

Migrate my main NAS from RN424 (X-RAID RAID 5) to RN426 (X-RAID, RAID6)

I have a RN424 which holds all my data in a single volume called 'data'. This RN424 is currently called 'NAS-6E' and has static IP address 192.168.1.62, and has 4 x 2TB disks in X-RAID, RAID 5.

I will purchase a new RN426 to be called 'Primary' and re-purpose the RN424 as 'Backup'. The 4 disks on the RN424 (4 x 2TB WD Red) will physically be migrated to the new RN426 as the starting core of 4 disks, containing all my data. (In a later exercise I will repurpose the RN424 as my main Backup.) IP address for RN426 has been reserved as 192.168.1.60.

RN426 6 x WD20EFAX sourced from: 4 x WD20EFAX from RN424, and 2 x WD20EFAX new

- 1 Shut down 424. Remove all 4 disks, taking note of channel number. Keep in order 1-2-3-4.
- 2 Install 4 disks, in same order into 426, taking note channel number 1 is at top of box. This will bring across all the data plus main attributes of the data volume on the RN424
- 3 Start up 426 – should be same password and IP address and configuration as old 424. RAID will remain as X-RAID, RAID 5.
- 4 Change IP address to 192.168.1.60 and device name to 'Primary'. [Refer: Notes from SB]
- 5 While still under X-RAID, RAID 5, hot-insert the 5th (blank, new 2TB) disk into channel 5 and let this synchronise to expand the volume.
- 6 Change from X-RAID to Flex-RAID. ReadyNAS system can easily change a volume from X-RAID to Flex-RAID mode. Data on the X-RAID volume is preserved when switching to Flex-RAID. The RAID level of the resulting Flex-RAID volume is automatically assigned based on the number of disks and the current parity level. [Q1: What RAID level will be assigned based on the default for 5 disks? Probably RAID 5???]
To change from X-RAID to Flex-RAID:
 - a) Click the **X-RAID** button at the right side of the page.
 - b) Confirm **Yes** that you want to switch from X-RAID to Flex-RAID.
 - c) The volume switches from X-RAID mode to Flex-RAID mode and the indicator on the X-RAID button turns gray.
- 7 Now under FlexRAID, hot-insert the 6th (blank, new 2TB) disk into channel 6 (bottom of pile).
 - a. Select the unallocated disk (6th) to add to the volume by clicking on the disk image;
 - b. Select **Add Parity** button;
 - c. In **Add Parity** window, select **Yes**. Volume expands and redundancy changes from RAID 5 to RAID 6, but requires a resynchronisation, which starts immediately. [Q2: Is this assumption regarding change of RAID from 5 to RAID 6 correct??]
 - d. RAID level should show RAID 6.
- 8 Once all synchronised, change from Flex-RAID back to X-RAID.
 - a. Click the **X-RAID** button at the right side of the page.
 - b. Confirm **Yes** that you want to switch from Flex-RAID to X-RAID.
 - c. The volume switches from Flex-RAID mode to X-RAID mode and the indicator on the X-RAID button turns green.
 - d. The RAID level of 6 should now be maintained in X-RAID mode.