



2021

BACKUP MANAGEMENT ENHANCEMENT

LET'S DO IT TOGETHER
MOVING FORWARD TO INDUSTRY 4.0



IT DEPARTMENT



1.0 Introduction:

Introduction:

- To setup disaster recovery (DR) backup

Objective:

- To create offsite backup data set
- To create DR backup infrastructure
- To minimum data lost



4.0 Projects Timeline

Task	Owner	Nov 2021				Dec2021				Jan 2022				Feb 2022			
		W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4	W 1	W 2	W 3	W 4
Prepare Hard Drive	IT																
Setup Hard Drive	IT																
Veeam Configuration	IT																
UAT	IT																
Monitoring	IT																



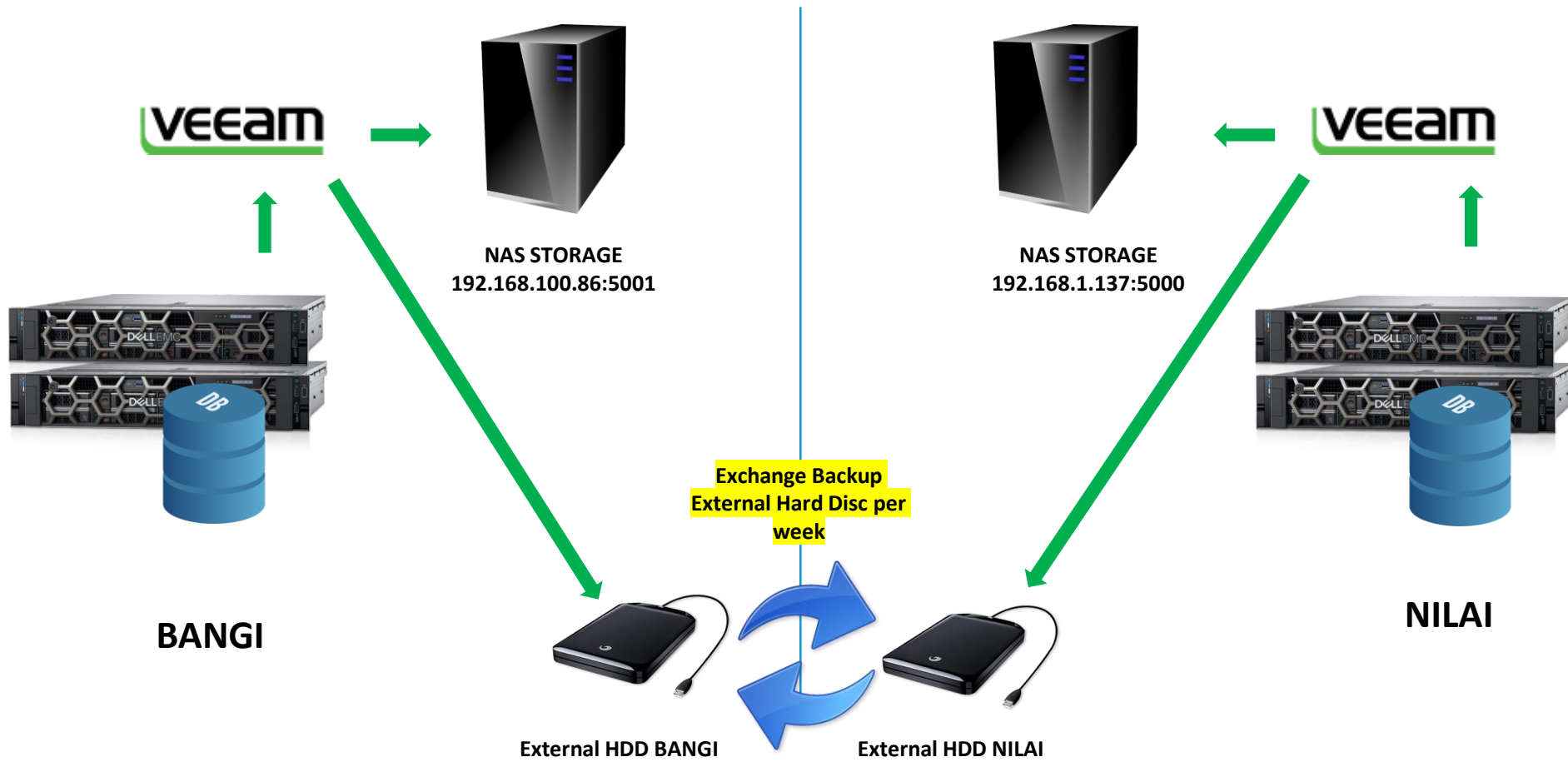
5.0 Infra Diagram

Backup Server Diagram

BEFORE UPGRADE

- Backup Server
192.168.100.80
-
- HyperV01 Server
192.168.100.81
-
- AD Server
192.168.100.82
-
- Antivirus Server
192.168.100.83
-
- Bossnet Server
192.168.100.84
-
- File Server
192.168.100.85

- Backup Server
192.168.1.209
-
- HyperV01 Server
192.168.1.210
-
- AD Server
192.168.1.214
-
- Antivirus Server
192.168.1.216
-
- Bossnet Server
192.168.1.213
-
- File Server
192.168.1.182



5.0 Infra Diagram

Proposed Backup Server Diagram – MAXIS Solution (Option 3)



6.0 Cost

Local Storage Solution

No	Item	QTY	IOS	Gen Next
1	NAS Storage	2	3,460.00	3,940.00
✓ 2	External HDD	2	590.00	590.00

Cloud Solution

No	Item	QTY	Tax	Total
1	Maxis AWS Cloud Solution – 1 times setup	1	360.00	6,000.00
2	Monthly Fee – 2 years contact	2	12.00	212.00
Total for 1 st time configuration				6,200.00
Total Monthly fee x 12				2,544.00



7.0 Comparison

NAS vs External HDD

NAS	External HDD
Intelligence storage device ✓	Normal external storage
Can serve as Own Private Cloud ✓	Single portable storage device ✓
Can direct access network	Need attach to computer
Extra backup potential – Raid Configuration ✓	No raid partition
Need to manage	Nothing to manage ✓
Expensive	Cheap ✓



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8.0 Conclusion

Option 1, Using External Hard Drive have been selected to build the new backup infrastructure

- Cost saving
- Fast date recovery
- More easy to setup backup configuration compare with other option



9.0 Appendixes

Bangi Backup Server : 192.168.100.80

The screenshot displays the Veeam Backup and Replication console. The main window shows a list of backup jobs. A red box highlights the job 'Bangi-Nilai-BOSSNET01'. Below the list, a detailed view of this job is shown, including summary statistics, data processed, status, and a throughput graph.

Name	Type	Objects	Status	Last Run	Last Result	Next Run	Target
Backup to external HD	Windows Agent Backup	4	Stopped	41 days ago	Failed	<Disabled>	External HD
Bangi-Nilai-BOSSNET01	Windows Agent Backup	1	Stopped	17 hours ago	Success	After [PTSB-FS01]	Bangi2Nilai
Bangi-Nilai-FS01	Windows Agent Backup	1	Stopped	16 hours ago	Success	After [Bangi-Nilai-B...	Bangi2Nilai
PTSB-AD01 Backup Job	Windows Agent Backup	1	Stopped	21 hours ago	Success	1/12/2021 6:00 PM	Synology NAS
PTSB-AV01 Backup Job	Windows Agent Backup	1	Stopped	21 hours ago	Success	After [PTSB-AD01 Ba...	Synology NAS
PTSB-BOSSNET01	Windows Agent Backup	1	Stopped	21 hours ago	Success	After [PTSB-AV01 Ba...	Synology NAS
PTSB-FS01	Windows Agent Backup	1	Stopped	20 hours ago	Success	After [PTSB-BOSSNE...	Synology NAS

SUMMARY		DATA		STATUS		THROUGHPUT (ALL TIME)	
Duration:	52:02	Processed:	198.5 GB (100%)	Success:	1	Speed: 768 MB/s	
Processing rate:	66 MB/s	Read:	122.5 GB	Warnings:	0	[Throughput Graph]	
Bottleneck:	Target	Transferred:	5.2 GB (23.7x)	Errors:	0		

Name	Status	Action	Duration
PTSB-BOSSNET01	Success	Job started at 30/11/2021 9:50:01 PM	
		Building hosts list	00:18
		Processing PTSB-BOSSNET01	50:59
		Load: Source 18% > Proxy 9% > Network 54% > Target 97%	
		Primary bottleneck: Target	
		Job finished at 30/11/2021 10:42:03 PM	



9.0 Appendixes

Nilai Backup Server : 192.168.1.209

The screenshot displays the Backup Exec Job Tools interface. The top navigation bar includes 'Home', 'View', and 'Job' tabs. Below this is a toolbar with icons for 'Start', 'Stop', 'Retry', 'Active Full', 'Statistics Report', 'Edit', 'Clone', 'Disable', and 'Delete'. The main area shows a list of backup jobs with columns for Name, Type, Objects, Status, Last Run, Last Result, Next Run, Target, and Description. The 'Nilai-Bangi-FS01' job is highlighted with a red box.

Name	Type	Objects	Status	Last Run	Last Result	Next Run	Target	Description
Backup to external HD	Windows Agent Backup	4	Stopped	64 days ago	Failed	<Disabled>	Backup to external HD	Created by BPSB-BACKUPSV01\Administrat
BPSB-AD01 Backup Job	Windows Agent Backup	1	Stopped	23 hours ago	Success	1/12/2021 6:00 PM	Synology NAS	Created by BPSB-BACKUPSV01\Administrat
BPSB-AV01 Backup Job	Windows Agent Backup	1	Stopped	23 hours ago	Success	After [BPSB-AD01 Ba...	Synology NAS	Created by BPSB-BACKUPSV01\Administrat
BPSB-BOSSNET01	Windows Agent Backup	1	Stopped	23 hours ago	Success	After [BPSB-AV01 Ba...	Synology NAS	Created by BPSB-BACKUPSV01\Administrat
BPSB-FS01	Windows Agent Backup	1	Stopped	22 hours ago	Success	After [BPSB-BOSSNE...	Synology NAS	Created by BPSB-BACKUPSV01\Administrat
Nilai-Bangi-BOSSNET...	Windows Agent Backup	1	Stopped	2 days ago	Warning	After [Nilai-Bangi-FS...	Nilai2Bangi	Created by BPSB-BACKUPSV01\Administrat
Nilai-Bangi-FS01	Windows Agent Backup	1	0% completed at...	21 hours ago		After [BPSB-FS01]	Nilai2Bangi	Created by BPSB-BACKUPSV01\Administrat

