

User Guide for Fixing Security Vulnerability of Hybrid SAN

Before You Upgrade:

1. Applicability of the Patch:

This document instructs users to fix the CVE-2023-28808 security vulnerabilities of Hybrid SAN.

No.	Device Type	Controller Type	The included version range:
1	DS-A71024/48/72R	Single	The scope of this patch is as follows: 1) The scope of this patch covers from V2.3.4-2 to
2	DS-A80624S	Single	 v2.3.o-o, 2) For versions below V2.3.4-2, please contact HIK Technical Support Team for processing;
3	DS-A81016S	Single	3) For versions above V2.3.8-8,which have fixed this security vulnerability, and there is no need to upgrade this security patch package; *Checking the software
4	DS-A72024/72R	Single	version information by viewing on web login page: https://IP:2004
5	DS-A80316S	Single	Intelligent, individual, economic and reliable data storage. Log in to the System: Basic Management User Name: web_admin Password: Mode: Advanced Mode
6	DS-A82024D	Dual	Hybrid SAN Enter Software Version HIKVISION DS System Version Hybrid SAN V2.3.8-6 Device Serial No.:20120808

2. Please use Internet Explorer for upgrading.

3. There are 4 files in the package.

storos-step1-CheckMd5_for_CVR-V1.0-915
 storos-step2-CVE-2023-28808_for_CVR_Update1-V1.0-915
 storos-step3-CVE-2023-28808_for_CVR_Update2-V1.0-915
 storos-step4-CVE-2023-28808_for_CVR_Update3-V1.0-915

4. For dual controller device, please upgrade two controllers separately, and remember to do the upgrade one by one.

Notice: If you forget the IP of dual controller device, please contact HIK Technical Support Team.



Steps to Upgrade:

How to Upgrade: Login web page (https://IP:2004) and select *"System—Tool"* to reach the upgrade page as following Figure shown:



Step 1. Upgrade ①"*storos-step1-CheckMd5_for_CVR-V1.0-915.bin*";

 If the upgrade fails, then please stop upgrading and contact HIK Technical Support Team.

If the upgrade fails, which means that the Hybrid SAN have done some customization before, so you need to get the Customization Process Order (like DZP20220531204), then send it to a responsible Manager for Customization to evaluate a customized patch;

Maintenance	EVETEN -> Tool		d.	- A	- di	
Storage	STSTEM -> TUUI					
System	Modify password SNMP configure Network test					
Network						
** Alarm	Current update package:	No update				
" Time	Choose update package:		浏览			Upload
* Tool						
Log	Current host name:				at the	Modify
? Help			Tips		×	
🔿 Logout	E Services status (Total: 2)		Results: Failed to update	BIOS: system version mi	smatched!	
	Service name					
	SNMP				Close	
	ISCSI			L	Inused	

2) Or if the upgrade succeeds, then wait 2 minutes and continue the **Step 2**.

HIKVISION DS-A81016S management							
Maintenance							
Storage	Modily Password SNMP Configuration Communication Test						
SAN Management							
Hybrid SAN							
System	Current Upgrade File: storos-s	<pre>step1-CheckMd5_for_CVR-V1.0-915.bin</pre>					
** Network	Select Upgrade File:	Note	×	Upload			
₩ Alarm		Execution	n Result: BIOS is uploaded.				
[™] Time	Storage System Name:		Exit	Modify			
** Power Supply							
** Tool	Service Status (Total: 2)						
Log System	Service Name		Current Status				
🥐 Use Help	SNMP		Running				

Step 2. Upgrade 2 "storos-step2-CheckVersion-915.bin", then wait 2 minutes;

HIKVISIO	DS-A81016S mana	agement	* ++ + + +	+	
SAN Management	System -> Tool				
Hybrid SAN	Modify Password SNMP Configu	ration Communication Test			
System	Modily Password SMMP Conligu	Communication rest			
** Network	Current Ungrade File:	storos-sten2=CVE=2023=	28808 for CVR Undate1-V1 0-9	915 bin	
₩ Alarm	Select Upgrade File:	30103 31692 CVC 2023	anth		
™ Time	Select opgrade the.	Note		IIIIIalaa	×
Power Supply Tool	Storage System Name:	Execution Result: BI Restart the storage system	DS is uploaded. a after upgrade. Then the function	on can take effect	completely.
Log System	Service Status (Total: 2)				Exit
? Use Help	Service Na	me	Current Statu	s	Opti

Step 3. Upgrade ③"storos-step3-CVE-2022-28171_Update-915.bin, then wait 2 minutes.

Maintenance	Sustem > Teel					
Storage	Syacem -> Tool					
SAN Management	Modify Password SNMP Configuration Communication Test					
Hybrid SAN						
System	Current Upgrade File: st	oros-step3-CVE-2023-28808_for_CVR_Update2-V1.0-915.bin				
** Network	Select Upgrade File:		浏览	Upload		
		Note	×			
** Alarm						
** Alarm	Storage System Name:	Execution Re	sult: BIOS is uploaded.	Modify		
** Alarm ** Time ** Power Supply	Storage System Name:	Execution Re	esult: BIOS is uploaded.	Modify		
** Alarm ** Time ** Power Supply <	Storage System Name:	Execution Re	sult: BIOS is uploaded.	Modify		
** Alarm ** Time ** Power Supply ** Tool Log System	Storage System Name: Service Status (Total: 2) Service Name	Execution Re	Exit EIOS is uploaded.	Modify		

<u>Tip:</u> this patch may cause web logout, please wait some minutes, refresh page and re-login to continue;

Step 4. Upgrade ④"storos-step4-CVE-2022-28172_Update-915.bin"

HIKVISI	DN DS-A81016S management	· + ++ + + + +				
Maintenance	System -> Teal					
Storage	System -> 100					
SAN Management	Modify Password SNMP Configuration Communication Test					
Hybrid SAN						
System	Current Upgrade File: storos-step4-CVE-2023-28808_for_CVR_Update3-V1.0-915.bin					
Network Network	Select Upgrade File:	Note Vpload Restore				
₩ Alarm		Execution Result: BIOS is uploaded.				
Time	Storage System Name:	Modify				
Power Supply		Exit				
* Tool	Service Status (Total: 2)					
Log System	Service Name	Current Status				
O Use Help	SNMP	Running	Enabled			
	ISCSI	Running	Enabled			

Confirm Upgrade Information:

After upgrading, enter "Log System—Upgrade Log":

 If the latest log shown with 4 "*Upload bios success*", it means the upgrade is complete; no need to reboot the device;

faintenance								
Storage	Log System -> Upg	rade Log						
SAN Management	Upgrade Log Information	ation (Total: 113	3)	•• I	2	34	5	🗨
Hybrid SAN	Search:	Search						
System	Date	•			Log (Content		
Log System	April 06 2023	17:38:24	Upload bios success (sto	ros-step4-CVE-2023	28808_fc	or_Hybrid SA	N_Updat	e
Maintenance Log	April 06 2023	17:23:53	Upload bios success (sto	ros-step3-CVE-2023-	28808_fc	or_Hybrid SA	N_Updat	e
Operation Log	April 06 2023	17:21:40	Upload bios success (sto	ros-step2-CVE-2023-	28808_fc	or_Hybrid SA	N_Updat	e
Performance Log	April 06 2023	17:19:22	Upload bios success (sto	ros-step1-CheckMd5	_for_Hyb	rid SAN-V1.0)-915.bin	
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2) Log out to the beginning 2004 page, to check whether the version ended with "sp3" after upload all 4 patches;

HIKVISION DS-A81010	6S management
+ + Intelligent, individual, economi	e and reliable data storage.
Log in to the System	Basic Management
User Name:	web_admin
Password:	
Mode:	Advanced Mode
Er	iter
HIKVISION System Version:Hybrid_SAN V2.3.8	DS-A81016S 8-8sp3 Device Serial No.:K10628536

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3) Then please check all the functions that used in your project and related with Hybrid SAN, such as recording and backup of video &picture, if there were any exceptions, please contact HIK Technical Support Team.

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