Bug Fixed

2. Fixed the issue that recorded videos may become black sometimes after <u>watching live videos on</u> <u>mobile client or switching to multi stream to view on web/remote live viewer.</u>

Please find DP 2.15 release note for camera integration, bug fixed and known issue.

^{*}Upgrading FW cannot repair those videos which have became black already, but we have a solution to fix the videos without any problem. Please submit the request on http://www.nuuo.com/eHelpdesk.php.



NUUO version 1.1.2 release date_2013.9

Release Version 1.1.0* (2013/8/2)

Modules

Item			Version
FW	NVR	NS-1040	01.01.0000.0124
	Camera Pa	ackage	DP v2.14
			02.14.0000.0029
Application	Install Wiz	zard	1.1.0
	Remote Li	ve Viewer	1.1.0
	Playback S	System	1.1.0
	Backup System		1.1.0
	Verification Tool		1.1.0
	Offline Lic	ense Tool	1.1.0
Document	Local User manual		1.1
	Remote Us	ser manual	1.1
	QSG	·	1.1

Bug Fixed

1. Fixed the issue that users can't playback the videos backed up of the day.



NUUO version 1.1.2 release date_2013.9

Release Version 1.1.0 (2013/7/10)

Modules

Item			Version
FW	NVR	NS-1040	01.01.0000.0117
	Camera Pa	ackage	DP v2.14
			02.14.0000.0029
Application	Install Wiz	zard	1.1.0
	Remote Li	ve Viewer	1.1.0
	Playback System		1.1.0
	Backup System		1.1.0
	Verificatio	n Tool	1.1.0
	Offline Lic	ense Tool	1.1.0
Document	Local User	r manual	1.1
	Remote U	ser manual	1.1
	QSG	_	1.1

New Features

[General]

- 1. Push notification support on NUUO mobile client to receive instant notification as an event occurs.
- 2. One-way audio playing is supported on local side.
- 3. Remote I/O solution:
 - Record on input trigger
 - Configure input trigger as an event and output as an action
- 4. Compatible with touch panel:
 - Acer T232HL
 - ViewSonic TD2220
- 5. License is transferrable.
- 6. Support to associate a camera with input pin, which will be the communication media for server and client. (e.g. when an input was triggered and pushed a notification to mobile, users can playback the videos of its associated camera.)
- 7. Control multiple NVR servers separately by single IR remote control
 - When there are multiple NVR devices aligned together, the operator can give each device server ID from 1 to 9, and switch ID on remote control to control different NVR servers separately. There won't be any signal conflict.
- 8. New language: Thai, Turkish
 - The total language support is up to 18, including English, Croatian, Czech, Deutsch, Finnish, French, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Simplified Chinese, Traditional Chinese, Spanish, Swedish, Thai, and Turkish.

[Special on Remote Operation]

- 1. Compatible with Windows 8 32/64-bit.
- 2. Compatible with IE 10 (32-bit).
- 3. Generic fisheye dewarp function to support 360° fisheye camera.¹
- 4. New skin 1366x768 (TV standard).

Enhancement

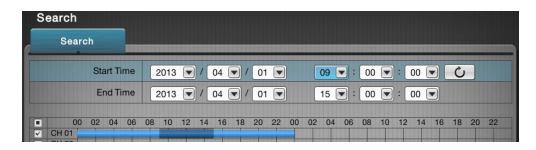
1. Improve video search page. Indicate recorded video footages on time table.

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¹ Axis P5544 and Vivotek CC8130 are excluded.



NUUO version 1.1.2 release date_2013.9



- 2. Enhance the speed of file system check, and add a mechanism to execute file system check at boot time.
- 3. Internet interface selection to choose which LAN is connected to the internet.
- 4. Modify RAID Management page to separate embedded disk(s) and external disk (DAS) from two groups, which implies there is no way to create a single volume with both embedded and external disks inside.2
- 5. Enlarge password limitation from 1~8 to 1~20.

Bug Fixed

- 1. Enlarge the maximum size of single volume to 16TB.
- 2. Fixed the issue that the configurations of recording schedule and user account weren't applied to system after restoring from abnormal shutdown.
- 3. Optimize the audio quality of cameras with GSM-AMR codec.
- 4. Fixed the issue that users are unable to back videos through Playback AP if the route of file is root directory, e.g. D:\\.
- 5. Fixed the issue that local live view image freezes after switching live view and playback back and forth many times.
- 6. System won't stop after the long-time playback (over 6 hours).
- 7. Fixed the issues that error message pops up while doing ezNUUO registration.

Known Issues

- 1. [IE 10] Some functions may not work properly, e.g. unable to drag and drop schedule bar on recording timeline. When encounter this kind of issue, please add this site in Compatibility View Settings of Internet Explorer. This issue will be fixed in the coming version.
- 2. If the Menu Authentication is enabled, system will ask you to log in again when applying configurations on the page of Display/Status Bar. This issue will be fixed in v1.2.

Please find DP 2.14 release note for camera integration, bug fixed and known issue.

² It's still functional for the current NVR which has created a single volume with both embedded and external disks after upgrading. However, if users delete this volume, there is no way to create the same volume back. Please do the backup before upgrad



NUUO version 1.0.1 release date 2013.3

Release Version 1.0.1 (2013/3/19)

Modules

Item			Version
FW	NVR	NS-1040	01.00.0004.0219
	Camera Package		DP v2.8.2
			02.08.0000.0011
Application	Install Wizard		1.0.0
	Remote Live Viewer		1.0.0
	Playback S	System	1.0.0
	Backup Sy	/stem	1.0.0
	Verification Tool		1.0.0
	Offline Lic	ense Tool	1.0.0
Document	Local User manual		1.0
	Remote User manual		1.0
	QSG		1.0

New Features

1. Tooltip support in Local Live View and Playback

The DP version we packaged in v1.0.1 is v2.8.2, if you have new camera demands in DP v2.9 or v2.10. Please download it from NUUO website. http://www.nuuo.com/EmptyNode.php?node id=2

Release Version 1.0.0 (2013/1/23)

Modules

Item			Version
FW	NVR	NS-1040	01.00.0004.0212
	Camera Package		DP v2.8.2
			02.08.0000.0011
Application	Install Wizard		1.0.0
	Remote Live Viewer		1.0.0
	Playback System		1.0.0
	Backup System		1.0.0
	Verification	n Tool	1.0.0
	Offline Lice	ense Tool	1.0.0
Document	Local User manual Remote User manual		1.0
			1.0
	QSG		1.0

Key Selling Point

- 1. High quality of local display
 - 120fps @1080p, H.264, MPEG4
 - 240fps @720p, H.264, MPEG4
- 2. One-click setup for more than 70 brands of IP cameras



NUUO version 1.0.1 release date 2013.3

- 3. ezNUUO free from router settings for remote/mobile viewing
- 4. POS support
- 5. Alarm source of NUUO Central Management System

Known Issues

- 1. When connecting two 2.5" hard disk to run Install Wizard, the system will create one RAID 0 volume, which will be corrected as one RAID 1 volume in the next version.
- 2. When use local IP for SMTP server, it will fail to send test mail. We will fix in the next version.
- 3. The system will restart after activating license successfully, which will be fixed in the next version.
- 4. Some words can't be displayed well due to current design, which will be kept improving in the future version.
- 5. Under the condition that there is no need to auto scan to view all channels of videos (e.g. watch 4 channels in 2x2 grid), the auto scan will cause screen flash regularly. We will fix it in next version.
- 6. There is an extra vendor "NUUO" in camera brand, which is not effective and will be removed in the next version.
- 7. The camera models are not in sequence, which will be improved in the next version.
- 8. The system may be freezed as trying to automatically detect Mobotix cameras. We will fix in the future version.

Current Limitations

- 1. Monitor-related
 - Please use the monitor with HDMI or VGA output source and with any of the following resolution support: 1024x768, 1280x720, 1280x1024, 1920x1080.
 - As connecting two monitors, the system will choose the highest resolution to duplicate the displays, which implies that it's possible that no images are shown on one monitor if the supporting resolutions of two monitors are different.
 - If the length of your HDMI/VGA is over 1M, add a "repeater" to strengthen the signal.
 - When the UI/video image isn't at the correct location, correct it by the "auto adjust" function on the monitor or adjust it manually.
- 2. To use ezNUUO service, please make sure the network is stable and the bandwidth is enough.
- 3. Continuous PTZ is not supported in Local Live View.
- 4. The mechanism of auto recycle is recycling a day of videos at 00:00. Please make sure the storage size is large enough.

Please find DP 2.8.2 release note for camera integration, bug fixed and known issue.



NUUO version 1.0.0 release date 2013.1

Release Version 1.0.0 (2013/1/23)

Modules

Item			Version
FW	NVR	NS-1040	01.00.0004.0212
	Camera Package		DP v2.8.2
			02.08.0000.0011
Application	Install Wizard		1.0.0
	Remote Live Viewer		1.0.0
	Playback System		1.0.0
	Backup System		1.0.0
	Verification Tool		1.0.0
	Offline Lic	ense Tool	1.0.0
Document	Local User manual		1.0
	Remote User manual		1.0
	QSG		1.0

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- 3. The system will restart after activating license successfully, which will be fixed in the next version.
- 4. Some words can't be displayed well due to current design, which will be kept improving in the future version.
- 5. Under the condition that there is no need to auto scan to view all channels of videos (e.g. watch 4 channels in 2x2 grid), the auto scan will cause screen flash regularly. We will fix it in next version
- 6. There is an extra vendor "NUUO" in camera brand, which is not effective and will be removed in the next version.
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- 1. Monitor-related
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 - As connecting two monitors, the system will choose the highest resolution to duplicate the displays, which implies that it's possible that no images are shown on one monitor if the supporting resolutions of two monitors are different.
 - If the length of your HDMI/VGA is over 1M, add a "repeater" to strengthen the signal.
 - When the UI/video image isn't at the correct location, correct it by the "auto adjust" function



NUUO version 1.0.0 release date 2013.1

on the monitor or adjust it manually.

- 2. To use ezNUUO service, please make sure the network is stable and the bandwidth is enough.
- 3. Continuous PTZ is not supported in Local Live View.
- 4. The mechanism of auto recycle is recycling a day of videos at 00:00. Please make sure the storage size is large enough.

Please find DP 2.8.2 release note for camera integration, bug fixed and known issue.