



Saving SharePoint

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DISASTERS: A BRIEF INTRODUCTION

What Do We Mean By “Disaster?”



- Saying “disaster” often invokes visions of twisters and floods
- Disasters (and recovery strategies that address them) come in many forms

The U.S. Government's Take¹

IT risk management covers three categories:

- Natural (hurricane, tornado, flood, fire ...)
- Human (operator error, sabotage, implant of malicious code, terrorist attacks ...)
- Environmental (equipment failure, software error, telecom network outage, electric power failure ...)

The Landscape Is Changing²

1998

1. Hardware (74%)
2. Data Corruption (17%)
3. Fire/Power (3% each)

2007

1. Hardware (35%)
2. Power (22%)
3. Flooding (12%)

SHAREPOINT AND THE DR EQUATION

The Message

- It's all about your content
- Backups ≠ Disaster Recovery
- How to be a DR Hero

Words To Remember

“About to inform someone there is no perfect SharePoint DR solution. I suspect they will take it hard. They want perfect.”

Mike Watson (@mikewat on Twitter)

-- Senior Product Manager, Quest Software

Content: The Balancing Act

SharePoint Content

SharePoint Customizations

SharePoint Servers

SQL Server

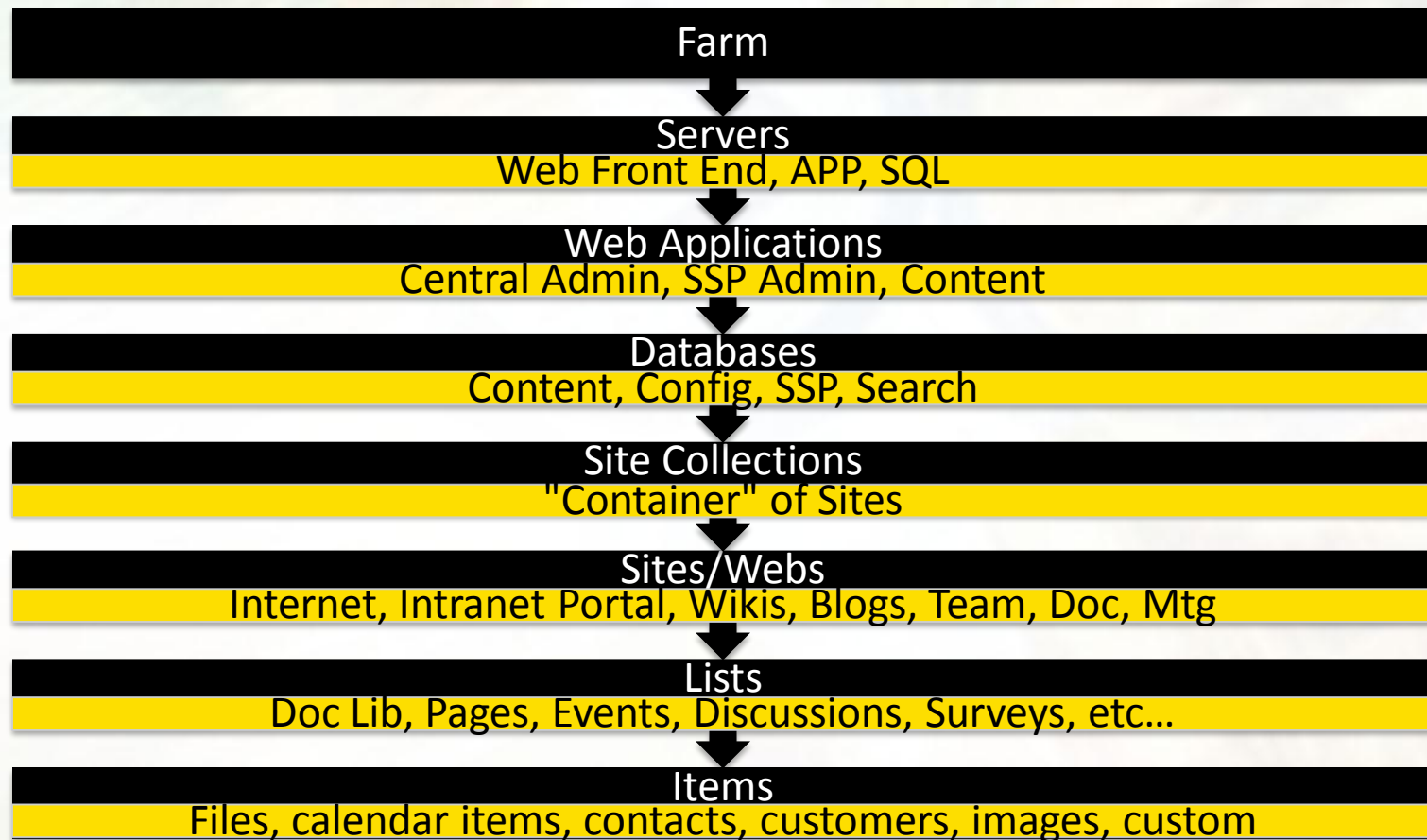
IIS

Windows Server

Network

You

SharePoint's Logical Hierarchy



Tonight On SPBC: An All New “DR Heroes”

SHAREPOINT

Save the Content, Save the Business

To be a DR Hero, you need:

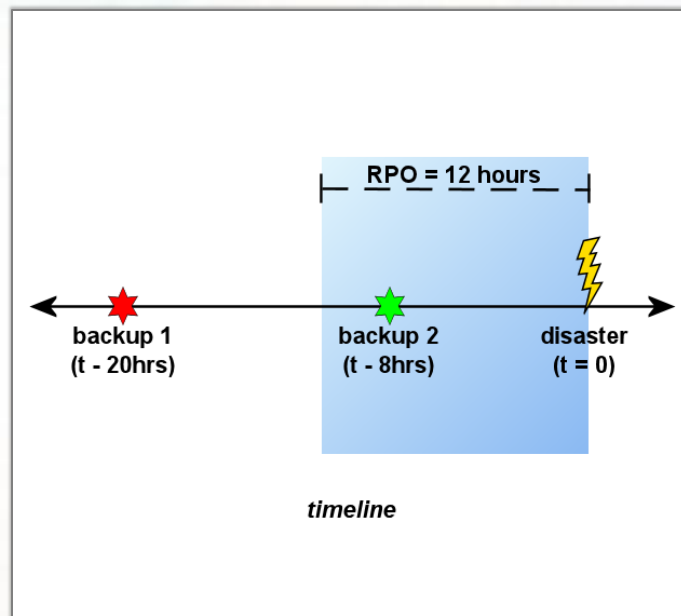
- Measurements
- Means
- Manpower (or Womanpower)
- Maintenance

MEASUREMENTS

DR Plans Begin With Targets

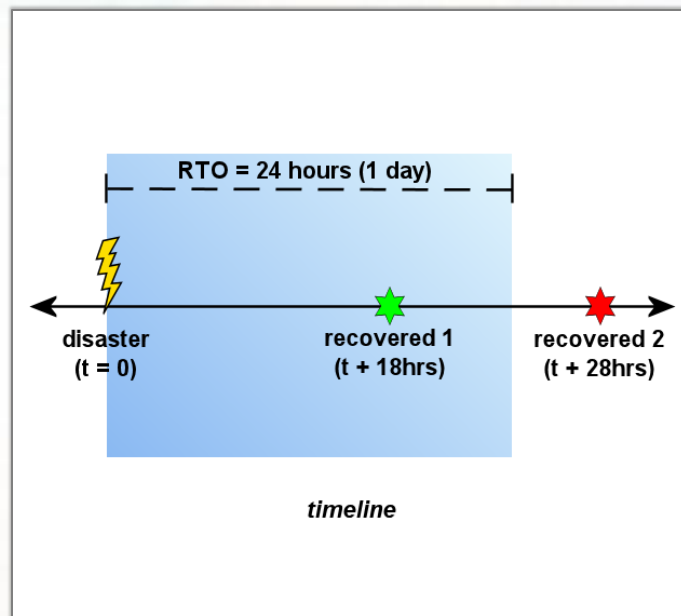
- DR is driven by business owners and stakeholders as part of a larger strategy
- The ultimate measure of a DR plan's success is whether or not it hits business-supplied targets
- DR targets are described in DR terms

RPO



- Acronym for “recovery point objective”
- Measured in time
- Describes maximum amount of acceptable data loss

RTO



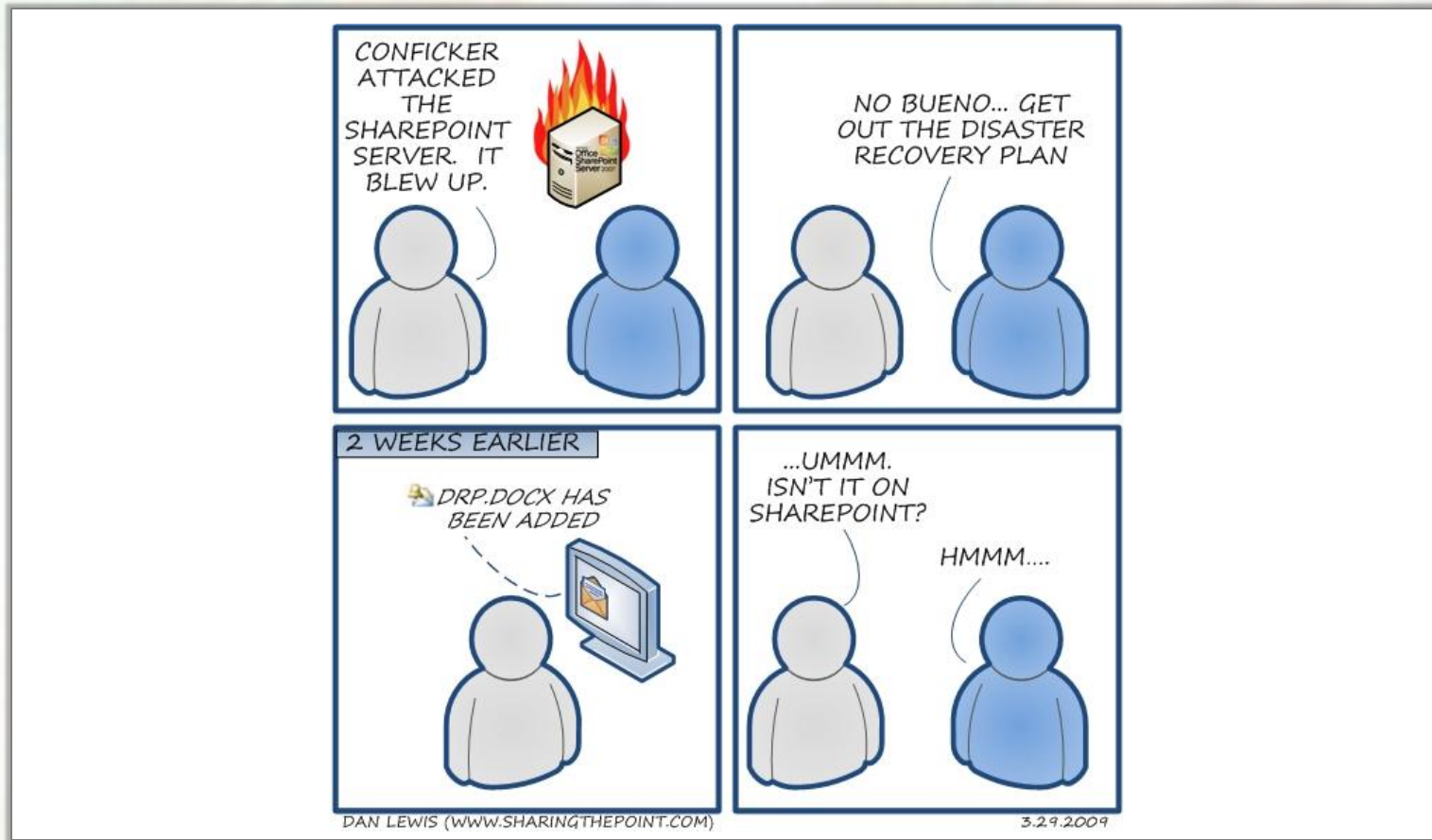
- Acronym for “recovery time objective”
- Also measured in time
- Describes maximum amount of time that can be taken to restore a system or functionality

MEANS

Tools And Techniques

- What do they cover?
- What don't they cover?
- Granularity
- Usability
- Viability (with given RPO & RTO targets)

Worst Laid Plans



Commonly Available Tools



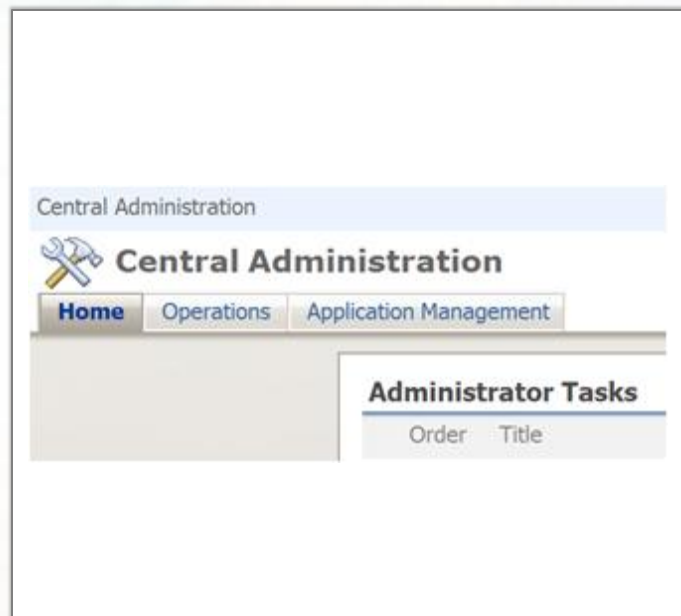
- SharePoint Designer
- CA backup/restore
- STSADM backup/restore
- SQL backups

SharePoint Designer



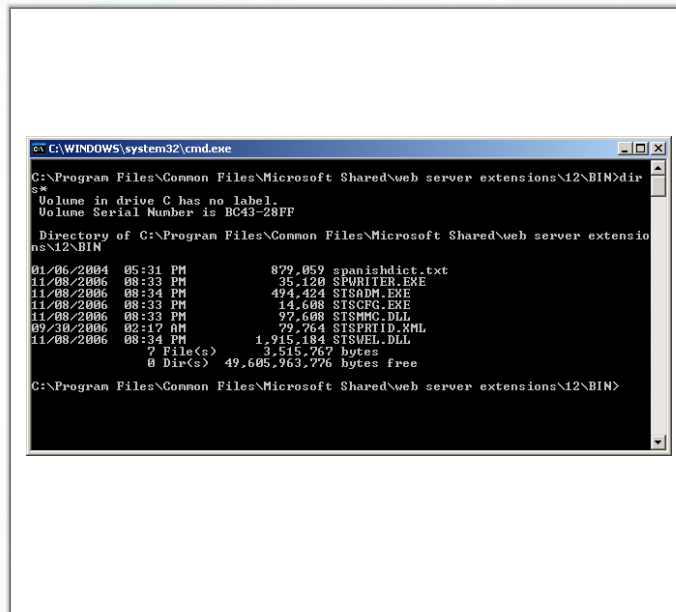
- The admin's nemesis
- Best case: end user content protection
- What can it do?
 - Structural migration
 - Site template creation
 - Content migration

Central Administration Backup/Restore



- Use case: one-off backups
- What can it do?
 - Farm
 - Web applications
 - Content databases
- Remember, content is king

STSADM.EXE Backup/Restore



```
C:\WINDOWS\system32\cmd.exe
C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>dir
s*
Volume in drive C has no label.
Volume Serial Number is BC43-28FF

Directory of C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN

01/06/2004  05:31 PM           879,059 spanishdict.txt
11/08/2006  08:33 PM             35,120 SPWRITER.EXE
11/08/2006  08:34 PM           494,424 STSADM.EXE
11/08/2006  08:33 PM           14,608 STSCFG.EXE
11/08/2006  08:33 PM             97,608 STSNHC.DLL
09/30/2006  02:17 AM              79,764 STSPRI1D.XML
11/08/2006  08:34 PM           1,915,184 STSWEL.DLL
              7 File(s)      3,515,767 bytes
              0 Dir(s)      49,605,963,776 bytes free

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
```

- Use case: regularly scheduled backups
- What can it do?
 - Farm
 - Web applications
 - Content databases
 - Site collections
- Did we mention that content is king?

SQL Server Database Backups



- Use case: scheduled backups for larger farms
- What can it do?
 - Content databases
- Bring your hard hat

Virtual Machine Snapshots



Additional Techniques And Strategies

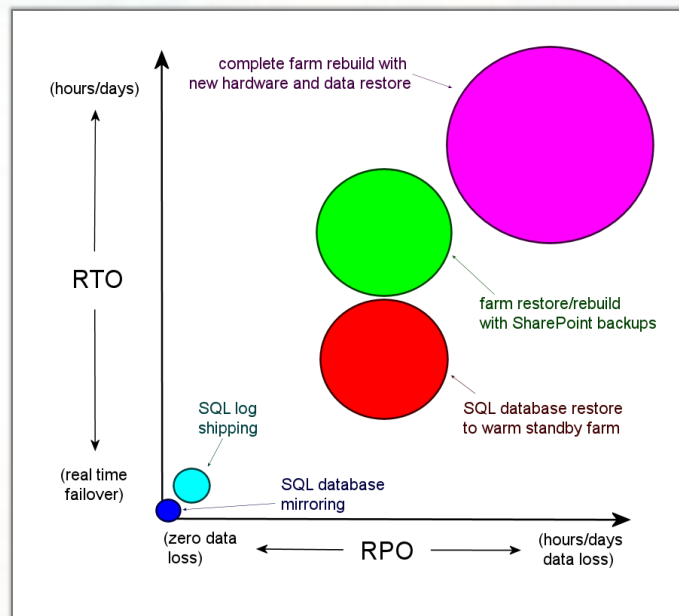
- Different techniques for different requirements
 - Clustering
 - Load balancing
 - Database mirroring
 - Transaction log shipping
 - Real-time replication
- As mentioned earlier, no “one size fits all”

Third-Party Tools



- It's a competitive market
- Can they do everything?
- How low can they go?
- <http://tinyurl.com/SPDRProducts>

The RPO And RTO Continuum



- Assumes an offsite DR strategy is in place
- Both cost and “performance” decrease as you move away from the origin
- Every solution has a different RPO & RTO footprint

MANPOWER (AND WOMANPOWER)

The Human Factor

- Who do you need?
- Know their roles
- When do you need them?
- People need backups, too
- Get the correct outsiders in on it
- Be thorough and make sure every nail is in every horseshoe

MAINTENANCE

Complacency Kills

- The only constant is Change
- Track and control your changes
- Test
- Test
- Test
- Validate results and create more baselines
- Test some more

CLOSING THOUGHTS

Putting It All Together

- Be a DR Hero
- DR is not just about having a tool or making backups
- There is no perfect SharePoint DR solution
- In the end, your users care about their content. Make sure you do, too.

References

1. National Institute of Standards and Technology (NIST) Special Publication 800-34. “Contingency Planning Guide for Information Technology Systems.” June 2002
<<http://tinyurl.com/SPDRNIST>>
2. “Number of Risks to UK Businesses Increases Over Past Ten Years.” Sungard Availability Services. 7 April 2009.
<<http://tinyurl.com/SPDRSungard>>

Questions?

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The SharePoint 2007 Disaster Recovery Guide

<http://tinyurl.com/SPDRBook>