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How to rebuild RAID5 when degraded

Description

Hikvision NVR supports RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, and RAID 5 is the most frequently-used type.

As for RAID 5, if one HDD is broken, the RAID5 will be in degraded mode, and we can rebuild RAID5 to recover data. If there are two HDDs broken, the RAID5 will be offline.

Note: RAID function is now supported by DS-9600NI-I series and DS-96000NI-I series NVR.

Preparation

NVR, Four HDDs at least

1) If Global Hot Spare HDD is set before:

Steps:

- 1. The degraded RAID 5 will rebuild automatically.
- 2. Then, user should replace the broken HDD with a new one, and plug it into HDD cabinet. Set its type as Global Hot Spare in Storage→RAID→Physic Disk. Just in case that another HDDs will be broken.

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No.555 Qianmo Road, Binjiang District, Hangzhou 310052, China • Tel: +86-571-8807-5998 • Fax: +1 909-595-0788 E-Mail: <u>support@hikvision.com</u> • <u>www.hikvision.com</u>



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2) If Global Hot Spare HDD isn't set before:

Steps:

 Check the RAID status firstly. If the RAID is in Degraded status, user can rebuild the RAID to recover data. Besides, you can check which HDD is offline by Physical disk. As below, I created RAID5 by NO.1,2,3 HDDs, and the Physical disk column showed the rest HDDs of the Array. That means NO.1 HDD is offline, and you should replace it with a new one.

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- 2. Replace NO.1 HDD with a new one, and plug it into HDD cabinet.
- 3. Click 'Rebuild' button, and choose Physical disk 1. Click 'OK', and the rebuild progress begins.

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Capture Schedule	Array Name	array1	Level Rebu RAID 5 🖻
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Physical Disk	Physical Disk	Do not unplug the physical	
Array		disk when it is under rebuilding.	
Firmware			
Storage Mode		ОК	
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Notes:

 The rebuild speed is Middle Speed in default. If the operation of local GUI is not fluent, you can change the Background Task as Low speed.

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Recording Sche	Version Physical Disk Co	1.1.0.0003						
Capture Schedule	Array Count	16						
📇 Storage Device	Virtual Disk Count	0						
RAID V	RAID Level Hot Spare Type	0 1 5 6 10 Global Hot Sp	are					
Physical Disk	Support Rebuild	Yes						
Array	Background Tas	Medium Spe	ed		-			
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