

Test Report of TS-101 Q-RAID 1 and Disaster Recovery Services

• Summary

QNAP TS-101 offers unique Q-RAID 1 mirroring disk management function for backup of TS-101 data via eSATA or USB port to an external disk. When the internal disk is damaged, the data can be recovered immediately.

This test will demonstrate how Q-RAID 1 mirroring backup function and data recovery can be easily done in a few steps. First, data is backed up from TS-101 to an external SATA disk via the eSATA port. Then verify when TS-101 internal disk fails or data is missing, the data can be accessed by installing the external SATA disk directly to TS-101 or by installing a new disk in TS-101 and restoring the data from external Q-RAID 1 backup disk.

• Outline

Step 1: Mirror Station - Install one hard disk (HDD 1) in TS-101 and externally plug in another SATA hard disk (HDD 2) to execute Q-RAID 1 backup for TS-101.

Step 2: Disaster Recovery A - Replace HDD 1 with HDD 2. Test if the backup data is readable and consistent.

Step 3: Disaster Recovery B - Replace HDD 2 installed in TS-101 with another new disk (HDD 3). Plug in HDD 2 externally, and test if the backup data can be copied from HDD 2 to HDD 4.



• Practical Operating Procedure

Step 1: Mirror Station - Install one hard disk (HDD 1) into TS-101 and externally plug in another SATA hard disk (HDD 2) to execute Q-RAID 1 backup for TS-101.

1. Enter the TS-101 administration page, click "Administration". Login TS-101 and then go to "eSATA Disk" of "Device Configuration".



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-()-	Network Settings TCP/IP Configuration Microsoft Networking - Apple Networking - Web File Manager - FTP Service - Multimedia Station - Download Station - Web Server View Network Setting:	\boxtimes	System Tools Alert Noblication * Restart/ Shutdown * Hardware Settings * System Update * Change Logo * Remote Replication * Backup/ Restore/ Reset Settings
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2. Select "Q-RAID 1" under Disk Usage Setting. Click "Apply" to execute Q-RAID 1 formatting and synchronization.

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3. When the recovering task finishes, the status of eSATA Disk will become "Ready", which means the mirror station (Q-RAID 1) has been set up successfully.

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Device Configuration				
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USB Printer	14-2010/01/24/54/51/01/01	Model:	HDS722525VLSA80	
eSATA Disk		Total / Free size:	238475 MB / 228119 MB	
		File System:	EXT 3	
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Step 2: Disaster Recovery A - Replace HDD 1 with HDD 2. Test if the backup data is readable and consistent.

1. First, check the data in HDD 1.

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	D	QNAP Company profile.doc			50 KB	2005/0	7/12 11:
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		Sales Leads.xls			121 83	2005/0	4/27 15:
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- 2. After turning off TS-101, take out HDD 1 and install HDD 2 in TS-101.
- 3. Turn on TS-101. Go to the administration page and login Web File Manager.





4. Check if the data in HDD 2 is consistent with HDD 1. If yes, it means the function of Mirror Station (Q-RAID 1) does work.

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		QNAP Company profile.doc			50 KB	2005/0	7/12 11:23
		QNAP_Questionnaire.doc			90 KB	2005/0	9/12 13:33
		Sales Leads.xls			121 KB	2005/0	4/27 15:38
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Step 3: Disaster Recovery B - Replace HDD 2 installed in TS-101 with another new hard disk (HDD 3). Plug in HDD 2 externally, and test if the backup data can be copied from external HDD 2 to HDD 3.

1. Enter the TS-101 administration page. Go to "eSATA Disk" of "Device Configuration".

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2. Click "Recover Data".

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USB Printer		Model:	HD5722525VL\$480
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3. Click "OK" to continue. Q-RAID1 will start to recover the data.

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4. When the recovering task finishes, the status of eSATA Disk will become "Ready".

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Device Configuration • SATA Disk • USB Disk • USB Printee • eSATA Disk	- eSATA Dik 1	Manufacturer: Model: Total / Pree stre: Pie System: Status: Format As: EXT 3 Eject: To remove the hardware device, system does not show the device Note: Do NOT unplug the device Note: Do NOT unplug the device Disk Usage Setting: O Data Sharing @ Q-RAID 1	ATA Mactor 60'0900MD 20167 MB / 70331 MB EXT 3 Ready Extension Ext now placet now} When the anymore, you can remove it safety. when it is in use to protect the device.

5. Follow the procedure of checking data in Step 2, go to "Web File Manager" of TS-101. You will find the data has been recovered completely.

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	D	Qnap Company Introduction.ppt					2,231	KB	2005/0	9/14 08:45
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		Sales Leads xls					121	KB	2005/0	1/27 15:38
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