

10 everyday things your data backup system should do

Data backup that is reliable, easy and fast is only the beginning...

SONICWALL®

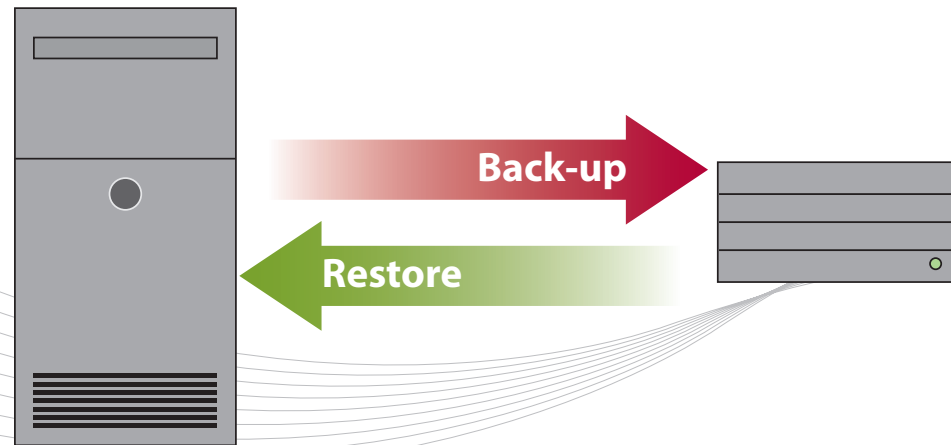
PROTECTION AT THE SPEED OF BUSINESS®

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Backup and Restore

Backing up data from a desktop, laptop or server sounds simple enough. You just copy your data from your system to someplace else; a backup tape, a central server, a second disk, an off-site SAN, a CD, a flash drive – you get the idea. Yet that simple act, copy from “here to there”, vexes nearly every organization at some point as backups don’t occur, fail in the middle or worse backed up data can’t be recovered.



With any data backup system you quickly realize that the only true measurement of its value is data recovery, the from “there to here” part. Having 500 backup tapes with color coordinated labels arranged neatly on the shelf might look nice, but they are only useful if they are readable and data recovery is simple and quick. A true data backup and recovery solution must be reliable, easy and fast.

1st Everyday Challenge






People delete good files sometimes

We've all done it. We delete a file, then empty the trash only to realize a minute, hour or day later we REALLY need that file. Reluctantly, we contact the administrator to help recover the file from backup. They can do it, but it will be tomorrow, now what?

Your Challenge: *Restore your deleted file in less than 1 day*

Step 1: Click once to reach your backup files

Step 2: Choose the file to restore

Name	Date
 FY2009 Tracking	7/22/2008 3:43 PM
 FY2008 Actuals	4/17/2008 5:23 PM
 FY2008 in review	7/7/2008 12:13 PM
 FY2008 quarterly - Q1	8/7/2008 9:34 PM
 FY2008 quarterly - Q2	2/11/2008 4:22 PM

Step 3:  [Restore Deleted File](#)

Everyday Fact: 97% of all restores are single files (Microsoft)



2nd Everyday Challenge

“Save” can be just like delete

You need to prepare a sales quote for “Louis” and open the *“Quote – Anderson”* spreadsheet to use as a template. When you’re done you hit *“Ctrl S”* (save) and you have the Louis quote saved. A millisecond later you realize you’ve saved the Louis quote over the Anderson quote. You need both and it will take 30 minutes to recreate the Anderson quote.

Your Challenge: *Restore the good “Quote – Anderson” file in less than 30 minutes*

Step 1: Click once to reach your backup files

Step 2: Navigate to the folder where the file is located

Step 3: Choose the file to restore

Step 4: Restore the file

Everyday Fact – Up to 40% of all data loss is caused by Human Error. (Microsoft)



3rd Everyday Challenge

System crash, is today lost?



Good News: Your hard drive has stopped whining

Bad News: Your hard drive has stopped turning

Really Bad News: This happened at 5:30 pm and the Board presentation you've been working on all day is...

Your Challenge: *Determine which version of the "Board presentation" you can recover*

- A. The 8:00 am version from yesterday's backup tape
(You did remember to do the backup?)
- B. The last saved version using disk recovery utilities
(Crossing your fingers helps here!)
- C. The 11:00 am version from your bosses' e-mail
("Boss, my computer crashed and there's no backup, so...")
- D. The last version you saved

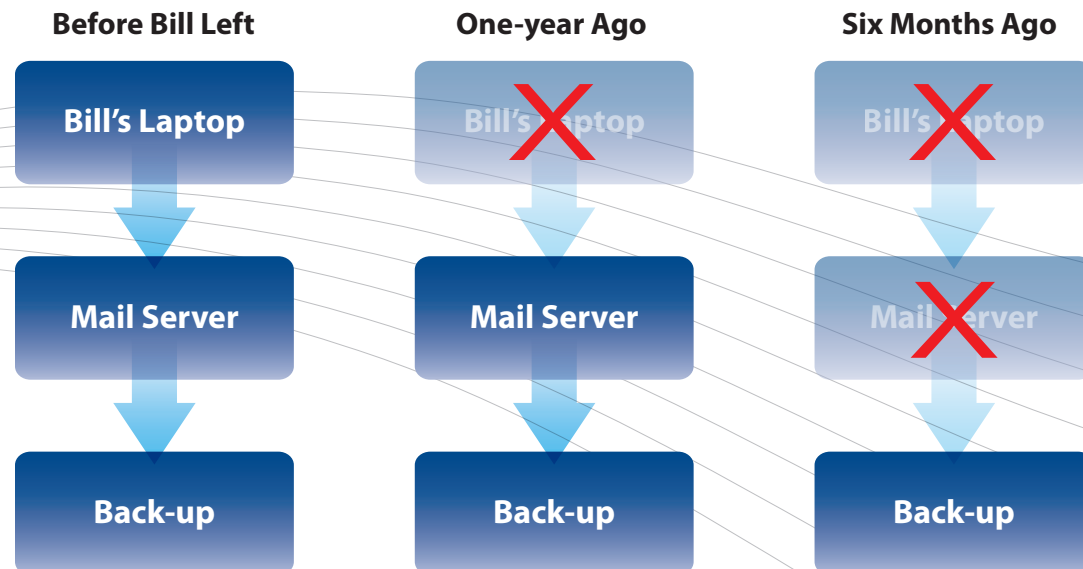
4th Everyday Challenge

The inbox is gone but not forgotten

Bill left the company a year ago. About 6 months ago, your predecessor deleted Bill's e-mail inbox from the mail server to save space. Today, your company received a subpoena to produce the last two years of Bill's e-mail in relation to an Intellectual Property dispute.

Your Challenge: *Produce Bill's old email box*

1. Bill's e-mail inbox was automatically backed up each day from the mail server to the backup system
2. Bill's e-mail inbox remained on the backup system even after the e-mail box was removed from the mail server
3. You can recover Bill's e-mail inbox from the backup system to the mail server



5th Everyday Challenge

“I think everyone is backed up”

The boss asked a simple question, **“Is everyone’s data backed up?”**. Your answer *“I think everyone is backed up”* did not inspire confidence, so the next question is more precise, **“Is everyone’s data backed up everyday?”**. You now have a new number one project.

Your Challenge: *Prove to the boss that “everyone’s data is backed up everyday”.*

This is one way to do it ...

```
Foreach [{user} in user_list.txt]
  If [exists /backups/{user}-{today}.txt]
    Then [print {user} “ – Backup is OK”]
  Else [print {user} “ – Backup Missed”]
  Endif
Endfor
_Note: Remember to keep user_list.txt updated
```

...but, an automatically generated e-mail like this everyday is easier.

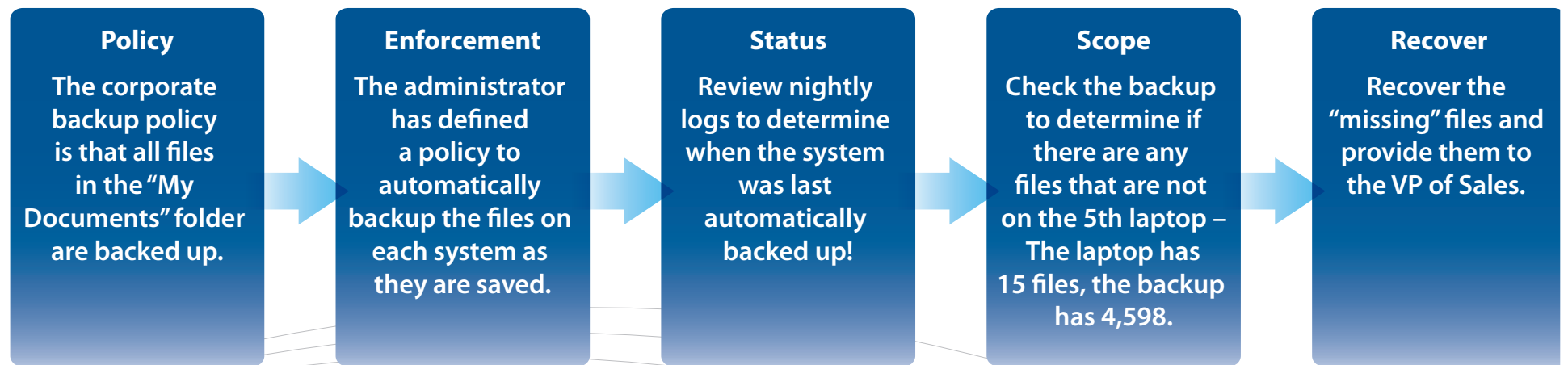
Activity Report	
Generated on: Nov 11, 2008 00:00:05	
Agents configured on this CDP Appliance: 17	
Agents reported activity during this period: 16	
No activity during this period from agent(s): KRIS-LAPTOP	
EXCHANGE	Last Rev. Timestamp
:\MSEXCHANGE\34C09-8B5E-8969A.bak	Nov 10, 2008 06:59:41
KRIS-DESKTOP	Last Rev. Timestamp
C:\repos\bt\bt-1K-20000F-01	Nov 10, 2008 23:59:56
SERVER101	Last Rev. Timestamp
:\MSSQL\North\32D-4097-3D4.bak	Nov 10, 2008 09:00:52

6th Everyday Challenge

When employees go bad

The 5 sales people who were laid-off all worked in remote offices on company laptops. Four of the returned laptops were OK, but on the fifth system there were only 15 files in the "My Documents" folder. You suspect that something is wrong and that files are missing.

Your Challenge: *Determine the scope of the damage and recover any missing data*



7th Everyday Challenge

When employees go bad, really bad

In the previous Everyday Challenge, you provided the VP of Sales with the files that were missing from the “bad” ex-salesperson’s system. But now the VP of Sales is saying that some of the files you recovered from the backup are garbage – *“The quarterly forecast report just says ha ha ha”*. It appears that the ex-salesperson entered garbage data into some key files knowing they were going to be backed up, that’s not good.

Your Challenge: *Recover a good version of the key files*

The backup system can keep up to 15 versions of each file as determined by the administrator. Any saved version of a given file can be quickly and easily recovered.



8th Everyday Challenge

Tape I/O Error [block 0: null]

It's Wednesday morning and the VP of Marketing's laptop has failed. While the new system is being reimaged, you go to the VP of Marketing's office to pick up last night's backup tape and recover their data to the new laptop.

Your Challenge: *Determine your odds of recovering the VP of Marketing's data this morning*

Scenario	Reason	Chance of Success
There is no tape in the drive	"I forgot" says the Marketing Admin	0%
You can't find the backup tape	It's at the Marketing Admin's home	0% for today
The backup failed	20% of all tape backups fail ⁽¹⁾	80%
You can't read the backup tape	40% of all backup tapes can not be read ⁽²⁾	60%
Recover files from offsite	64% of SMBs only backup data onsite ⁽³⁾	36%

⁽¹⁾InfoStor, ⁽²⁾Yankee Group, ⁽³⁾Gartner



Traveling? No backup for you



Backups and being Green

What happens to your backup process when you're not travelling but to be green you turn off your system before you go home?

Many backup systems perform their backups once a day at a specified time, say 3:00 am. When you travel you may not be connected to your network at 3:00 am.

Your Challenge: *Figure out what happens when you're travelling and your system is not connected at 3:00 am*

Typical Data Backup

Process: Backup the data on the systems that are connected to the network at 3:00 am.

Result: If you're not connected at 3:00 am your system is not backed up.

You Can: Remember to log in to your network before you go to sleep and hope the connection doesn't time out.

Continuous Data Protection

Process: As files are saved, they are marked for backup at the next connection.

Result: When you connect to the network the "saved" files are automatically backed up.

You Can: Get some sleep.

10th Everyday Challenge

Sometimes disasters happen

Disasters such as hurricanes, tornados and floods happen. But a disaster can also be something much smaller such as spilled coffee or a lost laptop.

On Saturday evening you receive a phone call from the building manager where you lease your office space. The building with your offices has had a fire and your offices are damaged. A few minutes later you receive a phone call from the CEO wanting to know your plan to get operational.

Your Challenge: *Determine the backup/restore tools you have available to you.*

- 1. Site-to-site backup** – The backup systems in your office automatically posted their most recent updates to your off-site backup server.
- 2. Offsite backup** – The backup systems in your office automatically posted their most recent updates to your off-site backup service.
- 3. Bare Metal Restore** – Restore the data and applications to the systems that were destroyed if the new hardware is the same.
- 4. Bare Metal Restore Universal** – Restore the data and applications to the systems that were destroyed if the new hardware is different.



Continuous Data Protection

The **SonicWALL Series of Continuous Data Protection (CDP)** products and services is designed to provide foolproof, intuitive data backup and data restoration.

Automatic Transparent Backup

CDP delivers automatic, transparent backup that ensures data, applications and systems are reliably protected from common user error, hardware failure, deletion, potential disaster and malicious attack. In addition, Administrators can easily pre-configure set policies to ensure that specific business-critical files, folders or applications are backed up.

User-directed Restore

Enables end-users, as allowed by Administrators, to securely restore their own files, including multiple historic versions. This increases user satisfaction and improves both user and IT productivity.

Low-touch Administration

CDP automates tedious backup administrative tasks, providing an easy-to-manage, low-touch solution. This includes automatically generating e-mail alerts and producing regularly-scheduled reports on backup activity.

Flexible Disaster Recovery Options

CDP provides flexible disaster recovery options, including SonicWALL Offsite Data Backup, SonicWALL Site-to-Site Data Backup and SonicWALL Local Archiving, as well as SonicWALL Bare Metal Recovery of complete systems. Extensible across multiple platforms including Windows and Linux®, CDP solutions can instantly recover data, applications or entire workstation or server systems onto original, new or virtual devices with SonicWALL Universal Restore.

How Can I Learn More?

- For an overview of SonicWALL CDP solutions
- To review the Disaster Recovery options that CDP enables
- To see what customer and resellers have to say about the SonicWALL CDP solutions
- Download the whitepaper, ***"The New Case for Continuous Data Protection"***

For feedback on this e-book or other SonicWALL e-books or whitepapers, please send an e-mail to feedback@sonicwall.com.

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About SonicWALL

SonicWALL® is a recognized leader in comprehensive information security solutions. SonicWALL solutions integrate dynamically intelligent services, software and hardware that engineer the risk, cost and complexity out of running a high-performance business network. For more information, visit the company Web site at www.sonicwall.com.