

The Industry Standard in IT Infrastructure Monitoring

Purpose

This document describes how to monitor environmental conditions (temperature, relative humidity, and light level) with Nagios XI and an Websensor EM08 from Esensors.

Target Audience

This document is intended for use by Nagios XI administrators and IT staff who wish to deploy environmental monitoring in their infrastructure.

The Websensor EM08

The Websensor EM08 is a low-cost, network-connected device available from Esensors. For more information on the Websensor EM08, or to purchase a unit, visit:

<http://www.eesensors.com/LowCostWebsensor.html>

Getting the Wizard

Everything you need to monitor a Websensor EM08 is included in a Nagios XI wizard available from:

<http://assets.nagios.com/downloads/nagiosxi/wizards/esensors-websensor.zip>

To begin, download this wizard save it on your workstation. To install the wizard in Nagios XI, see the “Nagios XI Wizard Installation Instructions”, available from the Nagios Library at:

http://assets.nagios.com/downloads/nagiosxi/docs/Installing_XI_Configuration_Wizards.pdf

Enabling the Plugin

Some models of eSensors require a specific plugin that is distributed with the wizard, but require a slight setup. We'll need to run one command at the command line. Make sure you've already installed the wizard or this step will not work.

```
gcc /usr/local/nagiosxi/html/includes/configwizards/esensors-websensor/plugins/check_em08.c -o /usr/local/nagios/libexec/check_em08
```

Now you don't have to understand what that's doing but know that this is needed if you're using an EM08 model eSensor.

Running the Wizard

Once you've installed the Websensor wizard in Nagios XI, you can access it by selecting the **Run the Monitoring Wizard** option in the **Configure** menu.

Select the **Websensor** wizard.

Monitoring Wizard - Step 1

Monitoring wizards guide you through the process of monitoring devices, servers, applications, services, and more. Select the appropriate wizard below to get started. Need a custom configuration wizard created for your organization? No problem! [Contact us](#) for pricing information.

- Websensor**
Monitor temperature, humidity, and light levels on a **Esensors** Websensor.
 - Generic Network Device**
Monitor a generic IP network device.
 - Printer**
Monitor an HP JetDirect compatible network printer.
 - SNMP**
Monitor a device, service, or application using SNMP.
 - Network Switch**
Monitor a network switch.
 - TCP/UDP Port**
Monitor common and custom TCP/UDP ports.
 - Website**
Monitor a website.
 - Web Transaction**
Monitor a synthetic web transaction.
 - Windows Desktop**
Monitor a Microsoft Windows XP, Windows Vista, or Windows 7 desktop.
 - Windows Server**
Monitor a Microsoft Windows 2000, 2003, or 2008 server.
-

On the next screen, enter the IP address of your Websensor unit and select the **EM-08T** as the Websensor model.

This assumes that your Websensor has already been configured for connection to your network with either a manually-assigned static IP address or an automatically assigned address from a DHCP server.

Read the documentation that came with your Websensor unit for initial network configuration instructions.

The next screen of the wizard will allow you to specify which metrics you'd like to monitor, along with warning and critical thresholds for each metric.

Note that the Temperature must be specified in Fahrenheit, relative humidity is specified in percent, and Illumination is measured in lux. A guide chart of common lux values can be found on Wikipedia at <http://en.wikipedia.org/wiki/Lux>.

Websensor Monitoring Wizard - Step 2

Websensor Information

Address:
The IP address or FQDNS name of the Websensor device you'd like to monitor.

Websensor Model:
The Websensor device you'd like to monitor.

For more information on our environmental monitoring products, or to place an order for a Websensor, visit www.eesensors.com.

Websensor Monitoring Wizard - Step 3

Websensor Details

Websensor Model: EM08-T

Address:

Host Name:
The name you'd like to have associated with this Websensor.

Device Metrics

Specify which metrics you'd like to monitor on the Websensor.

- Ping**
Monitors the Websensor with an ICMP "ping". Useful for watching network latency and general uptime.
- Temperature**
Monitors the temperature readings from the device.
Warning Below: Above: Deg. F
Critical Below: Above: Deg. F
- Humidity**
Monitors the humidity readings from the device.
Warning Below: Above: %
Critical Below: Above: %
- Illumination**
Monitors the illumination (light level) readings from the device.
Warning Below: Above:
Critical Below: Above:

Finishing the Wizard

The last few steps of the wizard allow you to set check frequency and other monitoring variables. You can either customize these values or leave them at the defaults as desired.

The Results

Once you've finished running the Websensor wizard, Nagios XI will begin monitoring your EM08 and display the current status of monitored metrics in the XI interface.

Service Status

Host: **192.168.5.254**

Showing 1-4 of 4 total records

Host	Service	Status	Duration	Attempt	Last Check	Status Information
192.168.5.254	Humidity	Ok	4m 53s	1/5	2010-06-17 12:54:33	OK Humidity: 31.3%
	Illumination	Ok	3m 12s	1/5	2010-06-17 12:56:14	OK Illumination: 1.2
	Ping	Ok	2m 53s	1/5	2010-06-17 12:56:33	OK - 192.168.5.254: rta 2.214ms, lost 0%
	Temperature	Ok	2m 33s	1/5	2010-06-17 12:56:53	OK Temperature: 75.6 F

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Last Updated: 2010-06-17 12:59:26

Finishing Up

That's all there is to monitoring environmental data from your Esensors Websensor EM08!