S-Series Enterprise Quick Start Guide

Introduction

The exacqVision S-Series Network Storage servers provide a fully integrated video and audio archive solution. You can increase the amount of video stored or expand beyond short-term storage without having to add recorders. Using larger capacity hard drives, the S-Series is capable of storing up to 96TB on 2U models and 216TB on 4U RAID models. The S-Series server is managed through the exacqVision client.

Installation

Before turning on the exacqVision S-Series server, ensure that you meet the following requirements.

Mounting and operating environment requirements

- Mount the exacqVision server in a dust-free, and climate controlled location where the temperature is less than 70°F, and the humidity level is less than 80% non-condensing.

  Note: Dust can cause components of the server to overheat, and elevated temperatures can contribute to premature hard drive failures.

- If the hard drives dispatch separately to the system, insert each drive into the appropriate hard drive slot, if they are numbered.

Electrical environment requirements

- Connect a monitor, mouse, and keyboard to the server.

- Connect the data NIC ports to your data Ethernet switches.
  Important: The management NIC must **NOT** be used to transmit data.

  Note: Contact Exacq technical support for S-Series configuration instructions. Failure to properly configure the S-Series and network switch might cause network failure.

Initial startup

When you start the exacqVision S-Series server for the first time, create a user name and password for the operating system, then create a root user name and password for the Enterprise Manager.

1. Turn on the exacqVision server.
2. Create a user name and password for the operating system when the logon dialog box appears. Configure operating system settings as required.
3. If prompted, log back on to the operating system with the user name and password you just created.
4. When you log back on, an exacqVision dialog box appears on the desktop. Create the exacqVision admin user name and password.

Note: This is not the same as the credentials you created to log on to the operating system. Use these credentials to log on to the exacqVision Server.

Configuring the server

To configure the exacqVision S-Series server, complete the following steps:

1. Open the exacqVision client on the S-Series.
2. From the navigation tree, select **Configure System**, and click the **Network** tab.
3. In the **Network Configuration** pane, choose one of the following options:

- If you install the server on a network that uses static IP addressing, select **Static** and enter the IP address.

- If you install the server on a network using DHCP, select **Dynamic**. If the information does not automatically configure, contact your network administrator.

4. Click **Apply**.

Setting up remote access to the servers

To configure the server through a remote exacqVision client, complete the following steps:

1. Verify that the exacqVision Client software is current. For the latest information about versions, see the Exacq website at: https://www.exacq.com/support/downloads.php
2. The Secure Shell (SSH) protocol is disabled by default. To enable SSH access, from the desktop shortcut, select **Exacq Linux Utilities** > **System options**.
3. The server can be configured through the client installed on a remote computer. Confirm connectivity with the server using the ping command and the server's IP address. If the client PC cannot communicate with the server, contact your network administrator.

Configuring the client

To configure the exacqVision client, complete the following steps:

1. Start the exacqVision client application.
2. When the local client is launched for the first time, enter the exacqVision user name and password created during initial startup.
3. Verify that the server appears in the **Systems** list with a status showing **Connected**.

Note: If the server does not connect, but you can confirm the server's ability to connect, check for anti-virus software on the remote client machine that may block the communication between the server IP addresses and ports.

Configuring for Storage

The storage is not configured by default, you must configure the storage. You can use the storage for archiving or extended storage. To configure the storage, complete the following steps:

1. From the navigation tree, select **Storage**, and click the **Network** tab.

2. In the **Network Storage Disks** pane, select the number of volumes that you want to divide the disk into.

   Note: The total storage available is equally divided into the number of volumes selected. The minimum size of each volume is 3 TB. Each volume can be used for Server Message Block (SMB) archiving or extended storage.

3. Click **Apply**.

Configuring a volume for archiving

To configure the storage for SMB archiving, complete the following steps:

1. In the **Network Storage Volumes** pane, in the **Type** list, click **SMB Archiving**. You can select multiple volumes for archiving, and attach to multiple servers.

2. Click **Apply**.

3. The drive is formatted and when ready, **OK** is displayed in the **Status** field. The volume is named diskx.x, where x represents a number. Take note of the disk name including the number and the IP address of the machine.

4. On the source server (archive initiator), configure for archiving. To point to the archive location, enter the IP address and volume name. Use the format \\IP Address\diskx.x, for example \\192.168.1.99\disk1.1. The disk connects and is ready for archiving.

Configuring a volume for extended storage

To configure the storage for extended storage, complete the following steps:

1. In the **Network Storage Volumes** pane, in the **Type** list, click **Extended Storage**.

2. Enter the IP address of the source NVR (initiator). An NVR can attach to multiple S-Series extended storage volumes, but each S-Series volume can only be configured to one NVR.

3. Click **Apply**.

4. The drive is formatted and when ready, **OK** is displayed in the **Status** field. Take note of the IP address of the machine.

5. On the source machine, that is the iSCSI initiator, or NVR server, configure for storage. Enter the IP address of the S-Series machine to attach the extended storage. The disk connects and is ready for storage.

Connections

For information on the S-Series server's back panel for 2U and 4U systems, see **Figure 1, Figure 2,** and **Table 1.**
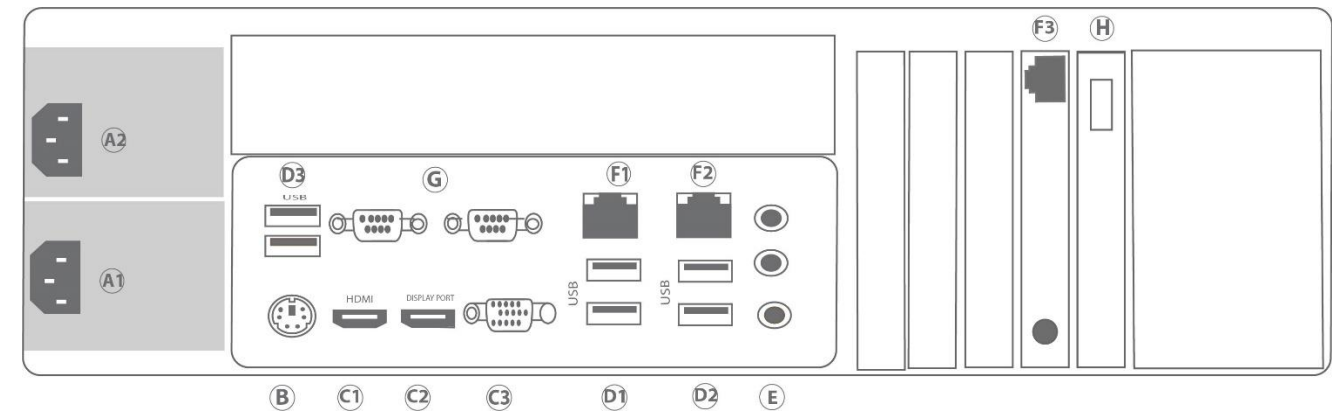

Figure 1. 2U S-Series Enterprise System back panel

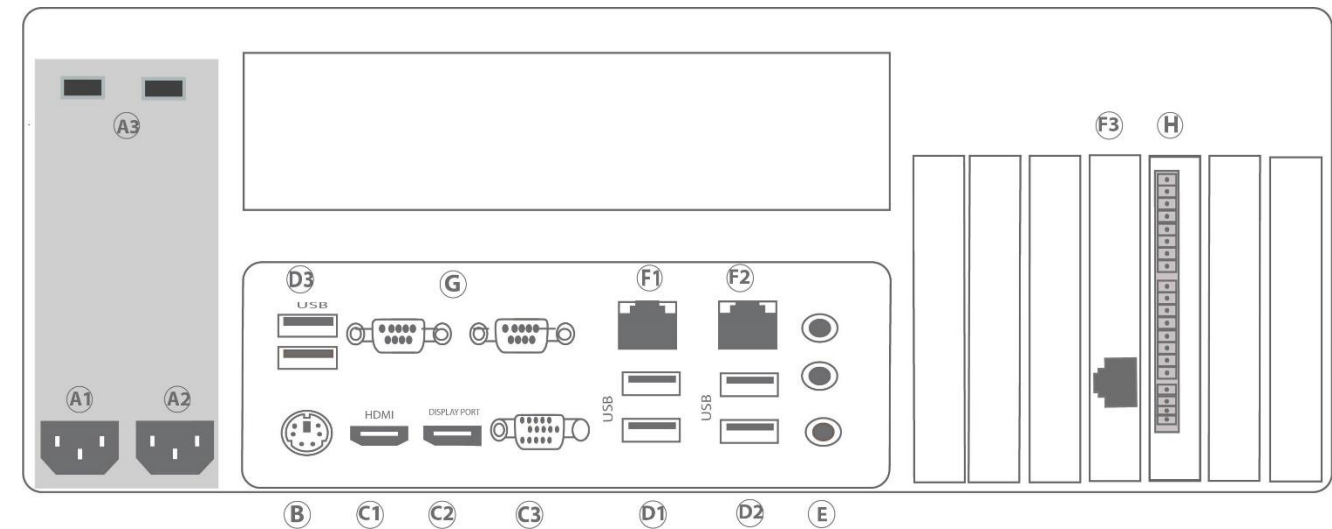Figure 2. 4U S-Series Enterprise System back panel back panel

	Name	No. of Ports	Description
A	Power	2	100-240VAC 50/60Hz. Power port (A1) and power port (A2). Connect A1 and A2 to separate power circuits. Power switch (A3).
B	PS/2 connector	1	PS/2 port.
C	Video out	3	HDMI (C1), Display port (C2), VGA (C3) You may use a maximum of two video outputs simultaneously.
D	USB	6	USB keyboard, mouse, memory device, or DVD burner. USB 2.0 (D1 and D3) and USB 3.0 (D2).
E	Audio in/out	3	Line in (blue); line out (green) and microphone (pink).
F	10/100/1000 Ethernet	3	On-board NICs. 2.5Gb (F1) and 1Gb (F2 and F3).
G	Serial port	2	Serial port
H	Input/Output card	1	In active

Table 1. 2U and 4U S-Series Enterprise back panel

Network performance configuration

Configure data ports by bonding to the same network switch and follow the switch manufactures instructions to enable bonding. For maximum performance, configure the network switches for IEEE 802.3ad Link Aggregation, and enable jumbo frames.