

RingStor Enterprise

Install Vault on Linux

Version 7.0

RingStor, Inc.

103 Carnegie Center, Ste 300

Princeton, NJ 08540

Table of Contents

1	Cloud Installation on Linux.....	3
1.1	Installation Preparation	3
1.2	Examples in Installation	3
1.3	Cloud End Point.....	4
1.3.1	System Requirement	4
1.3.2	Install Cloud End Point.....	4
1.4	Cloud Indexer	7
1.4.1	System Requirement	8
1.4.2	Install Cloud Indexer	8
1.5	DataServer.....	9
1.5.1	System Requirement	9
1.5.2	Install DataServer.....	9
1.6	RingStor Explorer	11
1.6.1	System Requirement	11
1.6.2	Install RingStor Explorer	12
1.7	Configure Cloud.....	12
1.7.1	Configure Cloud Index Path.....	12
1.7.2	Add First MountPath	13

1 Cloud Installation on Linux

This section is for installing RingStor cloud components on Linux servers. If you plan to install RingStor cloud components on Windows server, please refer to http://www.ringstor.com/ent/RingStor_User_Manual.pdf.

The installation of a complete RingStor Cloud shall follow these steps:

1. The Cloud End Point must be installed first
2. Install Cloud Indexer
3. Install DataServer to the cloud
4. Install RingStor Explorer

RingStor Explorer can be installed on any Microsoft Windows computer to manage RingStor system.

1.1 Installation Preparation

To install, following must be prepared before starting the installation:

1. A Network File System (NFS) server is configured and folder(s) are created on this server to store cloud side index and backup data.
2. On Linux server where RingStor cloud component will be installed, Network File System (NFS) client must be already installed, and NFS client can connect to NFS server. Firewall must be configured for NFS client to issue mount/unmount commands.
3. For Cloud End Point installation, a local or remote MySQL 5.7 or above must be available to create database repository.

1.2 Examples in Installation

Following are just examples used in step-by-step installation guide. They are put in place only to help understand how to install RingStor Cloud. Please change the value accordingly during installation.

localhost.localdomain – the Redhat Linux Server where all components are installed

rsadmin – the administrator to RingStor Cloud system

192.168.65.179 – Network File System (NFS) Server

/RingStorMountPath1/index – a shared folder on NFS server where index inside RingStor Cloud will be saved

/RingStorData/mountpath1 – a shared folder on NFS server where backup data inside RingStor Cloud will be saved

taxservicesllc – the administrator to a community created for new client

1.3 Cloud End Point

Cloud End Point can be installed on following platforms:

- Linux (all major distributions)

1.3.1 System Requirement

The following third party software must be available prior to Cloud End Point installation:

- A local or remote MySQL server 5.7 or above
- Recommended Memory: 6GB or more (all cloud components on one Linux box)

1.3.2 Install Cloud End Point

Run Installer

Download proper version of the installation package from <http://www.ringstor.com>. Run the downloaded package on the computer to start Cloud End Point installation.

Step 1 - Start Installation

Open a terminal, start the installation with command:

```
[root@redhatsvr1 Downloads]# sudo sh ringstor_cloud_linux_4.5.5_cmdline_x64.sh
Unpacking JRE ...
Preparing JRE ...
Starting Installer ...
This will install RingStor Cloud End Point on your computer.
OK [o, Enter], Cancel [c]
```

Type o and hit Enter to continue.

Step 2 - License Agreement

```
root@localhost:~/Downloads
File Edit View Search Terminal Help
effect.

11. No Waiver
No waiver of any right under this EULA will be deemed effective unless
contained in writing signed and/or electronically acknowledged by a duly
authorized representative of the party against whom the waiver is to be
asserted, and no waiver of any past or present right arising from any breach
or failure to perform will be deemed to be a waiver of any future rights
arising out of this EULA.

12. Entire Agreement
This EULA constitutes the entire agreement between the parties with respect
to its subject matter, and supersedes all prior agreements, proposals,
negotiations, representations or communications relating to the subject
matter. Both parties acknowledge that they have not been induced to enter
into this EULA by any representations or promises not specifically stated
herein.
By clicking and selecting the "I accept the terms of the License Agreement"
box below, you agree to the terms of this EULA.

I accept the agreement
Yes [1], No [2]
1
```

Hit Enter to review the license, type 1 and hit Enter to accept and continue.

Step 3 – Specify Installation Root Folder

```
Where should RingStor Cloud End Point be installed?
[/usr/ringstor/cloudendpoint]

Create symlinks?
Yes [y, Enter], No [n]

Select the folder where you would like RingStor Cloud End Point to create symlinks, then click Next.
[/usr/local/bin]
```

Review or provide installation folder, hit Enter to continue.

Step 4 - Cloud End Point hostname and port

```
Verify Cloud End Point's hostname and provide port number for service.
```

```
Host Name:  
[localhost.localdomain]
```

```
Port:  
[9000]
```

Host Name - review or provide hostname or IP. If an IP is provided, the computer must be configured with static IP.

Port - review or provide the port.

Cloud End Point service will listen on this port to provide services.

Hit Enter to continue.

Step 5 – Set up Cloud Administrator

```
Create cloud administrator account  
Provide username and password for cloud administrator account
```

```
Administrator Username:  
[ ]  
rsadmin
```

```
Administrator Password:
```

```
Confirm Password:
```

```
Note: This cloud administrator account is used to install other components  
into the cloud, manage all backup agents and schedules in the cloud, etc.  
Configure database
```

RingStor administrator's username/password must be setup.

Administrator Username – provide RingStor administrator's username

Administrator Password: - password for RingStor administrator

Hit Enter to continue.

Step 6 – Specify MySQL Database Repository

```
Provide MySQL Server settings to create database.

MySQL Server:
[localhost.localdomain]
106.14.169.235
TCP Port:
[3306]

MySQL Username:
[root]

MySQL Password:

Creating MySQL database, please wait...
MySQL database is created, continue install...
Cloud End Point Configuration Summary
Please review the configuration summary below. Click Cancel to stop
configuration, click Next to start the configuration.
Host Name: localhost.localdomain
Port: 9000

Setup has finished installing RingStor Cloud End Point on your computer.
Finishing installation...
[root@localhost Downloads]# █
```

A MySQL database server must be provided. RingStor cloud will store system data in this repository.

MySQL Server – review or provide host name of the computer where SQL server is running

TCP Port – review or provide TCP port for the MySQL service (see tip on how to find TCP port)

MySQL Username – review or provide MySQL server user account, this account must have permission to create database

MySQL Password – provide password for the user account above

Hit Enter to create database and complete the installation process.

1.4 Cloud Indexer

Cloud Indexer is a required component. It can be installed on following platforms:

- Linux (all major distributions)

1.4.1 System Requirement

- Recommended Memory: 6GB or more (all cloud components on one Linux box)

1.4.2 Install Cloud Indexer

Run Installer

Download proper version of the installation package from <http://www.ringstor.com>. Run the downloaded package on the computer to start Cloud Indexer installation.

Step 1 - Start Installation

Open a terminal, start the installation with command:

```
[root@localhost Downloads]# sh ringstor_cloudindexer_linux_4.1_cmdline_x64.sh
Unpacking JRE ...
Preparing JRE ...
Starting Installer ...
This will install RingStor Cloud Indexer on your computer.
OK [o, Enter], Cancel [c]
o
```

Type o and hit Enter to continue.

Step 2 - License Agreement

Hit Enter to review the license, type 1 and hit Enter to accept and continue.

Step 3 – Specify Installation Root Folder

```
Where should RingStor Cloud Indexer be installed?
[/usr/ringstor/cloudindexer]

Create symlinks?
Yes [y, Enter], No [n]

Select the folder where you would like RingStor Cloud Indexer to create symlinks
, then click Next.
[/usr/local/bin]
```

Review or provide installation folder for Cloud Indexer, hit Enter to continue.

Step 4 – Provide Cloud info and administrator credentials

```
Configure Cloud Indexer for RingStor
Cloud End Point
Cloud Hostname:
[localhost.localdomain]

Cloud Port:
[9000]

Cloud Administrator Account
User:
[]
rsadmin
Password:
```

Review or provide Cloud End Point and administrator login, Hit Enter to complete the installation process.

1.5 DataServer

DataServer is the server that resides inside the cloud, registers itself to Cloud End Point upon start, and provides services to DataAgents for data protection, recovery and more. The DataServer can be installed on following platforms:

- Linux (all major distributions)

1.5.1 System Requirement

- Recommended Memory: 6GB or more (all cloud components on one Linux box)

1.5.2 Install DataServer

Run Installer

Download proper version of the installation package from <http://www.ringstor.com>. Run the downloaded package on the computer to start DataServer installation.

Step 1 - Start Installation

Open a terminal, start the installation with command:

```
[root@localhost Downloads]# sh ringstor_dataserver_linux_4.1_cmdline_x64.sh
Unpacking JRE ...
Preparing JRE ...
Starting Installer ...
This will install RingStor DataServer on your computer.
OK [o, Enter], Cancel [c]
o
```

Type o and hit Enter to continue.

Step 2 - License Agreement

Hit Enter to review the license, type 1 and hit Enter to accept and continue.

Step 3 – Specify Installation Root Folder

```
Where should RingStor DataServer be installed?
[/usr/ringstor/dataserver]

Create symlinks?
Yes [y, Enter], No [n]

Select the folder where you would like RingStor DataServer to create symlinks, then click Next.
[/usr/local/bin]
```

Review or provide installation folder for DataServer, hit Enter to continue.

Step 4 – DataServer hostname and port

```
Verify DataServer's hostname and provide port number for service.

Host Name:
[localhost.localdomain]

Port:
[9090]
```

Host Name – review or provide hostname or IP. If an IP is provided, the computer must be configured with static IP.

Port – review or provide the port.

DataServer service will listen on this port to provide services.

Hit Enter to continue.

Step 5 – Provide Cloud End Point info

```
Configure DataServer to Attach to RingStor
Cloud End Point
Cloud Hostname:
[localhost.localdomain]

Cloud Port:
[9000]

Cloud/Community Administrator Account
User:
[]
rsadmin
Password:
```

DataServer must connect to the existing Cloud End Point and register itself to become part of RingStor cloud, make sure Cloud End Point is online and provide Cloud End Point settings in this step.

Cloud Hostname: review or provide the hostname or IP used when installing Cloud End Point

Cloud Port: review or provide the port number that existing Cloud End Point service is listening on.

Cloud/Community Administrator Username: RingStor cloud or community administrator

Administrator Password: RingStor cloud administrator's password

Hit Enter to complete the installation process.

1.6 RingStor Explorer

RingStor Explorer can be installed on following platform:

- Microsoft Windows 7/8/10//2003/2008/2012/2016/2019

1.6.1 System Requirement

The following third party software must be installed prior to RingStor Explorer installation:

- Microsoft .NET Framework 4.5 or higher is required.

You may download .NET framework 4.5 from microsoft.com at <https://www.microsoft.com/en-us/download/details.aspx?id=30653>

1.6.2 Install RingStor Explorer

Run the downloaded executable on the computer to start RingStor Explorer installation.

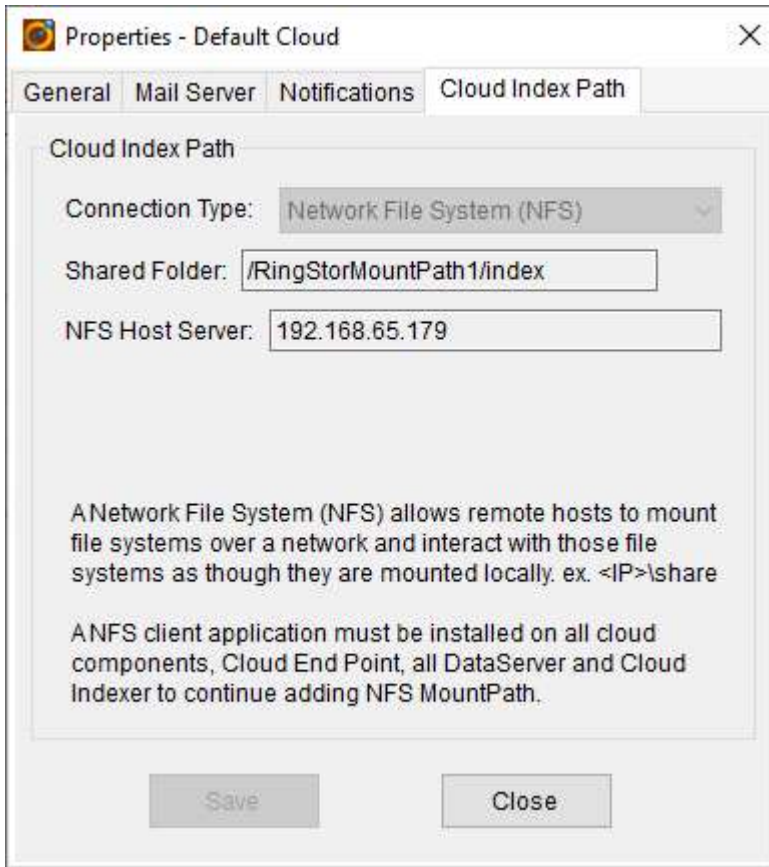
1.7 Configure Cloud

After all cloud components and RingStor Explorer are installed, initial configuration must be performed before backup can run.

1.7.1 Configure Cloud Index Path

Cloud Index Path is used to store cloud side index, this path must be accessible by all cloud components.

To configure the Cloud Index Path, log into RingStor Explorer with cloud administrator account, from top menu System -> Settings -> Cloud Index Path tab, provide Network File System (NFS) and shared path. An example is shown below:



Please note:

1. A Network File System (NFS) server is configured and folder(s) are created on this server to store cloud side index.
2. On Linux server where RingStor cloud component will be installed, Network File System (NFS) client must be already installed, and NFS client can connect to NFS server. Firewall must be configured for NFS client to issue mount/unmount commands.

1.7.2 Add First MountPath

MountPath is used to store cloud side backup data. At least one MountPath must be online before backup to cloud can run.

To add first MountPath, log into RingStor Explorer with cloud administrator account, from top menu Storage -> Add New MountPath to start.

Detailed instructions are at 8.3 in this document.