## **Eventide®**



User Manual

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## 1. Introduction

### 1.1. Welcome

Welcome and congratulations on your purchase of an Eventide<sup>®</sup> Smart Edge Capture Device™.

Eventide invented the digital communications recorder in 1989. With thousands of communications recorders in service in such diverse applications as corporate call centers, NORAD, nuclear submarines, NASA, maximum security prisons, air traffic control, and 911 call centers throughout the world, Eventide continues its tradition of combining unmatched ease-of-use with mission-critical reliability.

The Eventide Smart Edge Capture Device™ is the ideal solution to capture and buffer audio from supported interfaces and reliably transfer the audio (and supported in-band metadata) to one or more NexLog DX-Series™ Recording Solutions. Using Smart Edge Capture Devices™ in combination with the NexLog DX-Series™ line of mission critical communications recording solutions enables a robust, reliable, and fully manageable distributed recording solution.

This manual will help you maximize the use of your purchase. It includes:

- · How to install and upgrade your Smart Edge Capture Device™
- · Step-by-step instructions on how to set up and operate your Smart Edge Capture Device™
- Descriptions of all of the features unique to the Smart Edge Capture Device™

To help us reach you with information on updates and upcoming new features, please send us your warranty card. Eventide does not provide your information to marketers or any other outside organizations.

# 1.2. About the Smart Edge Capture Device™

#### 1.2.1. Recording System Compatibility:

The Smart Edge Capture Devices™ are fully compatible with all NexLog DX-Series™ recording solutions:

- NexLog 740 DX-Series Recording Solution
- · NexLog 840 DX-Series Recording Solution
- NexLog DX-Series™ Virtual Recording Solution (VM)

The Smart Edge Capture Device™ requires a NexLog DX-Series™ recording solutions for client access, playback and long term storage of recordings and is not intended to be used as a standalone device.

#### 1.2.2. Reliability and Security

Smart Edge Capture Devices™ capture, buffer and accurately transfer audio recordings and supported metadata to DX-Series recording solution(s). In the event of network delays or networking outages, the DX-Series Smart Gateways will continue to capture and buffer recordings locally, and then transfer recordings when network connectivity to the target NexLog DX-Series™ recorder(s) has been restored. Transfers via reliable TCP/IP encrypted connection.

#### 1.2.3. Configurations

Smart Edge Capture Devices™ are available in fifteen different easy-to-order configurations.

- · 8, 16, or 24 Analog channels
- · 8, 16, or 24 Digital PBX Tap channels
- · 24 or 48 T1 Tap channels

30 or 60 E1 Tap channels

· 8, 16, 24, 32, or 40 VoIP SPAN channels

### 1.2.4. Management and Monitoring

The NexLog DX-Series™ recording solutions enable centralized management of any connected Smart Edge Capture Devices™. The browser-based management utility conveys operational status, transfer rates and enables management of recording channels.

#### 1.2.5. Hardware/Software Profile

The DX-Series Smart Gateway is a self-contained Linux based enterprise grade 1U rack-mountable appliance. Smart Edge Capture Devices™ operate on a subset of the NexLog DX-Series™ software platform.

### 1.2.6. Software Update Subscription (DXSUS)

The first 12 months of DXSUS coverage are included with purchase. Purchase additional 12-month periods of DXSUS coverage for ongoing assured security, reliability and supportability.

### 1.2.7. Redundant Transfer Option

Smart Edge Capture Devices™ include a "CAS" transfer license to 1 target NexLog DX-Series™ recording solution. Additional "CAS" transfer licenses can be purchased for transfer to additional NexLog DX-Series™ recording solution(s).

## 1.3. Customer Support Information

Eventide is committed to your satisfaction. If, after using this manual, you still have questions about the operation of your Smart Edge Capture Device™, contact the Eventide Service department at service@eventide.com or call (201) 641-1200.

The Eventide web site has additional information that may be helpful. Go to www.eventidecommunications.com.

# 1.3.1. Identifying Smart Edge Capture Device™ Model and Version

You may need to identify the software version and serial number for the following products/components:

- Navigate to the Smart Gateway's address (example: http://192.168.2.100) with a web browser.
- Log into the Smart Gateway here. Note that the default logon credentials for the Smart Gateway (before they are changed by the administrator) are User Name: Eventide / Password: (serial number of the Smart Gateway). The Serial number of the Smart Gateway can be found on a sticker on the Smart Gateway.
- The Smart Gateway Serial Number and Current Firmware Version should be displayed.

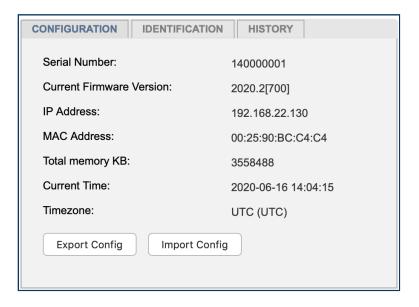


Fig. 1.1 System Info (with Serial and software version)

Alternatively, you can get the software version and serial number at the Smart Edge Capture Device™ by connecting a monitor and mouse:

- · Log into the Smart Edge Capture Device™
- · Click the System menu option and then System Info.
- The Smart Gateway Serial Number and Current Firmware Version will be displayed, as above.



## 2. Smart Edge Capture Device™ Setup

# 2.1. Unpacking the Smart Edge Capture Device™

#### **A** Caution

Use care and assistance when lifting and handling the Smart Edge Capture Device™.

Check the box for damage. A crushed box, holes, or water damage, for example, could indicate that the Smart Edge Capture Device<sup>™</sup> has been damaged. Open the box and inspect the Smart Edge Capture Device<sup>™</sup> and associated accessories. If the equipment appears damaged contact Eventide right away and save the damaged box and packaging!

Check that the unit is delivered with the expected configuration and accessories. The packing slip states the contents. In addition, the box will include:

- · One power line cord per power supply module
- · One server software DVD disk labeled "Eventide Smart Edge Capture Device™ Software"
- · A disk with this manual and other documents.

Other accessories may be included, depending on your order.

# 2.2. Smart Edge Capture Device™ General Specifications

Table 2.1 Specification Summary for the Smart Edge Capture Device™

Smart Edge Capture Device™	
Product view	Contide Contid
Remote software	Web browser based Smart Edge Capture Device™ Configuration Manager
Operating System	Linux (embedded)
Call Record Database	Internal relational database with programmable retention
	Compression Rates (Kbits/s): 13.3, 16, 32, 64 Mu-law
Channel Inputs	Frequency Response: 200 to 3400 Hz
	Signal to Noise: -50dB
	Crosstalk: -60dB
	AGC: 24dB Boost
	Impedance: >10 K ohm
Network	Ethernet 1,000 Mbps (Qty. 2)
Height	1.75 inches (1 rack units)
Depth	14 inches
Power	350 watts
Power supplies	Single Fixed
Weight	10.5 lbs (4.8 kg)
Analog channels	8-24
Digital PBX channels	8-24

Smart Edge Capture De	vice™
T1/E1/ISDN PRI channels	24-60
VoIP channels	8-40
Standard hard disk storage	128GB SSD

#### 2.2.1. Rear Panel Details:



Fig. 2.1 Typical Smart Edge Capture Device™ Rear Panel

The rear panel of this Smart Edge Capture Device™ shows (from left to right): power supply, a RS-232 port for serial ANI/ALI and SMDR feeds or serial time sync, two USB 2.0 ports, two USB 3.0 ports, VGA and one slot for a telephony board.



Fig. 2.2 Diagram of Smart Edge Capture Device™ Rear Panel

1 - Power Module	6 - Ethernet Device 1 (Eth0)
2 - Power Plug (NEMA 5-15P)	7 - Ethernet Device 2 (Eth1)
3 - Serial Port 11	8 - VGA Output
4 - USB 2.0 Ports	9 - Diagnostic Port (not used)
5 - USB 3.0 Ports	10 - Add-on Telephony Board Slot (optional)

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The serial port is a standard RS232 DB 9 port.

## 2.3. Bench Test

Before installing the unit, you may want to run a brief bench test, especially if you are unfamiliar with Eventide Smart Edge Capture Devices<sup>TM</sup>. The following steps are a suggested bench test procedure, which you may modify as you wish. If you change settings, note the defaults first and set them back to the defaults after you complete the test.

- · Connect a Monitor, Keyboard, and a Mouse.
- Plug in the provided line cords to the appropriate line voltage.
- Unlock the door and press the power switch. The boot process will start and diagnostic messages will scroll by on the monitor.
- After several minutes, the screen will show the Login page of Configuration Manager. Login with the default user/password which is Eventide and the serial number of this Smart Edge Capture Device<sup>TM</sup>.
- Navigate to the Recording Interface page to see the channels that the Smart Edge Capture Device™ recognizes as ready for recording. For example, if you ordered a 16-channel unit (whether analog-only, digital-only, or a combination), you should see 16 green steady indicators when you expand the board view on this page.
- Likewise, for 24 channels, 32 channels, and so on. This is a good time to make sure you see the expected number of channels.
- Look at the menu on the left of the display to view the pages of the Configuration Manager.
- Choose System: Date & Time to configure the time, time zone and time sync source for this system. We recommend doing this before making any recordings.
- Choose Networking: Network Interfaces to configure the IP address for this system. This will allow you to connect to and administrate the Smart Edge Capture Device™ remotely.

When you have finished viewing each screen, you can shut down the unit as follows:

**Important!** Do not force a shutdown by pulling the power plug or using the power switch. A forced shutdown can result in corrupted files and loss of data.

- 1. Select System.
- 1. Select Power Off.
- 2. Select the Shutdown button.
- 3. Enter a reason for the shutdown.
- 4. Answer \*OK\* to the prompt.

After the Smart Edge Capture Device™ completes its controlled shutdown procedures, the unit will automatically shut down.

## 2.4. Installation

#### 2.4.1. General

Smart Edge Capture Devices™ are computer equipment. They have essentially the same requirements, both physical and electrical, as standard servers, and similar attention should be paid to their environment to assure long life and reliable operation. Site preparation, especially for larger installations, may include providing rack cabinets and concentrating communication wiring – phone lines, radio, etc. – nearby.

### 2.4.2. Operating Limits

The installation should allow the units to operate within their electrical and physical operational limits.

#### **Table 2.2 Operating Limits**

ts

Parameter	Range or Limits
Frequency	50 - 60 Hz
Power (typical/ max)	Smart Edge Capture Device™ 200W/350W
Temperature	Operating +5C (41F) to 40C (104F)
Humidity	10% - 80% relative, non-condensing
Altitude	-10,000 to +10,000 feet operating (to 22,000 feet non-operating). If operated at high altitudes, take special care that airflow is unrestricted by dust or obstacles.
	These units contain hard disk drive storage units and mechanical components that are sensitive to mechanical vibration. They are intended for operation in fixed locations.
Vibration	Typical vibration limits for the hard disk drives are as follows:
(Hard Disk Drives)	Operating: .2 G, 5-300 Hz
D11103)	Non-Operating: 1 G, 5-300 Hz
	Note: There is a variant of the NexLog DX-Series™ available for high vibration environments, which adheres to MIL-STD-167-1A (25 Hz)
	Typical shock limits for the hard disk drives are as follows:
Shock (Hard	Operating: 1 G, 11 ms half-sine
Disk Drives)	Non-Operating: 40 G, 11 ms half-sine
	Note: There is a variant of the NexLog DX-Series™ available, that has passed MIL-S-901D medium weight, Grade "B shock testing.
Orientation	The Smart Edge Capture Device™ should always be mounted on a flat, non-sloping surface.

#### 2.4.3. Location Considerations

When choosing a location, consider the following:

• Operating Limits. The location must respect the unit's operating limits, as listed in the Operating Limits section of this manual.

- **Convenience.** If the unit will be operated from its front panel, then it should be comfortably accessible to the operator. Service personnel should have access to the unit. If the unit is to be installed in a rack, special rack units that provide a horizontal writing surface are commercially available.
- Security. If the unit must be physically secure, then it can be placed in a locked equipment room with limited access. This will also help ensure data security. Consider that a user with access to the unit can remove power, disconnect the input cables, monitor calls, and do other things to compromise your data. Logins are no protection against a determined attacker with physical access to a machine. In short, if you are concerned about malicious users making a purposeful effort to gain unauthorized access to your data, then the only real protection is to place the unit in a secure location.
- Cable lengths. For analog signals, such as POTS lines and radio receiver outputs, cable lengths are not likely to be an issue. An adequate level can be obtained hundreds of feet from the signal source. The unit has programmable adjustments for low or high signal levels. That being said, shorter cable lengths will create less signal attenuation and pick-up less noise than longer cable lengths. For tapping digital PBX telephones and T1/E1 circuits, maximum cable lengths are extremely important, and can be different for different makes & models of telephone systems. Contact Eventide technical service for digital-tap cable length information for your particular digital phone system or T1/E1 circuits.
- Particulates. The fans and hard drives, can be damaged by smoke and dust. If you find dust build up on the surfaces or the fans being clogged, consider changing the location.
- Power dropouts or surges. The unit should be protected from power dropouts and surges. The chosen location should have line power available that is not on the same circuit as equipment that draws a large current on start-up, such as electric motors or compressors or banks of fluorescent lights. Line voltage fluctuations, brown-outs, and power outages can result in loss of data and damage to the unit. An Uninterruptible Power Supply is required to mitigate these problems. For a list of approved UPS units, see Connecting AC Power and UPS (Uninterruptible Power Supply).
- Spilled liquids. Liquids spilled on the unit can damage it. The location should not encourage people to place coffee cups on the unit, for instance.
- Vibration and Shock. Vibrating or physically shocking the unit while the hard drives are operating could damage the hard drives. The location should not be subject to vibration or jolting while the unit is operating.

#### 2.4.4. Mounting Options

As normally provided, the unit can be mounted on any flat, non-sloping surface that can bear its weight. It can be rack mounted if the rack has a shelf to support it, and the supplied mounting ears can be attached to the rack with the rack screws provided, in order to prevent casual removal. The unit must not be mounted solely with the mounting ears and rack screws!

If no rack shelf is available, a rack-slide rail install kit, which includes slide rails, rear slide supports, brackets, and mounting hardware, can be ordered:

· 4-post Rack-Slide Rail Kit for the Smart Edge Capture Device™: Eventide Part# 324430

Alternatively, a center rack mounting option is also available:

· 2-post Center Rack Mount Kit for the Smart Edge Capture Device™: Eventide Part# 108109

# 2.4.5. Connecting AC Power and UPS (Uninterruptible Power Supply)

The Smart Edge Capture Device™ uses "universal" power supplies. All systems ship with US type power cords, end customer must provide a country appropriate power cord. This means you can plug the Smart Edge Capture Device™ into any line (mains) voltage from 100 volts to 240 volts nominal. However, to prevent unplanned shutdowns caused by power glitches or interruptions, Eventide strongly recommends the use of an Uninterruptible Power Supply (UPS) unit that meets certain minimum characteristics:

The UPS must provide power for a long enough period to allow orderly shutdown of the Smart Edge Capture Device™ in case of power failure.

If your facility has a backup generator, the UPS should provide power long enough to operate the Smart Edge Capture Device™ until the generator becomes operational following the start of a power failure (typically a minute or less) PLUS a period long enough to allow orderly shutdown of the Smart Edge Capture Device™ in case of generator failure.

The UPS should be an approved model, i.e., one that can communicate its status to the Smart Edge Capture Device™. This isn't strictly necessary if your facility is manned and personnel are trained to shut down the Smart Edge Capture Device™ using the appropriate procedure in case of power failure

before the UPS battery drains. However, an approved UPS will keep the Smart Edge Capture Device™ running and automatically signal to the Smart Edge Capture Device™ to perform a safe shutdown when its battery power gets low.

Eventide offers commercial-grade, heavy-duty rack-mount UPS units. Eventide has tested the following units and confirms they work with the Smart Edge Capture Devices™.

Manufacturer	Rating	Rack Height
APC / Tripp-Lite	1500VA, 940W, 120V	2U (3-1/2 inch)
APC / Tripp-Lite	1500VA, 940W, 240V	2U
APC / Tripp-Lite	750VA, 120V	2U
APC / Tripp-Lite	750VA, 240V	2U
APC / Tripp-Lite	3000VA, 2700W, 120V	2U
APC / Tripp-Lite	3000VA, 2700W, 240V	2U

In addition, consumer-grade UPS units may be available locally and are suitable for more casual installations and shorter run-times. Eventide has tested the following units and confirms that they work with the Smart Edge Capture Devices™.

Manufacturer	Model	Recommended for
APC	Back-UPS ES 500	Smart Edge Capture Device™

To connect your Smart Edge Capture Device™ to a UPS, simply plug the UPS into an AC socket, and plug the Smart Edge Capture Device™ into the UPS using the power cords provided. If you use an approved UPS, also connect the UPS to one of the USB ports on the rear panel of the Smart Edge Capture Device™ using the cable provided with the UPS. This communication link will perform a safe shutdown when necessary, and also allow the Smart Edge Capture Device™ to notify you (by display and optionally by email) if there is a power problem.

#### **A** Caution

The power cord is used to connect the Smart Edge Capture Device™ to main power. Remove power cord before servicing the unit.

# 2.4.6. Before You Connect Audio Signals to the Smart Edge Capture Device™

Before you connect the telephone lines, radio outputs, or other signals to be tapped and recorded, set the internal clock, date, time zone, and channel names on the Smart Edge Capture Device™. If you are installing (not upgrading) new software on a currently operating Smart Edge Capture Device™, disconnect the audio inputs until you have restored the configuration of the Smart Edge Capture Device™, including channel selection and time zone. The reason for this is that the Smart Edge Capture Device™ will begin recording as soon as it detects an input signal. Calls with the wrong time, date, and time zone may get recorded and will likely remain on the Smart Edge Capture Device™ for a long time. This might be confusing later when you search, filter, and archive calls. Refer to Section 3 of this document for configuration information including Date and Time settings.

# 2.4.7. Connecting Telephone, Radio, and Other Analog Audio Signals to the Smart Edge Capture Device™

This section applies to units equipped with an Analog Input Board. If you are not sure this board is installed, check the printed back-panel diagram that was packed with your Smart Edge Capture Device™.

#### **A** Warning

To reduce the risk of fire, use only 26 AWG or larger telecommunication wire.

The Analog Input Board handles interfacing to analog audio signals. The number of channels per board will vary depending on which is ordered. Eventide sells 8, 16, and 24 channels versions of the Analog Board.

A mating connector is provided for each board unless a Quick Install Kit has been ordered (see The Optional Quick Install Kit). The connector has two rows of contacts. One row is numbered 1 through 25, and the other row is numbered 26 through 50. Numbering is such that pin 1 is opposite 26, and 25 is opposite 50. Each audio input requires two wires, in what is known as a "balanced" configuration.

There is no "ground" connection. The channel and connector pin correspondence is detailed in \*Appendix D: Channel Wiring for Eventide Analog Input Boards\* of the NexLog DX-Series User Manual.

To connect a telephone line to a given channel, simply connect the two wires to the two pins for that channel. It is not necessary to check or observe polarity.

To connect an audio source such as the line output or recording output of a radio, connect the "hot" lead to one pin and the ground or shield lead to the other. Again, there is no distinction between input pins. Either can be connected to the "hot" lead.

Any audio source may be connected, provided that the audio voltage is nominally in the .1 - 1 Volt range and remains fairly constant. Differing voltage levels are compensated for when setting up the board parameters in the configuration manager. Not recommended are sources with greatly varying levels, such as "speaker" outputs. Also unusable are "microphone" signals, whose levels are too low by far to be usable without pre-amplification.

#### 2.4.7.1. The Optional Quick Install Kit

For any analog telephone recording board in the Smart Edge Capture Device™, you will have received either a mating blue-ribbon connector, or if ordered as an option, a Quick Install Kit. The connections for the mating blue-ribbon connector are detailed in \*Appendix D: Channel Wiring for Eventide Analog Input Boards\*. The pins are numbered on the connector itself for reference.

The Quick Install Kit, Eventide part #109033-003 (3-meter cable) and #109033-007 (7-meter cable), include the following components:

Figure 10—Quick Install Kit Components



#### Cable

Connects the Smart Edge Capture Device™ telephony board to the punch block. The rear-entry connector (right in photo) goes to the Smart Edge Capture Device™ and is fastened to the telephony board rear panel with small wire bails on each side. The endentry (left in photo) RJ-21 male connector goes to the punch block and is held in place with a Velcro strip.

Note: This cable may have special wiring!
Before substituting a standard 50-pair
extender cable for this cable, confirm that
the telephony boards in your Smart Edge
Capture Device™ do not have special
connections. (See Channel Wiring for Analog
Input Boards). If you need a greater length,
you may use an extender cable in series with
the cable provided as part of the kit whether
or not it is one with special wiring.



#### Punch Block

The punch block is a convenient, industrystandard appliance used to connect twisted pair telephone wiring to the Smart Edge Capture Device™. It provides a central location to connect your physical wiring.

The 25-pair "Split 50" 66 Block has 50 rows and four columns. Each row contains four connectors (contacts). Each outside contact contains an electrical connection to the one next to it, creating a pair of contacts, but the left pair of contacts are electrically isolated from the right pair of contacts (thus, they are "split").

Using a punch-down tool (not provided), the telephone wires are forced into a slit cut in the contacts in the block, which makes a firm electrical and physical connection. The blocks are usually mounted in the orientation shown.

The right side of the block has a female RJ-21 connector for the cable that goes to the Smart Edge Capture Device™. The left side of the punch block (opposite the RJ-21 connector) is used to connect the telephone (or other audio) lines.



#### **Bridging Clips**

The right side (nearest the connector) has each column connected to an associated connector pin-pair so that the top row is connected to pin 1, the next row to pin 26, the third to pin 2, etc. Thus, adjacent vertical rows form one signal pair.

When you connect the first telephone line, you just start at the top and connect the wire pair to the first two rows on the left. The next wire pair would go to the next two rows down, on the left.

Finally, to connect the telephone line to its associated Smart Edge Capture Device™ input, slip two bridging clips over the two center contacts in each row.

The purpose of the punch block system is to centralize your connections, as well as to provide a clean way to isolate the telephone or radio system from the Smart Edge Capture Device™, should it become necessary. The components can be isolated by removing clips, rather than removing wires.

#### 2.4.8. Connecting Digital PBX Stations that are to be Tapped

Note: For tapping digital PBX telephones and T1/E1 circuits, maximum cable lengths are extremely important, and can be different for different makes & models of telephone systems. Contact Eventide technical support for digital-tap cable length information for your particular digital phone system or T1/E1 circuits.

This section applies to units equipped with one or more Digital PBX Station tapping Boards. If you are not sure this board is installed, check the printed back-panel diagram that was packed with your Smart Edge Capture Device™.

#### **A** Warning

To reduce the risk of fire, use only 26 AWG or larger telecommunication wire.

The Digital PBX Station tapping Board handle interfacing to certain Digital PBX Station makes and models (check with Eventide for compatibility). The number of channels per board will vary depending on which is ordered. Eventide sells 8, 16, and 24 channels versions of the Digital PBX Station tapping Board.

A mating connector is provided for each board unless a Quick Install Kit has been ordered (see The Optional Quick Install Kit). The connector has two rows of contacts. One row is numbered 1 through 25, and the other row is numbered 26 through 50. Numbering is such that pin 1 is opposite 26, and 25 is opposite 50. For most Digital PBX systems (except Mitel Supersets, Avaya Index phones, and ROLMphones), each Digital PBX Station requires two wires.

To connect a supported digital PBX telephone line to a given channel, connect the two wires to the two pins for that channel.

#### 2.4.9. Connecting to an Ethernet Network

Connect to an Ethernet network by attaching a network cable between the RJ45 jack on the back of the Smart Edge Capture Device™ and your hub, switch or router. The cable should be CAT5 or equivalent with a male RJ45 plug for the Smart Edge Capture Device™ end and with the connector pin wiring going straight through from end to end. Alternatively, a crossover cable can be used to isolate the Smart Edge Capture Device™ from the network and connect directly to a PC's network connection without using a router or switch. The Smart Edge Capture Device™ has two RJ45 jacks and can be connected to multiple networks simultaneously. The jack closest to the input boards is Device 2 (eth1), and the jack to its left is Device 1 (eth0). The third jack, close to the power supplies, is not used.

#### 2.4.10. Connecting a Keyboard

A keyboard can be connected to a Smart Edge Capture Device™ to allow easier and faster data entry and interaction than is permitted by the Smart Edge Capture Device™'s optional front panel interface. This can be useful for performing system administration tasks from the front panel and for diagnostic work.

#### Note

The same configuration capabilities that are available by connecting a monitor and keyboard can be accessed via a web browser from a PC, using the browser-based Smart Edge Capture Device™ Configuration Manager. Under most circumstances this will allow for a quicker setup procedure.

Connect a USB keyboard to any USB connector on the Smart Edge Capture Device™. This may be done while the Smart Edge Capture Device™ is running and does not require a shutdown and restart of the Smart Edge Capture Device™.

## 3. Configuration and Use of the Smart Edge Capture Device™

### 3.1. Welcome

This document assumes a familiarity with the NexLog DX-Series<sup>™</sup> platform and does not go into full detail of every configuration option. Just like NexLog DX-Series<sup>™</sup>, the Smart Edge Capture Device<sup>™</sup> is configured from its Configuration Manager, using a subset of options present in the NexLog DX-Series<sup>™</sup> Configuration Manager. Your experience with NexLog DX-Series<sup>™</sup> transfers over directly, and everything unique to the Smart Edge Capture Device<sup>™</sup> is explained in this document.

Some differences in and clarifications about the Smart Edge Capture Device™ platform:

- There is only an Eventide User, no other users can be added. This account is used for administration and configuration only. The default password is the serial number of the Smart Edge Capture Device™; we recommend changing this to something unique. The minimum password complexity is 8 characters in length, and at least character must be a digit (0-9).
- There is no recall screen nor direct client access. Instead, recordings are forwarded to a NexLog DX-Series™ recording solution where they can be accessed with MediaWorks DX™. Inputs can be auditioned from the Recording Interfaces page while in progress, so settings can be adjusted correctly.
- Media Forwarding: This page is where you configure the transfer of recordings from this Smart Edge Capture Device™ to a NexLog DX-Series™ recording solution. It is covered in depth below.
- The Smart Edge Capture Device™ is not intended for long term media storage; instead it forwards it's recordings along to a NexLog DX-Series™ for extended storage, where it can further be archived to blu-ray or NAS for long-term archival storage.
- Retention: Retention settings are always set to 7 days, and the retention warning time is 6 and a half days. This means an alert will trigger if the transfer time (Archive Pointer) falls behind

current real time by 12 hours. If the transfer time falls behind the 7 day retention time limit, media will be deleted before it has been transfered, so it is crucial to avoid this situation.

- The recording interfaces are configured using the Recording Interfaces page on the Smart Edge Capture Device™, not on the target NexLog DX-Series™ systems.
- Similarly, for email-alerts to work, Email must be configured on the Smart Edge Capture Device™.
- The option to enable the Encrypted Terminal (SSH) has been moved to Networking: System Identification.
- The page to configure and enable SSL has moved to Networking: SSL.
- The available IP Recording Templates are:
  - SIPRFC
  - Cisco CallManager Built-in-Bridge
  - SIP Trunk (SPAN or Recorder as Endpoint)

## 3.2. Initial Set Up

Before connecting the recording boards or configuring media input, we recommend connecting a mouse, keyboard, and monitor, booting up the Smart Edge Capture Device™ and then:

- Check that the time and timezone are correct and configure the same Time Sync source as the NexLog DX-Series™ Recorder(s) this Smart Edge Capture Device™ will connect to.
- Configure Networking. This is essential for the core feature, Media Forwarding, to work, and it also makes all future configuration easier, as you can reach the recorder remotely via the web rather than connecting a mouse, keyboard, and monitor.

To do these, you'll need to Login.

## 3.3. Login

After powering on the system and connecting a mouse, keyboard and monitor, you will see a login screen like this:



Fig. 3.1 Login Page

The default username and password for the Smart Edge Capture Device™ is Eventide/serial number. We recommend changing this password after first login.

Once you are logged in, the page will change to the Home page:

### 3.4. Home

The home page gives you Smart Edge Capture Device™ status at a glance.



Fig. 3.2 The Smart Edge Capture Device™ Home Page

To the left, there's the menu for quick access to every page of Configuration Manager. To the right, there's a live status diagram, showing the Smart Gateway and its the channels activity, and information about the speed and current time of the most recent media transfers between the Smart Edge Capture Device™ and its target NexLog DX-Series™ recorders.

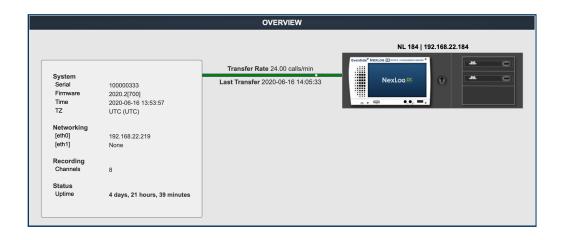


Fig. 3.3 Mouse Over for More Information

You can mouse over the Smart Edge Capture Device™ to see additional detail, including Serial, Firmware, Time, Timezone (TZ), networking ports and IPs, number of recording channels, and uptime status.

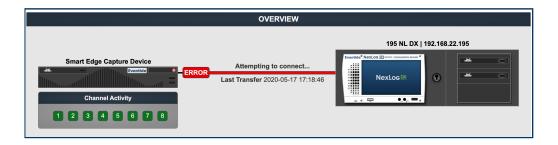


Fig. 3.4 NexLog DX-Series™ Not Connected

If the Smart Edge Capture Device™ cannot connect to a configured NexLog DX-Series™ recorder, you will see a red alert as in the above image.

## 3.5. Media Forwarding

Media Forwarding is where you configure the destination NexLog DX-Series™ recording solution for this Smart Edge Capture Device™. All Smart Edge Capture Devices™ can send media to at least one NexLog DX-Series™ recorder; to configure more than one destination requires an additional add-on license. Media Forwarding operates similarly to a Centralized Archive drive on a NexLog DX-Series™ system, but is always archiving while on; there is no need to start or stop, once configured it will connect to the NexLog DX-Series™, and forward all recordings along to the NexLog DX-Series™, starting with the oldest available recording on the Smart Edge Capture Device™.

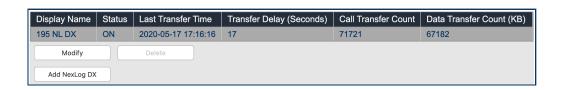


Fig. 3.5 Media Forwarding

To add a destination NexLog DX-Series™ recorder, click the Add NexLog DX button. You need to know the IP address of the NexLog DX-Series™ recorder and valid login credentials for a User with the Centralized Archive - Login permission. Both the user name and password are case sensitive. The NexLog Display Name field allows you to name this recorder so that you don't have to distinguish it solely by ip address.

The SSL option requires that SSL first be configured and enabled on the destination NexLog DX-Series™ recorder, with the **Centralized archive connections** setting on the SSL page's SSL Settings tab set to both or SSL only.

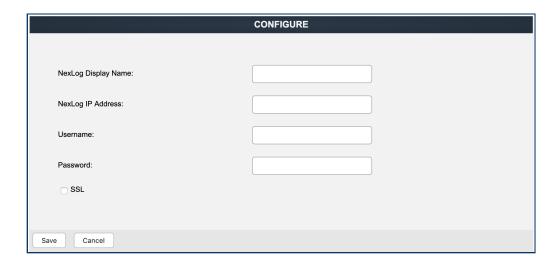


Fig. 3.6 Add a Media Forwarding destination

To modify an existing destination, click the Modify button.

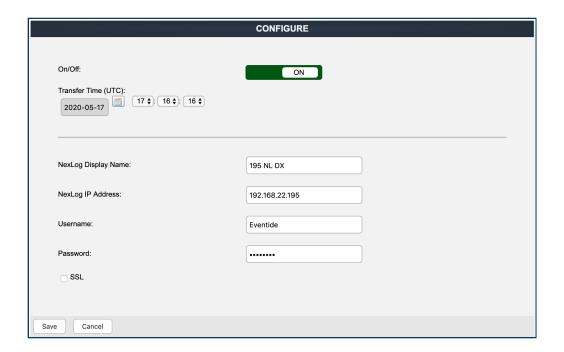


Fig. 3.7 Modify a Media Forwarding destination

A destination can only be deleted if it is inactive, so to delete, first click the Modify button and set the destination to Off, then wait for any in-progress transfers to complete. The delete button will be available only once the current transfers are finished. Click Delete and then confirm the prompt.



Fig. 3.8 Deleting a Media Forwarding destination

### 3.6. Alerts

The alerts specific to Smart Edge Capture Device™ (and Centralized Archives more generally) that are especially important are:

- 2404 (Active): The archive time for (Name of Media Forwarding NexLog DX-Series™ recorder target) is currently behind the call retention warning limit. Recordings are in danger of being deleted before transfer.
  - o This alert means that the media currently being transfered was recorded at a time that is now older than 12 hours. If this alert is triggered, it suggests that this destination is turned off, the Smart Edge Capture Device™ has lost its connection to the NexLog DX-Series™, or there is severe network congestion between the Smart Edge Capture Device™ and NexLog DX-Series™. This requires immediate attention as a healthy Smart Edge Capture Device™ to NexLog DX-Series™ set up is capable of archiving up to real time, all the time, and should only be behind in cases of outages or temporary network congestion.
  - This alert may also be triggered in few benign scenarios, and should quickly resolve thereafter:
    - The Media Forwarding Destination was recently added to the Smart Edge Capture Device<sup>™</sup>. The inital default transfer time is 1989-01-01, and immediately moves forward to the oldest call on the Smart Edge Capture Device<sup>™</sup>. If there are already more than 12

hours of recordings on the Smart Edge Capture Device™, this alert will remain active until the transfer has caught up to the latest 12 hours.

- Similarly, if you decide to change the transfer time on an existing Media Forwarding Destination, this alert can be tripped for much the same reason as above. Under normal circumstances, the transfer time will move forward and this alert will resolve.
- In both situations, the best practice is to check in on the transfer's progress over the course of a day, or longer if needed. If it is moving forward faster than real time, and incoming recording volume is steady, you can be sure it will catch up.
- 2404 (Resolved): The archive time for (Name of Media Forwarding NexLog DX-Series™ recorder target) is now ahead of the call retention warning time. Recordings are no longer in danger of being deleted before transfer.
  - This alert means the situation that was causing the Active version has been addressed and the transfer speed is now outpacing real time.
- 2403 (Active): The archive time for (Name of Destination Recorder) is behind the call retention period of X days. This means calls will be deleted before they can be archived.
  - This alert is the situation that 2403 is intended to warn you about. This alert means that the transfer time has fallen behind the retention limit; perhaps the Media Forwarding Destination was turned off in settings, the network has died, or the NexLog DX-Series™ itself was incapacitated. This means that retention will start to delete recordings that have not been transfered yet, resulting in lost recordings.
- 2403 (Resolved): The archive time for (Name of Destination Recorder) is now ahead of the call retention period of X days. Calls are no longer being deleted before they can be archived.
  - When resolved, the transfer time is now ahead of the retention limit and recordings are not being deleted before they transfer.

