



aCloud

Seed Backup Configuration Guidelines

Version 5.8.7R1



Change Log

Date	Change Description
May 2, 2019	Version 5.8.7R1 document release.

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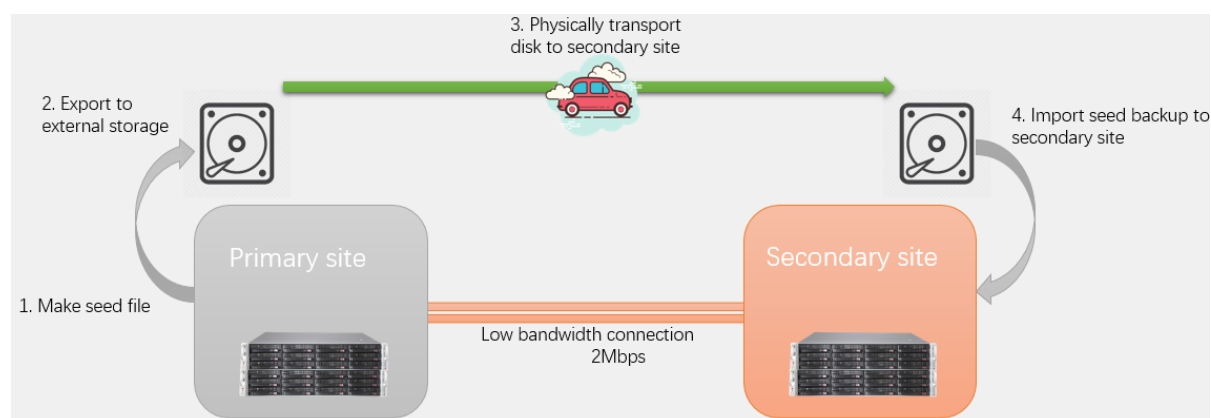
Chapter 1 Background

1.1 Definition

- Complementary feature for off-site DR scenario
- Replace network-based data transfer with storage medium transportation
- Offline replication
- Targeted customer
 - ✓ Off-site DR
 - ✓ Limited bandwidth connection between 2 sites
 - ✓ First-time backup is too large
 - ✓ Data transfer takes forever via network

1.2 Scenario:

Customer have primary and secondary site with disaster recovery plan. However, bandwidth between 2 sites are very narrow (2Mbps, maximum speed 256KB/s). Assume customer first backup size is around 2TB, it require around 48.5 days to transfer the backup to the secondary sites. We can use seed backup function to solve this circumstances. Export VM backup to external storage medium and physically transport the disk to other site. After transport the first backup, smaller incremental backup can be transport via network connection.



Chapter 2 Configuration

2.1 Export Seed Backup

1. Configure DR Task policy

Create DR Task

1 Basics — 2 Configure Secondary Site

Primary Site

Virtual Machine

Back Up

Recover

Migrate Back to Primary Site

Secondary Site

Virtual Machine

Recover to Secondary Site

Disaster Recovery

Name: DR Seed

Primary Site: Primary aCloud

Secondary Site: Second Cluster

Protected VM(s): 1 selected

Cross-Site Disaster Recovery

RPO: 1 hour

Remote Backup Repository: VirtualDatastore1

Total: 3.52 TB Free: 1021.98 GB First Backup Size: 2.42 GB

Data Transmission: ☐ Compressed

Local Backup

Backup Periodic: CDP (seconds)

Local Backup Repository: VirtualDatastore1

Save Cancel

2. Link management restricted to 5Mbps

Link Configuration

Transfer Rate: ☐ No limit ☒ Maximum 5 Mbps

DR IP Address: ☒ Layer 2 Link ☐ Layer 3 Link

L2 Switch

Site

Primary aCloud

Interface: eth0

Site IP Address: [Redacted]

Netmask: 255.255.255.0

Listening Port: 443

Advanced

Second Cluster

Interface: eth0

Site IP Address: [Redacted]

Netmask: 255.255.255.0

Listening Port: 443

Advanced

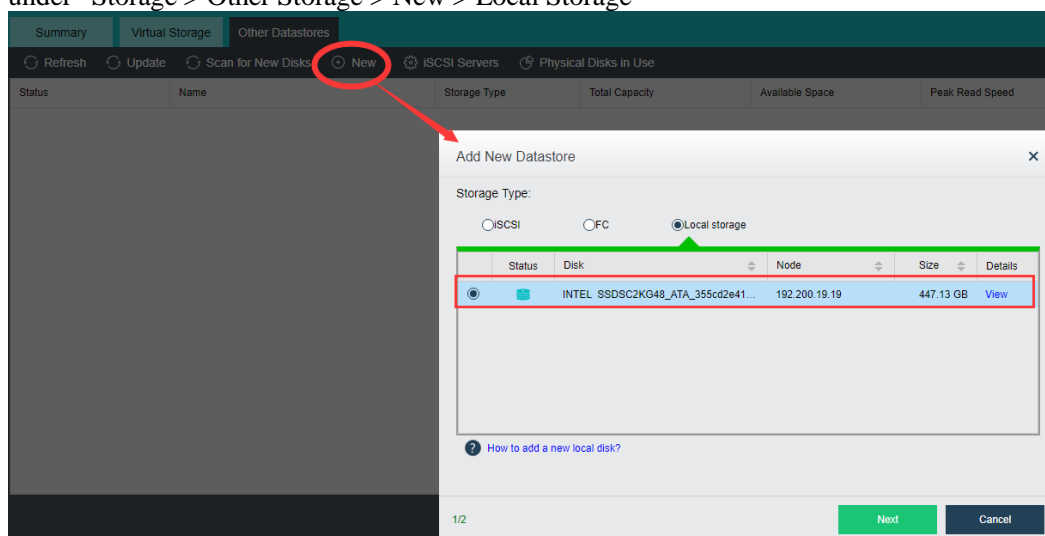
Data Transmission: ☒ Encrypted (Pack and encrypt backups on primary site before being transferred to secondary site to ensure file security, but this will affect performance)

OK Cancel

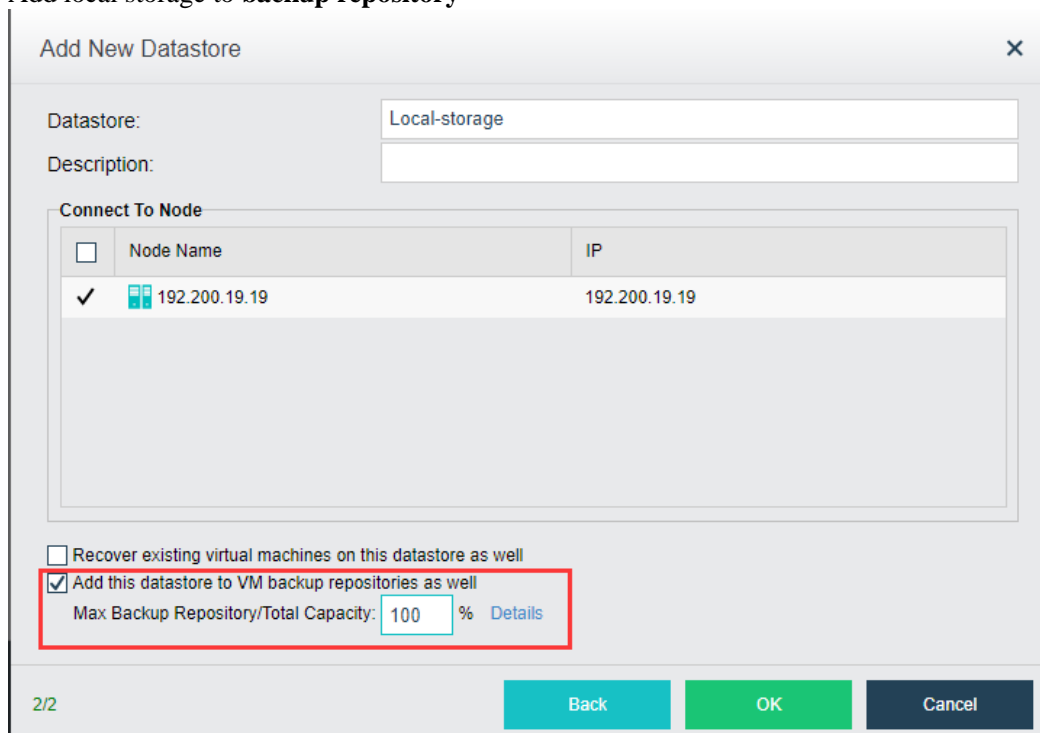
3. After executed DR task, make sure primary site backup have been created.



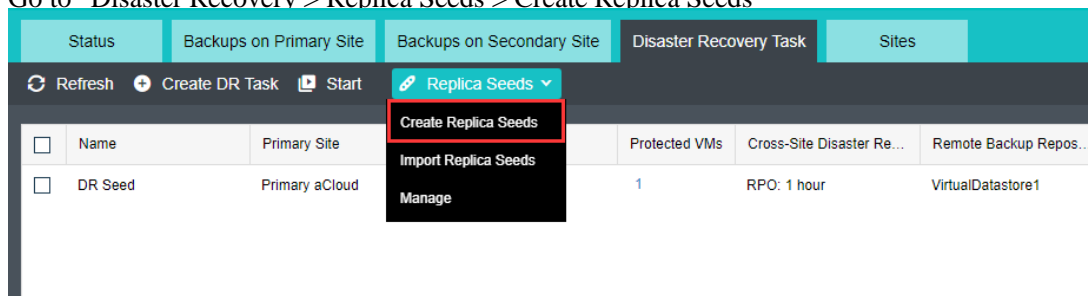
4. Plug-in USB HDD or server HDD to aCloud primary cluster (any server). Create local storage under “Storage > Other Storage > New > Local Storage”



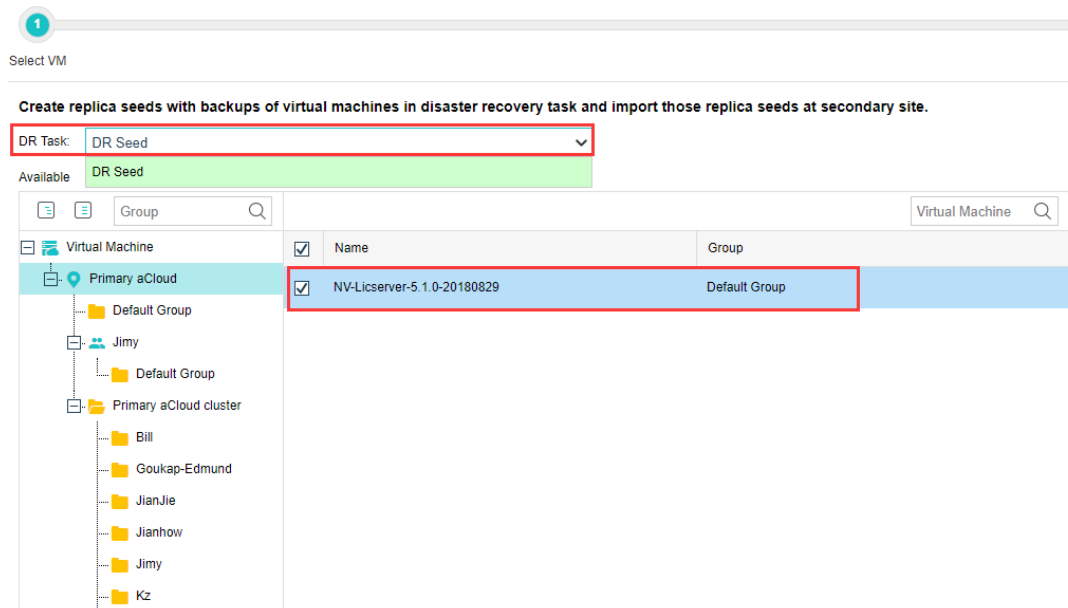
Add local storage to **backup repository**



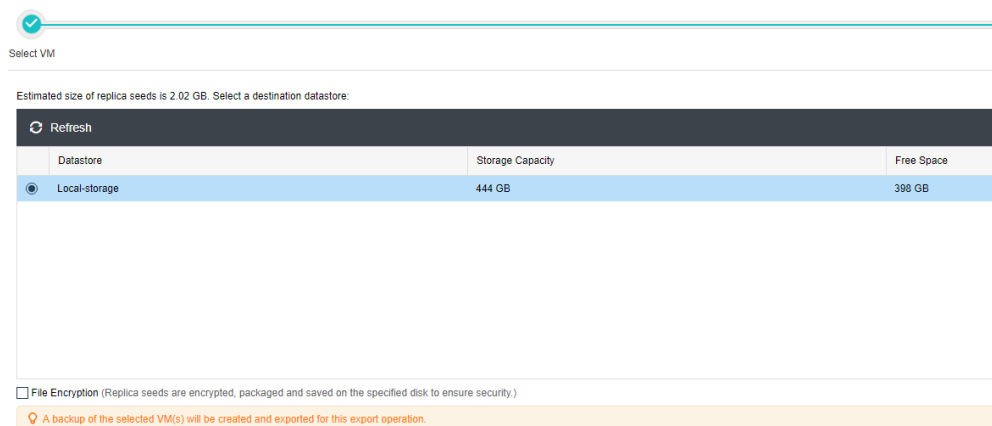
5. Go to “Disaster Recovery > Replica Seeds > Create Replica Seeds”



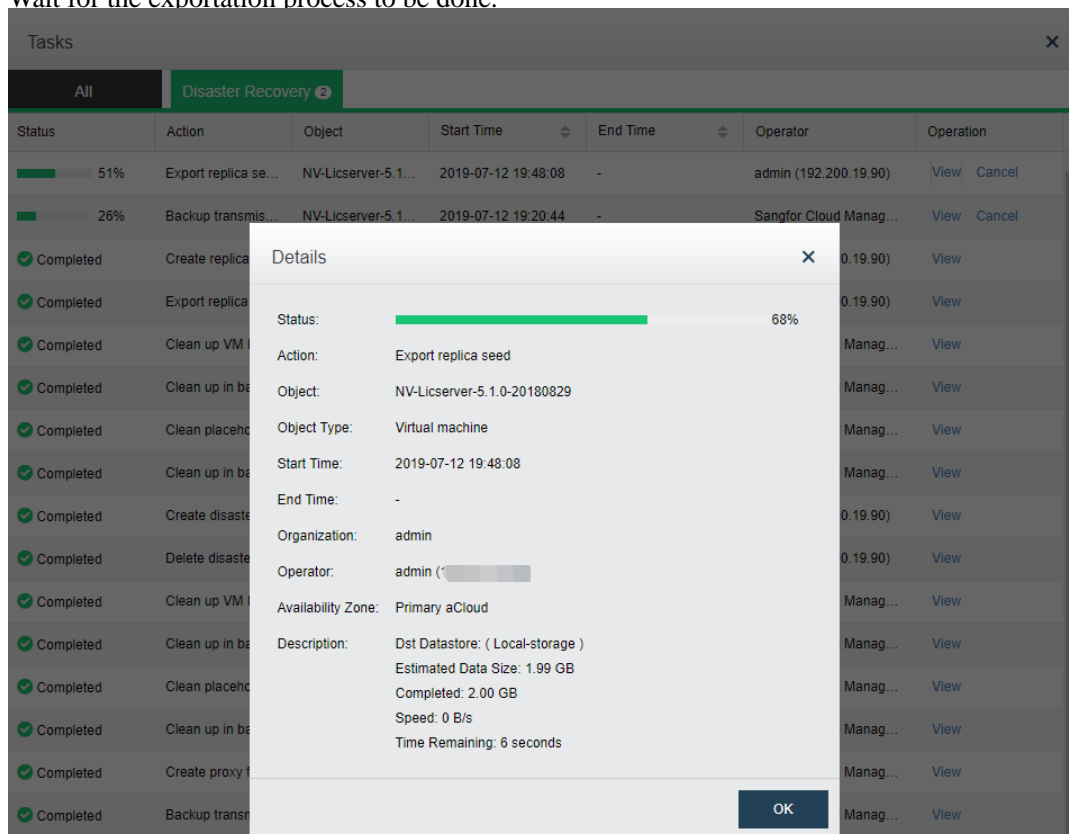
Select DR Task and VM that want to export as seeds backup.



6. Select local backup repository and click on start to proceed exportation.



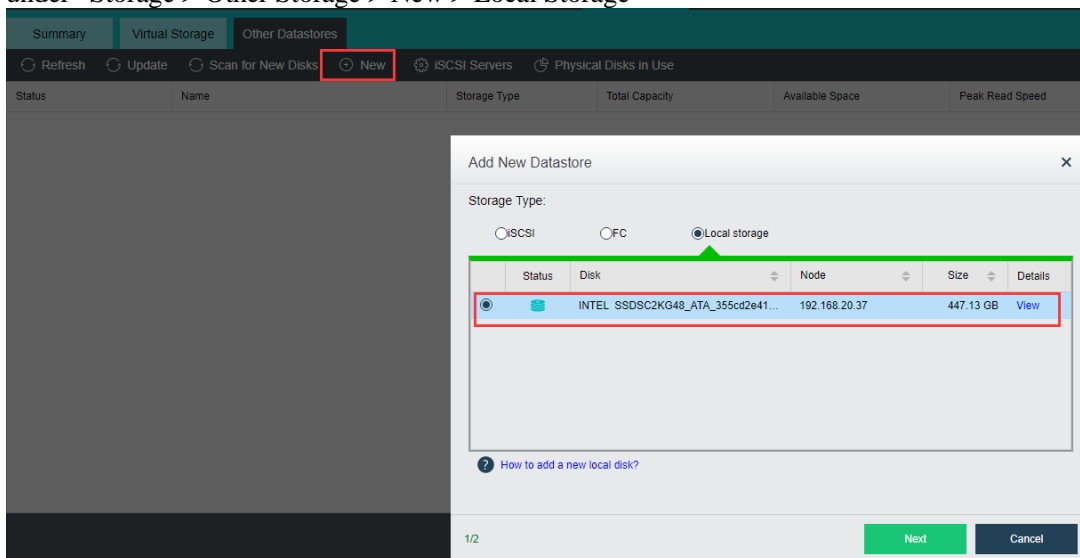
7. Wait for the exportation process to be done.



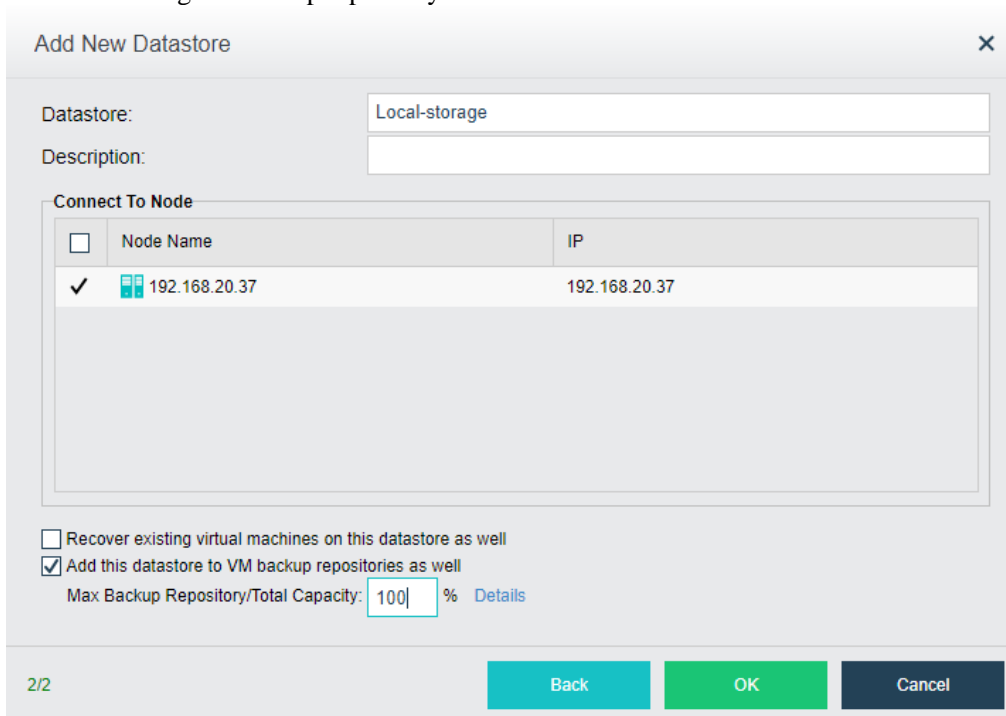
8. After export finish, unplug the local disk and move to another secondary sites.

2.2 Import Seed Backup

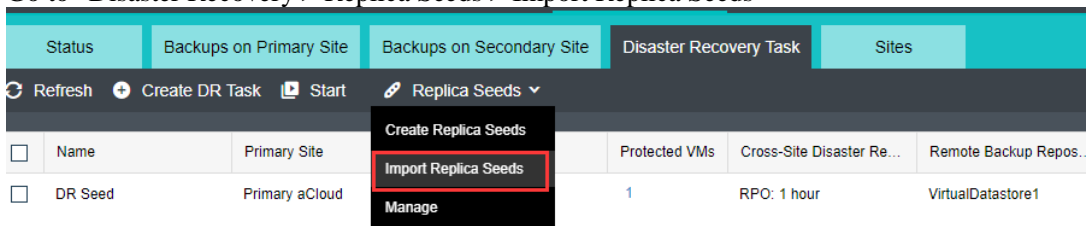
1. Plug-in USB HDD or server HDD to aCloud secondary cluster (any server). Create local storage under “Storage > Other Storage > New > Local Storage”



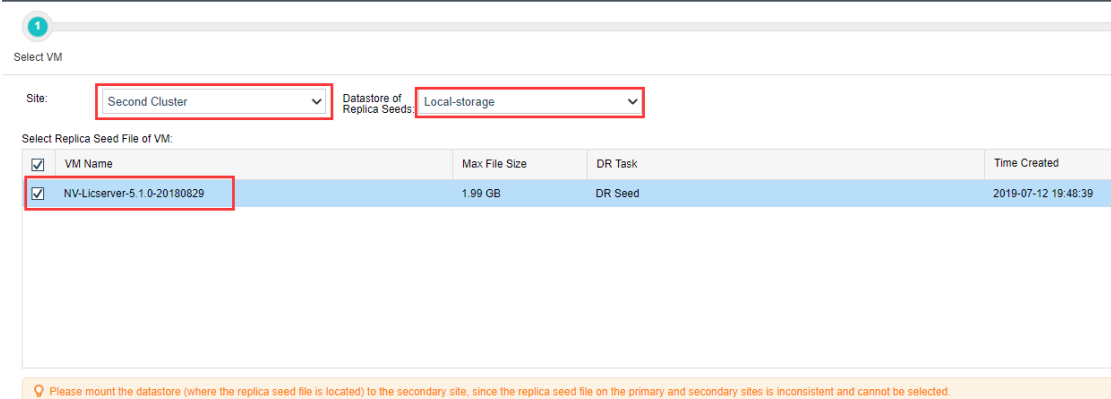
2. Add local storage to backup repository as well.



3. Go to “Disaster Recovery > Replica Seeds > Import Replica Seeds”



- Select secondary site cluster and local storage, and choose exported VM name. Click Next to start the importation.



Select VM

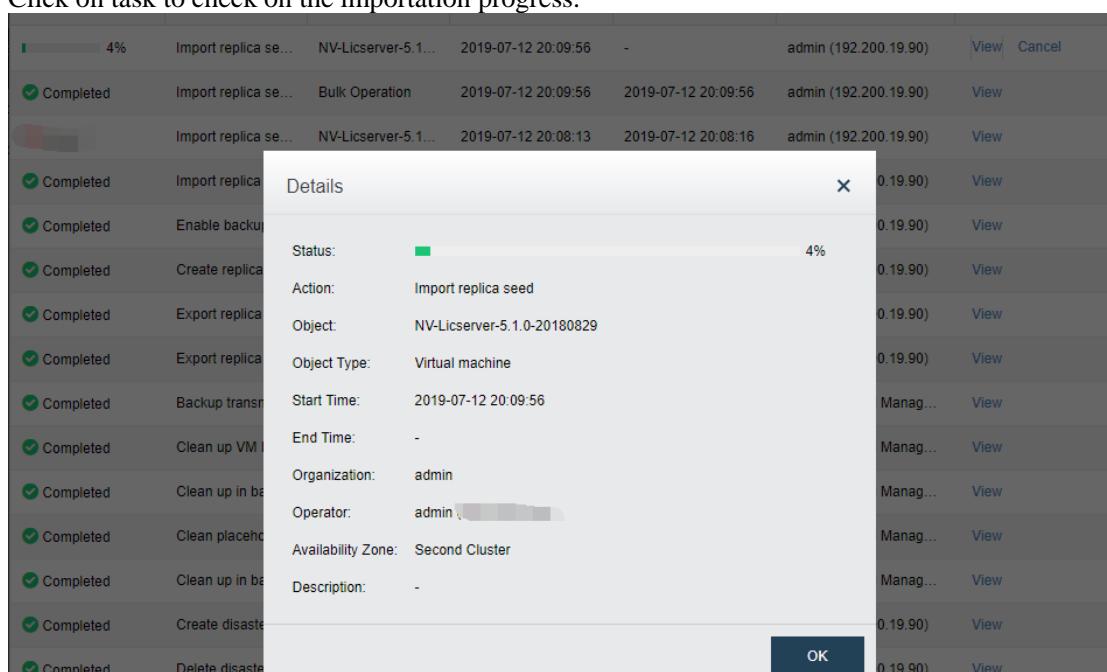
Site: Second Cluster Datastore of Replica Seeds: Local-storage

Select Replica Seed File of VM:

<input checked="" type="checkbox"/>	VM Name	Max File Size	DR Task	Time Created
<input checked="" type="checkbox"/>	NV-Licserver-5.1.0-20180829	1.99 GB	DR Seed	2019-07-12 19:48:39

Please mount the datastore (where the replica seed file is located) to the secondary site, since the replica seed file on the primary and secondary sites is inconsistent and cannot be selected.

- Click on task to check on the importation progress.



Status	Task Name	Object	Start Time	End Time	Operator	Availability Zone	Details
4%	Import replica se...	NV-Licserver-5.1...	2019-07-12 20:09:56	-	admin (192.200.19.90)		View Cancel
Completed	Import replica se...	Bulk Operation	2019-07-12 20:09:56	2019-07-12 20:09:56	admin (192.200.19.90)		View
	Import replica se...	NV-Licserver-5.1...	2019-07-12 20:08:13	2019-07-12 20:08:16	admin (192.200.19.90)		View

Details

Status: 4%

Action: Import replica seed

Object: NV-Licserver-5.1.0-20180829

Object Type: Virtual machine

Start Time: 2019-07-12 20:09:56

End Time: -

Organization: admin

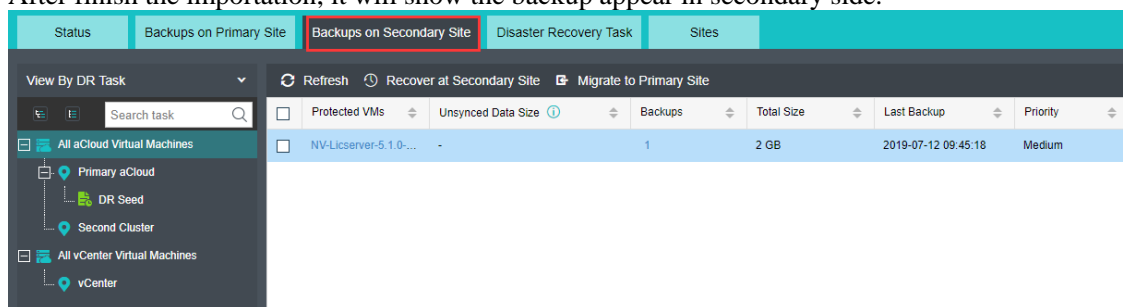
Operator: admin

Availability Zone: Second Cluster

Description: -

OK

- After finish the importation, it will show the backup appear in secondary side.



View By DR Task

Refresh Recover at Secondary Site Migrate to Primary Site

Protected VMs	Unsynced Data Size	Backups	Total Size	Last Backup	Priority
<input type="checkbox"/> NV-Licserver-5.1.0-...	-	1	2 GB	2019-07-12 09:45:18	Medium

All aCloud Virtual Machines

- Primary aCloud
- DR Seed
- Second Cluster

All vCenter Virtual Machines

- vCenter

Chapter 3 Precaution

1. While exporting seed backup file, system will automatically perform full backup on the virtual machine, to ensure backup data is the latest.
2. While importing seed backup file, system will automatically cancel recent backup transmission task and perform VM importation to the task.
3. After seed backup exported, it should not to have another incremental backup on the primary site, else it will unable to import in secondary site due to backup link invalid.
4. In other words, if backup image successfully transferred to secondary site, it will unable to recover as well since backup existed.



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