

How to Back up viewLinc Enterprise Server Software

The viewLinc Continuous Monitoring System software, like any business-critical application, should be backed up regularly to ensure business continuity in the event of an unforeseen failure. These backups should also be tested periodically to confirm that the backup can be used to restore the system to an operational state.

There are three approaches to backing up viewLinc, each with different requirements and advantages. Decisions on the backup method, frequency and testing interval should be made based on a risk-assessment.

This technical note covers three approaches to backing up viewLinc (in order of preference):

- 1 Virtual server snapshot
- 2 Backup of a running application
- 3 Backup of an off-line application

Virtual Server Snapshot

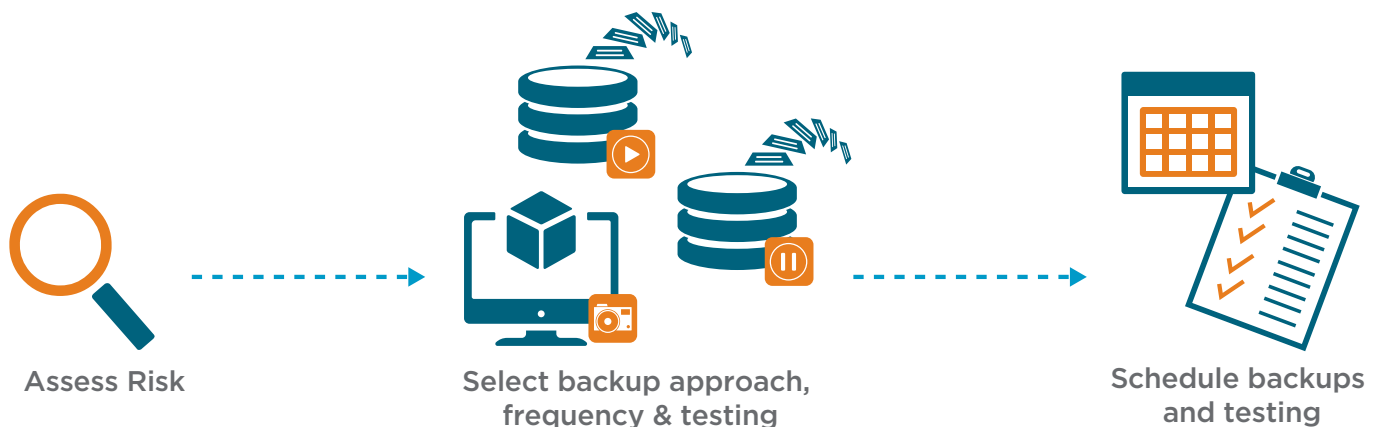
If you are running viewLinc on a virtual server (recommended), then snapshot-based backups are the preferred method. A “Running” or “Active State” type of snapshot should be used with viewLinc because this captures the full system state while the application is running. This includes the application, the operating system, installed drivers, etc.

Backup of a Running Application

If you are running viewLinc on a physical server, the preferred backup method is to utilize a backup application that is capable of backing up open files. Many such applications are commercially available. The backup application should be configured to back up the following directories*:

- C:\Users\Public\Documents\Vaisala\Vaisala viewLinc\db
- C:\Users\Public\Documents\Vaisala\Vaisala viewLinc\log

As with virtual server snapshots, running application backups benefit from not interrupting system operation.



* These directories are the default locations and may need to be modified if you selected alternate locations during system installation.

Benefits of a Virtual Server Snapshot

- It does not interrupt the operation of the system: data continues to be recorded and alarm notifications continue to be sent.
- It captures both the application and the complete environment in which it runs, providing the simplest and fastest path to restoration.

Backup of an Off-Line Application

If you are running viewLinc on a physical server, but do not have access to a backup application that is capable of backing up open files, you must temporarily stop the viewLinc application to back up the data.

Since viewLinc is a continuous monitoring system, data is constantly being written to its databases. If the application is still running when a simple backup tool copies database files, any new data written to the database will fail and may result in corruption of the database. For this reason, it is crucial to stop viewLinc's services prior to performing a backup with such a tool. The following viewLinc services must be stopped in the order listed:

- 1 viewLinc - Watchdog
- 2 viewLinc - Web Server
- 3 viewLinc - Enterprise Server
- 4 viewLinc - DB Service
- 5 The remaining services can be shut down in any order

Wait a few minutes and refresh the services list to confirm that services are stopped. Following confirmation, the backup application should be configured to back up the following directories*:

- C:\Users\Public\Documents\Vaisala\Vaisala viewLinc\db
- C:\Users\Public\Documents\Vaisala\Vaisala viewLinc\log

Following completion of the backup, viewLinc services must be started in the following order:

- 1 viewLinc - DB Service
- 2 viewLinc - Enterprise Server
- 3 viewLinc - Web Server
- 4 The remaining services can be started in any order

Since this method requires that the system is stopped (thereby delaying the acquisition of new measurements and the notification of alarm conditions) and since it may require manual effort, Vaisala recommends that one of the other methods be used if available (Virtual Server Snapshot or Backup of Running Application.)



Testing the Restorability of Backups

Regardless of the method chosen to back up your viewLinc system, it is critical that backups are tested periodically to ensure that the system can be recovered in the event of a failure. Backups can be restored to an instance of viewLinc running on a separate virtual machine or server to avoid interfering with operations.

* These directories are the default locations and may need to be modified if you selected alternate locations during system installation.