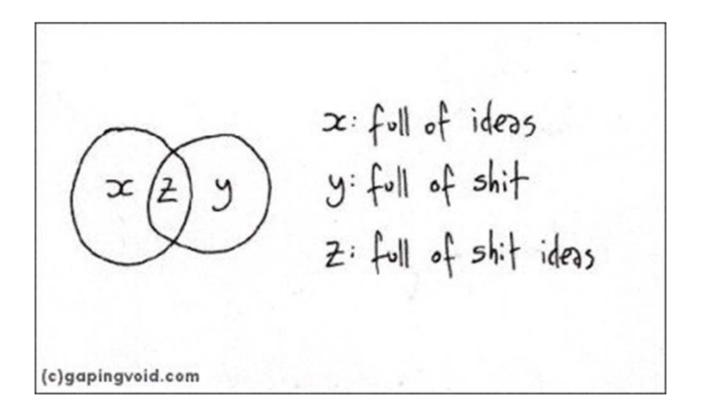
# **Down and Out - How Long is Your Recovery Time?**

Brian Flaherty, Assistant University Librarian (IT), The University of Auckland Library, New Zealand

b.flaherty@auckland.ac.nz









## The University of Auckland



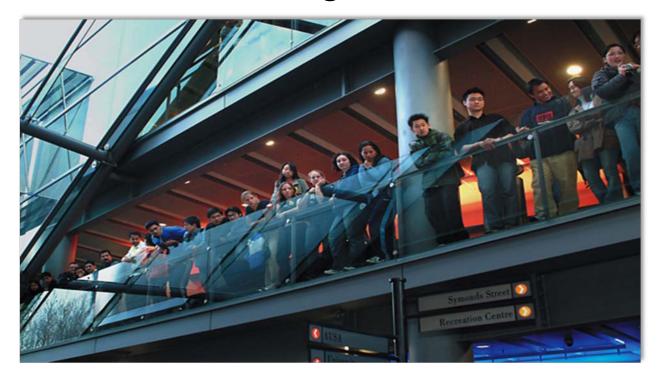
New Zealand's largest university Highest ranked research university in New Zealand *Universitas 21/APRU* Partner







### The University of Auckland



- 24,600 Undergraduate students
- 5,500 Postgraduate students
- 10,450 Staff academic & general including 250 Library staff



# **University of Auckland Libraries**

- 13 subject libraries with a variety of seating and computer spaces
- Most extensive library system in NZ
- Ranks alongside top five Australian university libraries

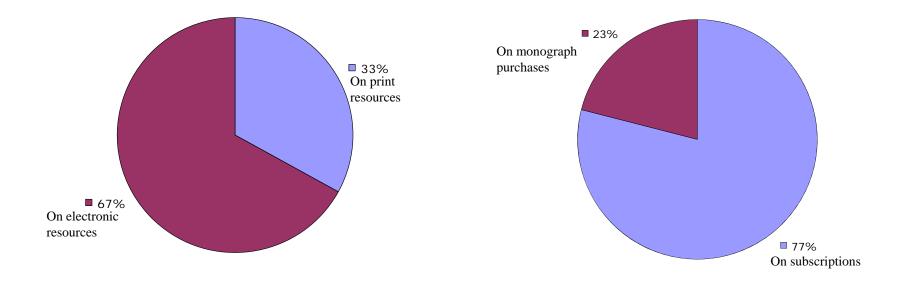




# Budget – Resources – NZ\$17.6m

Electronic & print resources 2008

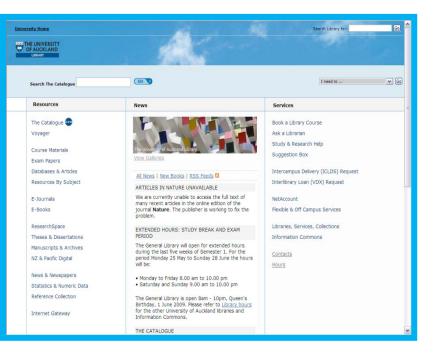
Subscriptions & monograph purchases 2008





# **Our Electronic Resources**

- 790+ network databases
- 79,000+ electronic journals
- 313,000+ electronic books
- 9,000+ electronic course readings





# If our electronic resources are down the Library is down...





# The Library is used 24x7

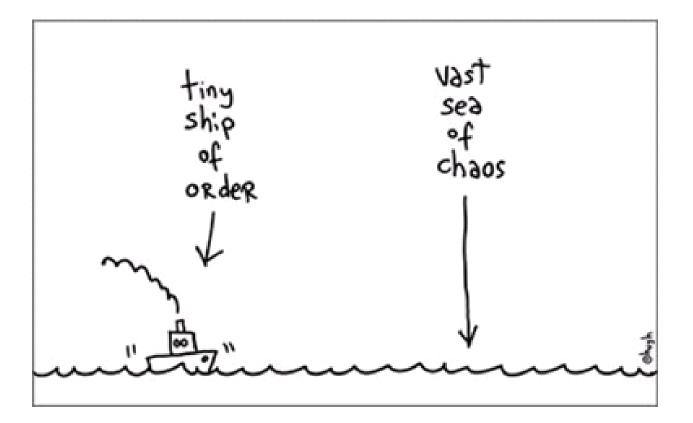




Library Web Site Voyager

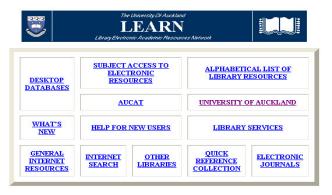
# WHERE WE STARTED







### **LIBRARY WEB 1996-2009**



#### LEARN Statistics

Comments and suggestions to <u>b,flaherty@auckland.ac.nz</u> Last updated: 5 June 1997

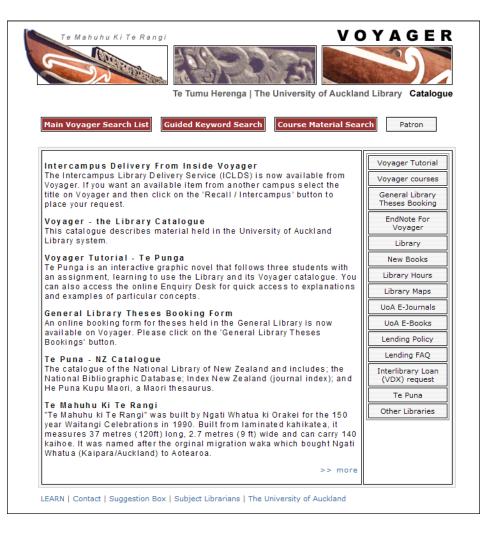








#### Implementation of Voyager in 1998





# Sun Fire<sup>™</sup> E25K Server





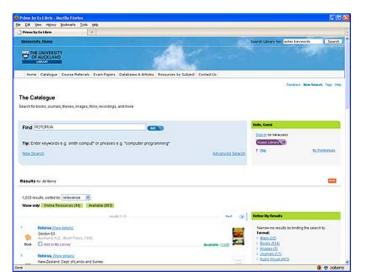


#### Followed by...

			gigy of search results - Marilla Firefex		55
			ny Balande Jak 198		
0	junit Se	sarch - Dis	gliop of search res		
1	No.	ta firme		a	and cherry fuel effect execution ( Search
1	T 0	AUCKU	AND CONTRACTOR	and the second	
			per Course Halenals Exam Papers Calabases & Artoles Resource Quick Search Custom Search Wy Research	by Subject ContactUs	Log In End Section Help
-	Car HE I		Ques search Control Status Hy Research		Log In Tod Delinon Help
			n Results	Sam	A solution of all
Tal	in Voter	Brief Mar	a full line	Sector Res	-
			Name of Contract Streets	- Commentation	22 Particul My Terrority
	-	Addes		Yest Database Autom	Tage
1	-		Solution for the set of the set		two Janua, 110
÷	-		Lanuthold/or lands/sciences)	W Local Autor Greek Inde ( Perform)	
2	-		tat 10-2 Meet is abouting in these Dealers in Bulances, report,	IN Epselet Academic Development Dealling	
٠	-		Ward, Two shots, a convert them. Danied i Adams, report.	IVV Looked Audens Deben Dorfe ( PHILIN	2002/10 2002/10 2002/10
1	-	Celle,0	Tennes (L. e. Der Tellerung auf Einerman, and Bernell an deren, Tengel Volkman, Zurei, Ten Zureich, Dereich alle Proceent annaller Kontek, and Leise Laurenblack Material Volkman, Einer Volkman, Dereich and Volkman, Andereich andereich Volkman, Einer Volkman, Dereich and Berneller, Berneller Behann an einerste, Einer Volkman, Dereich andereichen des einer seiners- Behann 1121, andereich (Schlim dereich einer Volkman, meiner Heiter als einer seiners- Behann 1121, andereich (Schlim dereich einer Volkman, meiner Heiter als einer seiners- Behann 1121, andereich (Schlim dereich einer Volkman, meiner Heiter, weil apart freiz 3	200 Austina Desita Fransa 😪 (Post Fold S	Autor Custobara Autor Custobara Autoritata
				No. of the second se	BORAMORE, CI
6	-		S1 Institute extraoria 31 Sex Zoenzia fistoria,	309 Casescreences Intel® PHILE	Million Male (1)

Digital South	r Horriga Harden gury Budwarla Jush 198			
Digitized - Second				
Sector Sector Sector		_		
	INCOME.	1	1	
Seath	Fends Pressus Searches My Space		-	Logn End Section Help
	lections - University of Auckland Advanced Leanth			Sel
Select colection	Sinauth M	*		00
A word or please		S Contanto () Cont	0.2411 MR	
2	Actions of Mann and Bandle Main. Existences Housed in the Department of Antonycology at the Universe the Anthree of Mann and Pacific Mains compress the wei interlographic sound collection visiting to the Pacific Two Markol activities are subtently online and more are plante O	rid's largest collectors of		Antimotopy Distripute Action Ethopsphetic and exchanges placosystem the New Dested, New Guines, Na Taking Natural and Samas from the Department of Antimotopy Processing Actions: Includes a major sub-collection of photopyship of Lepta policy; O
	Hobey of the University of Accilent PDF locks of centersour holdness of faculties and departm photographic of staff and buildings.	uerts, and	lich	Cutters Collector of some A North Name Photographs of the Paramy Island (site station, buildings and people, and Robbi relind scenes
××× ×××	<u>Activities Collection</u> Protograph of Activities have the collections of the Sch Econces at the University of Accilland	test of Botopcal	-	Out History Out Instruct relating to the University of Auckland
			17 de como	
ve .				a e zote

Sources for this citation	
Article Title: On a roll for Rotorua           Journal:         Chartered accountants journal of New Zesland ( <u>1172-9929</u> ) Phil yr:2006 vol:85 iss:7 pr	g.9
Full Text	
Full text available via EBSCOhost Business Source Premier Year: 2006 Volume: (65 Issue: 7 Start Page: 9 CO	
Library Holdings	
Electronic and paper holdings in <b>Yoyager catalogue</b> If the ten is not hold in any University of Auditard library you may request it from another library in NZ or overseas by cloking on the Interlibrary Loan button in Yoyager. Web Search	
Search for related information in Google Scholar 20 Article Title V Search Terms: On a coll for Rotenua	
Search for article title in Google 🚳	
feedback	
Problems with the Find Full Text system? Let the library know through the Feedback Form	
Provens woh we niko nu rex system bet we long y now about the recubate rorm	
(2) 2005 SFR by Extubris Inc. Creative Embled	
	🙂 😇 zotero

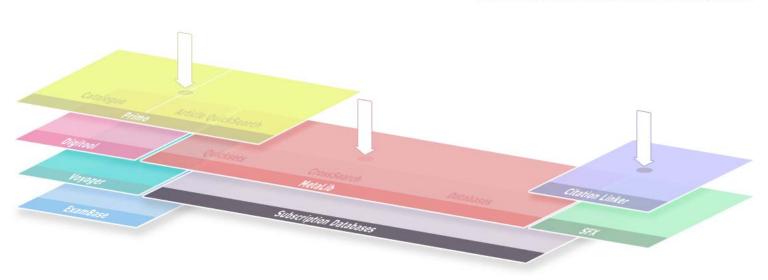




#### Fitting the pieces together

Primo / Metalib Search Stack

Arrows indicate an application that can search down through the stack







### Unique Communities and Peoples – Kyaka 1955



JLL DISPLAY		Basic Se	arch Advanced Search Contact
Previous Record	Next Record New Search <	5	
d 12 of 42	Record ID: 7149	Image No:	AG/AG_003
			a marine par
	the states	the time	A company
		- State	
And and the second s			

Title:	Saint Stephen at Jerusalem
Relation:	
Date:	1514 [ca.]
Creator:	Carpaccio, Vittore, 1455?-1525?
Contributor:	Not applicable
Gender:	Male
Relation:	Not applicable
Description:	painting, 148 x 194 cm, Musée du

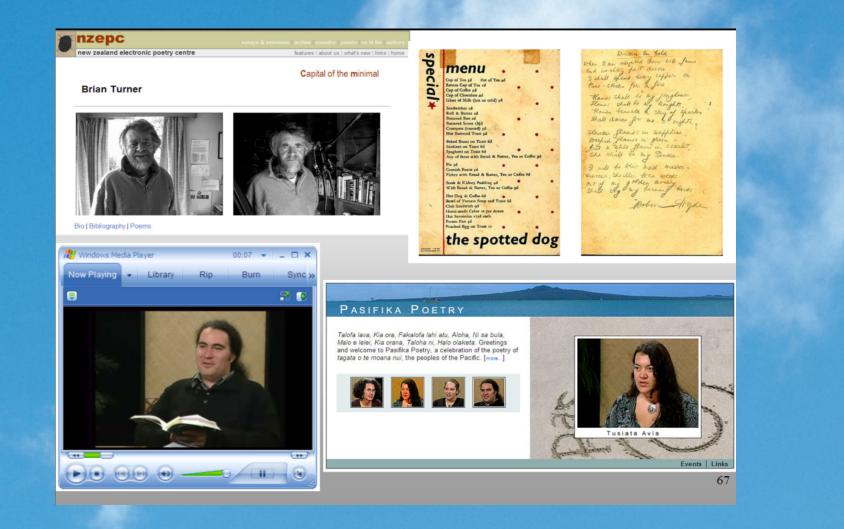
Style/Period/Movement:

LC Subject Headings:

Place Depicted:

Other Headings: Paper Number: Slide Test: Carpaccio, Vittore, 1455?-1525? Not applicable Male Not applicable painting, 148 x 194 cm, Musée du Louvre. A European (Italian) 16th century painting. High Renaissance, Cinquecento Asia, Israel, Jerusalem, Jerusalem Stephen, Saint, d. ca. 36 | Architecture in art | Crowds in art

Not applicable



2.5GB of data, 6,000 files in 115 folders. Including 2GB of digital video & audio files HE UNIVERSITY OF AUCKLAND

LIBRARY

# WHY WE NEEDED TO CHANGE

User expectations User expectations User expectations UNIVERSITY EXPECTATIONS

User expectations





#### IT Continuity & DR Planning – HL Assessment - Jan 2009

IT Continuity and Disaster Recovery Planning - Assessment of progres	s - Jan2009										Status Complete Partial Not Started No Info			
Internal Use Only & Confidential										Complete	Failia	Not Started	NOTINO	_
Date: 18.02.2009								<b>O</b> 1-1						
								Status						
Disaster Recovery and IT Continuity Stage	NICAI	Arts	SBE	Eng	Law	FHMS	Science	Business & Economics	Student Admin	FoEd	Property Services	Library	Uniservices	ITS
1. CONDUCT RISK ASSESSMENT (for the Faculty or Service Division)														
<ul> <li>Identify the critical business processes</li> </ul>	No Info	Partial	Partial	Complete	Partial	Complete	No Info	Complete	Complete	Complete	Complete	Complete	Partial	Complete
<ul> <li>Identify the critical IT resources that provide or support these processes</li> </ul>	No Info	Partial	Partial	No Info	Partial	Complete	No Info	Complete	Partial	No Info	Partial	Complete	Partial	Complete
<ul> <li>Identify disruption impacts and maximum tolerable outage times</li> </ul>	No Info	Partial	Partial	Partial	Partial	Complete	No Info	Complete	Partial	Complete	Partial	Complete	Partial	Complete
<ul> <li>Develop recovery priorities</li> </ul>	No Info	Partial	Partial	Partial	Partial	Complete	No Info	Complete	Partial	Complete	Partial	Complete	Partial	Complete
2. IDENTIFY PREVENTATIVE CONTROLS	Nonno	l'artial		i ai tiai	i artiar	Complete	Nomo	Complete	i aitiai	Complete	l'artiai	Complete	T ai tiai	Complete
<ul> <li>Implement controls</li> </ul>	No Info	Complete	Not Started	Partial	Partial	Complete	No Info	Complete	Partial	Complete	Partial	Complete	Not Started	Partial
<ul> <li>Maintain controls</li> </ul>	No Info	Complete	Not Started	Not Started	Partial	Complete	No Info	Complete	Partial	Complete	Partial	Complete	Not Started	Partial
3. DEVELOP RECOVERY STRATEGIES														
<ul> <li>Identify methods</li> </ul>	No Info	Partial	Partial	Complete	Partial	Complete	No Info	Complete	Partial	Complete	Partial	Complete	Partial	Complete
<ul> <li>Document recovery strategy</li> </ul>	No Info	Partial	Partial	Partial	Not Started	Partial	No Info	Complete	Partial	Partial	Partial	Partial	Partial	Complete
<ul> <li>Define roles and responsibilities</li> </ul>	No Info	Partial	Partial	Complete	Partial	Complete	No Info	Complete	Partial	Complete	Partial	Complete	Partial	Complete
<ul> <li>Develop communications plan</li> </ul>	No Info	Partial	Not Started	Partial	Not Started	Partial	No Info	Complete	Partial	Partial	Partial	Complete	Not Started	Complete
4. DEVELOP IT CONTINUITY PLAN														
<ul> <li>Develop supporting information</li> </ul>	No Info	Partial	Not Started	Partial	Partial	Partial	No Info	Partial	Partial	Partial	Partial	Partial	Partial	Complete
<ul> <li>Notification/Activation phase</li> </ul>	No Info	Partial	Not Started	Partial	Not Started	Partial	No Info	Complete	Partial	Partial	Partial	Partial	Partial	Complete
<ul> <li>Recovery phase</li> </ul>	No Info	Partial	Not Started	Not Started	Not Started	Partial	No Info	Complete	Partial	Partial	Partial	Partial	Partial	Complete
<ul> <li>Restoration phase</li> </ul>	No Info	Partial	Not Started	Partial	Not Started	Partial	No Info	Partial	Partial	Partial	Partial	Partial	Not Started	Complete
<ul> <li>Plan appendices</li> </ul>	No Info	Partial	Not Started	Partial	Not Started	Partial	No Info	Complete	Partial	Partial	Not Started	Partial	Not Started	Partial
5. PLAN TESTING AND TRAINING														
<ul> <li>Develop test objectives</li> </ul>	No Info	Not Started	Not Started	Not Started	Not Started	Partial	No Info	Complete	Partial	Complete	Partial	Not Started	Partial	Complete
<ul> <li>Develop success criteria</li> </ul>	No Info	Not Started	Not Started	Partial	Not Started	Not Started	No Info	Complete	Partial	Complete	Not Started	Not Started	Partial	Complete
<ul> <li>Document lessons learned</li> </ul>	No Info	Not Started	No Info	Partial	Partial	Partial	Not Started	Not Started	Not Started	Partial				
<ul> <li>Incorporate into revised plan</li> </ul>	No Info	Not Started	No Info	Complete	Partial	Partial	Not Started	Not Started	Not Started	Partial				
- Train personnel	No Info	Not Started	Partial	Partial	Not Started	Not Started	No Info	Partial	Partial	Partial	Not Started	Not Started	Not Started	Partial
6. PLAN MAINTENANCE														
<ul> <li>Review and update plan</li> </ul>	No Info	Partial	Not Started	Partial	Not Started	Not Started	No Info	Complete	Not Started	Partial	Partial	Not Started	Partial	Complete
<ul> <li>Coordinate with internal and external organizations</li> </ul>	No Info	Partial	Not Started	Not Started	Not Started	Not Started	No Info	Partial	Partial	Partial	Partial	Not Started	Not Started	Partial
<ul> <li>Control distribution</li> </ul>	No Info	Partial	Not Started		Not Started	Not Started	No Info	Not Started	Partial	Not Started	Not Started	Not Started	Not Started	Partial
<ul> <li>Document changes</li> </ul>	No Info	Not Started	Not Started	Partial	Not Started	Not Started	No Info	Complete	Not Started	Partial	Not Started	Not Started	Not Started	Partial



Disaster Recovery and IT Continuity Stage	Arts	B&E	Eng	FoE	FHMS	Finance	HR	ITS	Law	Lib	Lggns	NICAI	Prop Serv	Science	SBE	StuAdmin	Uniserv
Date updated (mm/yy)	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09	05/09
1. Conduct Risk Assessment	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- Identify business critical processes	*	*	*	*	*	*	0	*	*	*	4	*	*	*	贫	*	*
- Identify critical IT resources	*	*	۵	۵	*	*	0	*	*	*	4	*	*	*	÷t	*	*
- Identify disruption impacts, maximum outages	*	*	*	*	*	*	0	*	*	*	۵	*	*	*	÷	*	*
- Develop recovery priorities	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	-	*	*
2. Identify preventative controls	1	1	1	1	1	1	1	1	1	1	1	1	1	/	1	1	1
- Implement controls	*	*	*	*	*	۵	0	*	*	*	۵	*	*	*	*	*	*
- Maintain controls	*	*	*	*	*	۵	0	*	*	*	۵	*	*	*	*	*	*
3. Develop recovery strategies	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- Identify methods	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	贫	*	*
- Document recovery strategies	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	*	*	*
- Define roles and responsibilities	*	*	*	*	*	4	0	*	*	*	a.	*	*	*	余	*	*
- Develop communications plan	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	*	*	*
4. Develop IT Continuity Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- Develop supporting information	*	*	*	*	會	۵	0	*	會	*	4	*	*	*	*	*	*
- Notification / Activation phase	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	*	*	*
- Recovery phase	*	*	*	*	*	4	0	*	*	*	4	*	*	*	*	*	*
- Restoration phase	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	*	*	*
- Plan appendices	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	*	*	*
5. Plan testing and training	1	1	1	1	1	1	1	T	1	1	1	1	1	1	1	1	1
- Develop test objectives	*	*	*	*	*	4	0	*	*	*	۵	*	*	*	*	*	*
- Develop success criteria	*	*	*	*	*	۵	0	*	*	*	a.	*	*	*	*	*	*
- Document lessons learned	*	*	*	*	*	۵	0	*	*	*	۵	*	*	*	*	*	*
- Incorporate into revised plan	*	*	*	*	*	۵	0	*	*	*	4	*	*	*	*	*	*
- Train personnel	*	*	*	*	*	۸	0	*	*	*	4	*	*	*	*	*	*
6. Plan Maintenance	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- Review and update plan	*	*	*	*	*	۵	0	*	*	*	۵	*	*	*	*	*	*
- Coordinate with internal and external orgs	*	*	*	*	*	۵	0	*	*	*	4	*	*	*	*	*	*
- Control distribution	*	*	*	*	*	۵	0	*	*	*	۵	*	*	*	*	*	*
- Document changes	4	4	4	*	*		0	*	*	*		4	4	*	*	4	*



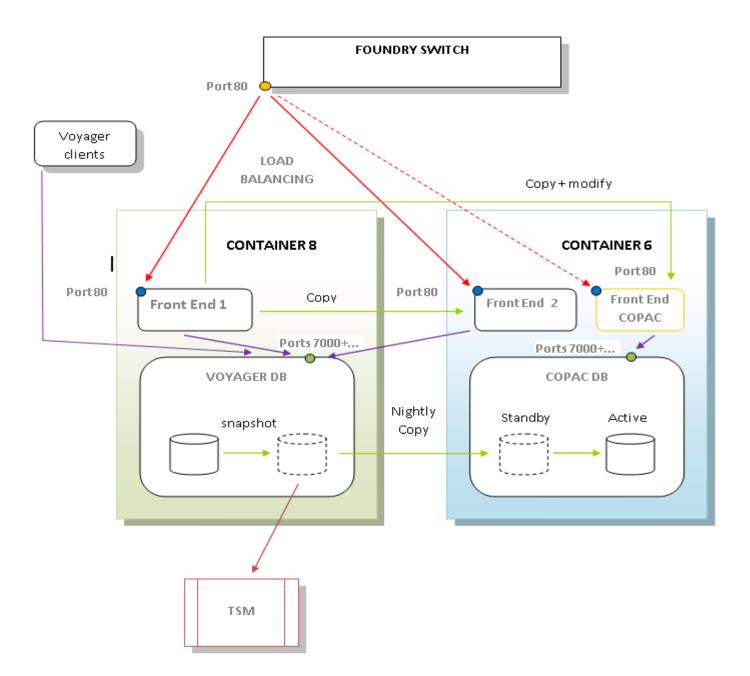
THE UNIVERSITY OF AUCKLAND LIBRARY	
IT Co	ntinuity and
Disaster R	ecovery Plan
The University of A	uckland Library
	Department LIBRARY Contact Person BRIAN FLAHERTY Date



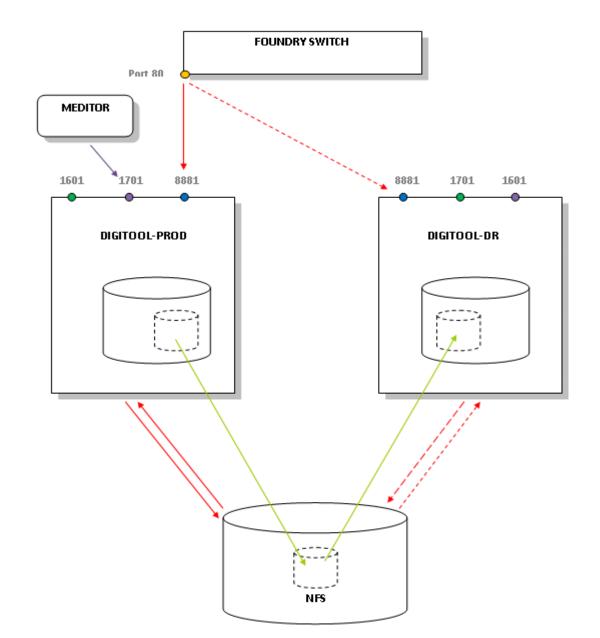
#### Building a Business Continuity Plan with Disaster Recovery /Continuity for "enterprise systems"

# WHERE WE'VE BEEN OVER THE PAST TWO YEARS

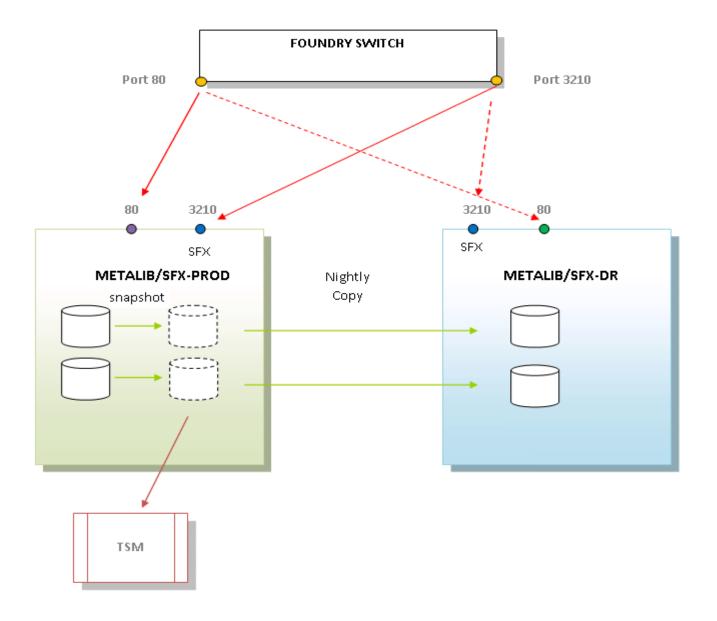
#### VOYAGER



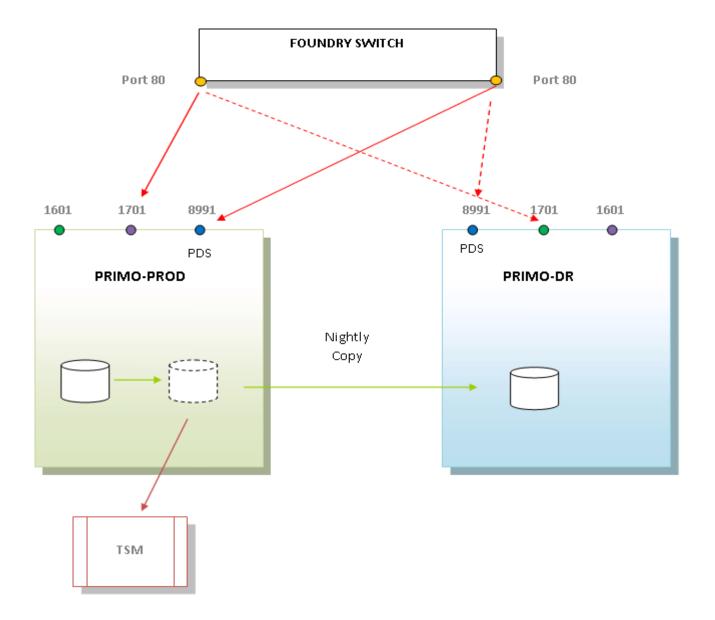
#### DIGITOOL





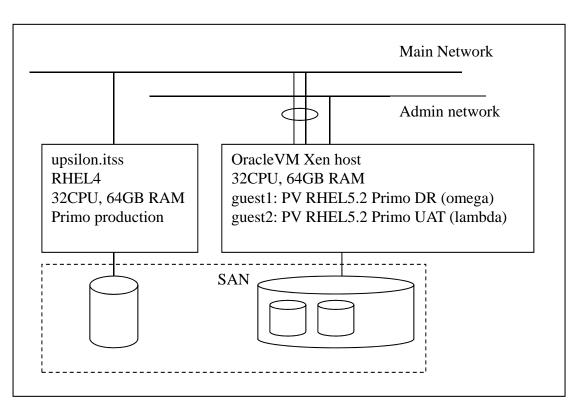


#### PRIMO





#### Virtualisation







# Questions?

# **Down and Out - How Long is Your Recovery Time?**

Brian Flaherty, Assistant University Librarian (IT), The University of Auckland Library, New Zealand

b.flaherty@auckland.ac.nz

