ServersCheck

Quick Installation Guide – Networked Sensor through the Tibbo DS202/3 Device Server

This document is intended to help you configure a networked enabled sensor by attaching the Sensor to the Device Server (manufactured by Tibbo – part number DS202-01 upgradable with firmware developed by ServersCheck)

IMPORTANT NOTICE FOR WATER / FLOODING SENSORS

The flooding / water detection sensor consists of 2 parts: the sensor (gray box with ServersCheck label on it) and the purple water sensing cable (shown left). Only the purple cable may be submerged! The sensor has to be kept at all times above the water level.

1. Getting Started

The temperature, humidity, flooding/water and power failure sensors from ServersCheck have 2 openings :

- RJ45 connector
- Plug for power adapter

All sensors are powered (including flooding sensor) through the serial or USB port. The sensors do not require an external power adapter to be connected to the sensor.

Only the power sensor requires a power adapter plugged into it ; the power adapter's current sent to the sensor will be used to analyze the power state.

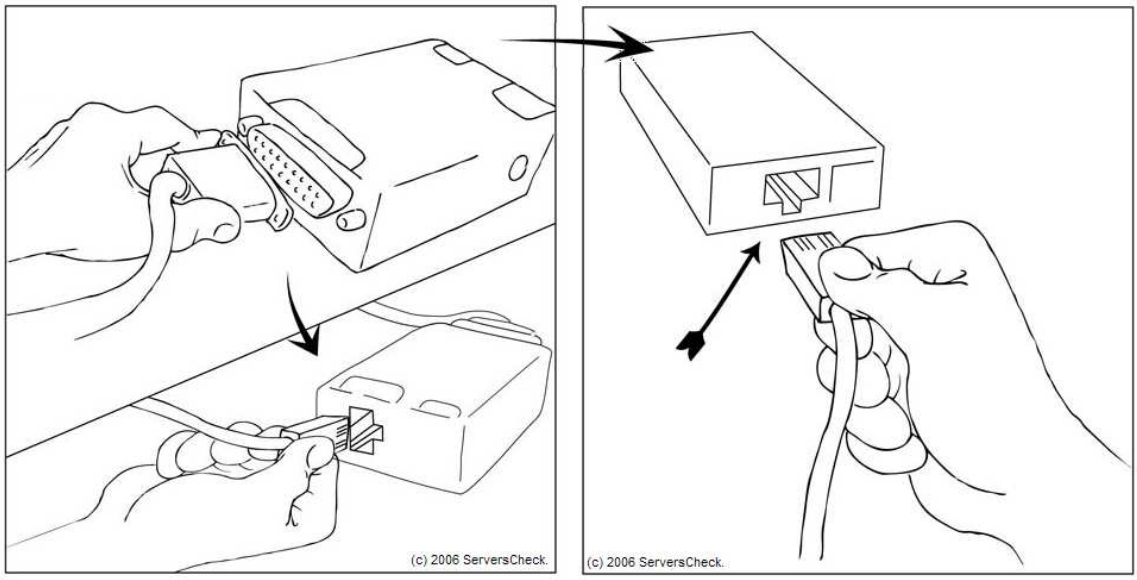
For an Ethernet enabled sensor you need following items that have been included in your shipment:

- Sensor
- RJ45 to DB9 cable
- DS202/DS203 device server
- Power adapter for the DS202/DS203 device server

You will also need a network cable to hook up the solution to the network.

Following connection is important. Doing differently may result in time out errors.

1) First connect the gray/white RJ45-DB9 cable to the Tibbo device by fixing the female DB9 end of the cable to the male DB9 end of the device server as shown in following figure. Then attach the network cable
2) Power up the device server using the included power adapter
3) Wait 10 seconds
4) Now connect the cable to the sensor as shown in the figure below: the RJ45 end of the gray/white cable into the sensor



2. Configuring the Tibbo DS202/3 Device Server for Sensor communication

You need to download the software from following url:
http://downloads.serverscheck.com/tibbo/tdst-5-07-11-x86.exe

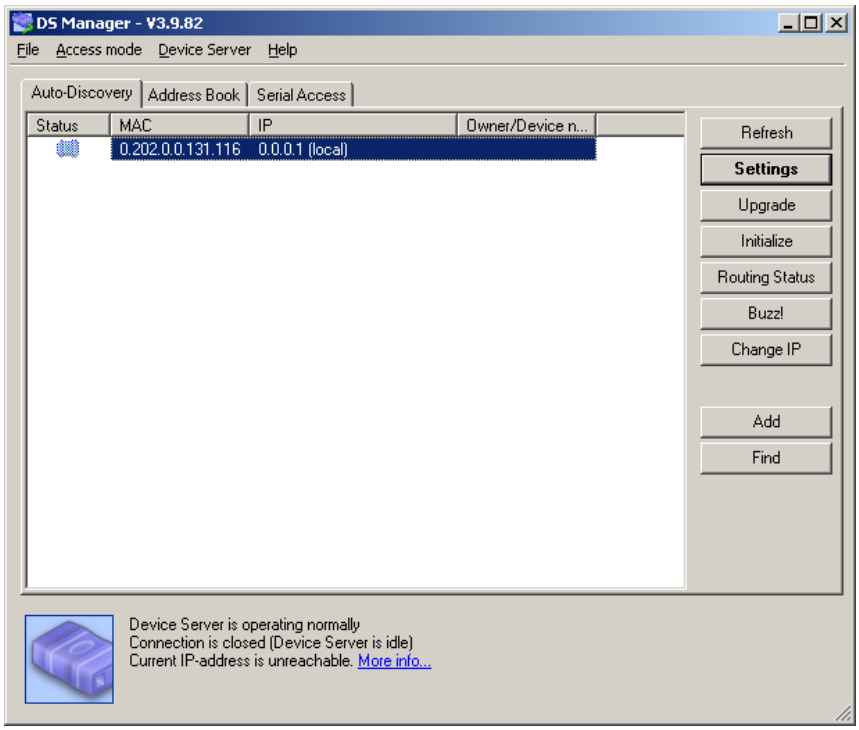
The software can be installed on Windows x32 systems (not x64)

Install the software.

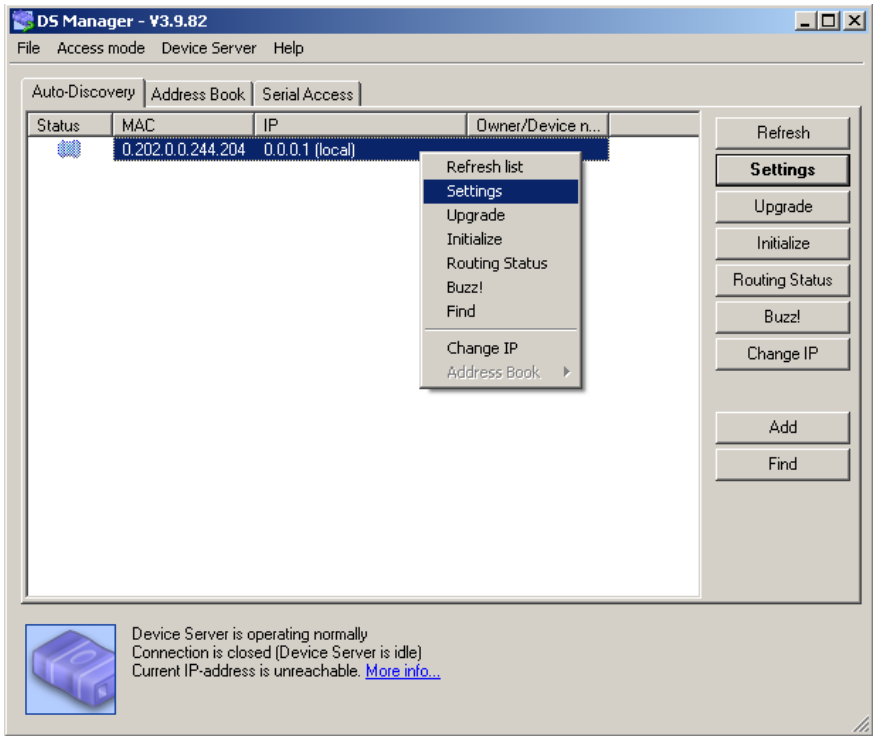
Now take the device server. Plug in the network cable and then power it using the adapter shipped with the device. Make sure that both the device server and the host computer are in the same network segment.

Go to **Start > All Programs > Tibbo > DS Manager**

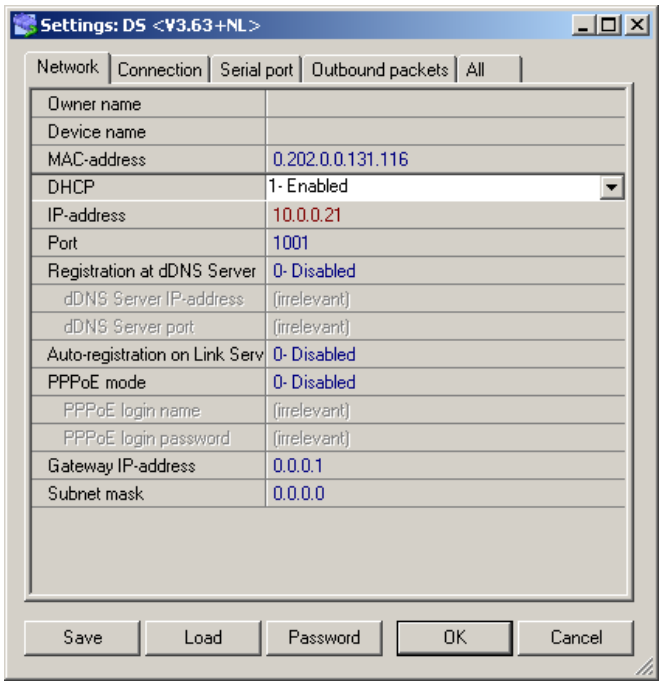
This will start the DS Manager software. It will immediately scan your network for any device servers that it can find and list them as shown below:



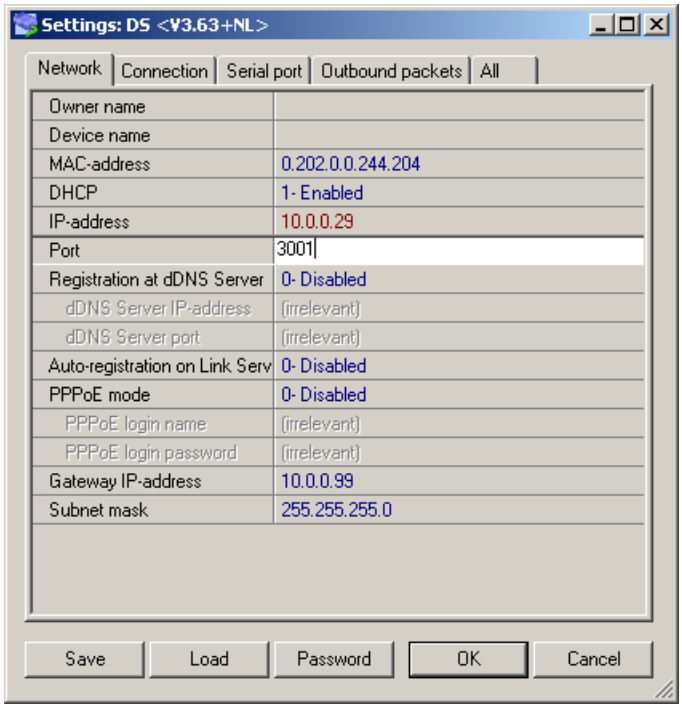
Right click on the device you just found and click on **Settings** or use the **Settings** button in the menu on your right.



This action will open a new window where you can configure the network settings. Default operation mode is fixed IP. You can also select to use DHCP as shown below. When you change the value then this will be directly applied to the device server. You can get a message after that it could not detect any devices. Simply click on the **Refresh** button on your right in the above screen.

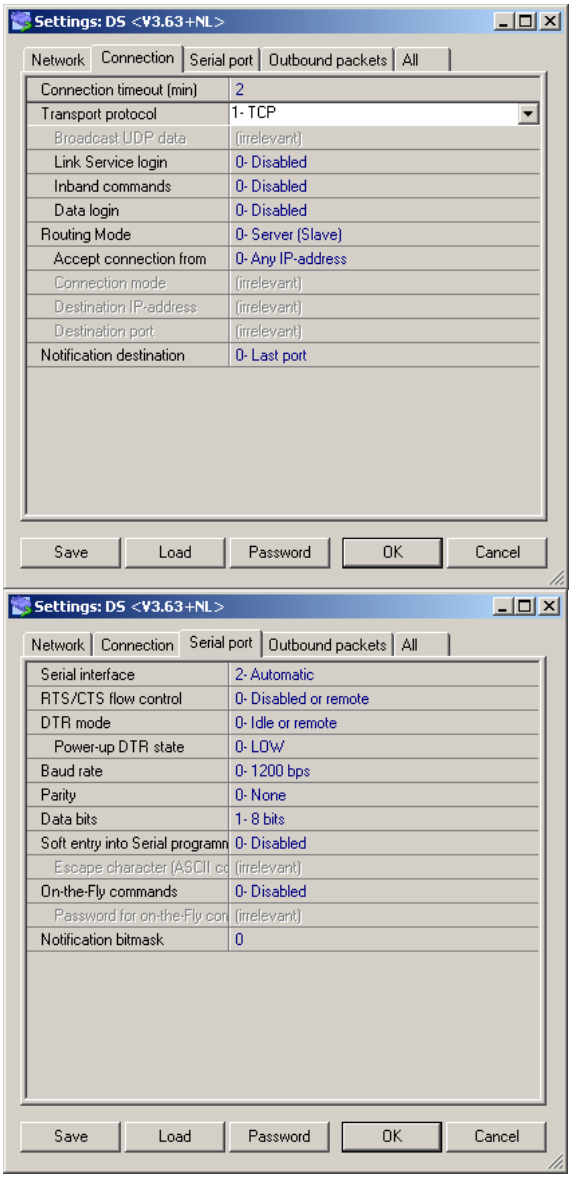


Click on **Port** and set then value to **3001** , then click on **OK**



Now click on the **Connection** tab after having set your network settings

Set the transport protocol to **TCP** and the **Connection timeout (min)** to **2**
Click on the **Serial Port** tab and change values as follows:



RTS/CTS flow control has to be **0-Disabled**
DTR mode has to be **0-Idle or remote**
Power-up DTR state has to be set to **0-Low**
Baude rate has to be set to **0-1200 bps**
Parity has to be set to **0-None**
Data bits has to be set to **1-8bits**
Soft entry into Serial Program has to be set to **0-Disabled**
On-the-Fly commands has to be set to **0-Disabled**

Click on **OK** to save the settings.

Your device server is now ready for use.

3. Configuring the ServersCheck Monitoring Software for sensor communication

We have now a device server that is configured and to which a sensor is connected.

We are now going to configure a temperature check in the ServersCheck Monitoring Software.

The ServersCheck Monitoring Software is required to monitor, report and alert on sensor readings.

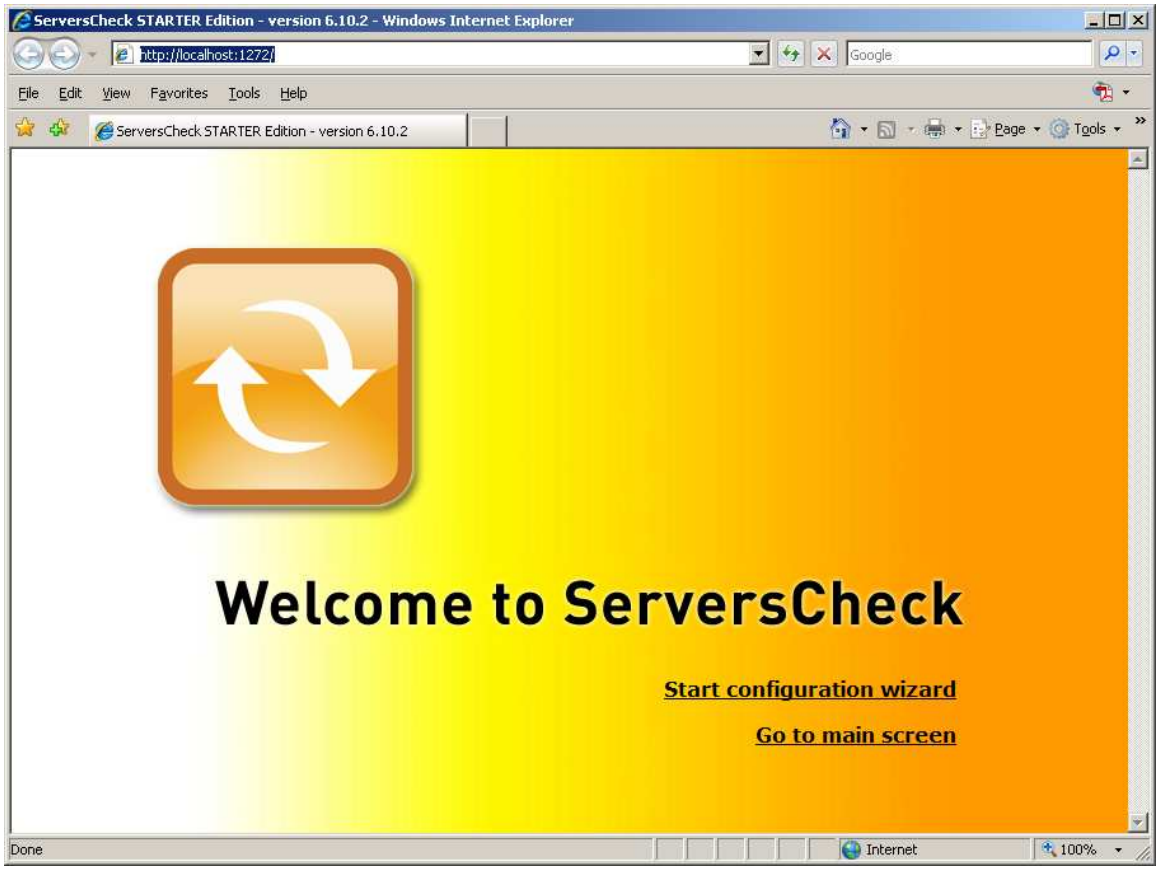
The base version can be downloaded from following URL :
http://www.serverscheck.com/download.asp

Apply the purchased license keys (Sensor, Starter or Enterprise edition) as outlined in the email you received with the keys.

The monitoring of the sensors require the .NET 1.1 framework to be installed on the computer running the ServersCheck Monitoring Software. If you do not have .NET 1.1 installed but .NET 2.0 then you might receive following error message:
Object synchronization method was called from an unsynchronized block of code

You can download the .NET Framework Version 1.1 from following url:
http://www.microsoft.com/downloads/details.aspx?familyid=262D25E3-F589-4842-8157-034D1E7CF3A3&displaylang=en

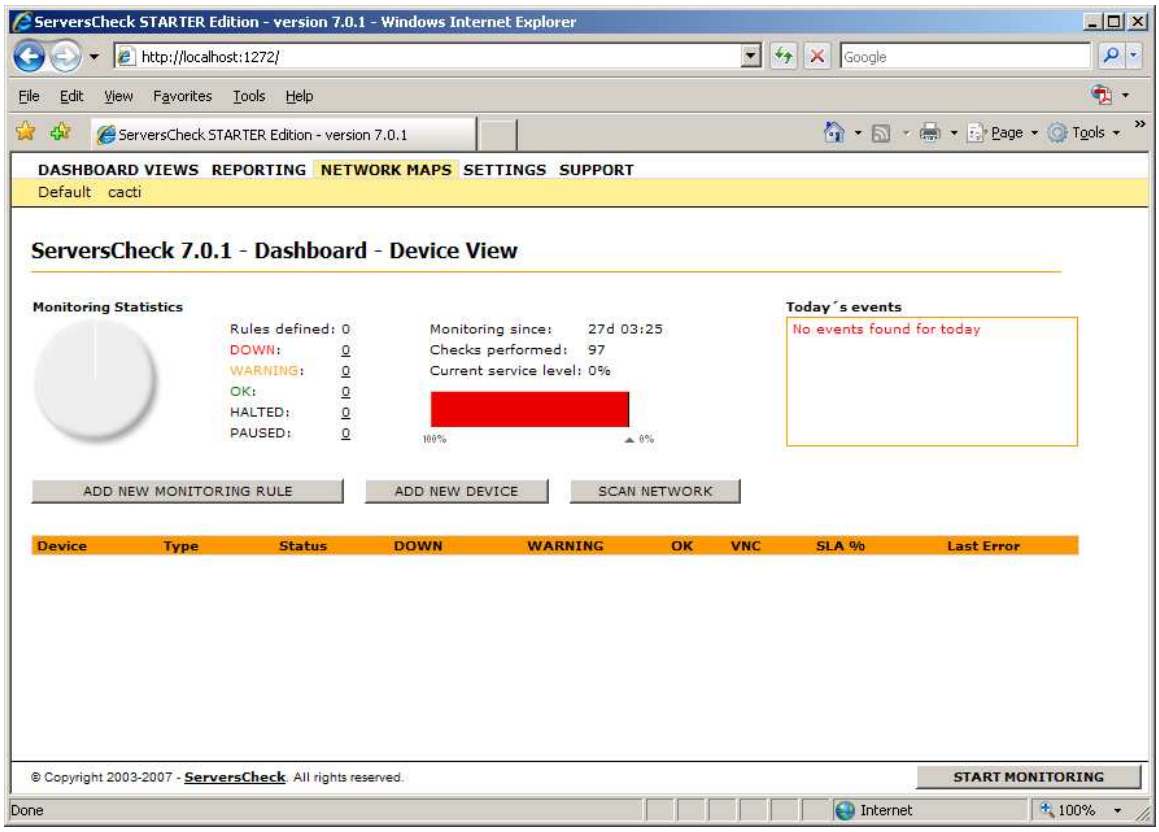
After installing the software, open your browser and point it to http://localhost:1272.



Click on the **"Start Configuration Wizard"** to set the initial settings

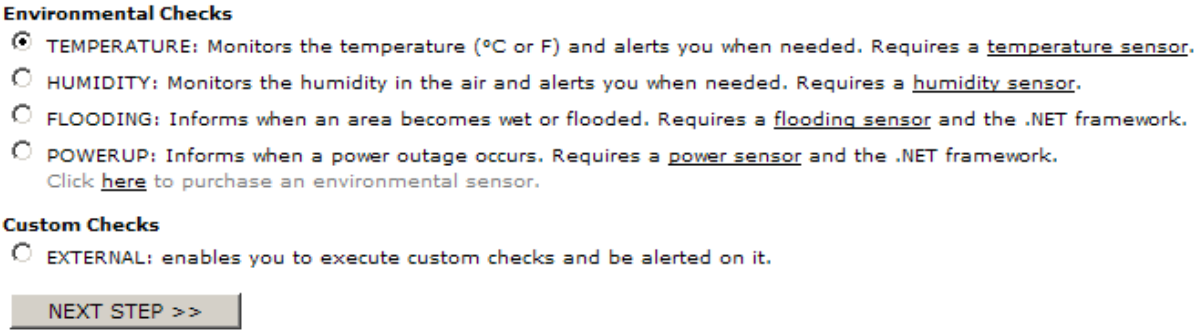
This wizard will configure the security settings, the service settings, email server for sending out email alerts and more.

After having completed all steps of the configuration wizard click on "**Dashboard View > All Rule View**"

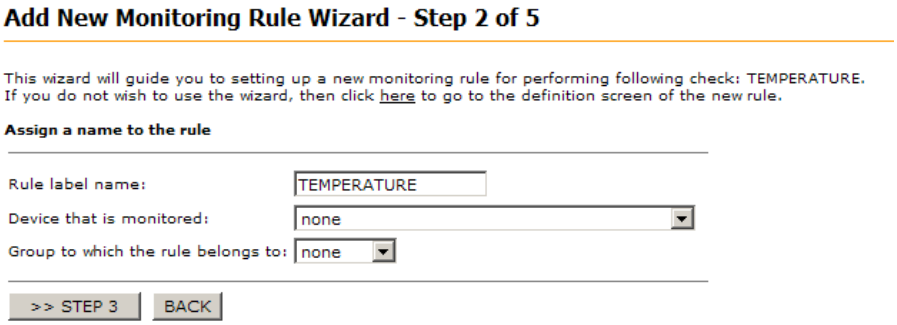


Click on the "**Add New Monitoring Rule**" button

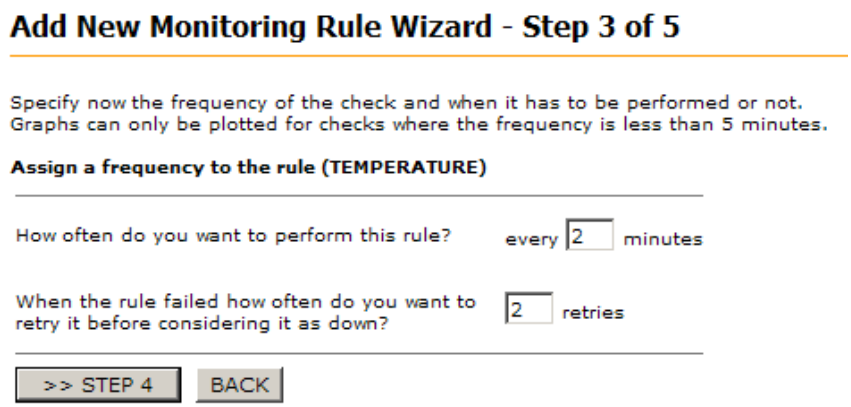
A new screen will open like the one below



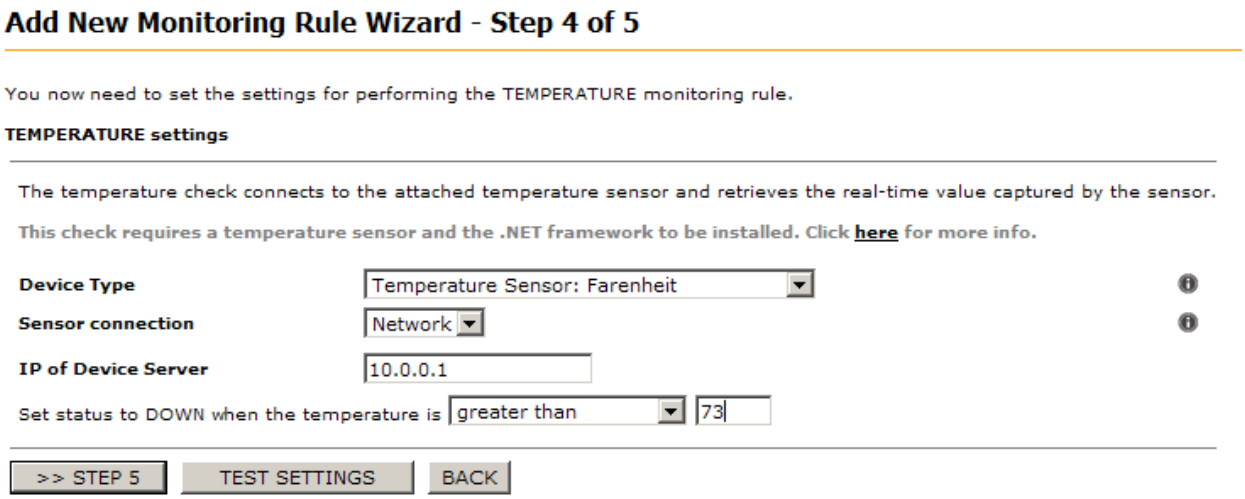
Click on the **Next Step** button



Click on the **>> STEP 3** button



Set the frequency to at least every 2 minutes as 2 minutes is the built-in timeout for a sensor

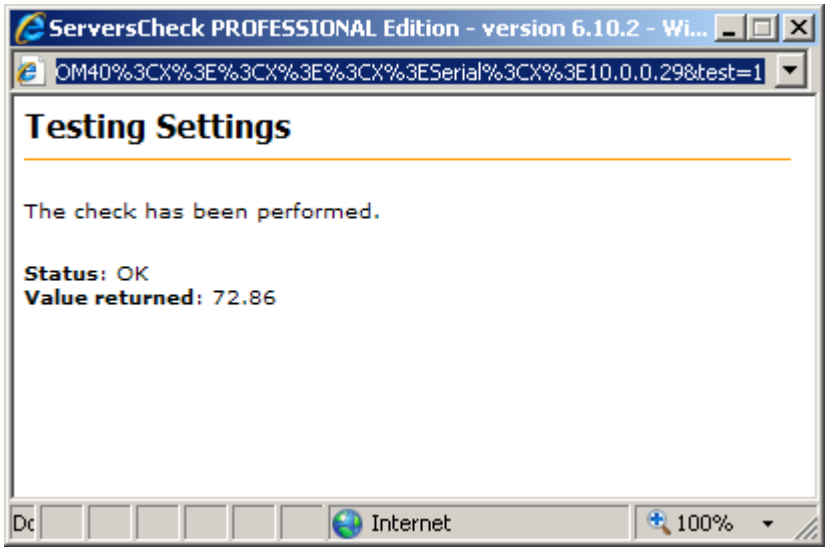


Select the device type. In above example this is the temperature sensor – farenheit. If you want to monitor temperature in ° Celsius, then select the correct option.

Select **Network** as a sensor connection and enter the IP address of the device server.

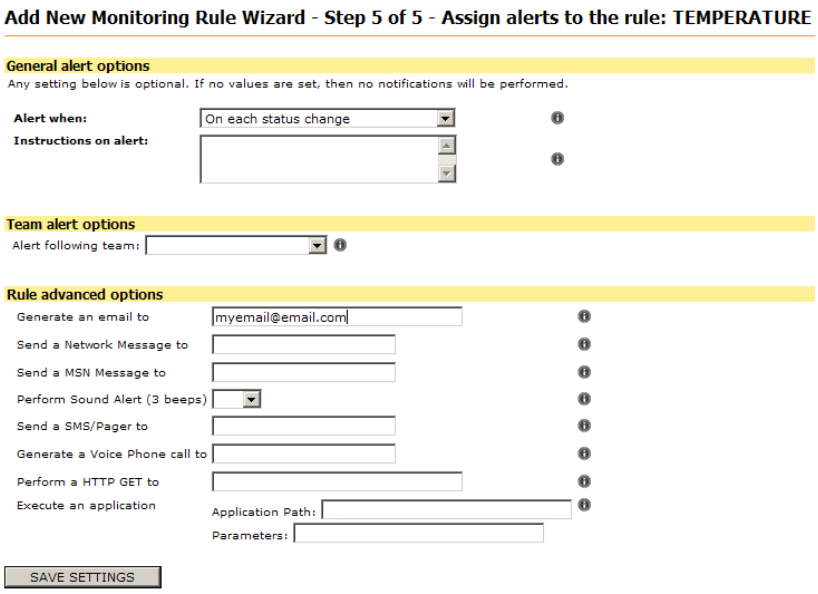
In the last line set when you want to be alerted. In the above example this is when the temperature is greater than 73° Farenheit.

Click on **TEST SETTINGS** to verify your settings.



The value being returned is the temperature value as read from the sensor.

Click now on the **STEP 5** button to define how you would like to be alerted.



Click on **SAVE SETTINGS**

In the main screen you will see that the rules have been added to your list of rules: