

How to create a RAID Array for the first time using the Bios

Last Modified on 05/23/2025 10:28 am EDT

How to create a RAID array for the first time using the Bios

Procedure Steps

Before building an array, it is important to understand volume limits and how these limits relate to your operating system. For more information, refer to <http://technet.microsoft.com/en-us/library/cc773268%28v=ws.10%29.aspx>

1. Turn the unit on.
2. To access the RAID configuration utility, press the 'Ctrl' + 'A' keys at the Bios.
IMPORTANT: If you have a 3U-16 Chassis, there are two RAID cards, one for the operating system and one for the storage drives. DO NOT access the RAID card for the operating system; only access the storage drive's RAID card. Accessing the RAID card for the operating system can cause a serious system failure. If your unit is a dual RAID card machine, wait until you see the list of storage drives (i.e. more than one) before pressing the 'Ctrl' + 'A' keys.
3. Once the configuration is loaded, navigate using the arrow keys to the 'Create Array' tab.
4. Press the 'Insert' key to select the drives you would like to include in this array (this is usually all of the drives in the unit except for the operating system). Press 'Enter' to move the selected drives into the array.
5. Select which type of RAID configuration you would like use. RAID 5 is the most common.
6. Name the array.
7. For **Stripe Size**, select **64K** for the best performance.
8. For **Read Caching**, select **Enable**.
9. For **Write caching**, select **Disable**.
10. Select **RAID via BUILD/VERIFY** to create the new RAID array.
The **QUICK format** option is not recommended.
11. Wait until the array build is completed before starting the operating system.
12. Import the new array as **GUID Partition Tape** to allow for drive volumes larger than 2TB in Windows Server 2008.

Applies To

Hybrid Recorder; LDVR (All versions); LNVR (All versions); Windows Server 2003; Windows Server 2008; Windows Server 2008 R2; Windows Vista; Windows XP; Windows 7

Additional Information
