SERVER RECOVERY - DAS

Your LaCie professional server makes it easy to configure automated backups to direct attached storage (DAS). See <u>Server Backup - DAS</u> for instructions on setting up regular backups to DAS connected to its USB 2.0 and eSATA 3Gb/s ports. Automated backups will run twice a day though you may start a manual backup at any time using the server Dashboard. Should the server encounter system failure, the backups on the DAS will help you to restore it to a working state.

REQUIREMENTS TO PERFORM A FULL SYSTEM RESTORE - WINDOWS STORAGE SERVER 2008 R2 ESSENTIALS

You will need the following items to perform a server system recovery:

- Your LaCie professional server or, a LaCie professional server that has:
 - Equal or greater storage capacity
 - The same number of hard drives
- The DAS storage used as the destination for the server backups. Please make certain that it is connected to one of the server's USB 2.0 or eSATA 3Gb/s ports and powered on.
- The Setup and Recovery DVD included with your LaCie professional server.
- A USB keyboard to connect to your LaCie professional server.
- A VGA monitor to connect to your LaCie professional server.
- A USB flash drive to use as a boot key. All data stored on the USB flash drive will be deleted during the boot key creation. Make certain to backup all data stored on the USB flash drive before creating the boot key.
- A Windows workstation connected to the same network as the LaCie professional server. The Setup and Recovery DVD will walk you through the full system restore from the Windows workstation.

REQUIREMENTS TO PERFORM A FULL SYSTEM RESTORE - WINDOWS HOME SERVER 2011

You will need the following items to perform a server system recovery:

- The LaCie professional server or, a LaCie professional server that has:
 - Equal or greater storage capacity
 - The same number of hard drives
- The drive lock tool shipped with your LaCie professional server.
- The DAS storage used as the destination for the server backups. Please make certain that it is connected to one of the server's USB 2.0 or eSATA 3Gb/s ports and powered on.
- The Setup and Recovery DVD included with your LaCie professional server.
- A USB flash drive to use as a boot key. All data stored on the USB flash drive will be deleted during the boot key creation. Make certain to backup all data stored on the USB flash drive before creating the boot key.
- A Windows workstation connected to the same network as the LaCie professional server. The Setup and Recovery DVD will walk you through the full system restore from the Windows workstation.

Important info - Restoring to a server with greater storage capacity: You may restore your data and settings to a LaCie professional server with a greater capacity than the original. Following the restore, Windows Disk Management will list the additional capacity on the server disks as *Unallocated*. You may create another RAID volume using the *Unallocated* partitions (see <u>Technical Brief: RAID</u>).

Important info - Recent changes to your server: You will be prompted to select the system backup as the base for the restore operation. Please take into account any changes that you may have made to your server between the date of the selected backup and the date of the restore. For example, recent revisions to passwords will not be available on older backups. Choosing an older backup would revert the sever to a previous password.

FULL SYSTEM RESTORE

The full system restore includes two central steps:

- 1. Creating a server boot key.
- 2. Running the full system restore from a Windows workstation on the network.

Create the boot key

To perform a full system restore, the server requires that the workstation boot from a USB boot key. Therefore, you will be prompted to insert a USB flash drive into one of the server's USB 2.0 ports as part of the recovery operation. LaCie recommends using a flash drive that does not contain important files since **all data will be deleted** during the boot key creation.

- 1. On a workstation that is connected to the same network as the LaCie professional server, insert the Setup and Recovery DVD into the optical drive.
- 2. Click **Run LaCie.exe** at the AutoPlay prompt.



3. Choose **Yes** if the *User Account Control* window appears.

😗 Use	r Account Control		×	
0	Do you want to allow the following program from an unknown publisher to make changes to this computer?			
	Program name: Publisher: File origin:	LaCie.exe Unknown CD/DVD drive		
💌 s	how details		Yes No	
			Change when these notifications appear	

4. Click on **Server Recovery** at the DVD selection window.



5. Read the *Getting Started* page carefully then click **Next**

🕞 🛥 Recover your server	
Getting Started	
 You will be guided through the process of recovering your server in 3 phases: Create a bootable USB flash drive with the recovery software Discover your server on the network Choose your recovery method 	
 When choosing your recovery method, you can choose to: Restore your server from a backup (recommended) Reset your server back to factory defaults and erase your data Reset your server back to factory defaults and keep your data 	
Skip creating the bootable USB flash drive	
Learn more about server recovery	
Net	xt Cancel

6. Please read the window carefully before attaching the USB flash drive to one of the USB 2.0 ports on the workstation.



- 7. Click Next.
- 8. If your USB flash drive is not listed, use the pulldown menu to find it. **Since creating the boot key will delete all data on the USB flash drive, make certain to choose the correct device.**

5	Recover your server
· .	
	Prepare the USB flash drive for server recovery
	Select the USB flash drive from the drop down list. If you do not see the USB flash drive in the list, verify that it is inserted in the computer properly, and then click Refresh.
	USB flash drives that are not large enough are not included in the list.
	Select USB flash drive:
	Samsung UFD USB Device Drive 1 (E:\)
	I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	\blacksquare I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	\blacksquare I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	I understand that if I click Next, all files and folders on my USB flash drive will be deleted
	I understand that if I click Next, all files and folders on my USB flash drive will be deleted Next Cancel

9. Click the checkbox next to I understand that if I click Next, all files and folders on my USB flash drive will be deleted.

🕒 💷 Recover your server		
Prepare the USB flash drive for server recovery		
Select the USB flash drive from the drop down list. If you do not see the USB flash drive in the list, verify that it is inserted in the computer properly, and then click Refresh.		
USB flash drives that are not large enough are not included in the list.		
Select USB flash drive:		
Samsung UFD USB Device Drive 1 (E:\)		
I understand that if I click Next, all files and folders on my USB flash drive will be de	leted	

Next

Cancel

10. Click **Next**. It will take a bit of time to create the boot key.

🧼 🛥 Recover your server	
Preparing the USB flash drive for server recovery	
Please wait while the USB flash drive is prepared	
This may take several minutes.	

11. Once the boot key has been created, the server will prompt you to remove it from the server. Please keep it in a secure location since you will need it to perform the server system recovery.

🕞 🛥 Recover your server	3
The bootable USB flash drive for server recovery was created successfully. Remove the USB flash drive from this computer, and then click Next to continue to the next phase of recovering your server.	

12. Before selecting **Next**, you must prepare the server for the system recovery using the newly created boot key. Please see the instructions below that match your LaCie server.

Next

Cancel

LaCie 5big Office+ (Windows Storage Server 2008 R2 Essentials)

Follow the steps below to boot from the server boot key.

- Before booting from the flash drive, please shut down the server. Launch the Dashboard from the Windows workstation. Go to Start > All Programs > Windows Home Server 2011/Windows Storage Server 2008 R2 > Windows Home Server 2011 Dashboard/Windows Storage Server 2008 R2 Dashboard.
- 2. In the Dashboard, click on **Server settings**.



3. The Settings window will open. Note the red button on the lower left.

Server Settings	
General	
Media	Date, time and region
HomeGroup	
Remote Web Access	Date and time 1/23/2012 10:37 AM
Domain	Region and language of administrator Change
	Country/Region location of server:
	United States 🔹
	Install updates automatically (recommended)
	Help us improve quality, reliability, and performance of Windows Storage Server 2008 R2 Essentials. Join our customer experience improvement program.
	Automatically report errors
	View privacy statement
	Windows is activated. Change product key
	OK Cancel Apply

Server Settings	
General	
Media	Data dias and assist
HomeGroup	Date, time and region
Remote Web Access	Date and time 1/23/2012 10:37 AM Change
Domain	Region and language of administrator Change
	Country/Region location of server:
	United States 🔹
	Windows Update settings and error reporting Install updates automatically (recommended)
	Change/Install updates
	Help us improve quality, reliability, and performance of Windows Storage Server 2008 R2 Essentials. Join our customer experience improvement program.
	Automatically report errors
	View privacy statement
	Windows is activated. Change product key
	OK Cancel Apply

4. Click on the red button to select **Shut down**.

Server Settings	
General	
Media HomeGroup	Date, time and region
Remote Web Access	Date and time 1/23/2012 10:38 AM Change
Domain	Region and language of administrator Change
	Country/Region location of server:
	United States 👻
	Windows Update settings and error reporting Install updates automatically (recommended)
	Change/Install updates
	Help us improve quality, reliability, and performance of Windows Storage Server 2008 R2 Essentials. Join our customer experience improvement program.
	Automatically report errors
	View privacy statement
	Windows is activated. Change product key
Restart	OK Cancel Apply
Shut down	

5. Click **Yes** at the prompt to confirm that you wish to shut down the server.



- 6. Connect the USB keyboard to one of the server's USB 2.0 ports.
- 7. Connect the USB boot key to one of the server's USB 2.0 ports. Please make certain that this is the only USB flash drive connected to the server.
- 8. Connect a VGA monitor to the VGA port.
- 9. Start the server by depressing the LED button.
- 10. **Do not let the server boot to the Windows desktop.** Watch the VGA monitor to push F11 on the USB keyboard at the first available window. You will be directed to the *Boot Selection Popup*.
- 11. Using the arrow keys, scroll down to the **USB** device. This is the boot key.
- 12. Press **Enter** on your USB keyboard.
- 13. Once the server has booted to the USB flash drive, go to the Full System Restore.

LaCie 5big Office (Windows Home Server 2011)

Follow the steps below to boot from the server boot key.

- Before booting from the flash drive, please shut down the server. Launch the Dashboard from the Windows workstation. Go to Start > All Programs > Windows Home Server 2011/Windows Storage Server 2008 R2 > Windows Home Server 2011 Dashboard/Windows Storage Server 2008 R2 Dashboard.
- 2. In the Dashboard, click on **Server settings**.



3. The Settings window will open. Note the red button on the lower left.

😔 Server Settings	
General	
Media HomeGroup Remote Web Access Domain	Date, time and region Date and time 1/23/2012 10:37 AM Region and language of administrator Change
	Country/Region location of server: United States Windows Update settings and error reporting
	Install updates automatically (recommended) Change/Install updates
	 Help us improve quality, reliability, and performance of Windows Storage Server 2008 R2 Essentials. Join our customer experience improvement program. Automatically report errors
	View privacy statement Windows is activated. Change product key
	OK Cancel Apply



4. Click on the red button to select **Shut down**.

Server Settings	
General	
Media	Data das autoritas
HomeGroup	Date, time and region
Remote Web Access	Date and time 1/23/2012 10:38 AM Change
Domain	Region and language of administrator Change
	Country/Region location of server:
	United States 🔹
	Install updates automatically (recommended) Change/Install updates
	Help us improve quality, reliability, and performance of Windows Storage Server 2008 R2 Essentials. Join our customer experience improvement program.
	Automatically report errors
	View privacy statement
	Windows is activated. Change product key
Restart	OK Cancel Apply
Shut down	

5. Click **Yes** at the prompt to confirm that you wish to shut down the server.

Windows	Storage Server 2008 R2 Essentials	83
Windows Storage Server 2008 R2 Essentials will now shut down. Do you want to continue?		
	Yes No	

- 6. Once the server has shut down, plug the USB boot key into one of its USB 2.0 ports. The ports may be found in the back of the device.
- 7. Insert the pointed end of the drive lock tool into the system recovery button. The button may be found next to the power connection on the back of the server. See A below.





- 8. While pushing the system recovery button, turn on the server using the front LED button. Please do not push the LED button for an extended period of time. See B above.
- 9. Once the front LED blinks at a slower pace, release the system recovery button. The server will enter into recovery mode.
- 10. Since entering recovery mode requires time to initialize, LaCie recommends waiting three to five minutes before moving to <u>Full System Restore</u>.

Important info: To restore the data and settings, please make certain that your server backup disk is connected to the workstation. You risk losing your server settings when restoring the server to its factory default state.

Full System Restore

To complete the recovery, please return to the workstation with the Setup and Recovery DVD.

1. If the Server Recovery window is still open, please click **Next**. Skip Step 2.

The bootable USB flash drive for server recovery was created suc	ccessfully.
Remove the USB flash drive from this computer, and then click Next to conti phase of recovering your server.	nue to the next

1
Next Connel

2. If the Server Recovery is not running, please launch it from the Setup and Recovery DVD. At the *Getting Started* window, you will be prompted to create a boot key. Since the server has booted from the flash drive, you may skip the steps by checking the box next to *Skip creating the bootable USB flash drive*. Click **Next**.

🕞 🥌 Recover your server	
Getting Started	
 You will be guided through the process of recovering your server in 3 phases: Create a bootable USB flash drive with the recovery software Discover your server on the network Choose your recovery method 	
 When choosing your recovery method, you can choose to: Restore your server from a backup (recommended) Reset your server back to factory defaults and erase your data Reset your server back to factory defaults and keep your data 	
Skip creating the bootable USB flash drive	
Learn more about server recovery	
	Next Cancel

3. The recovery will search for your server on the network. You will receive the message below if it finds the server. Click **Next** and skip Step 4.



Next	Cancel

4. If the recovery does not find your server, it may still be booting to recovery mode. Please select **Close** and wait three to five minutes. Once it has booted to recovery mode, return to the Step 2.

📟 Re	ecover your server	
The s	erver was not found	
\bigotimes	Your server could not be found. Verify that the server started in recovery mode, and that the server and the client computer are connected to the same router.	
Learn n	nore about connecting to my server	
	Close	

5. Select the recovery method. LaCie recommends **Restore the server from a backup**. Before moving to the next step, make certain that the DAS used for the server backups is connected to the server and powered on.

Ð	😿 Recover your server
	Choose the recovery method.
	You can choose to restore your server from a backup or reset your server to the factory default settings.
	Restore the server from a backup (recommended)
	To select this option, you must have a valid backup on an external hard drive.
	Reset to factory default settings
	This option deletes all settings, user accounts and installed applications. You are given the option later to delete your data or to keep it.
	Learn more about my restore options
	Next Cancel

6. The recovery will search for the available backups to use for recovery. It may take several minutes.

	23
🕞 🐌 Recover your server	
Detecting external backup hard drives	
Please wait while we are detecting your backup drives.	
Connecting to the server	
	ancel

	83
🗩 🐌 Recover your server	
Detecting external backup hard drives	
Please wait while we are detecting your backup drives.	
Detecting backup drives	

7. Review the list of backups. This example has two but you may see many more.

your server	
Server name	
5bigOfficePlus 5bigOfficePlus	
advanced)	
	your server Server name SbigOfficePlus SbigOfficePlus

Next Cancel

8. Choose the backup you wish to restore and click $\ensuremath{\textbf{Next}}.$

elect a backup to use for restoring y	our server	
Date and time	Server name	
Tuesday, January 10, 2012 12:00:35 PM Tuesday, January 10, 2012 10:07:16 AM	5bigOfficePlus 5bigOfficePlus	

Learn more about choosing a backup

Next

9. Review the restore selections. You may have to check the box next to *I* understand that all data on the affected drive and volumes will be erased.

9	1 Recover your server
	Review your server backup and restore selections
	Review the backup that you selected and then click Next to start the restore process. Do not turn off the server or interrupt the restore process.
	The following backup will be restored to your server
	Backup date: Tuesday, January 10, 2012 12:00:35 PM
	Server name: 5bigOfficePlus
	I understand that all data on the affected drive and volumes will be erased Learn how server restore works
	Next Cancel

- 10. Click Next.
- 11. The recovery will begin. Please be patient during the recovery. The time to complete the recovery is based upon the amount of data stored on your server.

(a) to Recover your server	×
Restoring the server from the selected backup	
Please wait while the server restore completes. Depending on the size of your hard drive and volumes, this may require from several minutes to an hour.	
Restoring the server from the selected backup	
Can	cel
🍥 🐌 Recover your server	23
Restoring the server from the selected backup	
Please wait while the server restore completes. Depending on the size of your hard drive and volumes, this may require from several minutes to an hour.	
Restoring the server from the selected backup	
Can	cel

12. A message will tell you when the recovery has finished.





- 13. Click Close.
- 14. The server will reboot. You may remove the boot key.
- 15. If applicable, you may remove the USB keyboard and VGA monitor.

Technical note: The LaCie professional server will reboot automatically following a full system recovery. Upon restart, Windows Disk Management will begin the synchronization of the server's RAID configuration. The synchronization may take several hours to a day based upon the total storage capacity of your server. You may access, transfer, share, and backup your data during the synchronization. Please note that server performance may be reduced during the synchronization.