

OpenStack

OpenStack Backup Overview

Backup Modes

- Online: backup directly to RingStor Vault

Backup Type

- Full: all blocks on the volume are backed up
- Incremental: blocks modified since last backup are backed up

Backup Volumes

- Volumes from instances are listed
- Snapshot of each volume is taken
- A staging volume is created from the snapshot
- The staging volume is attached to RingStor DataAgent in OpenStack
- The staging volume is read into blocks
- The changed blocks are backed up



OpenStack

OpenStack Backup Steps

Create Linux-based Instance in OpenStack

- Minimum Free Space: 10GB
- Minimum Memory: 2GB

Install RingStor DataAgent software in Instance

Create DataSet from RingStor Explorer

Schedule Backup



DataSet

Provide OpenStack host and login Authentication **Create New DataSet** http://192.168.0.108/ Url: User: admin Password OpenStack Backup DataSet is a backupset that contains instances Domain Default inside OpenStack domain is required for Identity API v3 Tax & Service Connect ringstor1-OpenStack-Nova Specify project and instance for this DataAgent File Backup Project: demo - uuid:[19b85985d87443 MySQL Database Backu Instance dataagent1 - uuid:[269b8746-e OpenStack Backup Step 1 – Log into RingStor Explorer RingStor DataAgent software must be installed on this instance for backup and restore OpenStack instance/volumes. Step 2 – On left pane, select community and DataAgent Back Next Cancel Step 3 – Right click OpenStack Backup Select a project and instances for backup: Projects under the DataAgent, click Create New demo - uuid:[19b85985d8744342bd617299cdda22 ~ DataSet Instance: instance A - uuid [ae7cd2fe-aca6-4cef-8f19-5312ff5b9 Step 4 – Provide OpenStack ubuntu 16 image - uuid:[82c6edba-0a83-421d-8422-b5 configuration < Step 5 – Select project and instances in Volumes attached to selected instances are included in backup the project Images in selected instances are NOT included in backup 103 Carnegie Center, Suite 300, Princeton, NJ 08540 --- Tel: (609) 955-3422 Back Next Cancel



Backup

Schedule Backup

Recurring incremental backup is essentia

- Step 1 Log into RingStor Explorer
- Step 2 On left pane, select community, DataAgent, and click **OpenStack Backup to bring up** DataSets in right pane
- Step 3 Right click a DataSet in right pane, click Backup and Recover menu
- Step 4 On Backup tab, click Backup button
- Step 5 Set schedule details, notification if needed

	ingStor DataAgent	Console X
	Backup Recovery	
· · · · · · · · · · · · · · · · · · ·	DataSet DataAgent DataSet Backup Mode:	ringstor1-OpenStack-Nova OpenStack Online Backup
ial to protect files	Selected Size:	N/A
	Last Backup State	e. N/A
	Provide folder for bar	ckup data
	Connection Type:	Select a Connection Type
	NFS Host Server	
	Shared Folder:	av Invitación (data
	Connection type device for read a	determines how the component connect to the ind write
	Replication Eocal backup w	vill be imported to cloud later
	O Replicate back	up to: 🧶 🥘
Schedule	X Delete loca	al backup after replication is completed
Seneral Notifications Pre and Post Scripts	in chocked,	data can only be restored itom cloud
Basic Info	Back	Close
Name: OpenStack	Back	
Notes:	×	
Backup		
O Full		
Backup Schedule		
O Run It Now		
Schedule		
Day(s) ⊠ Mon ⊠ Tue ⊠ Wea ⊠ Thu ⊠ Fri ⊠ Sat ⊠ Sun		
Time: 00 🗸 : 00 🗸		
End Date		
○ End on: 07/02/2021 🔍 🗸		
Resume backup when DataAgent comes online		
Submit Cancel		

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Restore

Restore

Step 1 – Log into RingStor Explorer

Step 2 – On left pane, selectcommunity, DataAgent, and clickOpenStack Backup to bring upDataSets in right pane

Step 3 – Right click a DataSet in right pane, click Backup and Recover menu

Step 4 – On Recovery tab, set restore parameters.

Step 5 – Click Start Restore

ckup Recovery						
Select a Local Bac	kup for Re	estore				
Browse backups from: Select a backup to restore: Select an instance:		RingStor Vault				
		Backup on 7/2/2021 10:24:15 PM instance A- uuid:[ae7cd2fe-aca6-4 ~				
Run restore on t	his DataA	gent:	ringstor1-OpenSta	ck-Nova 🗸		
Url:	http://19	2.168.0	0.108			
User:	admin					
Password:	•••••					
Domain:	Default			Connect		
Project:	demo -	uuid:[1	9b85985d8744342bd	617299 ~		
New Instand	e Name:	insta	nce A_restored			
Boot Source:		Boot	Volume	~		
	Select a	n imag	je			
Flavor:	m1.tiny - uuid:[1] V					
Network:	private -	uuid:[5	5d78a328-8b3b-4833-	-a256-1 ~		
Network:	private -	uuid:[5	5d78a328-8b3b-4833-	•a256-1 ∨		
Start	Restore		Close			

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Backup

Monitor Jobs

RingStor Explorer Task List tab shows all jobs

Auto Refresh: On	~	Filters: All Com	munities 🗸 📝	All DataAgents	~	All Agents	\sim	All job states	~	Last 1 hour	~ 🔄	Total : 1	×		
Start Time	End Time	Community	DataAgent		Agent Ty	/pe	DataSet	Task Type	Task State	Proce Total	ssed/	Progress	Transmit Size	User	Reasor
7/2/2021 10:24:15 PI	M	Tax & Service	ringstor1-Op	enStack-Nova	OpenSta	ick Backup	OpenStack	Backup (Full)	Runnin	ig 1024 M	IB / 1024 MB	100%	22.36 MB	taxadmin	1

- Step 1 Log into RingStor Explorer
- Step 2 Click Task List tab to view recent jobs
- Step 3 Right click a job to view details

Failure Reason: error encountered

ask ID:	5623E310-7C	70-FDF0-30A3-E75C94F04847				
gent Type:	OpenStack Bac	kup				
ask Type:	Backup (Full)					
Fask State:	Completed					
DataSet:	OpenStack					
Start Date:	7/2/2021 10:24	15 PM				
End Time:	7/2/2021 10:27	41 PM				
Ouration:	3 Minute(s)					
Progress:	100%					
Processed Object	ts / Total Objects:	8/8				
Processed Size /	Total Size:	1024 MB / 1024 MB				
New Objects Det	ected:	8				
lotal Size for Nev	v Objects:	1024 MB				
Fransmit Size:	22.36 MB					
DataAgent:	ringstor1-Open	Stack-Nova				
Jser:	taxadmin					
ailure Reason						

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Troubleshooting

Logs

RSDataAgent.log - DataAgent service logs

RSAgentFileSystem_<DataSet> - Logs for DataSet. DataSet's name is appended to the log file name

Download Logs

Log into RingStor Explorer, open Task List tab on right pane, right click the job, select Download Logs from DataAgent

Logs			
01000			
O Logs	since a specifi	ed date	
Date:	01/23/2021]-
All			
		· · · · · · · · · · · · · · · · · · ·	
	CALL & CALL & CALL	0	