Feature Focus Guide:

Aloha Spy

Core Product: Aloha Quick Service, Aloha Table Service
Last Updated: May 30, 2024

Contents

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Revision Record

Date	Version #	Description
Prior to 01/17/2023	v4.3.91+	Introduced Aloha Spy.
	v5.3.19+	Added the capability of Aloha Spy to detect CtlSvr running on the Aloha BOH file server, across the Aloha network, making it unnecessary to register CtlSvr on the terminals.
	v6.1.20+ v6.2.13+ v6.3.9+ v6.4.638+	Modified AlohaSpy.exe to accept IP addresses that do not include zero padding to make each octet three digits long.
	v6.7.0+	Modified AlohaSpy.exe to provide output by way of TCP/IP and the COM ports to record modifier activities at the FOH terminals.
	v19.3+	Updated the Aloha Spy Feature Focus Guide to reflect CFC and Aloha Manager.
01/17/2023		Converted document to use new templates. Updated the front cover and back page to reflect new NCR branding.
05/28/2024		Updated document to reflect NCR Voyix branding.

About Aloha Spy

Aloha Spy at a Glance	
Core Product	Aloha® Quick Service, Aloha Table Service
Complementary Products	None
Separate License Required?	No
Other References	Aloha Quick Service Manager Guide, Aloha Quick Service Server Guide, Aloha Quick Service Reference Guide, Aloha Table Service Manager Guide, Aloha Table Service Server Guide, Aloha Table Service Reference Guide

The Aloha® Point-of-Sale (POS) system uses the Aloha Spy feature to interface with video security systems. AlohaSpy.exe, part of the Aloha POS system, gathers information from Front-of-House (FOH) terminals via TCP network connection through a specific, user-specified TCP port. AlohaSpy.exe passes this information through an appropriate serial port (COM port) to the security system at a user-specified IP address. Some security systems may alternatively make use of USB or RJ45 connections, but these connection types are proprietary, and may use their own program files in conjunction with AlohaSpy.exe.

Video cameras transmit their images to the security system using the Aloha network or a direct connection to the security system, to one or more remote video monitors. The monitors display images from the cameras with text superimposed over them, as provided and formatted by the security system based on information received from AlohaSpy.exe. The text appearing over the video image reflects actions taken by employees as they use the FOH terminals.

The amount of data, and the method by which it displays on the video monitors may be configurable, based on the system supplied by the manufacturer. Each manufacturer defines the way in which it superimposes text over video images received from the cameras. Text may appear in columns, tables, separate windows, or any combination of these. Textual information appearing on the monitor reflects real-time activities taking place on the terminal, and also becomes part of the image, as recorded in the storage depot. Security systems may store the video signal on a DVR, or they may use a secondary file server.

The Aloha system also records information about transactions and operator actions to a Debout.spy file, as operators touch FOH functions.
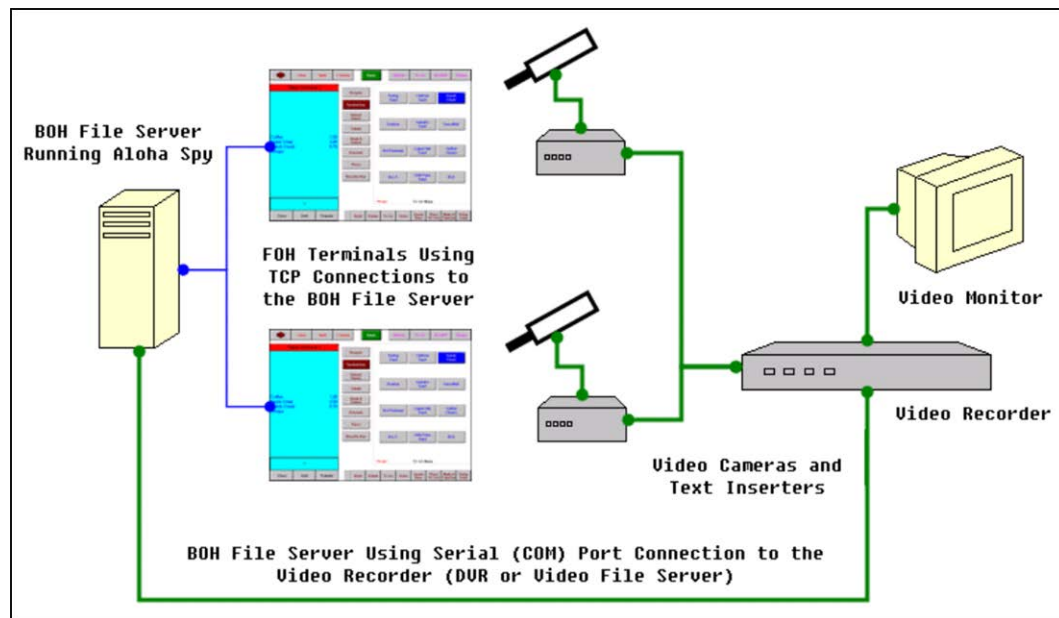
Figure 1 Aloha Spy Hardware Configuration Example

> **Tip**
> Hardware configuration for Aloha Spy is entirely dependent upon the security system in use. Figure 1 shows only one example of hardware configuration a security system manufacturer may require.

> **Tip**
> You can install any application required by the installed security system on the FOH terminals without having to register CtlSvr on the terminals. Aloha Spy detects CtlSvr running on the Aloha BOH file server, across the Aloha network, and functions accordingly.

Please contact your NCR Voyix Account Executive or Authorized NCR Voyix Partner for the most up to date information regarding security systems recommended for use with the Aloha POS system and Enterprise Solutions.

Configuring Aloha Spy

This section details the configuration requirements within Aloha Manager and Aloha Configuration Center (CFC) for Aloha Spy. If you are an experienced user, refer to Procedures at a Glance for abbreviated steps. If you prefer more detail, continue reading this document.

Aloha Spy Procedures at a Glance:	
If you are viewing this document using Adobe Acrobat Reader, click each link for detailed information regarding the task.	
1.	Locate **available ports** and test for availability. See page 6.
2.	Access **Maintenance > Business > Store > Store Settings** tab **> Security** group to enable Aloha Spy. See page 7.
3.	Access **Maintenance > Hardware > Terminals** to configure a terminal to use Aloha Spy. See page 8.
4.	Access **This PC** to create the AlohaSpyPort environment variable. See page 9.
5.	Access **Utilities > Refresh POS & All Products** to refresh the data. See page 10.
6.	Access **Start > Program > Windows Explorer** to create or edit the AlohaSpy.ini file. See page 14.
7.	Access **Start > Run** to register or stop the AlohaSpy service. See page 15.

Configuring Aloha Quick Service or Table Service to use the Aloha Spy feature is relatively straightforward. Install all hardware, cabling, and connections in accordance with the manufacturer's requirements, then configure Aloha to interface with the equipment. Each security system manufacturer makes its own decisions as to hardware topography, with regard to DVRs, secondary file servers, text inserters, cameras, associated cabling, and so on. Major components must come from the manufacturers directly. Generic components, such as cables, must meet specifications provided by the manufacturers.

Locating available ports

Before you begin any configuration related to Aloha Spy, you must identify an available TCP port for Aloha Spy to use for cross-network communication. Although TCP port 3999, the example used in this document, is almost always available, you should verify its availability before you use it.

****NCR Voyix provides a utility called NetInfo.exe that you can use to verify a port is available, and to identify unused ports. This utility is available in the \Misc\NetInfo directory on an Aloha software installation CD, and from the Aloha FTP site. Copy the utility to the Aloha Back-of-House (BOH) file server, prior to use.

To test a specific port number for availability:

1. Double-click Netinfo.exe to display the Network Information dialog box.
2. Verify TCP is selected as the mask setting.

3. Type the number of a port you want to use in the Port Number text box.

4. Click Query Port to determine if the port is currently in use. The message, 'No Service on this Port,' appears in the Result text box if the port is not in use.If the port is currently in use, information appears in the Result text box indicating the port is in use.

   If individual ports queried using the previous procedure are in use, you can use the NetInfo utility to identify an unused port.

To identify an unused port:

1. Click **Get Service by Ports (TCP)** in the NetInfo utility user interface. A list of ports in use appears in the list box below the button. This operation takes several seconds to complete.

2. Select a **port number** not currently listed for use with Aloha Spy.

> 💡 **Tip**
> We recommend a port in the range of 3000-3999.

3. Click **Exit**.

Enabling and defining Aloha Spy functionality

After identifying an unused TCP port, and obtaining the IP address of the Aloha BOH server, you are ready to configure the Aloha system to use Aloha Spy. Begin this process by enabling the Aloha Spy feature itself.

To configure the Aloha system to interface with a video security system:

1. Log in to **Back-of-House (BOH)**.
2. Select **Maintenance > Business > Store**.
3. Select the **Store Settings** tab.

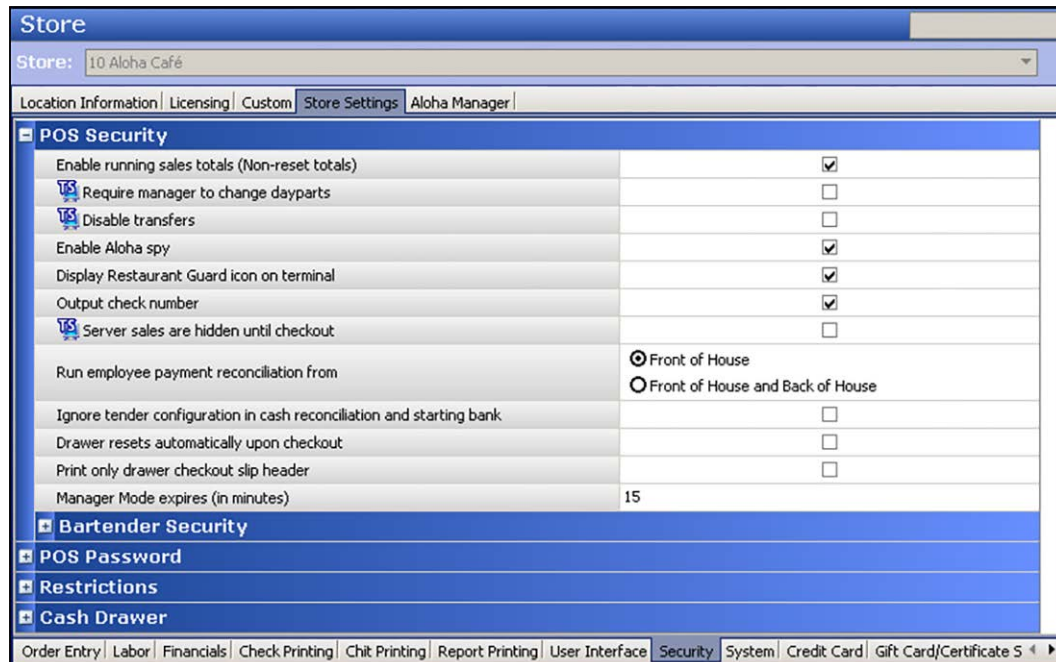4. Select the **Security** group located at the bottom of the screen.

Figure 2 Store Settings Tab - Security Group

5. Select **Enable Aloha spy** to activate the Aloha Spy feature with interfaces with the TVS security video.

6. Select **Display Restaurant Guard icon on terminal** to indicate that the employee theft prevention system is active.

7. Select **Output check number** to send the guest check number to the video security monitor, recording the number as part of the video image while continuing to record the check ID number in the Trans.log.

8. Click **Save** and exit the **Store** function.

Configuring terminals to use Aloha Spy

After configuring the Aloha system to interface with the security system by enabling Aloha Spy, you must configure each terminal to which a camera is attached, to work as an Aloha Spy server.

To configure a terminal to act as an Aloha Spy server:

1. Select **Maintenance > Hardware > Terminals**.

2. Select a **terminal**, such as '1 SERVER STAT #1.'

3. Select the **Output Devices** tab.

Figure 3 Terminals - Output Devices Tab

4. Under the 'Aloha spy server' group bar, type the **Port** number. [3999]
5. Type the **IP address** or the c**omputer name** to which the security system is attached.

> 💡 **Tip**
> The Aloha system can resolve server computer names easily, in a DHCP environment. If you are not using DHCP, type the actual IP address to which AlohaSpy.exe is to send its data. This IP address may name the location of the Aloha BOH file server, or it may name a secondary peripheral device, provided or specified by the system manufacturer, for receiving the data stream representing terminal activity.

6. Click **Save** and exit the **Terminals** function.

Creating the AlohaSpyPort environment variable

You must create the AlohaSpyPort environment variable on the BOH file server, naming the specific TCP port number by which Aloha Spy and the FOH will interface. You must identify an unused TCP port number, name this port in the new environment variable, and define the port in Aloha Manager. Aloha displays an error message if you do not define this environment variable. The example TCP port in this document, number 3999, is valid for many systems, but you must verify it is free before you attempt to use it, to prevent conflicts.

Windows® 2000, Windows XP, and Windows 2003 use essentially identical processes for configuring environment variables, although the dialog boxes appear different from one operating system to the other.

To create an environment variable for video cameras in use with Aloha Spy:

1. In the Search box, type **This PC**.

2. Right-click **This PC** and select **Properties**. The Control Panel > System and Security > System dialog box appears.

3. Select **Advanced system settings**.

4. Select E**nvironment Variables**.

5. Under the 'System variables' box, click **New**.

6. Type **AlohaSPYPort** in the Variable name text box.

7. Type the **port number** previously established as unused in your system in the 'Variable value' text box.

8. Click **OK** to create the variable.

9. Click **OK** to close the Environment Variables dialog box.

10. Click **OK** to close the System Properties dialog box.

11. Re-start the **computer** to initialize the new environment variable.

Refreshing the data

After all settings are in place in Aloha Manager, you must select Utilities > POS > Refresh POS & All Installed Products to transfer the new information to the FOH terminals, or wait for the End-of-Day (EOD) process to accomplish the data refresh for you. If you run the refresh prior to the EOD process, select 'Automatically restart all POS terminals' and click OK to continue. After the data refresh is complete, all new settings become operational across the Aloha network.

> ⚠ **Caution**
> Refresh data with caution and never during peak hours of operation. All FOH terminals reboot during a refresh and are down for a short period of time.

Create and configure AlohaSpy.ini

The AlohaSpy.ini file, stored in the %Iberdir%\ directory on the BOH file server, determines how terminal messages route to the security system. Create and edit this text file to reflect the installed hardware, and the settings established in Aloha Manager. AlohaSpy.ini requires three types of sections, each of which you must repeat as often as necessary to account for all security cameras in use, and the terminals to which they are attached.

The first section refers to the serial port on the Aloha BOH file server, if the security system is that computer through a serial connection. Communication occurs between the FOH terminals and the BOH server, based on the IP address and the TCP port specified in Aloha Manager (page 8), with the same TCP port also specified in the AlohsSpyPort environment variable (page 9). You will need one section like this in the file to describe the port in use. Match the settings in the COMM section to the settings for the port you are using, as stated in the Windows Device Manager.

- [COMM1]
- BAUDRATE=9600
- PARITY=0
- STOPBITS=1

COMM# Section	
Specifies the COM, or serial, port wot which the security system is attached on the Aloha BOH file server, as appropriate. In all cases, use the string 'COMM,' and provide values, such as baud rate, parity, and stop bits, as stated in the Windows Device Manager.	
BAUDRATE	Specifies the speed at which the video cameras communicate.
PARITY	Determines if the serial port checks for parity bits, within the video transmission stream.
STOPBITS	Determines if the serial port requires a terminating, or 'stop' bit for each transmission data segment.

The second section refers to the security camera, and the type of port to which it connects. You will need one section like this for each security camera. Change the 'DEVICE#' string in the header for subsequent sections, if you add more cameras, e.g. '[DEVICE2]' and '[DEVICE3].'

- [DEVICE1]
- DEVICETYPE=COMM
- DEVICETYPEID=1

DEVICE# Section	
Specifies the security camera number. This number is one (1), unless the site uses more than one camera. Each DEVICE heading requires a corresponding TERM heading.	
DEVICETYPE	States the type of port to which the video camera is attached on the security system. In most cases, set this value as 'COMM,' unless otherwise specified by the security system manufacturer.
DEVICETYPEID	Determines if the serial port checks for parity bits, within the video transmission stream.

The third section identifies the terminals monitored by Aloha Spy, the type of security system installed at the site, and associates the terminal with the camera monitoring it. The following are example sections showing three terminals, all being monitored by the same camera.

- [TERM1]
- DEVICEID=1
- SPYTYPE=TVS
- [TERM2]
- DEVICEID=1
- SPYTYPE=TVS
- [TERM3]
- DEVICEID=1
- SPYTYPE=TVS

If a separate camera monitors each terminal, then each subsequent section will contain a 'DEVICEID=' statement followed by a different number, e.g. 'DEVICEID=2,' and 'DEVICEID=3.'

TERM# Section	
Specifies the terminal being monitored by the video camera, one section (header) for each terminal, by using the terminal ID number, as in TERM3. Each TERM section includes information about the security system type, and the camera ID number, the DEVICEID.	
DEVICEID	States the ID number of the security camera attached to the terminal. If there is only one camera, this number is one (1).
SPYTYPE	Identifies the type of security system installed at the site. AlhaSpy.exe currently supports the value 'TVS,' although other strings may work if they are identical in each TERM# section.

Many popular security systems available today use a peripheral device that accepts data directly from the security cameras and text inserters, with a separate data input connection from the Aloha BOH file server. In all cases, refer to documentation provided by the security system manufacturer, as to hardware configuration.

Examples of AlohaSpy.ini files

Two examples of AlohaSpy.ini files appear in this section, to help you see how the example sections work together to define a viable working environment. The intent of these examples is to show how the different types of sections work together. These examples may or may not be applicable to your security system, and how its manufacturer wants the file configured. Contact your security system manufacturer for specific recommendations before you create your own AlohaSpy.ini files.

Example of AlohaSpy.ini file with one camera monitoring three terminals

In this example, one camera is mounted so that three terminals are in plain sight. The text inserters receive input from all three terminals, and superimpose the data on the video image in real-time, and in the recorded image.

- [COMM1]
- BAUDRATE=9600
- PARITY=0
- STOPBITS=1
- [DEVICE1]
- DEVICETYPE=COMM
- DEVICETYPEID=1
- [TERM1]
- DEVICEID=1
- SPYTYPE=ABC
- [TERM2]

- DEVICEID=1
- SPYTYPE=ABC
- [TERM3]
- DEVICEID=1
- SPYTYPE=ABC

Example of AlohaSpy.ini file with two cameras monitoring three terminals

This example illustrates an installation in which one camera monitors terminals #1 and #2, and a second camera monitors terminal #5. Terminals #3 and #4 are not monitored in this example.

- [COMM1]
- BAUDRATE=9600
- PARITY=0
- STOPBITS=1
- [DEVICE1]
- DEVICETYPE=COMM
- DEVICETYPEID=1
- [TERM1]
- DEVICEID=1
- SPYTYPE=ABC
- [TERM2]
- DEVICEID=1
- SPYTYPE=ABC
- [DEVICE2]
- DEVICETYPE=COMM
- DEVICETYPEID=1
- [TERM5]
- DEVICEID=2
- SPYTYPE=ABC

To create or edit the AlohaSpy.ini file:

1. Select **Start > Program > Windows Explorer**.
2. Select the **\AlohaQS** or the **\Aloha directory**, depending on if you are using Quick Service or Table Service.
3. Right-click a blank area in the Aloha directory, and select **File > New > Text Document**.
4. Type **AlohaSpy.ini** and press **Enter**.
5. Click **Yes**, if a message appears asking you if you want to rename the file.

6. Double-click **AlohaSpy.ini** to edit the file using Notepad.

7. Type the **command lines** according to the specifications.

8. Select **File > Save** to save the file.

9. Select **File > Exit** to close the file.

Register or stop the AlohaSpy service

After all configuration is complete, and the AlohaSpy.ini is in place, the only task left is to register the AlohaSpy.exe program as a service.

To register AlohaSpy.exe as a service:

1. Select **Start > Run**.

2. Type **Cmd** in the Open text box.

3. Use the **CD** command to change to the \AlohaQS\Bin or \Aloha\Bin directory, depending on if you are using Quick Service or Table Service. For example, use the command CD\BootDrv\Aloha\Bin, if this is the location of your Bin directory.

4. Type the following **commands** at the \…**\Bin** command prompt:

    ○ Alohaspy /service

    ○ Net Start Alohaspy.exe

    ○ RegSvr32 Aspyps.dll

5. Type **Exit** at the command prompt to close the command window.

    If you are already using the AlohaSpy service in standard mode and need to restart it in debugging mode, you must use a command prompt routine to accomplish this. Use the procedure above, substituting the following commands to restart the AlohaSpy service in debugging mode:

    ○ Net stop Alohaspy.exe

    ○ Alohaspy.exe /unregister

    ○ Alohaspy.exe /Service /Debug

    ○ Net Start Alohaspy.exe

AlohaSpy.exe outputs debugging information to %Iberdir%\Tmp\Debout.spy, if enabled in Aloha.ini.

Create and populate Debout.spy

When you create AlohaSpy.ini, Aloha creates Debout.spy in the %Iberdir%\Tmp directory. The system logs error messages in this file, such as incorrect port setup, and FOH transactions processed through the security system. To cause the system to begin recording detailed information from the security system, add the following variable to Aloha.ini in the NewData directory:

DEBOUTALOHASPY=TRUE

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Select Utilities > View Debugging File, in Aloha Manager, and select the debout file from the list to view its contents.

FOH activities recorded in Debout.spy

As employees interact with FOH terminals, Aloha Spy passes information about these activities to the video security system and records the information in Debout.spy, located in the %Iberdir%\Tmp directory. Although each video security system may make use of different Aloha button functions, each system tends to accomplish the following:

- Receives employee activity information from the Aloha system, based on buttons touched by the employee.

- Outputs employee activity as visual text strings to the video monitor, as an overlay on the video image on the monitor, often at the side or the bottom of the main image.

- Records the video image and the visual text strings together as a single image, to the DVR or another computer, depending on the nature of the system.

Aloha Spy, Feature Focus Guide

NCR Voyix welcomes your feedback on this document. Your comments can be of great value in helping us improve our information products. Please contact us using the following email address: Documentation.HSR@NCRVoyix.com