Back Up and Restore a Director Node

For supported software information, click here.

You should periodically back up the running configuration and the running state of the Versa Director node so that you can restore the configuration or running state, or both, if you encounter a problem with the Director node. You can back up the Director node in two ways:

- Create a backup file—This file contains the configuration currently running on the Director node and all information related to the configuration, including templates, device templates, and branch configurations. A backup file records no information about the version of the software image running on the Director node. When you recover a backup by performing a restore operation, you restore the previous configuration only, independent of the software version.
- Create a snapshot file—This file saves the running state of the Director node, including the software version, current state, and running configuration, including templates, device templates, and branch configurations. When you recover a snapshot by performing a rollback operation, you are returning the Director node to that software version, to that running state, and to that configuration. This means that if you upgrade the Director software after taking the snapshot, when you perform the rollback operation, you are effectively downgrading the Director software.

If you enable high availability (HA) for Versa Director, the backup and snapshot files are stored on both the primary (active) and standby Director nodes. If one of the Director nodes encounters a problem with its state or configuration, you can reinstall its running state or configuration from the snapshot or backup file on the other Director node.

You can periodically copy the Director backup files to an external file server. Doing so might be useful if, when you have only a single Director node, the Director node becomes unavailable or, in the case of HA, both Director nodes become unavailable.

Create and Manage Backup Files

A backup operation archives the configuration currently running on the Director node and all information related to the configuration, including templates, device templates, and branch configurations.

All backup files have the filename extension .backup.

When you have a single Director node, the backup files are saved in the /var/versa/backups/ directory.

When you back up HA-enabled Director nodes, the backup operation does the following:

- The primary (active) Director node saves a backup of the active node in its /var/versa/backups/ directory.
- The primary Director node synchronizes the files in its /backups directory with the /backups directory on the standby

Director node so that both nodes have the same copy of the primary node's backup.

- Both the primary and standby Director nodes save a backup of their local node in their /local-backups directory. The files in the /local-backup directory cannot be overwritten by the peer HA Director node.

View All Backup and Restore Command Options

To manage, create, and restore backup files, you use the **request system recovery** CLI command. To view all options for this command, issue the following command:

```
Administrator@Director> request system recovery ?
Possible completions:
backup          - Take Versa Director backup
delete          - Delete a backup file (from disk)
list            - Versa Director backup file (on disk)
periodic-backup - Take periodic backup of Versa Director
periodic-delete - Purge backups after specified number of days
restore         - Restore from Versa Director backup file
```

Create Backup Files Manually

To manually perform a backup operation that includes the software image package, issue the following command:

```
Administrator@Director> request system recovery backup include-package-dir true
```

To manually perform a backup operation that does not include the software image package, issue the following command:

```
Administrator@Director> request system recovery backup include-package-dir false
```

Create Backup Files Periodically

To perform a backup operation periodically, issue the following commands. Periodic backup files include the software image package.

```
Administrator@Director> request system recovery periodic-backup every [day | week | month]
```

List Backup Files

To display a list of all the backup files on the Director node, issue the following command:

```
Administrator@Director> request system recovery list
```

For example:

```
Administrator@Director> request system recovery list
```

```
files
    {
    name vnms@2017-01-08T06:47:04.backup
    }
files
    {
    name vnms@2017-01-15T06:47:04.backup
    }
```

Restore a Backup File

To restore the data in a backup file, issue the following command:

```
Administrator@Director> request system recovery restore file filename
```

filename is the name of the backup file to restore from /var/versa/backups.

If you have enabled HA, restore the backup on the primary Director node:

1. Shut down services on the backup Director node:

   ```
   Administrator@Director-Primary$ vsh stop
   ```

2. Restore the backup on the primary Director node, where *filename* is the name of the file to restore from /var/versa/backups:

   ```
   Administrator@Director-Primary> request system recovery restore file filename
   ```

3. When the backup operation completes, check that all the Versa services are up on the primary Director node:

   ```
   Administrator@Director-Primary$ vsh status
   ```

4. Start the Versa services on the backup Director node.

   ```
   Administrator@Director-Backup$ vsh start
   ```

5. When the Versa services are up on the backup Director node, the HA sync operation on the backup Director node then syncs its configuration and database with those on the primary Director node.

When you restore from a backup file on the standby Director node, first copy the desired backup file from the standby node's /var/versa/local-backups directory to the /var/versa/backups directory, and then issue the **request system recovery restore file** command. If you do not first copy the desired file, the restore operation fails, because the /var/versa/backups directory on the standby Director node contains the synchronized copy of the backup file from the primary Director node.

Delete Backup Files

To delete a backup file, issue the following command:

```
Administrator@Director> request system recovery delete file filename
```

filename is the name of the backup file to delete.

To automatically delete old backup files, issue the following command:

> Administrator@Director> **request system recovery periodic-delete after days** *number-of-days*

Create and Manage Snapshots

A snapshot operation archives the running state of the Director node, including the software version, current state, and running configuration, including templates, device templates, and branch configurations.

All snapshot files are saved to the /var/lib/vs/.vs_snap/ directory on the Director node.

Create a Snapshot

To create a snapshot, issue the following command:

> Administrator@Director> **request system create-snapshot** [**description** *text*] *filename*

filename is the name of the file is which to save the snapshot.

text is an optional text description of the snapshot.

List Snapshot Files

To view a list of all the backup files on the Director node, issue the following command:

> Administrator@Director> **show system snapshots**

Roll Back a Snapshot File

To roll back the Director node to a specific snapshot, issue the following command:

> Administrator@Director> **request system rollback to** *time* [**no confirm**]

time is the time at which the snapshot was taken.

To have the command not display a confirmation message, include the **no confirm** option.

Delete Snapshot File

To delete a snapshot file, issue one of the following commands:

> Administrator@Director> **request clear system snapshot no-confirm** *filename*
> Administrator@Director> **request clear system snapshop no-confirm timestamp** *timestamp*

> Administrator@Director> **request clear system snapshot timestamp** *timestamp*

filename is the name of the snapshot file to delete.

Supported Software Information

Releases 20.2 and later support all content described in this article.