

How Tourism Australia Achieved Near Instant Recovery While Reducing Costs And Risks with TSM and TSM Fastback

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Service Management for Information Technology
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Who is Tourism Australia?

As a Business

- A statutory authority of the Australian government
- Promotes Australia as a tourism destination both to consumers overseas, and domestically
- Delivers research and forecasts
- Reports to the minister



Who is Tourism Australia?

As enterprise infrastructure

- Diverse and heterogeneous, four server and 4 desktop OSs in production
- Consumes storage disproportionate to enterprise size – only 200 FTEs had 17TB of backups on disk
- Creative teams output a lot of large image files, constantly. This leads to storage growth.
- The result of unique department priorities and budgets
- Built “best of breed” in several areas, manages Australia.com which receives millions of hits per week



Key Problems

Email was a massive source of storage headaches. Regulatory requirements as well as raw volume of email data meant that recovery capability was concerning.

Tourism Australia receives 60,000 emails per day.

The organisation also manages it's own direct marketing campaigns through Outlook.



Key Problems

Business units had been backing up to an technology support organisation product optionally, or making their own decisions based on what they perceived their own priorities to be.



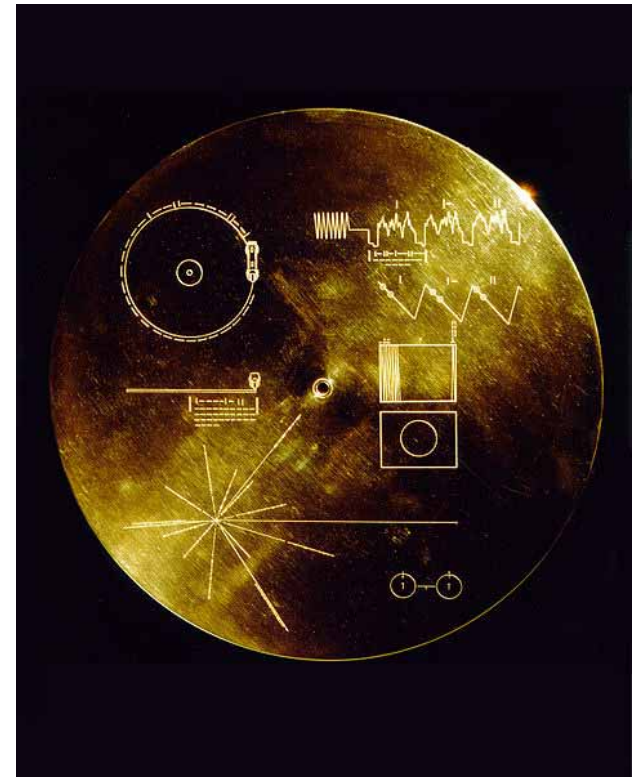
This produces what economists and game theorists call a “tragedy of the commons” where the benefits of independence is destroyed by support requirements and cost from complexity.

Key Problems

Management and manageability are never priorities when non-technology business units make technology decisions, largely due to inexperience.

It was largely unknown whether backups were successful or restores possible, and in a historical incident where recovery was necessary the

business opted to rebuild systems from scratch rather than open the can of worms that restores posed.



Key Problems

With multiple systems essentially colocated for the various departments, and no storage management, 200 FTEs were using 14TB simply for file data backups in Sydney as well



as the hundreds of gigabytes of storage in other countries for system image snapshots. When deduplication was switched on, hundreds upon hundreds of gigabytes were wiped off the storage infrastructure. Duplicate GFS backups of duplicate file data was centralised.

Key Problems

Monday



Key Problems

Monday

John



Bob



Sally



Anna



Key Problems

Monday Tuesday Wednesday End of Month

John



Bob



Sally



Anna



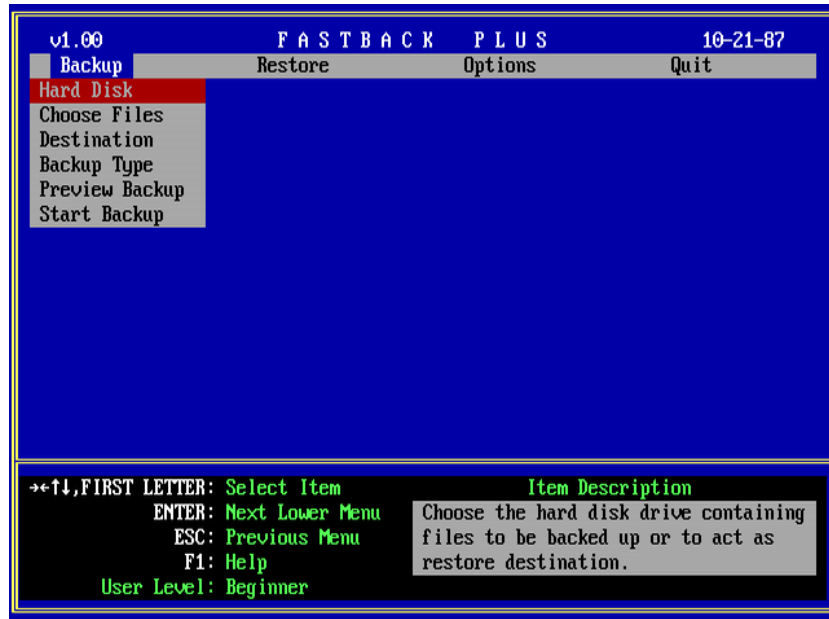
Solution

Monday, Tuesday, Wednesday and
End of Month for John, Bob, Sally and
Anna.



Solution Design

Tivoli Storage Manager was understood to meet the needs of file data backups across the board, the only thing that remained was how to approach storage management of Microsoft Exchange and Microsoft Sharepoint. A more granular RPO and a better RTO was desirable as well.



Solution Design

State	Start time	Volume	Type	Job ScheduleName	Duration (Est. Remaini...	Total Size	Backup Integrity level
Completed	Feb 2, 2010 4:00:01 AM	C:\non_auysde0704	incremental	AUSYDE0704	00:08:56	751.56 MB	Consistent
Completed	Feb 2, 2010 4:00:01 AM	L:\non_auysde0704	incremental	AUSYDE0704	00:03:20	131.27 MB	Consistent
Completed	Feb 2, 2010 4:00:01 AM	E:\non_auysde0704	incremental	AUSYDE0704	00:13:29	2.59 GB	Consistent
Completed	Feb 2, 2010 3:30:01 AM	C:\non_auysde0704	incremental	AUSYDE0704	00:03:19	148.09 MB	Consistent
Completed	Feb 2, 2010 3:30:01 AM	L:\non_auysde0704	incremental	AUSYDE0704	00:02:59	113.41 MB	Consistent
Completed	Feb 2, 2010 3:30:01 AM	E:\non_auysde0704	incremental	AUSYDE0704	00:08:01	1,000.47 MB	Consistent
Completed	Feb 1, 2010 10:00:02 PM	L:\non_auysde0703	incremental	AUSYDE0703	00:06:30	213 MB	Consistent
Completed	Feb 1, 2010 10:00:02 PM	E:\non_auysde0703	incremental	AUSYDE0703	00:12:18	1.28 GB	Consistent
Completed	Feb 1, 2010 10:00:01 PM	C:\non_auysde0703	incremental	AUSYDE0703	00:06:46	218.45 MB	Consistent
Completed	Feb 1, 2010 9:30:02 PM	E:\non_auysde0703	incremental	AUSYDE0703	00:08:23	621.86 MB	Consistent
Completed	Feb 1, 2010 9:30:01 PM	C:\non_auysde0703	incremental	AUSYDE0703	00:13:29	868.47 MB	Consistent
Completed	Feb 1, 2010 9:30:01 PM	L:\non_auysde0703	incremental	AUSYDE0703	00:01:56	89.36 MB	Consistent
Completed	Feb 1, 2010 4:00:02 PM	E:\non_auysde0703	incremental	AUSYDE0703	00:11:33	1.3 GB	Consistent
Completed	Feb 1, 2010 4:00:01 PM	C:\non_auysde0703	incremental	AUSYDE0703	00:06:12	265.31 MB	Consistent
Completed	Feb 1, 2010 4:00:01 PM	L:\non_auysde0703	incremental	AUSYDE0703	00:05:29	233.44 MB	Consistent
Completed	Feb 1, 2010 3:30:01 PM	C:\non_auysde0703	incremental	AUSYDE0703	00:12:00	1.46 GB	Consistent
Completed	Feb 1, 2010 3:30:01 PM	L:\non_auysde0703	incremental	AUSYDE0703	00:02:17	95.31 MB	Consistent
Completed	Feb 1, 2010 3:30:01 PM	E:\non_auysde0703	incremental	AUSYDE0703	00:10:38	674.86 MB	Consistent
Completed	Feb 1, 2010 10:08:48 AM	E:\non_auysde0703	incremental	AUSYDE0703	00:07:25	696.53 MB	Consistent
Completed	Feb 1, 2010 10:08:47 AM	C:\non_auysde0703	incremental	AUSYDE0703	00:02:59	86.17 MB	Consistent
Completed	Feb 1, 2010 10:08:47 AM	L:\non_auysde0703	incremental	AUSYDE0703	00:01:17	39.38 MB	Consistent
Completed	Feb 1, 2010 10:00:01 AM	C:\non_auysde0703	incremental	AUSYDE0703	00:06:30	1.55 GB	Consistent
Completed	Feb 1, 2010 10:00:01 AM	L:\non_auysde0703	incremental	AUSYDE0703	00:07:07	132.81 MB	Consistent
Completed	Feb 1, 2010 9:30:01 AM	C:\non_auysde0703	incremental	AUSYDE0703	00:12:18	283.98 MB	Consistent
Completed	Feb 1, 2010 9:30:01 AM	L:\non_auysde0703	incremental	AUSYDE0703	00:12:42	88.78 MB	Consistent
Completed	Feb 1, 2010 9:30:01 AM	E:\non_auysde0703	incremental	AUSYDE0703	00:07:33	395.92 MB	Consistent
Completed	Feb 1, 2010 4:00:01 AM	C:\non_auysde0703	incremental	AUSYDE0703	00:08:04	659.38 MB (24.54 GB)	Consistent
Completed	Feb 1, 2010 4:00:01 AM	L:\non_auysde0703	incremental	AUSYDE0703	00:03:58	97.7 MB (2.63 GB)	Consistent
Completed	Feb 1, 2010 4:00:01 AM	E:\non_auysde0703	incremental	AUSYDE0703	00:07:09	217.13 MB	Consistent
Completed	Feb 1, 2010 3:30:01 AM	C:\non_auysde0703	incremental	AUSYDE0703	00:04:45	141.02 MB	Consistent
Completed	Feb 1, 2010 3:30:01 AM	L:\non_auysde0703	incremental	AUSYDE0703	00:02:35	54.19 MB	Consistent
Completed	Feb 1, 2010 3:30:01 AM	E:\non_auysde0703	incremental	AUSYDE0703	00:04:49	146.31 MB	Consistent
Completed	Jan 31, 2010 10:00:01 ...	E:\non_auysde0704	Incremental	AUSYDE0704	00:04:22	104.97 MB (280.11 GB)	Consistent
Completed	Jan 31, 2010 9:30:02 PM	L:\non_auysde0703	Incremental	AUSYDE0703	00:02:58	56.69 MB (1.57 GB)	Consistent
Completed	Jan 31, 2010 9:30:02 PM	E:\non_auysde0703	Incremental	AUSYDE0703	00:02:48	40.84 MB (204.29 GB)	Consistent
Completed	Jan 31, 2010 9:30:01 PM	C:\non_auysde0703	Incremental	AUSYDE0703	00:04:57	938.53 MB (30.5 GB)	Consistent

Solution Design

Farm(AUSYDDB1:MOSSCONFIGURATION_INET_PROD)

Server Name:
AUSYDPRDMOSS01
Central Administration Server
Search/Index Server
Web Front-End Server



Server Name:
AUSYDPRDMOSS02
Central Administration Server
Search/Index Server
Excel Calculation Server
Web Front-End Server



Server Name:
AUSYDPRDMOSS03
Search/Index Server
Web Front-End Server



Server Name:
AUSYDPRDMOSS04
Search/Index Server
Web Front-End Server



Server Name:
ausyddb1
Database Server



A statutory body responsible for promoting tourism and performing research that generates lots of mail

How Tourism Australia



Achieved Near Instant Recovery

In that restores are immediate as far as the business units can tell, and that's what counts.



While Reducing Costs

Because we aren't paying for a dozen maintenance contracts anymore or using 14TB to maintain seven instances of the same 2TB of data on disk



We'd actually do a restore now if we had a disaster,
rather than considering if it'd be even worth trying

And [reducing] risks

with TSM and TSM Fastback

And TSM for databases, and the DR component and some pretty decent planning out.



Questions?