



Firmware Release Note

NSA221

**Release
V4.41(AFM.0)C0**

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Release Notes

Date: August 12, 2013

Supported Platforms:

ZyXEL NSA221

Notes:

- 1) Must First Clean your Browser's cache after performing upgrade
- 2) Upload Torrent File may not immediately appear in Download list. Usually will first appear in Queued first before appearing in Download.
- 3) Share Browser Copy/Move only allows One Instance of Copy and Move
- 4) After Create First System Volume, you must Reboot
- 5) Suggested to Rebuild database of media server after performing upgrade

Known Issues:

- If FTP Encoding incompatible with FTP client, some files will have odd file names which Media server cannot support.
- Web Help may not include mention of UPnP Features. Russian customer & PM both say this is OK.
- UPnP Port Mapping may not work with all Routers
 - Some routers have issues sharing CIFS (port 445)
 - When accessing FTP from the WAN, it may be necessary to set FTP client to ACTIVE mode (NOT Passive)
 - If Gateway device does not have WAN connected, UPnP page may act strangely.
- **Download Service may not always be able to download 10 at a time.** It will depend on how much free memory is left on the system at that time.
- iTunes Server may not play videos correctly if the file extension is mp4. However, if the file extension is changed to m4v the file will play correctly.
- You cannot copy or move files/folders with a name that includes any of the following characters:
 - " (double quote)
 - / (forward slash)
 - \ (backslash)
 - : (colon)
 - | (pipe)
 - < (less than)
 - > (greater than)
 - ; (semicolon)
 - , (comma)
 - ? (question mark)
 - * (asterisk)
- Media Server May Not Support the following Formats:
 - gif
 - tif
 - asf
 - m2p
 - dvr-ms
 - ogg
- Broadcatching cannot work with YouTube RSS Feeds
- Share Name or Share Path cannot be longer 200 characters
- Sometimes the database of mediaserver will corrupt and required rebuild database.
- iTunes 8 can not play video published by iTunes Server
- Some video file (with file extension: mp2) published in music type and when DMA-1000 play it, it may cause DMA-1000 to hang.
- Printer Server is not able to cancel print job if the print job has not been sent to NSA.
- When quota is full, user can not use share browser to move
- DyDNS provider 3322 only accept IP address from China
- If you enable another port 'X' in web publish, the UPnP setting might fail for the port 'X'. Re-enable UPnP port mapping will help to solve this issue.

- Can't migrate JBOD to RAID-1 when the size of the JBOD is larger than 2T

Complete Features List:

- Login
 - Support "Keep me login for 2 weeks" (But it always requires login if you reboot NSA)
- Playzone
 - Common
 - ◆ Now Playing Panel
 - ◆ Tool Panel Support Drag-n-Drop
 - Music
 - ◆ By Artist
 - Album
 - All Albums
 - ◆ By Album
 - ◆ By Genre
 - ◆ All
 - ◆ By Folder
 - ◆ Current Playlist
 - Photo
 - ◆ By Folder
 - ◆ By Date: List Year -> List Month -> List Photos in Month
 - ◆ All
 - ◆ Monosideshow slideshow
 - ◆ Cooliris slideshow
 - ◆ Google Map for photo with GPS information.
 - Video
 - ◆ By Folder
 - ◆ All
 - Favorite:
 - ◆ My Favorite
 - ◆ Shared Playlist
 - File Browser
 - ◆ Copy/Move/Create Folder/Delete Folder/file
 - ◆ Upload File
 - ◆ Rename File/Folder
 - ◆ Edit Share
 - ◆ Delete Share
 - Application Zone
 - Setting
 - ◆ System
 - Music
 - Photo Slideshow
 - Password
 - Language
 - Link to admin

- ◆ Admin
- Playzone media format support list:
 - **Video (with MAC):**
 - ◆ **[Video] DAT, M1V, MOV, MP4(isom), MP4 H264(mp42), 3GP, QT(20), MPEG, WMV, ASF, MPE, M4A, AVI(WMV3)**
 - Video (with Windows):
 - ◆ [Video] Support DVR-MS, M4V, MOV, MP4(isom), MP4 H264(mp42), 3GP, M2P, MPEG, MPG2, VOB, MKV, MPE, MPEG2, MPG, MTS, TS, M2TS, AVI(XVID), AVI(VP62), AVI(FMP4), MJPEG, MJPG, MP2(MPEG Version2), OGM(XVID), QT(20), RMVB(RV40), DAT, WMV, ASF, DIVX, M2T, M2V, M1V
 - ◆ [Video] Does not support ISO, RM(RV30), FLV
 - ◆ [Video] Does not seek MTS, M2TS, TS, AVI(XVID), AVI(VP62), AVI(FMP4), MJPEG, MJPG
 - Music (with Windows):
 - ◆ [Music] Support MP3, WMA, WAV, MP1, AIF, AIFF, 3GP(AAC), 3G2(AAC), RMI(RIFF MIDI), WAV(LPCM), MP4, OGG, AU(8-bit mu-law), M4A, MKA(A_PCM/INT/LIT), MKA(A_MPEG/L3), MPA(MPEG Audio V1), AC3
 - ◆ [Music] Does not support AAC, RA, RAM, APE, FLAC, ASF, MP2, M4B
 - Music (with MAC OSX quicktime):
 - ◆ [Music] Support MP3, WMA, WAV, AIF, 3GP(AAC), WAV(LPCM), 3G2(AAC), MP4, AU(8-bit mu-law), M4A, MPA(MPEG Audio V1), AC3
 - Photo: JPE, JPEG, JPG, BMP, PNG
 - Playlist: wpl, pls, asx, wax, m3u
- Copy/Sync for Copy Button feature
- Link Capture Browser Plug-in: Supports IE (for Windows) and Firefox (for all)
- Support IPOD web-streaming
- Menu
 - ⇒ Show System Information
 - ⇒ Show Volume Status
 - ⇒ Show Active Session (samba)
 - ⇒ Show UPS Current Capacity
 - ⇒ Show Temperature, CPU Loading, Memory Usage, Fan Speed
- Storage.
 - ⇒ RAID 0.
 - ⇒ RAID 1.
 - ⇒ JBOD
 - ⇒ Expand JBOD
 - ⇒ External Disk
 - (Read/write support following filesystem: NTFS, FAT16/FAT32, EXT2, EXT3, ReiserFS)
 - (Read only support : ISO9660, UDF)
 - ⇒ Support 3TB volume size (with two 1.5TB HD installed)
 - ⇒ When Creating Volume, will show volume status with "Create Volume" in the storage page and system status page.
 - ⇒ PTP Support (Digital Camera Support)
- Share Management

- ◆ Recycle Bin
 - ⇒ Create/Modify/Delete Share.
 - ⇒ Access control (public share/private share/advanced share).
 - ⇒ Support maximum 100 share.
 - ⇒ Publish Share to Media Server.
 - ⇒ Share Browsing/Folder Browsing.
 - ◆ Copy/Move/Create Folder/Delete Folder/file
 - ◆ Upload File
 - ◆ Rename File/Folder
- Account Management
 - ◆ User Groups
 - ⇒ Create/Modify/Delete Account.
 - ⇒ Support maximum 512 user accounts.
 - ⇒ User Quota Support
- System
 - ⇒ Date & Time (NTP / Manual Setting)
 - ✓ Time Zone
 - ✓ Daylight Saving
 - ✓ Auto Daylight Saving
- Network
 - ◆ PPPoE Client Support (also supported in NDU client)
 - ◆ No Master Browser Setting: Allow Unicode Computer Names in same workgroup
 - ⇒ Jumbo Frames
 - ⇒ Setting DHCP/Static IP.
 - ⇒ Setting DNS Server.
 - ⇒ Ftp Server.(Connection Limit range from 1~20 , Idle Timeout range from 30 ~ 300 MINUTES, Customize Passive Mode Port Range)
 - ⇒ FTP Server Custom Character Encoding
 - ⇒ Support additional HTTP Configuration Port Number Selection
 - ⇒ UPNP IGD Controller
- AutoUpload
 - Automatically Upload Files to Flickr or YouTube
 - Having log when en-queued files, file uploaded
- FTP Uploadr
- Media Server. (Media Server changed Solution)
 - ⇒ Publish file types.
 - ⇒ Publish Shares.
 - ⇒ iTunes Server Support
 - ⇒ DLNA 1.5 Support
 - ⇒ XBOX360 Support
 - ⇒ File-extension support:
 - ⇒ **ID3 Tags Decoding**

CATEGORY	FILE TYPE	EXTENSION
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Video	MPEG-1 / MPEG-2	dat, dvr-ms, iso, m1v, m2p, m2t, m2v, mp2, mpe, mpeg, mpeg2, mpg, mpg2, ts, vob, m2ts, tts
	MPEG-4	m4v, mp4
	AVI	avi
	DivX	divx, avi
	Motion JPEG	mjpeg, mjpg
	Quick Time Video	mov, qt
	RealMedia	rmvb, rm
	Ogg	ogm
	Matroska	mkv
	ASF	asf
	Windows Media Video	wmv
	Subtitle	srt, ssa, idx, sub
Music	MP3	mp3, mpa
	Ogg Vorbis	ogg
	RealMedia	ra, ram
	WAVE	wav
	Windows Media Audio	wma
	Matroska	mka
	Monkeys Audio	ape
	MP1	mp1
	MP4	mp4, m4a, m4p
	PCM	wav
	LPCM	wav
	DTS	dtb
	AC3	ac3
	Free Lossless Audio Codec	flac
	Au	au
	AAC	aac
	3GPP	3gp, 3g2
	AIFF	aif, aiff
	RIFF-based MIDI	rmi
	Playlist	wpl, pls, asx, wax, m3u
Photo	JPEG	jpe, jpeg, jpg
	Bitmap	bmp

PNG

png

■ Printer Server

- ⇒ Add / Delete Printer
- ⇒ Cancel Print Job

■ Download Service

- ⇒ Download BitTorrent, HTTP, or FTP files
- ⇒ FTP authentication supported
- ⇒ Pause, Delete, Continue Downloads
- ⇒ Priority
- ⇒ Max 10 items job processing
- ⇒ Support Configure Maximum Number of Seeding Job
- ⇒ Two Keep Seeding Criteria Support: Upload/Download Ratio and Seeding Time
- ⇒ Resume Completed Torrent Job to Do Seeding Again.
- ⇒ Support Show Detail Job Information and Configure Comment for Each Job
- ⇒ Support Download Service Download Period Control
- ⇒ Support IP Filter Table Management
- ⇒ Support Encryption in BT Protocol
- ⇒ Open Share Browser on Location of Completed Job to See Download Files.
- ⇒ Configurable Maximum number of Connections (max is 500)
- ⇒ DHT Enable / Disable Option

■ Download Service Notification (RSS Server): Notify Downloaded File from Download Service / Broadcatching Torrent Job

■ Broadcatching

- ⇒ Add RSS 2.0 Feeds with enclosures Only
- ⇒ Invalid feeds will show red color
- ⇒ Support encoding other than UTF-8

■ Package Management

- ⇒ Retrieve Package List (from internet server)
- ⇒ Install/Upgrade package
- ⇒ Uninstall package
- ⇒ Enable package
- ⇒ Disable package
- ⇒ Cancel Install package

■ Packages:

- ⇒ eMule
- ⇒ SqueezeCenter
- ⇒ MySQL / PHP / phpMyAdmin
- ⇒ S.M.A.R.T.
- ⇒ DyDNS Client
 - ◆ DynDNS (<http://www.dyndns.com/>)
 - ◆ No-IP (<http://www.no-ip.com/>)

<http://www.zyxel.com>

- ◆ 3322 (<http://www.3322.org/>)
- ◆ zoneEdit (<http://www.zoneedit.com/>)
- ◆ DHS (<http://www.dhs.org/>)
- ⇒ Gallery (Album)
- ⇒ WordPress (Blog)
- ⇒ NFS
- ⇒ BackupPlanner
 - ◆ Backup
 - ◆ Restore

■ Maintenance

- ⇒ Configuration backup/restore.
- ⇒ UPS shutdown capacity (Not supported in this version yet)
- ⇒ Power Management
 - Power Resume
 - Power Control Schedule
- ⇒ SSL: HTTPS, FTPS, Force HTTPS support, CA Management Support
- ⇒ FW Upgrade:
 - FW Upgrade by uploading FW file.
 - On-Line FW Upgrade.
- ⇒ System shutdown/restart.
- ⇒ High Temperature Buzzer alert support
- ⇒ Over Temperature auto-shutdown support
- ⇒ Logs
 - E-mail Alert in plain text or HTML

■ Service Tag (Only in Coventry Version)

- ⇒ Service Tag is designed to help identify service time longevity (and thus the limit of warranty period) from the start of usage moment for each device that came to customer's ownership, and approximate more clearly actual sales position at moment of time by registering each device via Internet based server located at ZyXEL residence.
- ⇒ Registration attempts should be continuous until successful. After success no registration attempts should follow anymore from that device.

Release Package:

File name	Description
441AFM0C0.bin	NSA Firmware Package for standard version
441AFM0C0.pdf	Firmware release note

Installation Notes:

Install/Upgrade Method	Procedure
FW Upgrade from GUI	1. Login to GUI page: Administration > Maintenance -> Fw Upgrade. 2. Select <firmware version>.bin and click the upgrade

	<p>button. System will show progress percentage after upload <firmware version>.bin to system memory.</p> <p>3. System will auto reboot</p> <p>4. New Firmware should apply</p>
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Default Settings for NSA221:

Menu Item	Function	Default Value
	admin's password	1234
Status	Server Name	nsa221
	Model Name	NSA221
	Media Server Status	Enabled
	FTP Server Status	Enabled
	Web Publishing Status	Disabled
System Setting	Server Name	<ul style="list-style-type: none"> ◆ Server Name: nsa221 ◆ Description: ◆ Workgroup Name: WORKGROUP ◆ Prevent NSA From Being Master Browser: Unchecked
	Date/Time	<ul style="list-style-type: none"> ◆ Date Time Setup: <ul style="list-style-type: none"> ■ Selected: Get from Time Server <ul style="list-style-type: none"> ◆ time.stdtime.gov.tw ◆ Time Zone <ul style="list-style-type: none"> ■ (GMT +8:00) ■ Manual Daylight Saving: Unchecked
Network	TCP/IP	<ul style="list-style-type: none"> ◆ IP Address: Dynamic ◆ DNS: Dynamic ◆ HTTP (Web Configurator): Disabled ◆ Jumbo Frames: Disabled ◆ Network Diagnostic Tool: a.root-servers.net
	UPnP Port Mapping	<p>BitTorrent: 9090</p> <p>CIFS (Windows File Sharing): 445</p> <p>FTP: 21</p> <p>HTTP (Web Configurator): 80</p>
	PPPoE	Disabled

Application	FTP Server	<ul style="list-style-type: none"> ◆ Enable FTP: Enabled <ul style="list-style-type: none"> ■ Connection Limit: 10 ■ Idle Timeout: 15 minutes ■ Port Number: 21 ◆ Enable Anonymous FTP Access: Unchecked ◆ Customize the port range for data transfer: Unchecked ◆ Download/Upload Rate For All Users (include admin) <ul style="list-style-type: none"> ■ Max. Download Rate: Disabled ■ Max. Upload Rate: Disabled ◆ Character Set: (UTF-8)
	Media Server	<ul style="list-style-type: none"> ◆ Share Publish <ul style="list-style-type: none"> ■ video: Publish Music Tracks / Photos / Videos ■ photo: Publish Music Tracks / Photos / Videos ■ music: Publish Music Tracks / Photos / Videos ◆ Enable iTunes Server: Enabled
	Download Service	<ul style="list-style-type: none"> ◆ Enable Download Service: Checked ◆ Enable Download Notify: Unchecked
	Web Publishing	Disabled
	Broadcatching	N/A
	Print Server	N/A
	Copy/Sync Button	<ul style="list-style-type: none"> ■ Copy Settings <ul style="list-style-type: none"> ■ NSA Copy Target: public ■ USB Volume: ■ Copy Direction: USB -> NSA ■ Create a New Folder for Copied Files: Checked ■ Backup Files to be Replaced: Disabled ■ Sync Settings <ul style="list-style-type: none"> ■ NSA Sync Target: public ■ USB Volume: ■ Sync Direction: NSA <-> USB ■ Backup Files to be Replaced or Removed: Unchecked
	Package	N/A
	Auto Upload	<ul style="list-style-type: none"> ■ Flickr/YouTube: Disabled

		■ FTP Uploadr: Disabled
Sharing	Users	default user(s): admin
	Groups	default group(s): none
	Shares	default share(s): ◆ video (Predefined) ◆ photo (Predefined) ◆ music (Predefined) ◆ public (Built-in) ◆ admin (Built-in)
Maintenance	Power	◆ Turn off hard disk(s): 3 minutes ◆ Minimum UPS Capacity: 50 % ◆ Power On After Power Failure: Keep Former Status ◆ Power On/Off Schedule: Disabled
	Log	N/A
	Configuration	N/A
	SSL	Force HTTPs: Disabled
	FW Upgrade	Periodically Check for Latest Firmware Automatically: Disabled
	Shutdown	N/A

History

Modification in V4.41(AFM.0)C0 | 08/09/2013

[Enhancement]

- The Dropbox API is migrated to V1.
- LibUPnP is upgraded to 1.6.18
- GUI supports multiple accounts deletion.

[Bug Fix]

- The quota limitation doesn't work when files are uploaded through Web file browser by the users with space inside the username, like "user user".