## How to playback DSD file by DLNA mode on sMS-100 with MinimServer

This instruction is about how to play DSD file by using DLNA mode on sMS-100 with MinimServer(DLNA server program) and Synology NAS, DS213J.

First of all, please connect sMS-100 to USB audio device which is available with DOP support. And install MinimServer on your PC, MAC, Linux or NAS, it means you don't need to install the MinimServer on Synology NAS only, you can use any device installed the MinimServer.

1. To install MinimServer on Synology NAS, you need to install JAVA Manager on Synology NAS and the DSM which is OS for Synology should be updated to 5.0.

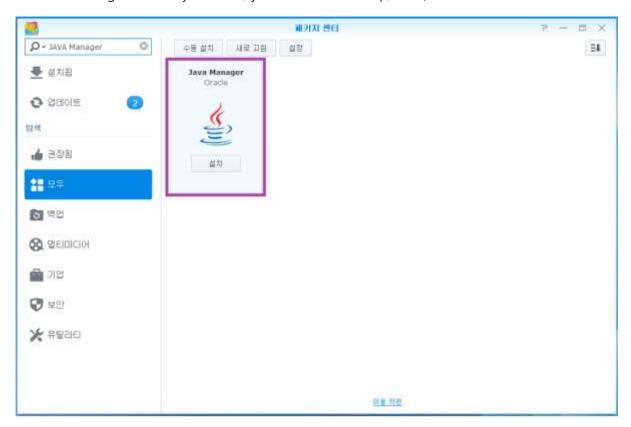
Synology Web page의 제어판을 열고 '업데이트 및 복원'을 선택하면 현재 사용중인 제품의 모델, DSM 버전을 확인 할 수 있으며 수동으로 DSM을 업데이트 할 수 있습니다. Please go to Synology Web page > Control panel(제어판) and choose 'Update&Restore', you can check the current model name and DSD version and update DSM to a newer version manually.

(Please refer to the Synology manual to learn how to update DSM, if the current version is 5.0 on your NAS, you don't need to update it.)

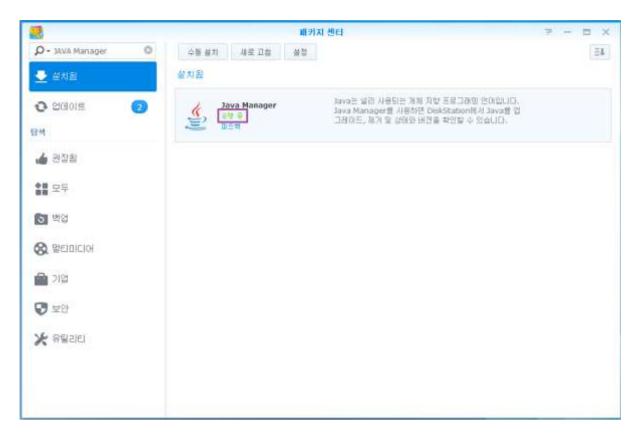


2. To install JAVA Manager, go to 'Package Center' and search 'JAVA Manager', you can get

'Open' button as a result and then click the 'Open' button to install the JAVA Manager. (If the JAVA Manager is already installed, you can omit this step, No.2)



3. Please go to 'Package Center' > 'Installed' in upper left side to check whether the installation is in progress



4. In this step, all is ready to be installed MinimServer on Synology NAS. You need to download the zipped file according to which OS and devices use, and install the MinimServer manually. In this instruction, we're using DS213j which is using ARM CPU, so we need to download and save the 'MinimServer-0.8.1b-arm.spk'.

MinimServer download: http://minimserver.com/downloads/index.html

The CPU is differ from NAS's make and model, so you need to check the correct installation file via the link below.

http://minimserver.com/installing.html

5. Go to Package Center and click 'Manual Install' button, and browse and select the file which you just downloaded in 4<sup>th</sup> step, and click 'Next' button to stall the installation.



6. Once the installation is finished, please go to Package Center > 'Installed' in upper left side, and check whether the installation and operating status are okay.



7. To check the operating status and set-up for DSD file transmission, the program named

MinimWatch should be installed, and you need to install the MinimWatch for Windows OS because there is no for Synology NAS.

Before installing MinimWatch, please check and download the proper JRE for your OS because MinimWatch use Java Runtime Environment (JRE).

JRE Download: http://www.java.com/en/download/manual.jsp

8. Once the JRE installation is finished, please download and run the proper MinimWatch.

MinimWatch Download: http://minimserver.com/downloads/index.html

9. Once the MinimWatch installation is finished, click the MinimWatch launcher icon and the MinimWatch will display a tray icon as the image below.

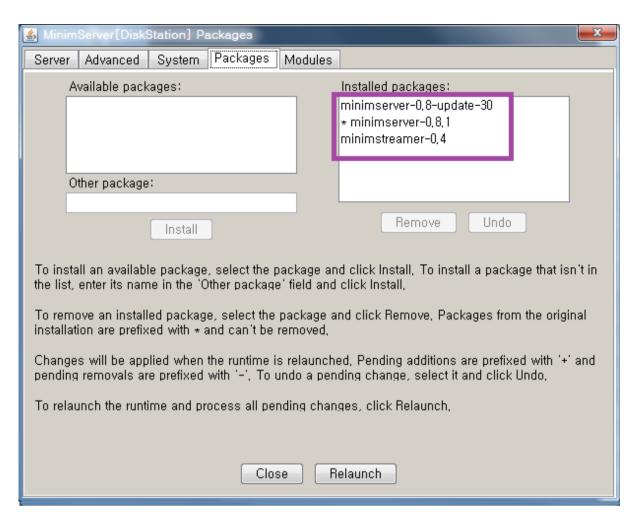


If the MinimWatch tray icon is not displaying normally, please copy the MinimWatch launcher icon and rename it to 'Run MinimWatch', and right click to go to Properties > (T) and add 'java.exe –jar ' in the contents and save, and try to runMinimWatch by using this icon.

10. Once the MinimWatch installation is finished normally, please right click the MinimWatch tray icon and select 'Properties' and set up the value as the image below.

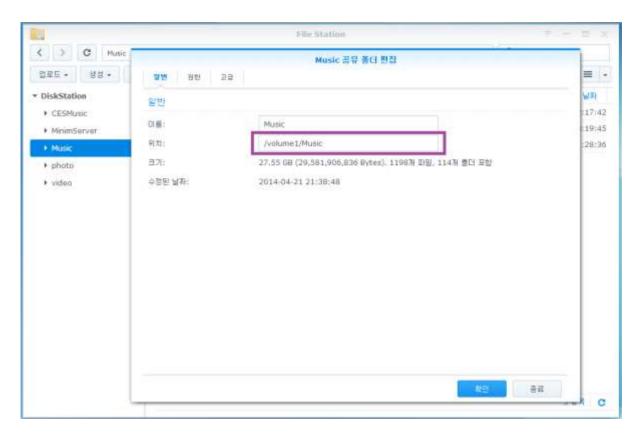
MinimServer[DiskS	tation] Server Properties
Server Advanced	System Packages Modules
Enter updated values	and click Apply or OK to save changes:
aliasTags	
alphaGroup	
contentDir	- +
displayName	MinimServer[DiskStation]
indexTags	Artist, Date, Genre, All Artists, Composer, Conductor, Orchestra
itemTags	
listViewAlbums	
mergeFolderAlbums	false
tagOptions	Album, sortTags={Album, Artist}
tagValue	
	OK Cancel Apply

- 11. For the set up to playback DSD files, the MinimServer should be updated to the latest version and then install the MinimStreamer.
  - To update the latest version, please go to 'Packages' tab and wait until some update package will be listed in 'Available pacakges' as 'minimserver-0.8-update-xx' in form. Please select the latest version and click 'install' button.
- 12. Once the installation is finished, click 'Relaunch' button and repeat the same procedure as the step, no.10. Please select 'minimstreamer-x.x' in 'Available packages' and click 'install' button.
- 13. Once the installation is finished, click 'Relaunch' button and repeat the same procedure as the step, no.10 again, you can check whether the MinimServer update and Minimstreamer had been installed in the latest version in 'Installed package.'

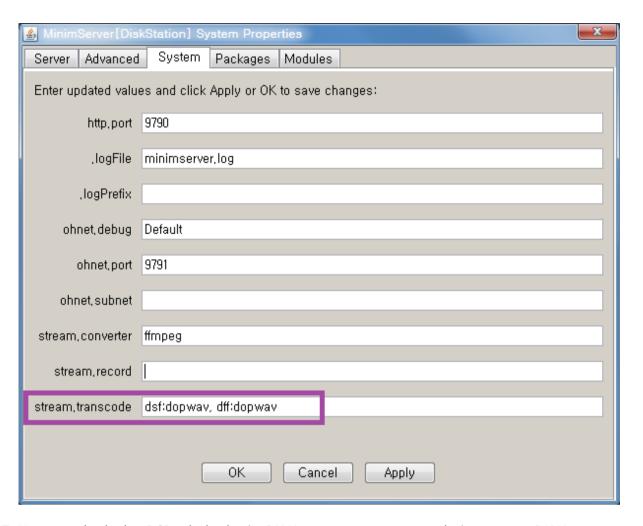


14. Please go to 'Server' and type the folder path which the music file is saved in to 'ContectDir'. In this instruction, we type the one of folder paths of Synology NAS because we installed MinimServer to Synology NAS.

Please go to Synology Web page > File Station and select one of music file folder and right click to check 'properties', and you can check the same path which saved music files and type it to 'content Dir'.



- 15. You can use '-' or '+' button to add or delete the music file folder at the next to 'contect Dir'
- 16. For the set-up to playback DSD files, go to 'System', find 'stream.transcode' and add 'dsf:dopwav, dff:dopwav' as the image below and click 'OK' button.



17. You can check the DSD playback via DLNA app on your smart device or any DLNA program.