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ENVIROMUX[®] Series

E-MNG-SH

Enterprise Environment Monitoring System Self-Hosted Management Software

Server Room	Alerts							Device Status		
	Sensor	Sensor	Sensor	Sensor	Device	Last		IP Address-	Device Name\$	Status≎
	Name	Value\$	Status≑	Туре≎	Name\$	Updated\$		10.0.1.16	Furnace Room E-2D	Normal
	E-5D E04 Port 2 ACLM-	0.0 Hz	Alarm	External Sensors	E-5D E04 DDNS	4 sec. ago	6	147.0.27.197	E-16D Server Rack Monitor	Normal
	E-5D E04	5.6 V	Alarm	External	Test Unit E-5D E04	4 sec. ago		147.0.27.207	E-2D Lab Room Environment Monitor	Normal
	Port 2 ACLM- Voltage			Sensors	DDNS Test Unit			147.0.27.208	E-5D Server Rack Monitor	Normal
	E-5DEL E07	Lights	Alarm	Digital	E-5DEL-1	1 sec. ago		147.0.27.212	E-5D E04 DDNS Test Unit	Alert
	Light	On	Alam	Inputs	(E07)	i sec. ayu		147.0.27.218	E-2D P05	Normal
	Detector (2)							192.168.1.100	E-16D 24V IPMI Rack	Normal
				Previous	1 Next			192.168.3.100	E-16DEL-1 (Master)	Normal
Server Room Temperature	Server Rack & Lab	20						192.168.3.101	E-16D S1	Normal
								192.168.3.200	E-16D P02	Normal
815	Sensor Name			Sensor Value\$	Sensor Ty		Updated\$	192.168.3.213	Oper8 Test Unit	Normal
64.4 81.5 98.6	Computer Lab			72.8 °F	External S		3 sec. ago	192.168.3.217	E-5D-48V	Normal
47.3 115.7	Computer Lab			27.4 %	External S		3 sec. ago	192.168.3.221	E-2DB P02	Normal
	Server Rack Te			77.4 °F	External S		3 sec. ago	192.168.3.222	E-2D E12	Normal
- 30.2 132.8	Server Rack Hu			21.2 %	External S		3 sec. ago	192.168.3.223	E-2DB E11 (RevF)	Normal
13.1 149.9	Equipment Lab	o 1 Temperatu	re	77.7 °F	External S	ensors	3 sec. ago	192.168.3.225	E-5D E02	Normal
13.1 °F	Equipment Lab	0 1 Humidity		21.2 %	External S	ensors	3 sec. ago	192.168.3.227	E-2D P04	Normal
-4.0 167.0	Equipment Lab	2 Temperatu	re	79.6 °F	External S	ensors	3 sec. ago	192.168.3.80	E-16D E100	Normal
▼ 75.2	Equipment Lab	2 Humidity		22.1 %	External S	ensors	3 sec. ago	192.168.3.81	E-5DEL-1 (E07)	Alert
/ SIL	Computer Lab Ten	nperature						192.168.3.82	E-2DB E08	Normal
	1Hr 8Hr 1Da		Mo 6 Mo	2.1/1				192.168.3.83	E-5D E01	Normal
Server Rack Main Voltage			and all a second second	Te 💿 Min. Corr	puter Lab Te	😞 Avg. Com	puter Lab Te	98.27.170.240	Remote E-5D	Normal
an a	82.00 °F 80.00 °F							La construction and a la construction of the		
Server Rack Main Voltage	78.00 °F									
110 71/	76.00 °F 74.00 °F									
118.7 V	72.00 °F									
	70.00 °F 68.00 °F									
Normal	66.00 °F	Mar 11 5		Mar 11 10:33 PM	Mar 12		Mar 129:40 AM			

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CHANGES

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

VERSION

Release Version 1.0.1.3.

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INTRODUCTION

E-MNG-SH is a self-hosted Software program that provides an easy-to-use, unified interface for monitoring and configuring up to 3,000 E-16D, E-5D, and E-2D monitoring systems (Devices) and all connected sensors (internal, external, digital input and IP sensors and output relays via Ethernet. Supported IP sensors (when connected to Devices) include E-MICRO-TRH(P) and E-1W(P). The Software is installed on a Windows-based server or computer (the Server) to actively poll all Devices for status information and alerts. Any computer, smartphone, or tablet with a web browser can be used to access the Software. All enabled users can be kept up to date on sensor statuses and be alerted instantly when a sensor goes out of range of a configurable threshold.

Features:

- Devices may be monitored individually or in a group
- Display values and status for individual sensors or list of sensors.
- Unlimited number of users can access the Software program at the same time.
 - o Users can configure their own Dashboards to display the data relevant to them and the window arrangement.
- Customize Dashboards to display Device status, sensor data, gauges, graphs, maps and IP camera snapshots.
- Any computer, smartphone, tablet with a web browser installed can be used to access the Software.
 - Access is operating system independent through the HTML5 user interface on the computer/smartphone/tablet's web browser.
 - o No clients or special apps to install.
- Self-hosted Software ideal for users in industries that require local Software management solutions for security or data privacy purposes.
- Plot the placement of E-LLDC-xx Liquid Location Detection Sensor Cables on floor plan maps to visually see the specific location of liquid presence when detected.

Software Requirements:

- Windows 7/8/10/11 32 or 64-bit, Windows Server 2008/2012/2016/2019/2022 32 or 64-bit.
- Requires firmware version 4.15 or later in E-xD Devices.

Note: We recommend the server/computer is protected by a firewall and anti-virus software if the server /computer is going to be accessed from the internet..

Server Roles and User Access:

One user is assigned as Super Admin to register the license and complete Software setup, plus has access to all Admin privileges.

Users with Admin access have privileges to add/delete E-xD Devices, edit sensors, set up Dashboards, acknowledge/dismiss alerts, simulate alerts, view logs, view sensor data, and monitor Dashboards. Admins can also add/edit/delete users (Administrators and Operators). Any number of users can be assigned as Admin.

Users with Operator access can acknowledge/dismiss alerts, view logs and sensor data, and monitor Dashboards. An unlimited number of users can be assigned as Operator.

Users with Read Only access can view alerts, logs, sensor data and monitor Dashboards. An unlimited number of users can be assigned as Read Only.

Virtual Machines

The E-MNG-SH self-hosted Software program now supports a floating Virtual Machine-friendly license.

MATERIALS

Materials supplied with this package:

NTI E-MNG-SH ENVIROMUX Self-Hosted Management Software including:

- NTI ENVIROMUX-Management-Software-Installer_Vx.x.x_x64.exe or NTI ENVIROMUX-Management-Software-Installer_Vx.x.x_x86.exe (vx.x.x = the version number) The current version number is 1.0.1.3.
- Adobe pdf file of this manual

Note:

x86 is for 32 bit servers or computers which can only run 32 bit Windows OS and limits the maximum RAM size to 4GB.

x64 is for 64 bit servers or computers which run 64 bit Windows OS and has a much larger RAM size limit.

LIMITATIONS

- The Management Software:
 - Only Devices (E-xD) can be added with current version.
 - E-MICRO-TRH(P) and E-1W(P) can be added when attached to an E-xD as an IP Sensor.
 - Managing Device sensors on cascaded Devices are not supported currently.
 - Any changes to Device configuration done locally will require a re-load on the E-MNG-SH Software
 - Cannot change, save or restore individual E-xD configurations from the E-MNG-SH Software
 - Internet Explorer does not work with the E-MNG-SH Software

DOWNLOAD

To get the installer, go to our website .

- If you wish to evaluate the software, click on "Request Server Software Evaluation" and fill out the registration form. We will send the files and you can install it as described under "Installation".
- To purchase the software, you can go to our website or contact an authorized representative or NTI sales associate directly at 330-562-7070. NTI will email you links to the software and a link to request a license activation key.

Self-Hosted Enterprise Environment Monitoring System Management Software

Monitor and configure up to 3,000 ENVIROMUX environment monitoring systems and all connected sensors. Access from anywhere using a web browser on a computer, smartphone, or tablet. No clients or special apps to install.

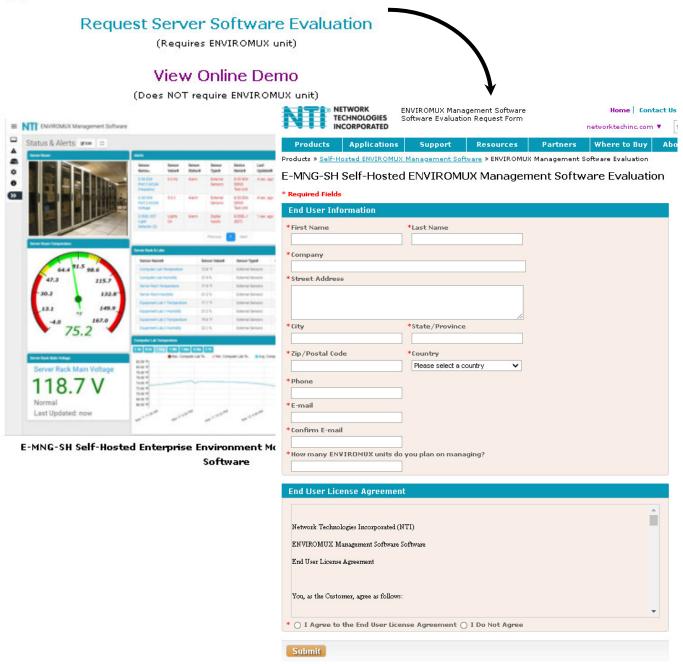


Figure 1- Registration Form

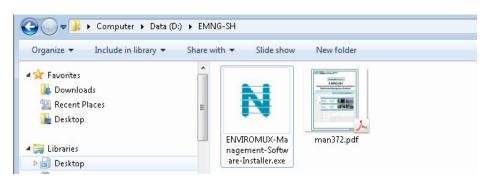
Whether you are evaluating the software, or purchasing it, you will receive an email with links for a download of the software. NOTE: The download exe files can only be accessed and downloaded once. Please be sure that you will be able to save the files to a local computer prior to using the links.

The email will also include the serial number for your copy of the software. Be sure to make note of it as you will need to refer to it when you request the license key or if you call for assistance with the software.

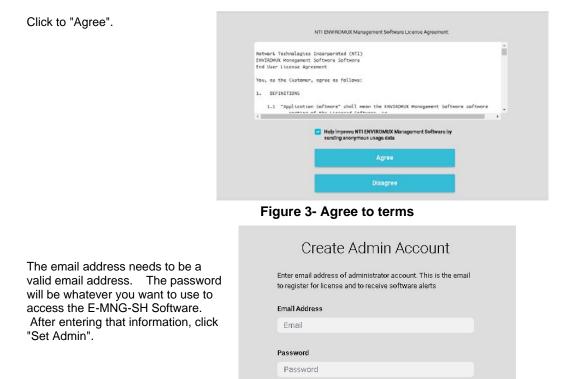
INSTALLATION

To install the Software on a Windows-based server or computer, double-click the appropriate version of ENVIROMUX-Management Software-Installer. (No need for Administrator privileges).

- For a 32 bit computer/server install ENVIROMUX-Management-Software-Installer_Vx.x.x. **_x86**.exe.
- For a 64 bit computer/server install ENVIROMUX-Management-Software-Installer_Vx.x.x.x _x64.exe







Confirm Password Confirm Password

Set Admin

Figure 4- Create Admin login account

You will be prompted for a license key. To request a license key, <u>contact NTI</u>. This key will be unique to this Windows user and installation of the management program. You will need the serial number for the software provided on the email that provided the software download. If you already have a license key enter the license key here and click "Activate License".

License Activation Please enter your license key to activate	The server needs to have access to the internet for license activation and trial activation. Offline activation is not supported in this version.
XXXX-XXXX-XXXX-XXXX-XXXX	
Activate License	License Activation
OR Activate Free 30 Day Limited Trial	Activated: Trial. Expires: 21 Mar 2021
Activate 30 Day Trial	Next
© 2021 Network Technologies Inc. All Rights Reserved	

Figure 5- Activation screen

If you choose to just demo the Software at this time, click "Activate 30 Day Trial". You can activate the license later by going to the Settings -> Application Settings page. With a trial activation, the software will be fully functional for 30 days, after which you will need to activate the license to resume operation. None of your settings will be lost.

Monitor		Application Settings				Home Application Setting		
A Events		Application Settings			License			
Devices	٠	Language	English	~				
Settings			Display language for server			Current License: Activated : E-MNG-SH. Renewed till 06 Jun 2022		
Application Settings	oplication Settings Device Poll Rate		5000 Delay between polling of sensor data for each device in millisecond. Minimum: 1000		Upgrade to new License			
Network Settings								
User Settings		Date Format	MMDD/YYYY	¥		Enter License Key		
			Date Format to show values in					
About		Time Format	hh:MM:SS TT	~				
	«		Time format to display values. HH: 24 hour format, hh: 12 hour format, TT: AM/PM			Activate New License		
		System Log Roll Period	Hourly	~				
			System logs will be rolled every new period as set above					
		Number of System Logs to Store	168					
			Number of rolled system logs to keep on disk					
		System Log Level	DEBUG	~				
			System Log Level. Recommended: INFO					

Figure 6- Activate later

Once the software license is activated, the software will auto-renew every 30 days. If the Server is not connected to the internet, the software will continue to function for 30 days after the first attempt to renew it. After 5 days of unsuccessful attempts (once each hour), the following screen will replace the standard License Activation screen. Within the next 25 days you will need to connect the Server to the internet and have it auto-renew or manually click the "**Try License Renewal**" button.

Notifications will be sent to registered users via email when there is only 14 days, 7 days and 2 days left before expiration.

Failure to successfully renew the license will result in the software becoming unusable.

License Activation

Your license has been used or we could not reach NTI servers to renew. Please check your network connection and try again.

Try License Renewal

If you wish to try an alternate license key please enter the license key below to activate

XXXX-XXXX-XXXX-XXXX-XXXX-XXXX

Activate License

Figure 7-Manually Renew License

Cloning Software

If the Software is installed on a virtual machine (VM) and this VM needs to be cloned to another computer, this can be done and the Software will continue to work with the same activation license, however only one instance of the activated software will function at a time. When you clone a VM like this, Please be sure to shutdown the old software or uninstall it, before the next license renewal. If you continue to run both old and cloned softwares, with the same license, they will interfere with each other and one of them will get locked out.

Once the program is installed, a teal "N" will appear on your desktop and a shortcut on the taskbar. A shortcut will also be added to the "Start Menu"-> All Programs list.



Note: This is a web-based software. The icon is used only for starting the software on a server. Management and monitoring of the software is done through the browser.

Note: Ensure that the server firewall allows TCP port access as set in the application settings (see page 8).

Any computer, smartphone, or tablet with a web browser installed can be used to access the E-MNG-SH software. Access is operating system independent through the HTML5 user interface on the computer/smartphone/tablet's web browser.

To access the E-MNG-SH, simply enter in the IP address or Server host name of the ENVIROMUX Management System into the URL bar on your browsing computer/smartphone/tablet. If your computer/smartphone/tablet has network access to the E-MNG-SH, you will be presented with the login screen. The server can be configured by anyone with access to it that has administrative privileges.

Users with only "Operator" privileges can assess the E-MNG-SH and view the monitored Devices, but they cannot change any settings. For more on privileges, see page 11.

The Software will open to two empty lists under the Home page. The Home page will display the IP addresses of the Devices being monitored and a list of any alerts associated with sensors being monitored on those Devices.

 C 88 © 127.0.0.1:8001/p/index Bookmurks Bur (Hire N NTI Network Techn V VM L Software O DuckDuckGo 			This is the address to access from same server/Computer (default is 127.0.0. If accessing from another computer/smartphone/tablet the url to use will be either the host name as set in application settings or one of the IP addresses							
	VIROMU	JX Management Softwar	e	the server/computer						auuresse
Monitor	•	Home		· .						Ho
Home Status +		Dovices Available			Alerts					
Graphs		IP Address+	Device Name\$	Status‡	Sensor Name-	Sensor Value\$	Sensor Status‡	Sensor Type‡	Device Name#	Last Updated\$
Multi-Sensors +			No devices ava	ulable.			No a	lerts		
Status & Alerts							Previous	Next		
IP Cameras										
Camera Tests										
Map 1										
Map 2										
A Events										
Devices	,									
Settings										
About	,									
	«									

Figure 8- View of the Home screen

To configure the E-MNG-SH to manage your devices and sensors, go to the Settings pages. Under Settings you will find three submenus,

- Applications Settings
- Network Settings
- User Settings

Make sure all of the details for operating the E-MNG-SH are as desired.

Application Settings

English
Display language for server
5000
Delay between polling of sensor data for each device in millisecond. Minimum: 1000
MM/DD/YYYY
Date Format to show values in
hh:MM:SS TT
Time format to display values. HH: 24 hour format, hh: 12 hour format, TT: AM/PM
Hourly
System logs will be rolled every new period as set above
168
Number of rolled system logs to keep on disk
DEBUG
System Log Level. Recommended: INFO
Help NTI improve ENVIROMUX Management Software by sending anonymous usage reports
Upload crash report to request NTI for fix (Restart Required)

Application Setting	Description
Language	Only English is available at this time
Device Poll Rate	Delay time between polling data for each sensor attached to each Device, measured in milliseconds (Min. is 1000)
Date Format	Format of how the date will be displayed in the Software- six to choose from
Time Format	Format of how the time will be displayed in the Software- four to choose from
System Log Roll Period	System Logs will be rolled as often as set here- Hourly, Daily, Weekly, Monthly, Quarterly or Yearly
Number of System Logs to Store	Number of system logs to store on disk- There is no limit.
System Log Level	Select the types of messages that will be logged in the system.log file on Software (see below)
Send Anonymous Usage Stats	Place a checkmark if you approve of sending anonymous usage reports to NTI to help improve this Software
Upload Crash Reports	Place a checkmark in the box to have your Software upload crash reports to NTI and to request a fix. We strongly recommend enabling upload of crash reports. If disabled, NTI will not be able to help with any fixes because of a possible Software crash

System Log Level

- CRITICAL only logs messages that cause Software to exit
- ERROR logs messages with Device, server communication, sensor or user errors including CRITICAL messages
- WARNING will log messages including possible issues with setup or communication including ERROR & CRITICAL
- INFO logs informative messages including WARNING, ERROR & CRITICAL
- FINE logs extra informative messages that logs Device communication including INFO, WARNING, ERROR & CRITICAL
- DEBUG logs all messages which may be too verbose for normal usage but helps with debugging any software issues, including FINE, INFO, WARNING, ERROR & CRITICAL

Don't forget to click "Save" once this is complete.

Network Settings

Network Settings

Network Settings	
 General Network Settings 	
Server Host Name	192.168.3.12
	Host name to use on all urls. This host name should be associated with atleast one of the IP Addresses of this server
Restrict to above Host Name	
	Restricts all access to use host name only. If host name is incorrect, you will not be able to access the server
HTTP Port	80
	HTTP port on which the software should listen to (Restart Required)
HTTPS Port	443
	HTTPS port on which the software should listen to
- SMTP Settings	
SMTP Server	smtp.gmail.com
	SMTP Server address or domain that you want to use to send emails
Email From Address	user@gmail.com
	SMTP email address that NTI ENVIROMUX Management Software should use to send emails
CMTD Face-office Trans	STARTTLS
SMTP Encryption Type	Encyrption type to be used with above SMTP Server
SMTP Server Port	587
Smir Seiver Folt	SMTP Port to be used with above encryption setting for server. Usual port # None: 25, TLS: 465, STARTTLS: 587
	<
SMTP Server Requires Authentication	Check this box if SMTP server requires authentication to send email
SMTP Username	user@gmail.com SMTP authentication username
SMTP Password	
	SMTP authentication password
Confirm SMTP Password	
	Confirm above SMTP authentication password
- Certificate Settings	
Certificate Signer	CA Signed 🗸
5	Certificate type to be used with HTTPS Server.
	Select Self Signed certificate if you are not using a third party CA service like Digicert, Verisign etc.
Certificate Option	Upload Keypair and Certificate
	Select a procedure to have the server certificate signed by CA
Private Key File (*.pem)	Choose File No file chosen
	Upload Private Key
Server Certificate File (*.pem)	Choose File No file chosen
	Upload Server Certificate
	Choose File No file chosen
CA Certificate File (*.ca)	
	Upload CA Certificate
	Save
	Send Test Email

Figure 10- Network Settings

Network Setting	Description
Server Host Name	If you want to access the server with a specific domain name, please set that domain name here The DB browser can be used to recover from an incorrect host name. (See next page)
Enable Above Host Name	Enable the Host Name assigned to the Server- restricting access to the Server by using the Host Name only.
HTTP Port	Port on which the Server will be connected with . This is the default HTTP port. If you change
	this, you will need to add ": <port#>" to the end of the IP address. i.e. If you change it to 85, you will need to enter <ip address="">:85 in the URL bar to access the Server.</ip></port#>
HTTPS Port	HTTPS port on which the Server will be connected with.

Network Setting	Description
SMTP Server	Enter a valid SMTP server address
Email From Address	Enter email "From" address to be used by E-MNG-SH to send messages from
SMTP Encryption Type	Choose encryption type from dropdown menu: STARTTLS, TLS or None
SMTP Server Port	Enter port used by SMTP Server (default is 587)
SMTP Server Requires	Place a checkmark in here if the SMTP Server requires authentication to send messages
Authentication	
SMTP Username	Enter the SMTP Username for the E-MNG-SH-if encryption is checked
SMTP Password	Enter the SMTP Password for the E-MNG-SH- if encryption is checked
Confirm SMTP Password	Re-enter the SMTP Password for the E-MNG-SH
Certificate signer	Certificate type to be used with HTTPS Server. Select self-signed certificate if you are not using
	a third party CA service like Digicert, Verisign, etc.
Certificate Option	Select a procedure to have the server certificate signed by CA
Private Key File	Choose and upload a private key file in *.pem format.
Server Certificate File	Choose a server certificate and upload in *.pem format
CA Certificate File	Choose and upload a CA Certificate file in *.ca / *.crt format.

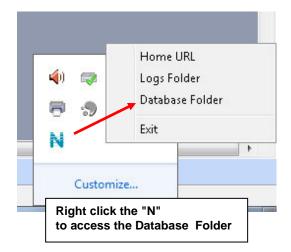
Don't forget to click "Save" once this is complete. You can test your settings by clicking "Send Test Email". An email will be sent to any configured users.

Server Host Name

If you want to access E-MNG-SH with a specific domain name, please set that host + domain name (also referred to as FQDN (Fully Qualified Domain Name)) here (for example "monitor.enviromux.com"). This FQDN should be associated with at least one of the IP Addresses of this server or computer. In the event the FQDN set is incorrect and access is restricted to this FQDN (as set in "Enable Above Host Name"), you would not be able to login to E-MNG-SH. In this case you can correct the FQDN by following the below procedure.

1. Access the server or computer where E-MNG-SH is installed. Open the database folder and locate the "settings.db" file. (You can right click on the E-MNG-SH icon (teal colored "N") in the system tray to access the database folder.)





- 2. Exit E-MNG-SH software now
- 3. Open "settings.db" with any SQLite editor like DB Browser or DBeaver
- 4. Set the desired FQDN in "HOST_NAME" column of "EMANAGER_SETTINGS" table
- 5. Save these changes and close the file. Restart E-MNG-SH now and you should be able to login with a correct host name.

User Settings

There is a limit of 1000 users that can be configured to access the E-MNG-SH. To add users, go to Settings -> User Settings . Enter the first and last name, email address and password for that user to use to access the E-MNG-SH.

Monitor >	User Settings						Home Use	r Settingi
Events >	Available Users					Add New User		
Devices >	Name	Email	Admin	Enabled	Felit			
Settings -	Admin	atimino com	Yes	Yes	Edit	User First Name	First Name	
pplication Settings					Edit Delete	-	Enter first name	
letwork Settings	TestUser	gamail.com	No	Yes	rigit Delete	User Last Name	Last Name	
							Enter last name	
Jser Settings						Email	Email	
About +							Enter uzera email addresa	
*						Password	Password	
							Enter users password	
						Confirm Password	Confirm Password	
							Confirm users password	
							Add New User	

Figure 11- User Settings for Adding Users

Once a user has been established, click on "Edit" in the "Available Users" window to bring up the Edit User page and add additional information. You can also, instead, click on "Delete' to remove the user altogether.

First decide what access level this user will have:

Super Admin- This user cannot be deleted and is the same user used in license registration and managing the E-MNG-SH. Admin - User has administrative privileges to make changes to the configuration of the E-MNG-SH Operator- User only has access to the information provided on the E-MNG-SH. No changes can be made. Read Only- User can see everything the E-MNG-SH has to offer, but cannot change any settings or add anything.

Note: Only Admin users can edit other user's passwords, the Operator users can edit their own password only

Edit User		Reset Password	
User First Name	Test	Enter New Password	New Password
	Enter first name		Enter new password to set
User Last Name	Last Name	Confirm New Password	Confirm Password
	Enter last name		Confirm new password for this user
Email	user@gmail.com		
	Enter users email address		Set New Password
Access Level	Operator	·	
User Enabled	Access level for this user. Admin can edit all settings except settings of ther us Super Admin can edit other user settings as well.	sers.	
Sound Alerts		Res	ad Only
	Enable sound alerts in dashboard		
Email Alerts		Re	ad Only
	Enable email alerts to be sent to this user		erator
Title	Job Title		
	Enter users job title	Adı	min
Department	Department	Su	ner Admin
Department	Department Enter users department	Su	per Admin
Department Company		Suj	per Admin

Figure 12- Edit user settings

Be sure to check the "User Enable" block to give the listed user access to the E-MNG-SH.

Place a checkmark in "Sound Alerts" to enable the user to hear audible warnings about an alert being sensed while the user is monitoring a Dashboard.

Place a checkmark in "Enable Alerts" so the user can receive emails about sensor alerts or reports generated (page 30).

The Title, Department and Company are optional information that can be provided for reference.

On this page the user's password can also be changed. After entering, click "Set New Password".

When finished, be sure to click "Save User".

DEVICES

Under Devices, in the menu, there are four options to select.

- Device Settings
- Sensor Settings
- Add or Remove Device
- Maps

The Device Settings page displays all the Devices you have configured to be monitored and the groups you have established for the management of those Devices. You can click on the IP Address of each to view status and adjust settings of each sensor in each device.

Device Tree	Devices Available			
- A Home	IP Address ⊷	Device Name≎	Status≑	
🗱 E-2D Units 🗱 E-5D Units	10.0.1.16	Furnace Room E-2D	Normal	
E-16D Units	10.0.1.17	Compressor Rm. E-5D	Normal	
	147.0.27.197	E-16D Server Rack Monitor	Normal	
	147.0.27.207	E-2D Lab Room Environment Monitor	Normal	
	147.0.27.208	E-5D Server Rack Monitor	Normal	
	147.0.27.212	E-5D E04 DDNS Test Unit	Normal	
	147.0.27.218	E-2D P05	Normal	
	192.168.1.100	E-16D 24V IPMI Rack	Normal	
	403 400 3 400		h11	

Figure 13- My Devices List

Next, under Sensor Settings, you have a "My Sensors" list of all sensors, IP addresses and cameras connected to the Devices being monitored.

or Tree	Sensors Available		
🛠 Home		Search Sensors:	
E-2D Units	Sensor Name≑	Sensor Type≑	Device Name≎
- 📾 E-2DB E08	1. E-2DB E08 Input Voltage	Internal Sensor	E-2DB E08
	1.1. E-2DB E08 Temperature 1	External Sensor	E-2DB E08
E-2D Lab Room Environment Monitor	1.2. E-2DB E08 Humidity 1	External Sensor	E-2DB E08
E-2D P04	1.3. E-2DB E08 Dew Point 1	External Sensor	E-2DB E08
E-2D E04 (RevG)	2.1. E-2DB E08 ACDCLM Sensor 2-1	External Sensor	E-2DB E08
E-2DB P02	2.2. E-2DB E08 ACDCLM Sensor 2-3	External Sensor	E-2DB E08
💼 E-2DB E15			
- E-2D P05	2.3. E-2DB E08 ACDCLM Sensor 2-2	External Sensor	E-2DB E08
E-5DEL-1 (E07)	2.4. E-2DB E08 ACDCLM Sensor 2-4	External Sensor	E-2DB E08
E-5D Server Rack Monitor	1. E-2DB E08 Digital Input 1	Digital Inputs	E-2DB E08
E-5D E04 DDNS Test Unit	2. E-2DB E08 Digital Input 2	Digital Inputs	E-2DB E08
Remote E-5D	1. CPU250 Win Server 2016	IP Devices	E-2DB E08
E-5D E01	1. E-16D-24V IPMI Rack Memory Free	SNMP Sensors	E-2DB E08
📾 E-5D-48V 📾 Compressor Rm. E-5D	2. IPDU Output Relay 1	SNMP Sensors	E-2DB E08
E-5D E02	3. NAS (NDATA) System Temperature	SNMP Sensors	E-2DB E08
🧱 E-16D Units			
📻 E-16DEL-1 (Master)	4. NAS (NDATA) Fan 1 Speed (RPM)	SNMP Sensors	E-2DB E08
🛏 📾 E-16D S1	5. NAS (NDATA) Fan 2 Speed (RPM)	SNMP Sensors	E-2DB E08
E-16D 24V IPMI Rack	1. E-2DB E08 Output Relay 1	Output Relays	E-2DB E08
E-16D Server Rack Monitor Ger8 Test Unit	1. Power Supply 1	Power Supplies	E-2DB E08
E-16D 48V	2. Power Supply 2	Power Supplies	E-2DB E08
🖴 E-16D E100	1. Wanscam HW0041-1	IP Cameras	E-2DB E08
	2. MXS 4K Camera MJPEG	IP Cameras	E-2DB E08

Figure 14- My Sensors List

Next is the "Add Or Remove Devices" page for adding more Devices to be monitored and adding groups to put the Devices into. Groups makes it easier to manage how the sensors and Devices will be monitored. From this page they can also quickly be removed from the list.

evice Groups			+ Add New Device		
Home			Domain or IP Address	Domain or IP Address of your Erwitomux device	
650 Units 6100 Units		Protocol		ИТТР	
				Protocol used to communicate with device	
			Port Of Web Server	80	
				Port number of web server protocol HTTP or HTTPS	
			Admin Username	root	
				Username of a user with admin privileges on above Enviromux device	
			Admin Password		
				Password for above user	
Create Group Ren	tame Group Delete Group Delete Device			Add Device	
vices Added					
	Device Name©	Status#			
IP Address-	Device Name=	Status≎ Normal			
IP Address-					
IP Address- 10.0.1.16 147.0.27.197	Furnace Room E-2D	Normal			
IP Address- 10.0.1.16 147.0.27.207	Furnace Room E-2D E-16D Server Rack Monitor	Normal			
IP Address- 10.0.1.16 147.0.27.197 147.0.27.207 147.0.27.200 147.0.27.212	Furnace Room E-2D E-160 Server Rack Monitor E-2D Lab Room Environment Monitor	Normal Normal Normal			

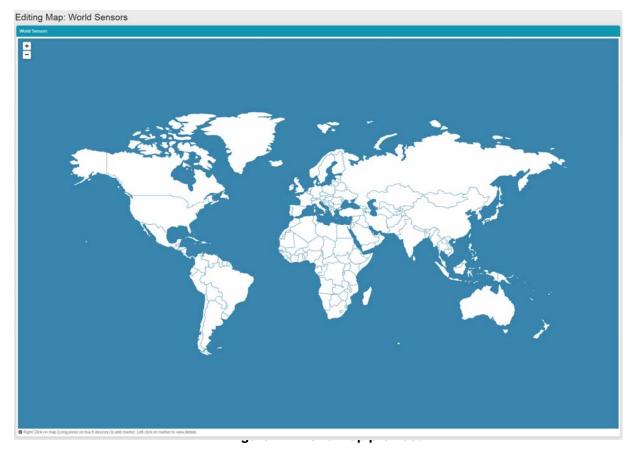
Figure 15- Add or Remove Devices

Lastly, use the "Maps" page to upload an unlimited number of images of a map, building, or server room (examples). Images must be .jpg or .png format, with a maximum size of 20MB (any resolution). On these images you can place markers for Places, Devices, or individual Sensors that you want to easily monitor the status of. Many map images are pre-loaded for you to choose from.

1. To setup a map, first select either "Floorplan" from the Map Type dropdown, or select a specific location from the pre-loaded maps. If you select "Floorplan", you will have the option to load a custom image. Locate the image file to be uploaded (must be .jpg or .png format). Then click "Upload".

2. Once uploaded, you can click on the map to have it enlarge in the viewing window.

/lap List					Home / Map Li	st
Available Maps				Add New Map		
Name	Мар Туре		Edit		Server Room	
Server Room	Floor Plan	Edit	Delete	Map Name	Enter name of this map	_
World Sensors	World	Edit	Delete	Мар Туре	Floor Plan Select Map Location Type you want to add sensors to	World
				Floor Plan	Choose File No file chosen Upload a floor plan of your desired location. Allowed file typespng, .jpg	World Floor Plan Africa Asia
					Add New Map	Europe North America Oceania South America
	F	Figuro	e 16- M	ap Types	s to choose from	Argentina Australia Austria Bangladesh Belgium Brazil Canada Chile China Colombia



3. Right click anywhere in the image to add a marker. A prompt for "Add Marker" will display. Click on that to bring up a list of sensors to be monitored in a Place, from a Device, or individual sensors.

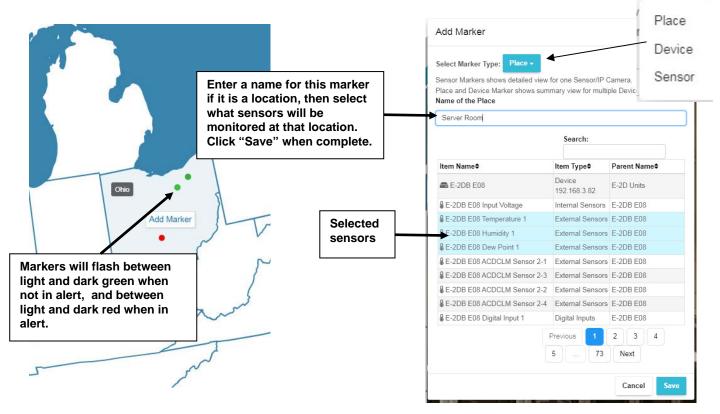


Figure 18- Loading maps and placing markers

			hinderaaliseda hiir ender da		
elect Marker Type: Device - ensor Markers shows detailed view lace and Device Marker shows sur		Itiple Devices/Sensors	Select Marker Type: Sensor - Sensor Markers shows detailed view Place and Device Marker shows sum		
Device Name\$	IP Address\$	Group Name\$			
■ E-2DB E08	Device 192.168.3.82	E-2D Units	Sensor Name≑	Sensor Type ≑	Device Name\$
E-2DB E02 (RevG)	Device 192.168.3.222	E-2D Units	E-2DB E08 Input Voltage	Internal Sensors	E-2DB E08
	192.168.3.222 Device		E-2DB E08 Temperature 1	External Sensors	E-2DB E08
E-2DB E01 (RevG/POE)	192.168.3.223	E-2D Units	E-2DB E08 Humidity 1	External Sensors	E-2DB E08
E-2D Lab Room Environment Monitor	Device 147.0.27.207	E-2D Units	E-2DB E08 Dew Point 1	External Sensors	E-2DB E08
	Device	5 50 11 3	BE-2DB E08 ACDCLM Sensor 2-1	External Sensors	E-2DB E08
E-5DEL-1 (E07)	192.168.3.81	E-5D Units	E-2DB E08 ACDCLM Sensor 2-3	External Sensors	E-2DB E08
E-5D Server Rack Monitor	Device 147.0.27.208	E-5D Units	E-2DB E08 ACDCLM Sensor 2-2	External Sensors	E-2DB E08
E-5D E04 DDNS Test Unit	Device	E-5D Units	E-2DB E08 ACDCLM Sensor 2-4	External Sensors	E-2DB E08
DE 30 E04 DONO TOSCOM	147.0.27.212	E SD ONIS	E-2DB E08 Digital Input 1	Digital Inputs	E-2DB E08
📾 E-16DEL-1 (Master)	Device 192.168.3.100	E-16D Units	E-2DB E08 Digital Input 2	Digital Inputs	E-2DB E08
📾 E-16D S1	Device 192.168.3.101	E-16D Units		Previous 1	2 3 4
E-16D 24V IPMI Rack	Device 192.168.1.100	E-16D Units		5 75	Next
	Previous 1	2 3 Next			

Figure 19- Markers for Device or Sensor

With your maps and markers defined, you can create a Dashboard and add your map to it (see page 24) .

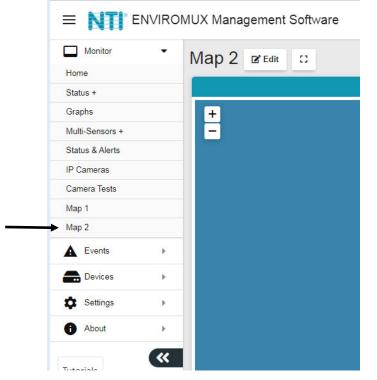


Figure 20- Use a configured map to monitor select sensors

With the map on the screen, click on any marker and the sensor or sensors associated with the Location/Device will be displayed and the status of those sensors will be indicated.

Assigned	Basement			×				
Marker		Search:						
	ltem Name≑	ltem Type ≑	Status≑	Parent Name≎				
	■ E-2DB E08	Device 192.168.3.82	Normal	E-2D Units				
	E-2DB E08 ACDCLM Senso 2-2	External Sensors	0.0 %	E-2DB E08				
	E-2DB E08 Dew Point 1	External Sensors	29.4 °F	E-2DB E08				
	E-2DB E08 Temperature 1	External Sensors	81.2 °F	E-2DB E08				
		Previous 1	Next					
		Close						

Figure 21- Sensor status at location "Basement"

Devices to Monitor

Before adding a Device, select the group under which the Device needs to be added. If no selection is made the Device will be added to the "Home" group.

To add a Device, click on "Devices"-> "Add or Remove Device" in the side menu. A window will open as shown on the next page.

Enter 1) the Domain or IP address for the Device,

- 2) the connection protocol (HTTP or HTTPS),
- 3) the server port number (usually 80 for HTTP and 443 for HTTPS)
- 4) any user with admin privileges on the E-xD can be used
- 5) the user with admin privileges password
- 6) press "Add Device".

If the IP address is valid, the message "Connecting to Device" will be followed by "Device added successfully" and the Device will appear in the Devices Added list. The sensors attached to that Device will be sensed and added to the "My Sensors" page.

If the IP address or Domain is not valid or accessible, the message "Error 913: Connection Timeout" will be displayed.

TIP: If you don't know the IP addresses of the Devices to be monitored, you can use the included NTI Discovery Tool (page 20) to identify them (provided they are all connected to the same LAN).

Monitor	Þ	Add Or Remo	ove Devices	Add Devices		Home / Add Or Rem
A Events		Device Groups		/luu Dorrooo	+ Add New Device	
B Devices	-	Home			Domain or IP Address	
My Devices		E-2D Units				Domain or IP Address of your Environnux device
My Sensors		E-6D Units			Protocol	HTTP
Add Or Remove D	Nevice					Protocol used to communicate with device
t Settings	•				Port Of Web Server	80
About						Port number of web server protocol HTTP or HTTPS
U Abbit					Admin Username	root
	«					Usemame of a user with admin privileges on above Enviromus device
					Admin Password	
						Password for above user
		Create Group Res	Delete Group Delete Or	wice		Parallel and the second se
						Add Device
		Devices Added				
ces added		IP Address-	Device Name\$	Statu	•	
		10.0.1.16	Furnace Room E-2D	Norm	4	
		147.0.27.197	E-16D Server Rack Monitor	Norm	6	
		147.0.27.207	E-2D Lab Room Environment Mon	hor Norm	0	
		147.0.27.208	E-50 Server Rack Monitor	Norm	4 T	
		147.0.27.212	E-5D E04 DDNS Test Unit	Norm	4	

Figure 22- Add Devices to monitor

Continue adding until all Devices to be monitored are listed.

<u>Groups</u>

Groups can be used to organize your Devices as viewed on the Dashboard.

The name of the default group "Home" can be changed. Below it has been changed to "Server Room". Click the name, click on "Rename Group", and enter the new name. Press Enter key to save.

Add Or Remove Devices	
Device Groups	
Server Room E-2D Units E-5D Units E-16D Units New Group New Group	
Create Group Rename Group Delete Group Delete Device	

Figure 23- Primary group, and New Group added

Click "Create Group" to add an additional group. While the "New Group" name is selected (highlighted), any Device that is entered will fall under that group.

To remove a group, while the group to be removed is selected (highlighted), click "Delete Group".

To move a Device from one group to another group, first select the Device in the group to remove it from, then click "Delete Device".

		+ Add New Device			
- 🋠 Horne		Domain or IP Addres	55		
- 🗃 E-2D Units			Domain or IP Address of your Environitiz device		
- 📾 E-208 E		127274	HTTP		
- 🛋 E-200 P		Protocol	Protocol used to communicate with dense		
- 📾 6-20 81					
- 🚔 E/208 8		Port Of Web Server	69		
	ab Room Environment Monitor		Port number of web server protocol HTTP or HTTPS		
- 📾 E-20 P0		Admin Username	root		
The second se	e Room E-2D	, Photos Marketonica	Username of a user with admin privileges on above Environce device		
- ■ 5-20 PG	30	100 N			
E-160 Units		Admin Password			
	L-1 (Master)		Postword for above user		
E-160 S					
	24V IPMI Rack		Add Device		
E-160 P					
E-160 S	Server Rack Monitor				
- E-160 E	(10)				
New Group					
_					
	ename Group Delete Group Delete Device				
Create Group Re	ename Group Dekete Group Dekete Device				
Create Group Re vices Added	ename Group Dekite Device Tame	Status0			
_		Stature Normal			



Add Or Remove Devices	Home 🧹 Add Or Remove Device
Device Groups	+ Add New Device
	Domain or IP Address 10.0.1.16 Domain or IP Address of your Enviromux device. Protocol HTTP Protocol used to communicate with device Port Of Web Server 80 Port number of web server protocol HTTP or HTTPS Admin Username root Username of a user with admin privileges on above Enviromux device
E-16DEL-1 (Master) E-16D St E-16D St E-16D 24V IPMI Rack E-16D P02 E-16D Server Rack Monitor E-16D Server Rack Monitor E-16D E100 Device successfully added	Password for above user Device added successfully Add Device
Create Group Rename Group Delete Group Delete Group Delete Device	

Figure 25- Device moved/added to New Group

Now select the new group name to add it to (above it is "New Group"), and re-enter the IP address and additional information. Click "Add Device". If successful, the message "Device added successfully" will appear and the Device will be listed under the new group name.

If you do not know the IP address of the Device you want to add, you can use the included NTI Discovery Tool (page 20) to identify them (provided they are all connected to the same LAN).

To reload the configuration for a Device, rename the Device or delete the Device, you can right-click the Device in the list from the Add Or Remove Devices menu.

e <mark>vic</mark> e Group)5		
- 🗥 Hom	e		
↓	-2D Units		
-4	🔒 E-2DB E08		
	Reload Config		
	Rename Device		
	Delete Device	nment Monitor	
1 1 7	E-2D P04	_	
	🔒 E-2D P05		
	-5D Units		
	-16D Units		
	lew Group		

Figure 26- Additional features from Add Devices menu

The user can access and change configuration settings for a Device by going to the My Devices menu, double-clicking the Group, and then the Device. Accessing the Device this way will open up the list of configuration options for the Device.

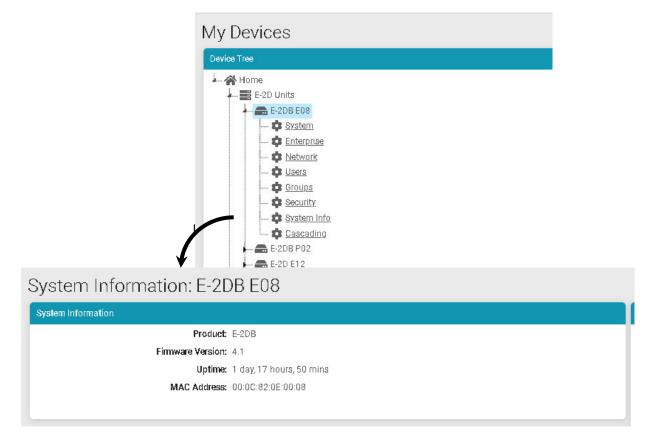


Figure 28- System Info page for the Device

Device Discovery Tool

In order to easily locate the Device on a network, the NTI Device Discovery Tool may be used. The Discovery Tool is available on many of our webpages, including <u>http://www.networktechinc.com/download/d-environment-monitor-16.html</u>. Download the discovery.zip, extract the contents to your PC and click on the file *NTIdiscover.jar*. This will open your browser and display the Device Discovery Tool page.

Note: The Device Discovery Tool requires the Java Runtime Environment to operate.

Note: The computer using the Device Discovery Tool and the ENVIROMUX must be connected to the same physical network in order for the Device Discovery Tool to work.

Network Technologies Inc Device Discovery Tool

START

When you load this page, the NTI Device Discovery Applet should load. Accept the Certificate to allow this
applet access to your network. Press the button entitled **Detect NTI Devices** to start the discovery
process. After a short time, the tool will display all NTI devices on your network, along with their network
settings.

Note: Do not close this page while the NTI Discovery Tool is running. Close the NTI Device Discovery Application first, then this webpage.

How To Use the Discovery Tool

- <u>To Change A Device's Settings</u>, within the row of the device whose setting you wish to change, type in a new setting and press the Enter key or the Submit button on that row. You can also press the Submit All button to submit all changes at once.
- To Refresh the list of devices, press the Refresh button.
- To Blink the LEDs of the unit, press the Blink LED button (This feature not supported on all products). The Blink LED button will change to a Blinking... button. The LEDs of the unit will blink until the Blinking... button is pressed, or the NTI Device Discovery Application is closed. The LEDs will automatically cease blinking after 2 hours.
- <u>To Stop the LEDs of the unit blinking</u>, press the Blinking... button. The Blinking... button will change to a Blink LED button.

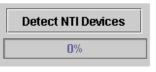


Figure 29- Device Discovery Tool page

Use the Device Discovery Tool to display all NTI ENVIROMUX Devices on the network, along with their network settings. Follow the instructions on the Device Discovery Tool page to use the tool and to change the Device settings if so desired.

NTI Device Discov	very					
Device	MAC Address	IP Address	Mask	Gateway		
ENVIROMUX	00:40:9D:24:07:70	65.243.248.18	255.255.255.128	65.243.248.1	Submit	Blink LED
		Submit All	Refresh	Close		

VIEW SENSORS INDIVIDUALLY

With Devices added, you can now view the sensors connected to those Devices. Select My Sensors from the side menu.

My Sensors

or Tree	Sensors Available								
Mome	Search Sensors:								
E-2D Units	Sensor Name≑	Sensor T	ype‡	Device Name≎					
	1. E-2DB E08 Input Voltage	Internal S	ensor	E-2DB E08					
	1.1. E-2DB E08 Temperature 1	click on this to see	the	E-2DB E08					
E-2D Lab Room Environment Monitor	1.2. E-2DB E08 Humidity 1	details for it		E-2DB E08					
🛖 E-2D P04 🛖 Furnace Room E-2D	1.3. E-2DB E08 Dew Point 1	External	Sensor	E-2DB E08					
E-2D E04 (RevG)	2.1. E-2DB E08 ACDCLM Sensor 2-1	External	Sensor	E-2DB E08					
=================================	2.2. E-2DB E08 ACDCLM Sensor 2-3	External	Sensor	E-2DB E08					
E-2DB E15 	2.3. E-2DB E08 ACDCLM Sensor 2-2	External		E-2DB E08					
E-5D Units	2.4. E-2DB E08 ACDCLM Sensor 2-4	External		E-2DB E08					
				E-2DB E08					
E-5D Server Rack Monitor	1. E-2DB E08 Digital Input 1	Digital Inj							
E-5D E04 DDNS Test Unit	2. E-2DB E08 Digital Input 2	Digital In		E-2DB E08					
	1. CPU250 Win Server 2016	IP Device	IS	E-2DB E08					
	1. E-MICRO E03	IP Senso	rs	E-2DB E08					
- 📥 Compressor Rm. E-5D	I.1 E-MICRO E03 Temperature	IP Senso	rs	E-2DB E08					
E-5D E02	I.2 E-MICRO E03 Humidity	IP Senso	rs	E-2DB E08					
E-5DB P02 (PLSD Test Unit)	I.3 E-MICRO E03 Humidity Dew Point	IP Senso	rs	E-2DB E08					
E-16DEL-1 (Master)	E.1 E-MICRO E03 Temperature 1	IP Senso	rs	E-2DB E08					
E-16D S1	E.4 E-MICRO E03 Temperature 2	IP Senso	rs	E-2DB E08					
E-16D 24V IPMI Rack	E.5 E-MICRO E03 Humidity 2	IP Senso	rs	E-2DB E08					
Oper8 Test Unit	E.6 E-MICRO E03 Dew Point 2	IP Senso	rs	E-2DB E08					
== E-16D 48V	D.1 E-MICRO E03 Digital Input 1	IP Senso	rs	E-2DB E08					
	D.2 E-MICRO E03 Digital Input 2	IP Senso	rs	E-2DB E08					
🖶 E-16D P02	1. E-1W P01	IP Senso		E-2DB E08					
	E.1 E-1W P01 Temperature 1	IP Senso		E-2DB E08					
	L. L. W. OT lemperature 1	IF Seliso	10	E-200 E00					

Figure 30- Sensors being monitored

The initial list will be all of the sensors, cameras, remote IP Devices and IP Sensors (E-MICRO-TRH(P) and E-1W(P)) that are attached to the Devices and are now being monitored by the E-MNG-SH. To see the details for a specific sensor in that list, click on the blue text for the Sensor Name.

	Sensor Sellings		
status: Norma	— Sensor Settings		
T2.5 Type: Temperature	Description	E-16D-24V Internal Temperature	
50.0 Last Alert Time: Never	Units	Descriptive name for the sensor	
.5 117.5 Lowest Reading 78.9 *F	1012/101002	Select the units for the sensor	
140.0 - Lowest Reading was at: 02/21/2021 10:59:03 AM Highest Reading: 89.4 "F	Min. Level	-40 Min. supported value for the sensor	
Highest Reading was at: 02/18/2021 04:33:30 PM	Mox. Level	195	
OF Total Normal Time: Total Alert Time: Total Normal Time: 11 days 22 hours 5 minutes		Max, supported value for the sensor	
185.0 Last Updated: 02/22/2021 01:27:02 PM	Min. Non-Critical Threshold	60 Min. threshold below which indicates a non-critical alert condition	
07.2	Max. Non-Critical Threshold	100	
87.2		Max. threshold above which indicates an non-critical alert condition	
	Min. Critical Threshold	50	
		Min. threshold below which indicates an alert condition	
Disable All Alerts for Device Clear Records Clear Graph	Max. Critical Threshold	Max, threshold above which indicates an alert condition	
ay 1Wk 1Mo 6Mo 2Yr	Refresh Rate	10	
●Max. ●Min. ●Avg.		The refresh rate at which the sensor view is updated	
	Refresh Rate Unit	Sec The refresh rate unit at which the sensor view is updated	
	Offset		
	U.S.R.	Add/Subtract a value to offset ambient temperature heating	
	+ Group Settings		
	+ Non-Critical Alert Settings		
AND TO THE TO THE AND	+ Critical Alert Settings		
CAD			

Sensor values, a historical graph, and all settings for that sensor can be viewed. Settings can also be changed if desired.

Figure 31- Details for Internal Temperature Sensor

To quickly find a sensor, type all or part of a sensor name or Device name in the "Search Sensors" box.

ensors Available		
		Search Sensors: 16del x
Devîce Name\$	Sensor Type\$	Sensor Name-
E-16DEL-1 (Master)	Output Relays	1. 16DEL-1 Output Relay 1
E-16DEL-1 (Master)	IP Devices	1. E-16D Web Demo
E-16DEL-1 (Master)	Tac Sensor	1. E-16DEL-1 Digital Input 1 Tach Sensor (In Reserve)
E-16DEL-1 (Master)	Internal Sensor	1. E-16DEL-1 Internal Temperature
E-16DEL-1 (Master)	Power Supplies	1. E-16DEL-1 Power Supply
E-16DEL-1 (Master)	Events	1. Event #1 E-16D-M Internal Temperature
E-16DEL-1 (Master)	SNMP Sensors	1. NAS (NDATA) System Temperature
E-16DEL-1 (Master)	IP Cameras	1. Wanscam HW0041-1
E-16DEL-1 (Master)	External Sensor	1.1. E-16DEL-1 STHS-99 Port 1 Temperature
E-16DEL-1 (Master)	External Sensor	1.2. E-16DEL-1 STHS-99 Port 1 Humidity
E-16DEL-1 (Master)	External Sensor	1.8. E-16DEL-1 STHS-99 Port 1 Dew_Point
E-16DEL-1 (Master)	IP Devices	10. SPLITMUX-HD-4RT Web Demo
E-16DEL-1 (Master)	External Sensor	10.1. E-16DEL-1 RTD Port 10 Temperature 1
E-16DEL-1 (Master)	External Sensor	10.2. E-16DEL-1 RTD Port 10 Temperature 2 (Reserved)
E-16DEL-1 (Master)	IP Devices	11. E-MICRO Web Demo Unit
F-16DEL-1 (Master)	External Sensor	11.1 F-16DEL-1 STHSD Port 11 Temperature

Figure 32- Use Search Sensors box

To see sensors connected to a specific Device, double-click or expand the Device in the group.

My Sensors
Sensor Tree
- 🖌 Home
4 🧱 E-2D Units
4 🚔 E-2DB E08
🌡 Internal Sensors
External Sensors
🖿 🌡 Digital Input
🌡 IP Devices
- SNMP Sensors
🕨 🔮 <u>Output Relays</u>
Power Supplies
IP Cameras
Events
Smart Alerts
E-2DB P02
E-2D E12
E-2DB E11 (RevF)
E-2D Lab Room Environment Monitor
E-2D P04
🕨 🛲 E-2D P05

Figure 33- Sensors, relays, IP Cameras etc attached to a specific Device

If you click once on a specific sensor category, the screen format will change and show the status of all sensors in that category.

External Sensors					Sensor Tree
Description	Туре	Value	Status	Action	Home
1.1. E-2DB E08 Temperature 1	Temperature Combo	79.1 °F	Normal	View Delete	
1.2. E-2DB E08 Humidity 1	Temperature Combo	18.7 %	Normal	View Delete	Internal Sensors
1.3. E-2DB E08 Dew Point 1	Dew Point	32.8 °F	Normal	View Delete	B External Sensors B E-2DB E08 Temperature 1
2.1. E-2DB E08 ACDCLM Sensor 2-1	AC Voltage	0.0 V	Normal	View Delete	E-2DB E08 Humidity 1
2.2. E-2DB E08 ACDCLM Sensor 2-3	DC Voltage	-0.1 V	Normal	View Delete	
2.3. E-2DB E08 ACDCLM Sensor 2-2	AC Current	0.0 %	Normal	View Delete	& E-2DB E08 ACDCLM Sensor 2-3
2.4. E-2DB E08 ACDCLM Sensor 2-4	DC Current	0.4 %	Normal	View Delete	E-2DB E08 ACDCLM Sensor 2-2 E-2DB E08 ACDCLM Sensor 2-4

Figure 34- External Sensors connected to specific Device

From that screen you can view each sensor, or delete it from the list.

SETUP A DASHBOARD

Groups of sensors can be monitored in Dashboards containing rows and columns displaying the status of individual sensors. Each of the sensors monitored on each of the Devices can be added to various Dashboards and organized in rows and columns as necessary for easy viewing.

To get started, click the "Edit" button next to "Dashboard1".

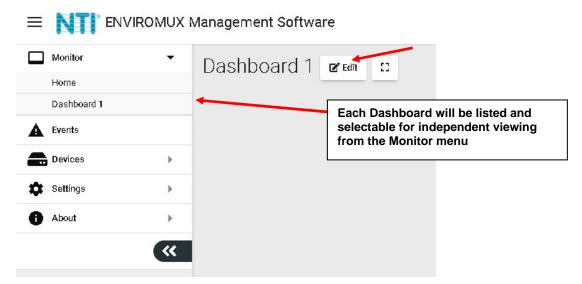


Figure 35- Initial Monitoring Dashboard menu

This will open the window into the options available for creating new Dashboards. With the editing window open, you can change the name of the Dashboard, add a new Dashboard, or add a new row of monitored sensors to the layout. If you click the Finish Edit button, the editing window will close and the configured Dashboard will remain.

Dashboard 1	🕑 Finish Edit	:1	Add New Dashboard	
				≓+ Add New Row



Click "Add New Row" to establish your first row of sensors. Clock the "X" to delete the row and all columns in it.

New Dashboard	🕑 Finish Edit	53	Add New Dashboard	₪		
Row Header						6
						1
≕+ Add New Column						Delete the row
					=+ Add New Row	

Figure 37- How to add Columns or delete Rows

Then click the "Add New Column" to create a column in that row. Click it multiple times for multiple columns. We recommend all columns fit in the same row side by side. To resize the columns click on the Decrease or Increase icon, as many times as needed, and that column will resize accordingly after a short delay (see also page 27).

🗹 Finish Edit	1 Add New Dashboard	
	=+ Add New Column	
	=4	Add New Row
		↔ ↔ X

Figure 38- Ready to add a sensor window

To add a sensor, in the Column Header, click the "Add New Window". A list of all sensors connected to all of the Devices will appear, 10 at a time. Select which sensor is to be monitored in the column. You can also enter a name to associate with that sensor. Navigate through the many sensors available.

Sensors can be viewed as individual sensors, graphs for single sensors, gauges for single sensors and much more. IP Camera snapshots, an alerts list, or Device status can also be viewed.

	Window Name Outside Office			
ngle Sensor Value 👻	Dísplay Type:	Ingle Sensor Value +		
	Device	Searc	Sensor	Sensor
2012-1 - 2010-1	Namo¢	Sensor Name\$	Value#	ТуреФ
le Sensor Value	E-208 696	E-2DB E06 Input Voltage	8.6 V	Interna Senso
le Sensor Graph	E-208 E96	E-2DB E06 Temperature 1	79.5 °F	Extern Senso
ter construction and an and a set	E-208 E06	E-2DB E06 Humidity 1	10.4 %	Extern Senso
Sensor Card	6-208 606	E-2DB E06 Dew Point 1	32.0 °F	Externa Sensor
ensor Gauge	8-208 006	E-2DB E06 ACDCLM Sensor 2-1	0.0 V	External Sensors
or List	6-208 696	E-2DE E96 ACDCLM Sensor 2-3	-0.1 V	Externa Sensor
	0.208 006	E-2DB E06 ACDCLM Sensor 2-2	0.0 %	Externa Sensor
insor Graph	6-208 696	E-2DB E06 ACDCLM Sensor 2-4	0.4%	Externa Sensor
era	E-208 E96	E-2DB E06 Digital Input 1	Open	Digital Inputs
	E-208 E06	E-2DB E06 Digital Input 2	Open	Digital Inputs
		Previous	1 2 Next	8 4
List				

Figure 39- Select sensors to view

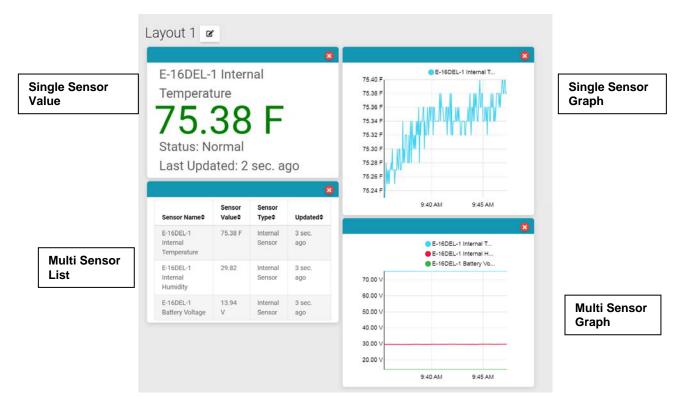


Figure 40- Multiple types of views available

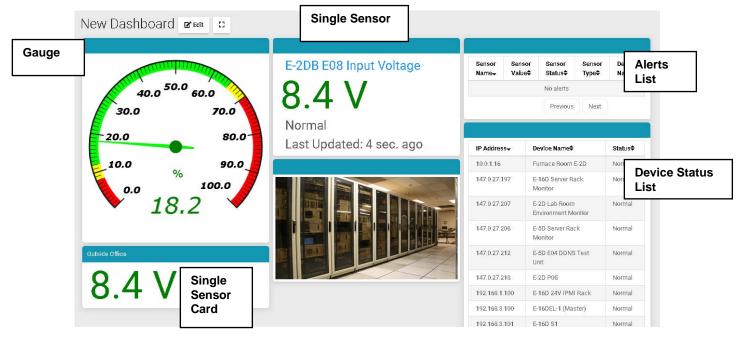


Figure 41- More types of views

To select one sensor, click one listed item and it will turn blue. Click "Save" to enter that in the column.

To select multiple sensors, there is no need to hold the shift key. Clicking one after the other keeps the sensor selected.

To deselect a sensor, click the sensor again.

Once done click "Save" to enter them in the same window.

To quickly locate the sensor you want to display, use the Search box to enter characters in the description to sort the available sensors and display only the ones that include your search parameters.

ndow Name			
			Search
splay Type:	Single Sensor Value 👻		
	Search		
Device Name\$	Sensor Name\$	Sensor Value\$	Sensor Type≎
E-2DB E08	E-2DB E08 Input Voltage	8.4 V	Internal Sensors
E-2DB E08	E-2DB E08 Temperature 1	E-2DB E08 Temperature 1 77.1 °F Ex Se	
E-2DB E08	E-2DB E08 Humidity 1	19.8 %	External Sensors
E-2DB E08	E-2DB E08 Dew Point 1	32.7 °F	External Sensors
E-2DB E08	E-2DB E08 ACDCLM Sensor 2-1	0.0 V	External Sensors
E-2DB E08	E-2DB E08 ACDCLM Sensor 2-3	-0.1 V	External Sensors
E-2DB E08	E-2DB E08 ACDCLM Sensor 2-2	0.0 %	External Sensors
E-2DB E08	E-2DB E08 ACDCLM Sensor 2-4	0.4 %	External Sensors
E-2DB E08	E-2DB E08 Digital Input 1	Ореп	Digital Inputs
E-2DB E08	E-2DB E08 Digital Input 2	Ореп	Digital Inputs
	Previous	1 2	3 4 5

Figure 42- Select one or more sensors

To delete a window in a column, click the red "X" in the upper right corner of Increase width the window. Delete a column If you wish to change the order in which your sensors are viewed, you can move a window from one column to another. First add the column if it **Decrease width** doesn't already exist, "then simply drag the window **Delete a window** by holding the window header bar to the target column. While dropping to the target column, that 40.0 50.0 60.0 column will show a white placeholder indicating that 70.0 the window can be dropped there. 30.0 80.0 20 0 Use the Increase button to increase the width of a selected column. 10.0 90.0 Use the Decrease button to decrease the width of a 100.0 0.0 selected column. 19.8 Outside Offi

Figure 43- Change the width of a column

To add a new group of sensors to a separate row, Click "Add New Row" and configure the new row in the same fashion.

New Dashboard				
Table Table : BCO	Orderen Russel	500	TORNIA RECEI	00
	E-160EL-1 ACLM-3P480 Port 4 Current Phase A		Anna Anna Anna Anna Anna	
	1.7 A		Been Been Been Been Been Been Rame Valuat Betat Typel Ramat Ec.e.1/2	Last Uptarball
40.0 50.0 60.0	Normal			Renoul Ham
	Last Updated: 8 hours ago		P Address Derive Terrest	Palat
30.0 70.0	E-16DEL-1 ACLM-3P480 Port 4 Voltage Phase A	0	10.01.14 Pattace Bases 8:03 147.6:27.707 E-160 Sarver Rest, Maritur	Annual Surrey
	117.8 V		147.0.27.207 EGD Lab Room Detromment Identity 147.0.27.208 E10 Server Rook, Identity	Aurest Control
20.0 80.0	Normal		147.027.010 EVE EVE EVE EVEN	Aureat Roman
	Last Updated: 5 hours ago		TELEVISION EVENING EVENING	Normal Sentra Conta
10.0 % 90.0	E-160EL-1 ACLM-3P480 Port 4 Active Power Phase A		145,146,3,200 0140 WE	Barriel Barriel
100.0	171.5 W		182386.8207 0.05489 182386.8200 0.000 0.000	Same I
0.0	Normal		182-184.8222 848-014 182-184.8223 848-021 (New?)	Samel Samel
▶ 19.5	Last Updated: 8 hours ago		192,195,2227 010 020 192,195,2227 0120 KM	Barten 1 Restau 1
		The Addition Wooder	192,192,202 E192 E192 E192 E192 E192 E192 E192 E19	Annu' Annui
			142.146.3.86 628.828 142.146.3.89 618.881	Romal . Romal .
9.6.1/		Ľ	BLITITO DEP BRINCH DEP	
8.6 V			New Row	- Automotive Wester
C De Lancestano			Added	
The Address Constant				
				_
And Assess				
Color Marco	Course Buildin	000		
E-2DB E09 Digital Input 2	NAS (NDATA) System Temperature			
Open	37.0			
Normal	Normal			
Last Updated: 6 sec. ago	Last Updated: 3 sec. ago			
	Figure 44- A	Click to Add New Row		
To logout of the server without si click on the Root icon in the uppe click on "Log Out".			_	
Message number (image right) in the last alert was viewed or ackn	ndicates the number of a nowledged by this user	alerts triggered since	Admir Admir	
		- Indication of New	Edit Profile	
	Alert			
			Log Out	
			Figure 45- I	Log out

There is no limit to the number of Dashboards that can be setup to organize the type of sensor data you want to see. For example, a "Graphs" Dashboard was setup to view only the graphs from specific sensors.

When in full screen mode (see bottom of this page), scrolling the screen is not possible. Please make sure all windows fit inside the screen to be visible on the monitor.



Figure 46- Dashboard setup to display specific content

Once you are finished editing a Dashboard, click "Finish Editing"

Dashboard 1	C' Finish Edit C3 Add New Dashiboard
	≣+ Add New Row

While viewing your Dashboard, to make it fill your screen, click on the small box to the right of the Edit button. Press the "Esc" key to return to normal viewing.

	IROMUX N	Click for full screen mode	
Monitor Home	•	Dashboard 1 🖉 Edit	
Dashboard 1			
Devices	Þ		
Settings	×		
f About	· ~~		

Figure 47- Enable full screen view

EVENTS MENU

The E-MNG-SH can provide information on alerts generated by the devices it is monitoring, and will provide that information in three different forms.

Events Log will provide a list of events that have occurred for each device/sensor the E-MNG-SH is monitoring.

Reports, once configured, will contain event information on selected sensors, devices (and all sensors connected to those devices), or markers assigned to configured maps. The information the reports will provide includes 1) the combined number of alerts that have been generated by each selected sensors/device's sensors/markers in the maps and 2) the combined length of time each of those devices/sensors/ markers were in alert. The frequency of reports and the data present in reports can be configured by "Triggers" and "Actions" respectively.

Recordings are a collection of IPCAM snapshot recordings that have been saved as configured in each sensor alert that is set to provide a snapshot recording from a connected IPCAM.

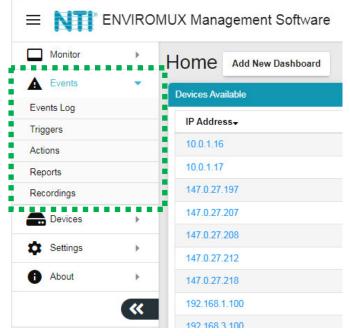


Figure 48- Events Menu

Events Log

The Events Logs is where Sensor Events, Smart Alerts and Alert messages are individually recorded. The time of each event, the type of event and the source of each event are recorded.

Alert logs are recorded in red font.

When the alert is Acknowledged or Dismissed, the alert will show up in the Events Log along with the name of the user.

From the link in the message, you can click and go directly to the sensor to see its current state.

Events Log			Home	Events Log
Events Log				
Time	Event Type	Message		
02/23/2021 10:34:36 AM	Info	Sensor 4.1 E-SDEL Port 4 NLS returned to Normal on device E-SDEL-1 (E07)		
02/23/2021 10:23:32 AM	Alert	Sensor 4.1.E-SDEL Port 4 NLS went into Alert on device E-SDEL-1 (E07)		
02/23/2021 10 14 57 AM	info	Sensor 4.1 E-5DEL Part 4 NUS returned to Normal on device E-5DEL-1 (E07)		
02/23/2021 10:11:33 AM	Alert	Sensor 4.1 E-SDEL Port 4 NLS went into Alert on device E-SDEL-1 (E07)		
02/23/2021 10:00:15 AM	info	Sensor 4.1.E-SDEL Port 4 NLS returned to Normal on device E-SDEL-1 (E07)		
02/23/2021 09:59:41 AM	Alert	Sensor 4.1.E-SDEL Port 4 NLS went into Alert on device E-SDEL-1 (E07)		
02/23/2021 09 52:04 AM	Info	Sensor 1 1 E-16D-24V IPMI Rack Motion Detector 1 JE/b) returned to Normal on device E-16D 24V IPMI Rack		
02/23/2021 09:51:53 AM	Alert	Sensor 1.1.E-16D-24V IPMI Rack Motion Detector 1 /E//s went into Alert on device E-16D 24V IPMI Rack		
02/23/2021 09:24:43 AM	info	Smart Alert 2. Smart Alert #2 Deacon & Siren Trigger returned to Normal on device E-2D Lab Room Environment Monitor		
02/23/2021 09:24:43 AM	Info	Smart Alert 1.Smart Alert #1 Lab Intrusion returned to Normal on device E-2D Lab Room Environment Monitor		
02/23/2021 09 24 43 AM	Info	Event 4 Event #4 Lab &moke Detector returned to Normal on device E-2D Lab Room Environment Monitor		
02/23/2021 09:24:43 AM	Info	Event 3.Event #3 Lab Water Sensor returned to Normal on device E-2D Lab Room Environment Monitor		
02/23/2021 09:24:43 AM	Info	Event 2 Event #2 Lab Equipment Door returned to Normal on device E-2D Lab Room Environment Monitor		
02/23/2021 09:24:43 AM	linfo'	Event 1 Event #1 Lab Main Door returned to Normal on device E-20 Lab Room Environment Monitor		
02/23/2021 09:23:35 AM	Info	Smart Alert 2.Smart Alert 2 Beacon & Siren Alerta returned to Normal on device E-16D Server Rack Monitor		
02/23/2021 09:23:35 AM	Into	Smart Alert 1 Smart Alert 1 Emernenvey UPS Shutdown returned to Normal on device F-160 Server Rack Monitor		

Figure 49- Events Log

If a sensor is in alert, you can directly connect to it and Acknowledge or Dismiss the alert.

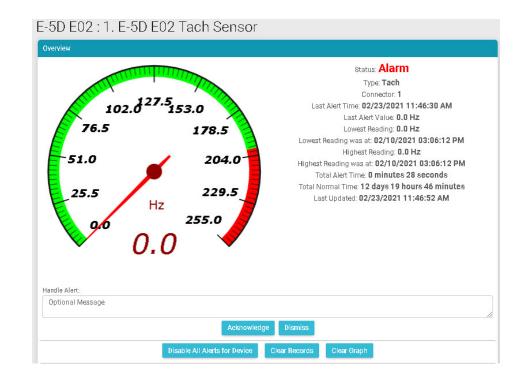
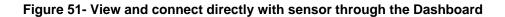


Figure 50- Connect directly to acknowledge or dismiss alert

Whether the Event is viewed on the Events Log page, or from a Dashboard displaying the event, you can click on the sensor in the image and address the event directly.

You can click on the alert to Acknowledge/Dismiss the alert directly from Dashboard.

Porch Temperature 15 (STHS-0)	Remote 5D STHS-LSH Port 1 Upper Level Temperature	Aleta					
	Remote 5D STHS-LSH Port 1 Upper Level	Senser, Name+	Sensor Value¢	Sensor Status#	Sensor Type¢	Device Name®	Last Updated4
0.0 72.5 95.0	Temperature	E-5D E02 Tach Sensor	0.0 Hz	Alarm	Tac Sensors	E-5D E02	5 sec. ago
	74.0 °F			Previous	s 1. Next		
117.5	74.0 F						
140	Normal	IP Address+	Device Nar	me≎			Status≎
1000	Last Updated: 14 sec. ago	10.0116	Fumioe Room E-2D			Normal	
162	.5	147.0.27.197	E-16D Serv	ver Rack Monitor			Normal
		147.0.27.207	E-2D Lab F	toom Environmen	t Monitor		Normal
5.0	E-2DB E08 Input Voltage	147.0.27.208	E-5D Serve	er Rack Monitor			Normal
		147.0.27.212	E-5D E04 I	DDNS Test Unit			Normal
-		147 0 27 218	E-20 P05				Normal
1	8 3 V						Normal
7	8.5 V	192.168.1.100	E-16D 24V	IPMI Rack		E-16DEL-1 (Master)	
7	Normal	192.168.1.100 192.168.3.100					Normal
							Normal
7 sthso)	Normal	192.168.3.100	E-16DEL-1	(Master)			



When you click on the alert from the Dashboard, a pop-up will display providing the option to acknowledge or dismiss it.

Acknowledge/Dismiss Alert			<u> </u>					Autiin		
E-16D-24V Internal Temp	erature									H
Optional Message										
					Sensor Value ≎	Sensor Status≑	Sensor Type\$	Device Name\$	Last Updated≑	
	Cancel	Acknowledge	Dismiss	hal Temperature	89.1 °F	Alarm	Internal Sensors	E-16D 24V IPMI Rack	1 sec. ago	
	Normal		_			Previous	1 Next			
	Normal									

Figure 52- Acknowledge or Dismiss alert pop-up

Reports

Reports will contain event information on selected sensors and devices individually or in groups as they are assigned to Devices, or markers assigned to configured maps. Before you must configure Actions to be reported on and Triggers for how often to have Reports generated.

First click on "Actions" in the Events menu. Apply a name to the Action you will create. Then click on "Add New Action" and your new Action will appear in the list to the left.

Once the Action is listed, click on "Edit" to configure it.

tion Setting	gs			edit		Apply a	
allable Actions						Add New Action	
Name	Action Type	Entity	Triggers	Enabled	Edit		Name
mple Report	Generate Report & Email	E-16DEL-1 (Master)	Sample Trigger	Yes	Edit Delete	Action Name	Enter name for reference
nsor Report	Generate Report & Email	E-16D-24V Outdoor Porch Temperature 14 (STO)/ Å	Sensor Trigger	Yea	Edit Delete		
ap Report	Generate Report & Email	Ohio	Map Trigger	Yes	Feld Delete		Add New Action
ap 2 Report	Generate Report & Email	Server Rack	Map 2 Trigger	Yes	Edit Delete		

Figure 53- Action List

Edit Action: Sample Report				This Hou	r	
				This Hou	r	
Edit Action				This Day		
Last Run Time:	01/25/2022 09:00:03 AM			This Wee	ek	
Action Name	Sample Report			 This Mon 	th	
	Enter name for reference (Optional)	This Qua	rter			
Action Enable				This Year	r	
	Select to enable this action			Last Hou		
Action Type	Generate Report & Email Stelect what action to take					
0	Last Day		Last Day			
Report Period	The period for which to generate report. Report Week starts on Sunday		Last Week			
Report Data Type	Device					
unbour come this	Select the type of data this report should have			Last Qua		
Select Device				Last Year		
		Search:		Last X H		
Device Name¢	IP Address¢	5	Parent Group Name\$	Last X Da		
	Device 192.168.3.100	E	E-16D Units	Last X W	eeks	
	Device 192.168.3.82	E	-2D Units	Last X M	onths	
	Device 192.168.3.222	E	-2D Units	Last X Q	uarters	
-	Device 192.168.3.223	E	-2D Units	Last X Ye	ears	
Devices that	Device 147.0.27.207	E	-2D Units	Custom	Times	
a can be	Device 192.168.3.81		-5D Units			
	Device 147.0.27.208	E	E-5D Units			
selected.	Device 147.0.27.212		-5D Units			
-	Device 192, 168, 3, 101		-16D Units			
-	Device 192.168.1.100		E-16D Units			
-			STOD OTHES			
Select Triggers that activate this Action	Previous	1 2 3 Next				
		Search:				
Trigger Name®	Trigger Frequency=	Next Trigger Time¢		E	nabled¢	
Sample Trigger	Repeat Daily	01/26/2022 09:00:00 AM		Ye	PS	
Sensor Trigger	Repeat Weekly	01/27/2022 12:00:00 AM		Ye	95	
Map Trigger	Repeat Daily	01/25/2022 12:00:00 PM		Ye	16	
Map 2 Trigger	Repeat Weekly	01/31/2022 12:00:00 AM		Ye	15	
Processes of starger	Previous	Next Save Action				
	R	Run Action Now				

Figure 54- Action Options

Be sure to enable the "Action Enable" block. Otherwise reports will not be generated.

For Action Type, select between "Generate Report" and "Generate Report & Email". If you select "Generate Report & Email" then all users with "Email Alerts" selected (Figure 12) will received reports via email.

The Report Period is the data in the time period that reports should include. A long list of time periods is available to select from.

The Report can include alerts from specific sensors, sensors that are connected to specific devices (E-xD units) or sensors identified with markers place in configured maps. Available selections will adjust depending upon what Report Data Type you select.

Once Triggers have been set up, they will appear in the list. Triggers determine how often the Action will be initiated and when. Either select a Trigger to cause the action to occur and generate a report, or configure a new Trigger first (on the next page).

Be sure to click "Save Action" to retain your changes. To test the result of the action, click "Run Action Now". The Report generated by that action should appear under Reports, and if you have selected it, each user with Email Alerts enabled will also receive a pdf copy of the report.

Triggers

Triggers determine how often an Action will be taken and a Report generated from that Action.

Click "Triggers" in the Events menu. Apply a name to the Trigger you will create. Then click on "Add New Trigger" and your new Trigger will appear in the list to the left.

Once the Trigger is listed, click on "Edit" to configure it.

Monitor	•	Trigger Settings	3					Home // Trigger Set
Events	•	Available Triggers					Add New Trigger	
Events Log		Name	Last Trigger Time	Next Trigger Time	Enabled	Edit		
Triggers Actions		Sample Trigger	01/24/2022 09:00:01 AM	01/25/2022 09:00:00 AM	Yes	Edit Delete	Trigger Name	Name Enter name for reference
Reports		Sensor Trigger	01/20/2022 12:00:01 AM	01/27/2022 12:00:00 AM	Yes	Edit Delete		
Recordings		Map Trigger	01/24/2022 12:00:04 PM	01/25/2022 12:00:00 PM	Yes	Edit Delete		Add New Trigger
Devices	•	Map 2 Trigger	01/24/2022 12:00:03 AM	01/31/2022 12:00:00 AM	Yes	Edit Delete		
Settings								
About	*							

Figure 55- Trigger List

uit myyer.	Sample Trigger	Repeat Weekly
Edit Trigger Last Trigger Time:	01/24/2022 09:00:01 AM 01/25/2022 09:00:00 AM	Once Repeat Hourly Repeat Daily
Next Trigger Time: Trigger Name	Sample Trigger Enter name for reference (Optional)	Repeat Weekly Repeat Monthly
Trigger Enable	Select to enable this trigger	Repeat Quarterly Repeat Yearly
Trigger Frequency	Repeat Daily Specify how often this trigger should repeatedly activate	~
Select Hour	9 AM Select hour of the day at which this triggers	~
	Save Trigger	

Figure 56- Trigger Options

If the Trigger had been previously setup, the last trigger time and next trigger time will be indicated.

The name given to the Trigger will be displayed and can be changed.

A checkbox to enable the Trigger is provided so that it can be used.

Select the Trigger Frequency from a list of options. Depending upon what Trigger Frequency is selected, the option for fine tuning the frequency will change. (See next page)

Trigger Frequency Select date and time of trigger		Once Specify how often this trigger shoul	Trigger Frequency	Repeat Hourly Specify how often this trigger should repeatedly activate	
		01/31/2022 12:00:00 AM	Select Minute	48	
		Select trigger date and time		Select minute of the hour at which this triggers	
Trigger Frequency Repeat			Trigger Frequency	Repeat Monthly	
Select Hour	Specify how 12 AM	often this trigger should repeatedly activate	Select day of mont	h 1	
	Select hour of	Select hour of the day at which this triggers		Select day of the month at which this triggers	

Figure 57- Option detail for Trigger Frequency

Be sure to click "Save Trigger" to retain your changes.

With Triggers and Actions setup, Reports will be generated and added to the Report List.

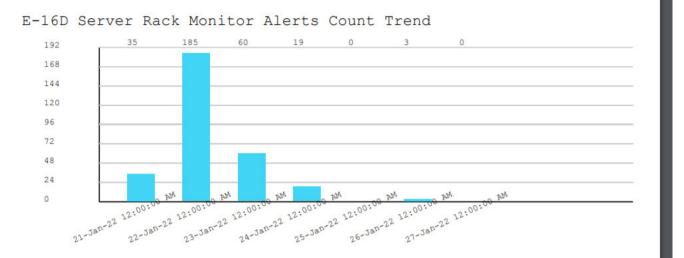
Pending Reports: 0 Available Reports					
7. E-16DEL-1 (Master) Device Report	Last Day	Completed	Device	01/08/2022 09:00:02 AM	View Download Delete
6. E-16DEL-1 (Master) Device Report	Last Day	Completed	Device	01/07/2022 09:00:02 AM	View Download Delete
5. E-16DEL-1 (Master) Device Report	Last Day	Completed	Device	01/06/2022 09:00:03 AM	View Download Delete
4. E-16D-24V Outdoor Porch Temperature 14 (STO)/ Å Report	Last Week	Completed	Sensor	01/05/2022 11:54:51 AM	View Download Delete
3. E-16DEL-1 (Master) Device Report	Last Day	Completed	Device	01/05/2022 09:00:04 AM	View Download Delete
2. E-16DEL-1 (Master) Device Report	Last Day	Completed	Device	01/04/2022 09:00:06 AM	View Download Delete
1, E-16DEL-1 (Master) Device Report	Last Day	Completed	Device	01/03/2022 03:37:16 PM	View Download Delete

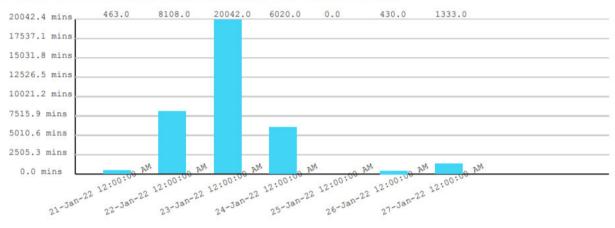
Figure 58- Reports list

With a report in the list, you can click "View" to see the content immediately, click "Download" to save it for viewing later, or click "Delete" if you don't want it in the list any longer.

The sensor report will provide a graph indicating the total number of alerts generated by each sensor and the total length of time that sensor was in alert.

Maps and device reports provide an alert details summary and its trends (see image on next page). A maximum of 800 reports will be stored before the software automatically deletes the oldest reports.





E-16D Server Rack Monitor Alerts Time Trend



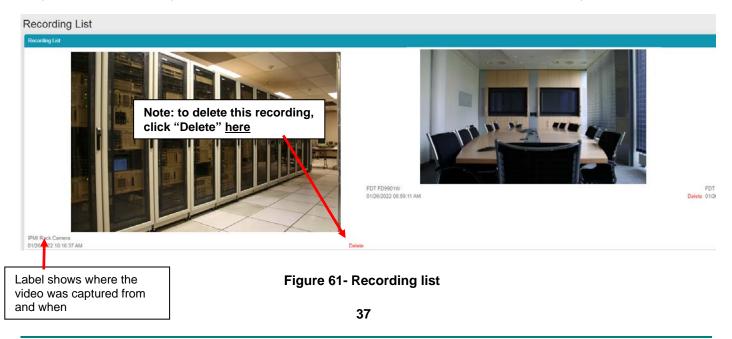
Recordings

Recordings are snapshot recordings from selected IPCAMs when a sensor goes into alert. The IPCAM and the length of time it will record will be selected under critical alert settings for that sensor (below). Recordings are collections of snapshots from the camera, taken as frequently as the refresh rate for the camera is set for.

- Critical Alert Settings			
Disable Alerts	Deable alert notifications for this sensor		
Alert Delay	20 Duration the sensor must be out of thresholds before alert is generated	Sec	: v
Notify Again Time	6 Time after which alert notifications will be sent again	Hr	•
Notify on return to normal	Send a notification when this sensor returns to normal status		
Auto acknowledge	Automatically acknowledge alert when sensor returns to normal status		
Enable Syslog Alerts	Send alerts for this sensor via syslog		
Enable SNMP Traps	Send alerts for this sensor via SNMP traps		
Enable E-mail Alerts	Send alerts for this sensor via e-mail		
E-mail Subject	E-16D-24V Screen Room Temperature 3 Alert Subject of e-mails sent for alerts		
Select IP Camera	IPMI Rack Camera Select IP camera for image capture/recording on alert		~
Attach IP camera capture to e-mail	Attach captured image from selected IP camera to atent e-mail		
Save image to USB	Save captured image from selected IP camera to USB Flash		
Length of time to record this IP camera	Disable Record Disable Record		~
Enable SMS Alerts	5 Sac 10 Sec 15 Sec		
Send custom SMS	30 Sec 1 Min 2 Min 5 Min		
Customized SMS	5 Min 10 Min Customized SMS message sent for alerts		
Enable Siren	Turn on the siren when this sensor goes to alert		
Enable Beacon	Turn on the beacon when this sensor goes to alert		
Associated Output Relay	None Name of the output relay that can be controlled by this sensor		v
Output Relay status on alert	Inactive Status of the output relay when going to alert		~
Output Relay status on return from alert	Inactive Status of the output relay when returning from alert		•

Figure 60- User settings to enable Recording

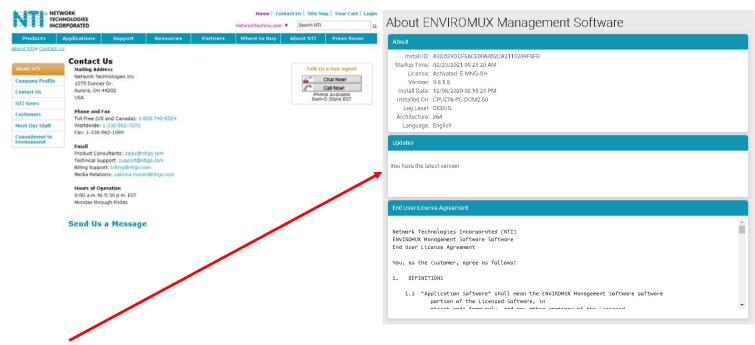
To see your recordings, click on "Recordings" in the Events menu. The camera the recording came from and time it was recorded will be in the bottom left corner of the recording. To delete a recording, click "Delete" in the bottom **right** corner of the recording image. Up to 1000 recordings will be stored before the software automatically deletes the oldest recording.



THE ABOUT MENU

The About menu includes tools for viewing the firmware version you are using and any details about it, as well as providing a link the this manual and a link to a contacts page should you need to contact NTI. Lastly it provides a link to the firmware downloads page where you can get access to the most current version of the E-MNG-SH program.

0	About	
	About ENVIROMUX Management Software	
	User Manual	
	Downloads	
	Contact NTI	
	Figure 62- About menu	



From the "About ENVIROMUX Management Software" page you can also, at a glance, see if another more current version of the software is available, without having to actually leave the program and go to the Downloads page.

SHUT DOWN E-MNG-SH SERVER

To shut down the E-MNG-SH completely, left click the tray icon in the bottom right corner of your desktop.

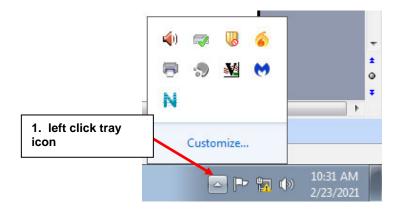


Figure 63- Click on Tray icon

Then right click the E-MNG-SH icon, and select Exit.

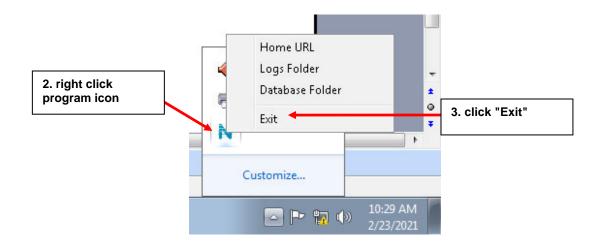


Figure 64- Exit the program

OTHER TYPE DEVICES

The E-MNG-SH can be accessed from any network-connected computers/smartphone/tablet (provided the computer/smartphone/tablet has access to the Server the E-MNG-SH is on).

AA 🛄 <		192.168.3.1	12	S) U	T	
	UX Manag	gement Softwar	е		\geq	Admin	
Devices Available							
IP Address-	Device	Name\$			Status\$		
10.0.1.16	Furnac	e Room E-2D			Normal		
147.0.27.197	E-16D	Server Rack Monitor			Normal		
147.0.27.207	E-2D La	ab Room Environment N	Ionitor		Normal		
147.0.27.208	E-5D S	erver Rack Monitor			Normal		
147.0.27.212	E-5D E	04 DDNS Test Unit			Normal		
147.0.27.218	E-2D P	05			Normal		
192.168.1.100	E-16D	24V IPMI Rack			Normal		
192.168.3.100	E-16DE	E-16DEL-1 (Master)			Normal		
192.168.3.101	E-16D	E-16D S1			Normal		
192.168.3.200	E-16D	E-16D P02			Normal		
192.168.3.217	E-5D-4	E-5D-48V			Normal		
192.168.3.221	E-2DB	E-2DB P02		Normal			
192.168.3.222	E-2D E	E-2D E12		Normal			
192.168.3.223	E-2DB	E-2DB E11 (RevF)		Normal			
192.168.3.225	E-5D E	E-5D E02		Normal			
192.168.3.227	E-2D P	E-2D P04		Normal			
192.168.3.80	E-16D	E-16D E100			Normal		
192.168.3.81	E-5DEL	E-5DEL-1 (E07)		Normal			
192.168.3.82	E-2DB	E-2DB E08		Normal			
192.168.3.83	E-5D E	E-5D E01		Normal			
98.27.170.240	Remot	e E-5D			Polling Fa	ailed	
Alerts							
	Sensor Value≑	Sensor Status≑	Sensor Type≑	Device Name ≑	Las	st Update	d
i de la companya de l		No a	lerts				

Figure 65- Screenshot from an iPad

▲ 37°	* 🖸 🏹 чG:	96% 🔲 1:28 рм			
③ 192.168.3.12/	/p/index	• • •			
	\sim				
Home Home					
Devices Available					
IP Address 、	Device Name ≑	Status≑			
10.0.1.16	Furnace Room E-2D	Normal			
147.0.27.197	E-16D Server Rack Monitor	Normal			
147.0.27.207	E-2D Lab Room Environment Monitor	Normal			
147.0.27.208	E-5D Server Rack Monitor	Normal			
147.0.27.212	E-5D E04 DDNS Test	Normal			
$\leftarrow \rightarrow$	† (33) 0			

Figure 66- Screenshot from a smartphone

UNINSTALL THE PROGRAM

To uninstall the program: Go to the appropriate programs settings page (i.e. Control Panel -> Programs and Features) and select the "ENVIROMUX Management Software" to uninstall.

Note: Uninstalling the program will also remove any settings and saved sensor values. The license will remain (the license is not transferable)

SOFTWARE UPDATE

From time to time a new version of this program will be available. If you decide to update, follow these steps.

1. Download the new software version to the computer/server the E-MNG-SH is installed on.

2. Shut down the E-MNG software if running on this computer/server.

3. Double-click on the new installation file to install. Once the update has completed, it will prompt for login from the default browser.

Login to the E-MNG-SH and verify that the update has worked. Cick on "About" in the side menu, then click "About ENVIROMUX Management Software". The version number shown there will indicate what version you are running. The Updates section will get refreshed after the next update check.

Monitor	About ENVIROMUX Manageme		
Events	Software		
Devices	About		
Settings	Install ID: 8BE4A025003FD262A573BE5B1EB56F1D Startup Time: 20-Apr-21 12:38:56 PM		
i About	License: Activated: E-MNG-SH Version: 0.9.2.8		
About ENVIROMUX Management Software	Install Date: 19-Feb-21 11:06:30 AM Installed On: PAUL.DOM2:80		
User Manual	Log Level: INFO Architecture: x64		
Downloads	Language: English		
Contact NTI	Updates		
	You have the latest version		
	42		

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