

Software Version 8

This Quick Start Guide provides an overview of how to connect, configure, and monitor the Assureon™ Server and Assureon Client components. For more details, see the *Nexsan Assureon™ Administration Guide* on the Assureon Support > [Documents & Downloads](#) page on Nexsan.com.

Overview

Nexsan Assureon features unique, industry-leading electronic storage systems designed to capture, monitor, and retrieve important information. Assureon architecture includes two main components:

- **Assureon Servers**, which integrate server hardware, Microsoft Windows, and the Assureon Client. Assureon servers perform file encryption, storage, access control, and disposition, and are pre-configured with a storage device.
- The **Assureon Client**, an installable Windows Service, which monitors directories, collecting and archiving important files based on policy settings. As an alternative, the **Assureon Edge** can be added to the system as a dedicated server with a CIFS or NFS NAS head for Assureon archiving.

1 Connecting Assureon

Use the steps in this section to connect your Assureon Server to a network switch and to E-Series Storage Systems, if applicable.

NOTE: DO NOT power on the system until all cabling is completed. See *Powering on Assureon components* on page 2.

► Step 1: Connect the Management and Access data ports to your network

- Connect one of the included black CAT 6 cables from the **Server MGMT** (IPMI) port to a **1GigE** port on the **customer network switch**.
- Connect the other black CAT 6 cables from the **Server Access 1** and **Access 2** ports to **10GigE/1GigE** ports on the **customer network switch**.

If your Assureon system includes an **E-Series Storage System**, then continue with steps 2-4. If not, see *Launching the Assureon Configuration Wizard* on page 2.

► Step 2: Connect the SAS cables

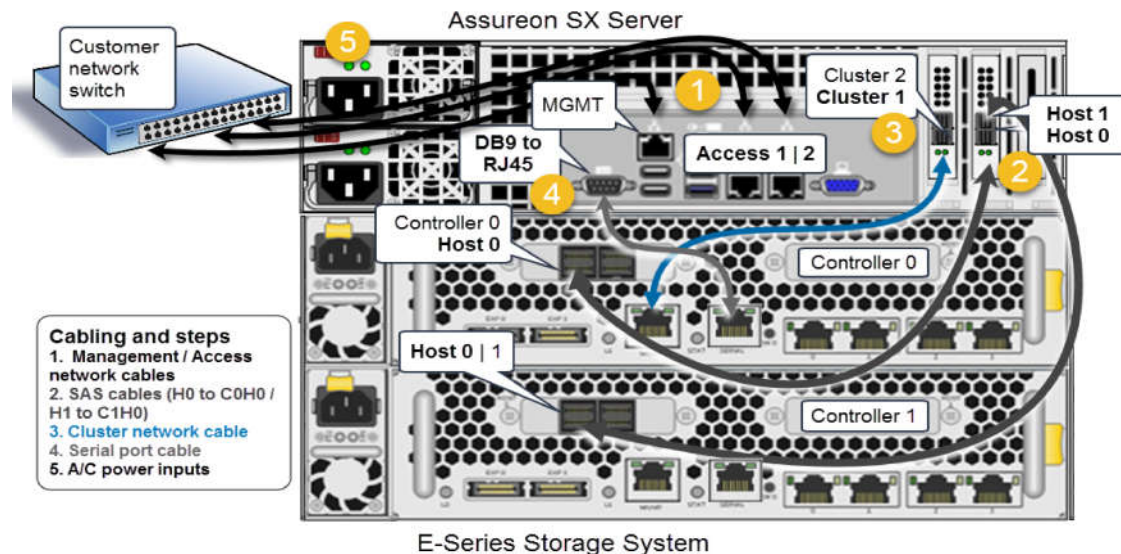
- A Connect the **Server Host 0** port to the **Storage System Controller 0 Host 0** port.
- B Connect the **Server Host 1** port to the **Storage System Controller 1 Host 0** port.

NOTE: Nexsan servers use the provided add-on SAS cards. DO NOT connect to the two SAS ports on the right-hand side of the unit. Step 3: Connect the cluster network cable

- Connect the blue CAT 6 cable (included) from the **Server Cluster 1** port to the **Storage System Controller 0 MGMT** port.

► Step 3: Hardware refresh and multi-node cluster network cabling

- A Connect from the **Server Cluster 1** and **Server Cluster 2** ports to a cluster network switch.
- B Connect the **Storage System Controller 0 MGMT** port to the **customer network switch**.



► Step 4: Connect the serial cable

- Connect from the **Server DB9 Serial** port to the **Storage System RJ45** port.

► Step 5: Connect to your power supply

To ensure continuous power and controller connectivity, you must connect the redundant Assureon PSUs to the storage rack power source.

Using the supplied power cords, connect each PSU to main power, making sure to fold down the power cord retaining clip over each one.

Both the server and the storage chassis require redundant, UPS-protected power, and must be deployed with the following A/C cord types:

110V: (NEMA 5-15P to C13) | 208V/220V (C14 to C13)




- A On the **Assureon Server**, connect the female ends of the 110v power cords to the two server power inputs.
- B Connect the male ends of the power cords to the power source in the rack.
- C On the **E-Series** (if applicable), connect the female ends of the 208/220V power cords to the power inputs.
- D Connect the male ends of the power cords to the power source in the rack.

2 Powering on Assureon components

Power on the components in this order described in this section. [To ensure proper discovery of the E-Series, before you power on the Assureon Server, we recommend that you wait until the E-Series power-on sequence has completed and all power and drive LEDs are green.](#)



- A Power on the **E-Series Storage Expansion** (if applicable).
- B Power on the **Assureon Server**.

► Step 1: Power on the E-Series Storage Expansion (if applicable)

- Press and hold the power button located on the right front panel of the chassis until the power LED lights up. 

NOTE: If a drive carrier activity LED does not light up, check to make sure the corresponding drive is properly seated in the chassis.

► Step 2: Power on the Assureon Server

- A Press and hold the power button located on the right front panel of the chassis until the power LED lights up. 
- B Verify that the power LEDs  on the left and right front control panels are illuminated to ensure that the controller nodes are receiving power and the power modules are functioning properly.
- C Verify that the drive carrier LEDs are illuminated in to indicate they are powered on.
 - **Blue LEDs:** Solid when installed and powered on, blinking when there is disk activity.
 - **Red LEDs:** Solid on: disk fail; Blinking at 1 Hz: Rebuild drive; Blinking with two blinks and one stop at 1 Hz: Hot spare; On for five seconds, then off: Power on; Blinking at 4 Hz: Drive beacon.

3 Launching the Assureon Configuration Wizard

Next, run the Configuration Wizard to configure network settings, create file systems and organizations, specify authentication methods, and create watches.

- A Using a KVM console connected to the Assureon server, login using the user name and password provided to you by your Assureon technician (for example: ASU123456\AssureonAdmin).
- B On the desktop, click the Configuration Wizard shortcut (created during installation).

You can also navigate to the following location to launch the wizard:

```
<C>\Program Files\Nexsan  
Technologies\Assureon Configuration  
Server
```

See the *Configuration Wizards Guide* on the Assureon support [Documents & Downloads](#) page for details.

4 Logging in to the System Administration interface

The System Administration Web interface is used to monitor and manage all components of the Assureon archive.

► Browser requirements:

- Internet Explorer 11 (or higher) with compatibility view off, Google Chrome, and Firefox.

► To access the main menu:

NOTE: If you are still working in the Assureon console session opened in section 2, launch Internet Explorer from there, and the Administration interface will open. If not, continue with step A:

- A Launch Internet Explorer from any server on the local server and type:
`http://<IP of F001 Assureon server>`
or
`http://<fully qualified Assureon server name>`
- B Specify the user name and password provided to you by your Assureon technician (for example: ASU123456\AssureonAdmin).
- C The **System State** home page is the default page when the UI is opened. It is used to monitor the system's activity. The main menu, located on the left side of the UI, helps you navigate the System Administration.

► To verify that the system is up and running prior to configuring:

- Use the **System State** page to check on the overall health of the system.

5 Configuring the system for archiving

The following procedures must be completed before you begin archiving.

► Step 1: Create access classifications

Classifications allow you to control access to a user's files and provide an intuitive way to search, audit and dispose of files.

- Use the **Access Classification** page to classify archived files for access and reporting purposes.
- When a classification is created, two security groups are created in Active Directory, providing a file access mechanism. For users to be able to access their files, they may need to be added to a security group. See the *Assureon Administration Guide* on the Assureon support [Documents & Downloads](#) page for details.

► Step 2: Create retention rules

Retention rules specify how long a file is kept under management. Once created, they cannot be modified or deleted. Retention rules can:

- Allow files to be stored in encrypted or compressed format.
- Set the Minimum Retention Period in days for the Flexible Retention Option.
- Set files to have either flexible or compliant retention. Flexible retention allows the retention period for files where a Minimum Retention Period has been specified to be shortened. With compliant retention files, the retention date may never be changed.

► Step 3: Create an archive folder

Use the **Archive Folders Configuration** and the **Archive Folder Editor** pages to create new or edit existing archive folders for computers. Files copied or created in archive folders are selected and processed according to retention rules and classifications.

- A** In the Archive Folder page, select a **Domain** and **Machine Name** and click **Edit**.

NOTE: Select the virtual Machine Name, if one is configured, in place of the physical Machine Name.

- B** Under the Tasks panel, click **Add Folder**.
- C** Specify a **Name** for the archive folder, as well as the folder location.
- D** Select the pre-configured Organization to specify the classifications and retention rules available for the rule.
- E** Click on the Include rule and specify classification, retention rule, and processing requests. Click **Save**.

6 Installing the Client Service

When installed on a Microsoft Windows Server, the Client Service can archive and shortcut files from local drives. When the Client Service is installed, other client-related components such as the Synchronization Utility, Assureon Explorer, and Filter Driver are also installed.

► To install the Client Service on a server:

NOTE: The user that runs the Client Service must have full access to all files on disk.

- A** Log on to the server where you want to install the Client Service.

- B** Using Windows Explorer, go to `\\<servername>\installers`, where `<servername>` identifies your Assureon server, then double-click `Assureon_FSW.exe`. The Welcome dialog appears. Click **Next**.
- C** Accept the default location or click Change to modify it. Click **Next**.
- D** Select the applicable **Cluster** option. Specify the **Virtual Machine Name**, **Virtual Domain Name** and **Shortcut Type**. Click **Next**.
- E** Select **Typical**. Click **Next**.
- F** Unless you have an ADAM instance installed, Select the **Do not use ADAM** option. Click **Next**.
- G** Specify the user (for example, `FSWMANAGER@assureon.net`). Enter the password, and click **Next** twice.
- H** Click **Install**.

User certificates

Assureon can be configured to use certificate authentication. Certificates encrypt the traffic between the Assureon client and the Assureon server and also determines the data that users have access to.

► To configure the client to use certificates:

- A** Install a certificate. You can issue a new certificate or reuse certificates across different clients.
- B** For new certificates, you must map the certificate to a user. This determines what data the certificate has access to.
- C** Configure the client to use the certificate. Please refer to the *Assureon Administration Guide* on the Assureon support [Documents & Downloads](#) page for complete instructions about the processes in this section.

Assureon Explorer

The Assureon Explorer allows you to read and restore files and directory structures from the Assureon store. The data is displayed in the Assureon Explorer in a tree-like view.

► To launch the Assureon Explorer:

- On the machine which has the client installed, double-click the Assureon Explorer desktop icon.

► To read a file:

- Double-click the file, or right-click it and select **Open**. The file will open in the correct application, based on the file extension.

7 Monitoring activity

The System Administration user interface provides a centralized tool to monitor the health of Assureon servers, clients, and external storage.

Email Alerts

Configure email alert settings. See the *Assureon Administrator Guide* for details.

- A** In the main menu, click **Events**, then the **Email Alerts** tab.
- B** Enable **Send Email Alerts**.

- C Disable all check boxes in the **Notifications** section (bottom left).
- D Click the **Enabled** option in the Daily Summary Email section (bottom right).
 - a Uncheck **Include successful data**.
 - b Check **Include Successful Clients**.
 - c Configure your preferred daily email delivery times.
- E Click **Save Settings**.

NOTE: If you have a replicated Assureon system, be sure to repeat this process at site 2. Alert notifications must be set up independently.

► **Recommended alerts to enable:**

- **The Daily Summary email** – automatically sends email to inform you of overall system health including status information on external storage and statistical information about ingested data on Clients.
- **The System State Alert email** – If a warning or error occurs for a specified duration of time (60 minutes recommended), a message is sent.

A Critical Alert email is automatically sent to the recipients specified in the recipients field in instances when a problem is detected on the server.

Clients

The **Clients** link on the System State homepage displays the amount of data that was archived during the previous day in a table. Administrators can use the **Thresholds** page to set specific values related to the number or size of files that are expected to be ingested per client.

The **Clients** page (accessed by the main menu) monitors the Assureon Client Service, including:

- Starting and stopping synchronizations,
- Viewing the status of currently executing synchronizations,
- Reporting the amount of data that was ingested by date.

► **To configure threshold parameters on the Clients panel:**

- A From the **System State** homepage, select the **Thresholds** tab.
- B Click the **Clients** panel drop-down.
- C For each threshold, specify the threshold values for **Minimum Files** and **Minimum Bytes**.
- D For each threshold, specify days of week when you want the system to process the threshold. Enter values in this format, using comas: **Su, M, T, W, Th, F, S**.

- E For each threshold, set the **Enable E-mail Alerts** and/or **Ignore Warning and Errors** options to **True** or **False**.
- F Click **Save**.

Reports

Use the **Reports** page to view storage reports in both summary and date-specific views. The reports page displays both a tabular and graphical view for reports.

► **To export a report:**

- A Click **Reports** from the main menu.
- B Click **Export**, and then select the export format: PDF, Excel (XLS and XLSX), RTF, or CSV.
- C You are prompted to save the file. Specify a file name and click **Save** to export the report.

NOTE: The application you are planning to use to view the exported file must be installed on the machine.

Change Journal

The Assureon Change Journal uses the Windows change journal to track changes made to files in archive folders.

► **To enable the Change Journal:**

- Use the Assureon Client Options dialog accessed by right-clicking the Client Service Taskbar icon and selecting **Options**.

File Synchronization application

Use the **File Synchronization** application (FileSyncApp.exe) to archive new or modified data to the Assureon server using the configured archive folder settings. The File Synchronization dialog can be started from the desktop, the start menu, or from the Assureon agent tray in the bottom right.

The synchronization must either be executed manually or scheduled using the **Archive Folders Editor** page in the System Administration.

► **Available archive types:**

- **Real-time setting** – File will be archived automatically when they are written or changed.
- **Full sync** – Every file is scanned and compared to the files already on the Assureon server.
- **Sync using archive bit** – Only files that have the archive bit set will be considered for archiving.
- **Sync using Windows change journal** – Uses the Change Journal database to determine which

