

## **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 Backup Steps**

### **Create Linux-based Instance in OpenStack**

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

### **Install RingStor DataAgent software in Instance**

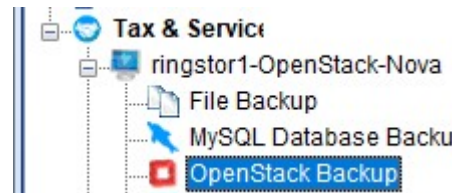
### **Create DataSet from RingStor Explorer**

### **Schedule Backup**

## Create New DataSet

OpenStack Backup DataSet is a backupset that contains instances inside OpenStack

Step 1 – Log into RingStor Explorer



Step 2 – On left pane, select community and DataAgent

Step 3 – Right click OpenStack Backup under the DataAgent, click Create New DataSet

Step 4 – Provide OpenStack configuration

Step 5 – Select project and instances in the project

Provide OpenStack host and login:

Authentication

Url:

User:

Password:

Domain:

domain is required for Identity API v3

Specify project and instance for this DataAgent

Project:

Instance:

RingStor DataAgent software must be installed on this instance for backup and restore OpenStack instance/volumes.

Select a project and instances for backup:

Projects

Instance:

Volumes attached to selected instances are included in backup

Images in selected instances are NOT included in backup

## Schedule Backup

Recurring incremental backup is essential to protect files

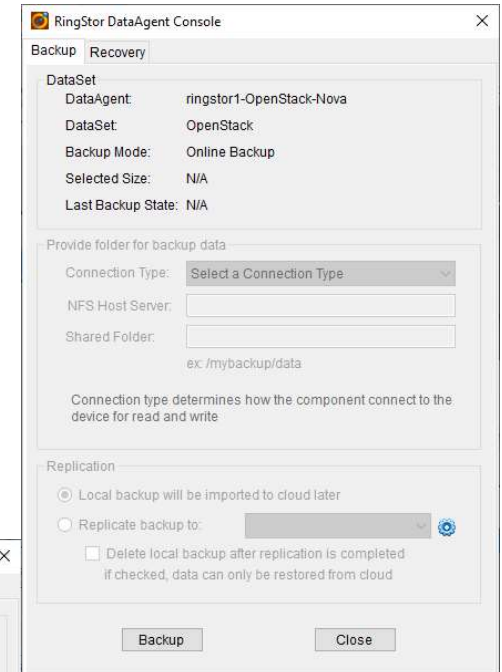
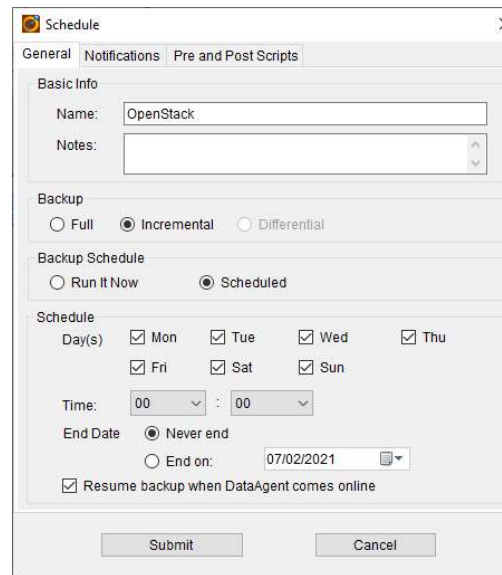
Step 1 – Log into RingStor Explorer

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



## Restore

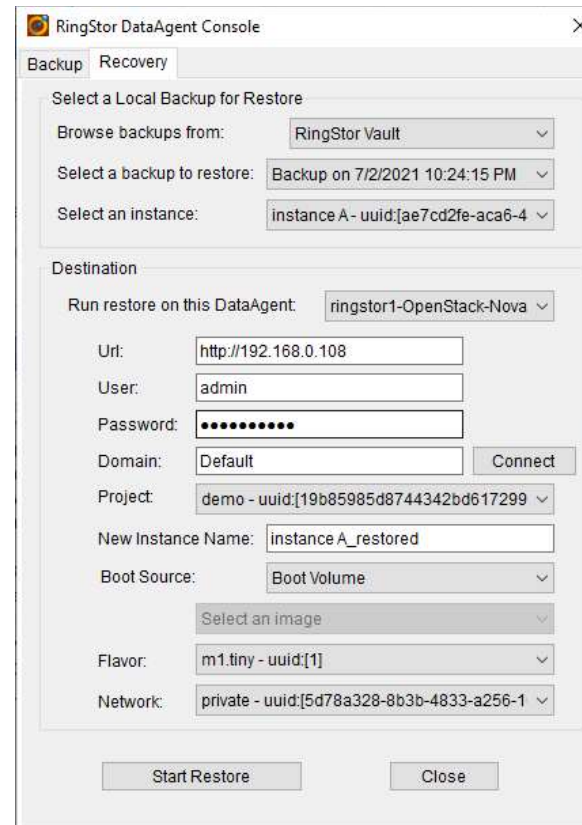
Step 1 – Log into RingStor Explorer

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 Recovery tab, set restore parameters.

Step 5 – Click Start Restore



The screenshot shows the 'RingStor DataAgent Console' window with the 'Recovery' tab selected. The interface is divided into two main sections: 'Select a Local Backup for Restore' and 'Destination'.

**Select a Local Backup for Restore:**

- Browse backups from: RingStor Vault
- Select a backup to restore: Backup on 7/2/2021 10:24:15 PM
- Select an instance: instance A- uuid:[ae7cd2fe-aca6-4

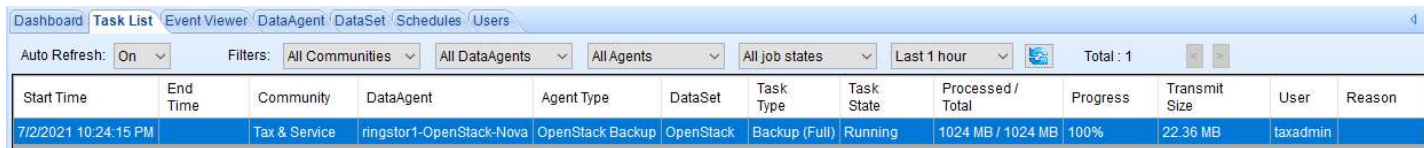
**Destination:**

- Run restore on this DataAgent: ringstor1-OpenStack-Nova
- Url: http://192.168.0.108
- User: admin
- Password: [masked]
- Domain: Default
- Project: demo - uuid:[19b85985d8744342bd617299
- New Instance Name: instance\_A\_restored
- Boot Source: Boot Volume
- Select an image: [dropdown menu]
- Flavor: m1.tiny - uuid:[1]
- Network: private - uuid:[5d78a328-8b3b-4833-a256-1

Buttons at the bottom: Start Restore, Close

## Monitor Jobs

RingStor Explorer Task List tab shows all jobs



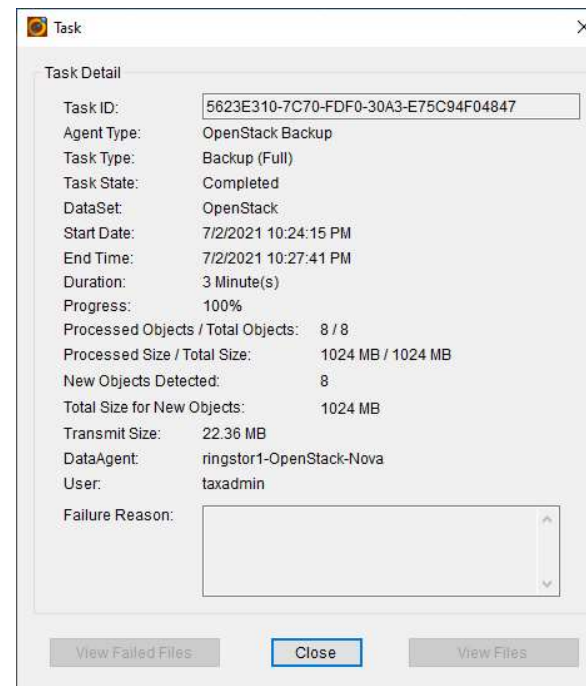
Start Time	End Time	Community	DataAgent	Agent Type	DataSet	Task Type	Task State	Processed / Total	Progress	Transmit Size	User	Reason
7/2/2021 10:24:15 PM		Tax & Service	ringstor1-OpenStack-Nova	OpenStack Backup	OpenStack	Backup (Full)	Running	1024 MB / 1024 MB	100%	22.36 MB	taxadmin	

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



**Task**

Task Detail

Task ID: 5623E310-7C70-FDF0-30A3-E75C94F04847

Agent Type: OpenStack Backup

Task Type: Backup (Full)

Task State: Completed

DataSet: OpenStack

Start Date: 7/2/2021 10:24:15 PM

End Time: 7/2/2021 10:27:41 PM

Duration: 3 Minute(s)

Progress: 100%

Processed Objects / Total Objects: 8 / 8

Processed Size / Total Size: 1024 MB / 1024 MB

New Objects Detected: 8

Total Size for New Objects: 1024 MB

Transmit Size: 22.36 MB

DataAgent: ringstor1-OpenStack-Nova

User: taxadmin

Failure Reason:

View Failed Files    **Close**    View Files

## 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

