

Plug & Play Sensor Guide



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1 Try out Plug & Play Sensor™

Using Plug & Play Sensor

This User Guide contains the following sensor types that lead you through the following Desktop Operation Sensor activities:

- *Timer Sensor*
- *Desktop Sensor*
- *System Sensor*
- *I/O Sensor*
- *Remote Sensor*
- *Trace Sensor*

Update Plug & Play Sensors

Your Desktop Operation Sensor software includes a directory of Plug & Play Sensors, located in the *Sensor* folder. ManualEnds Technology develops many Plug & Play sensors and they are available to you at no cost, are updated daily, and can be found in the Download Section of our Web site at www.manualends.com.

Introduction to Plug & Play Sensors

Sensor Group



: "Enable edit":

Contains sub window and enable for edit (such as, Timer Sensor, Desktop Sensor, I/O Sensor, Remote Sensor ...etc)



: "Disable edit":

Fixed action sensor and disable to edit (such as, System Sensor... etc)



: "Timer Sensor" group icon.



: "System Sensor" group icon.



: "I/O Sensor" group icon.



: "Remote Sensor" group icon.



: "Desktop Sensor" group icon.



: "Trace Sensor" group icon.












: "Network Sensor" group icon.

Create a System Sensor

A system sensor is an application that directly monitors windows operation system. Windows is an event driven environment. Such as, when a message box appears on your system, the system is for the most part idle. This continues until you click the button after-that the Windows operating system generates a button click event and posts it to your applications event queue. There are other events that Windows generates for running applications to alert them of certain conditions. For example, when the time is changed manually on the system so that applications that are time sensitive can adjust their internal data, or when the printer start a new document job, or when Windows reports that the system is low on memory. An example of task is one that displays a message box telling the user to shut down some applications (or maybe even which ones to shutdown), or sending an email to a network administrator.

Component List:

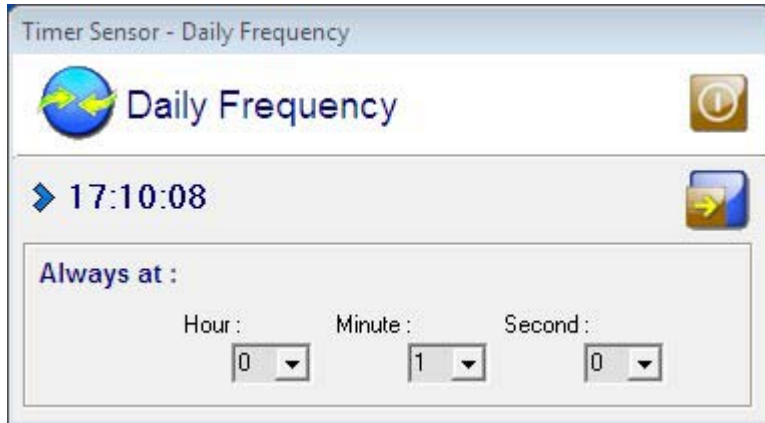
Icon	Control name	Command name	Trigger action.
	System Exit Request	System Exit Request	When system exit request message has been requested.
	System Exit	System Exit	When system exit message has been requested.
	System Fonts Changed	System Fonts Changed	When system font has been changed.
	Printer Job Active	Printer Job Active	When printer job start active.
	System Color Changed	System Color Changed	When system color has been changed.
	System Time Changed	System Time Changed	When system time has been changed.
	System Setting Changed	System Setting Changed	WIN.INI has changed
	Display Resolution Changed	Display Resolution Changed	When display resolution has been changed
	System Device Changed	System Device Changed	When system device setting has been changed.

Group – Timer Sensor



A “**Daily Frequency**” Timer sensor is a schedule action to set your process using Time value. A Daily Frequency trigger allows you to configure a task to run at a certain time (0 ~ 23 hour, 0 ~ 59 minute, 0 ~ 59 second).

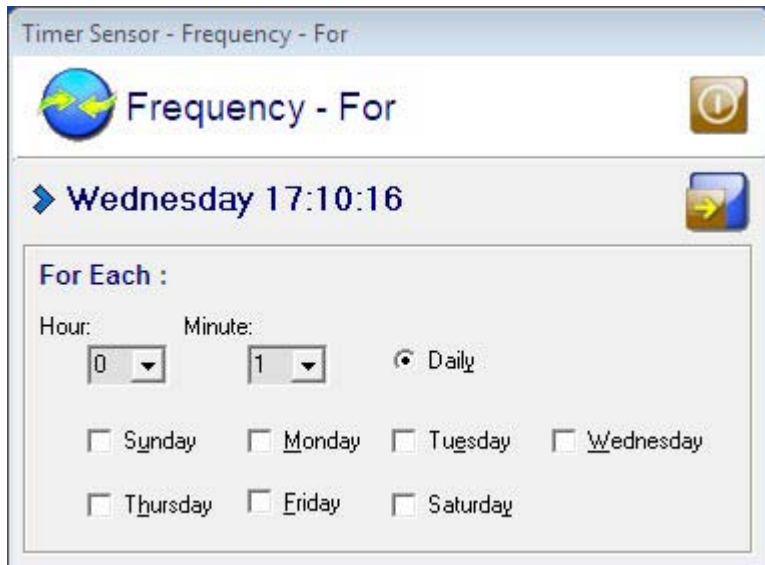
Figure B.1 Timer Sensor – Daily Frequency window.



A “**Frequency – For**” Timer sensor is a schedule action to set your process using Time value. A Frequency - For trigger allows you to configure a task to run at a certain time (0 ~ 23 hour, 0 ~ 59 minute).

For each: 0 hour 1 minute Daily → 02:09:00 → 02:10:00 → 02:11:00 → 02:12:00 → ...etc.

Figure B.2 Timer Sensor - Frequency - For window.

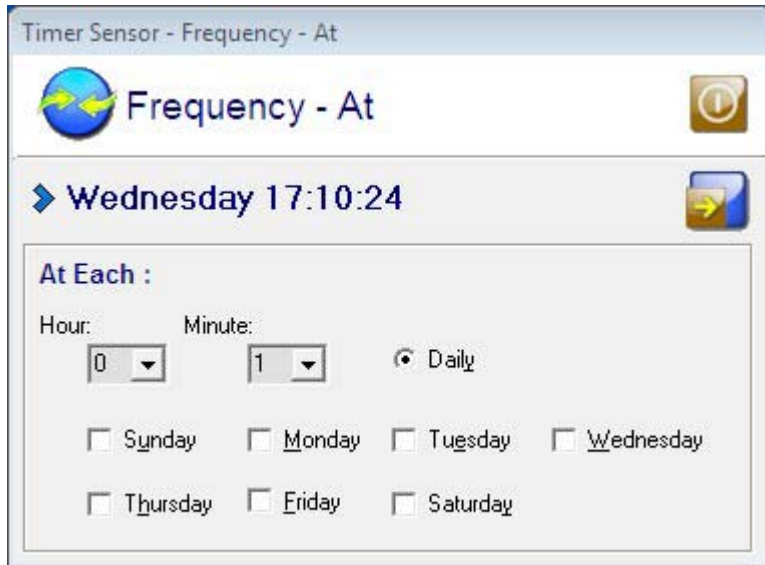




A “**Frequency – At**” Timer sensor is a schedule action to set your process using Time value. A Frequency - At trigger allows you to configure a task to run at a certain time (0 ~ 23 hour, 0 ~ 59 minute).

At each: 0 hour 1 minute Daily → 02:09:37 → 02:10:37 → 02:11:37 → 02:12:37 → ...etc.

Figure B.3 Timer Sensor - Frequency - At window.

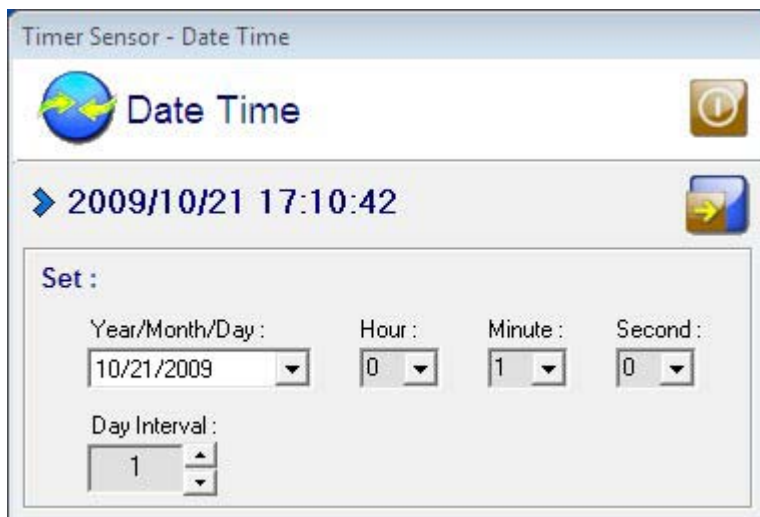


A “**Date Time**” Timer sensor is a schedule trigger allows you to configure a task to run at a certain date and time.

2003/ 7 / 6 0 hour 1 minute 0 second 1 Day Interval

→ 2003/ 7 / 6 00:01:00 → 2003/ 7 / 7 00:01:00 → 2003/ 7 / 8 00:01:00 → ...etc.

Figure B.4 Timer Sensor – Date & Time window.



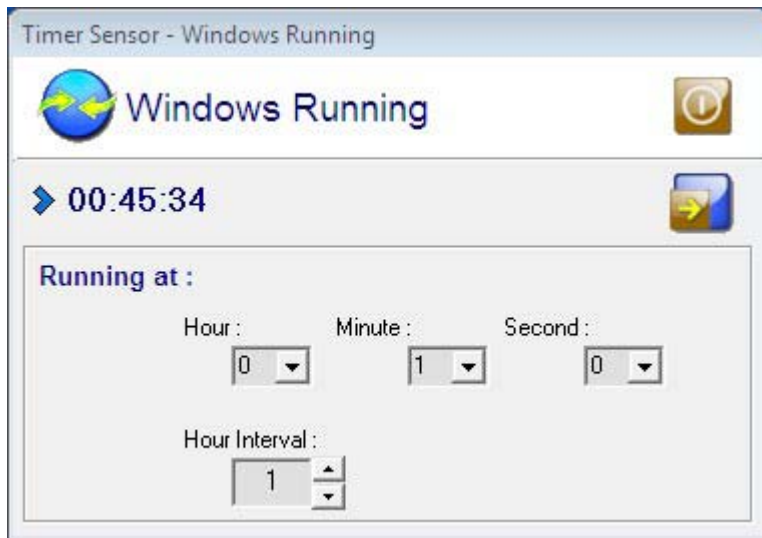


A “**Windows Running**” Timer sensor is an Operation time monitor trigger allows you to configure a task to run at a certain Operation time.

Limit: Set Time Maximum: < 24 hours

0 hour 1 minute 0 second 1 hour Interval → 00:01:00 → 01:01:00 → 02:01:00 → 03:1:00 → ...etc.

Figure B.5 Timer Sensor – Windows Running window.



A “**Countdown Timer**” sensor is a timer tool for server. Countdown Timer allows you to setup seconds, minutes, or hours to count down to.

Figure 2.2.19 Scam Sensor – Countdown Timer sensor window.

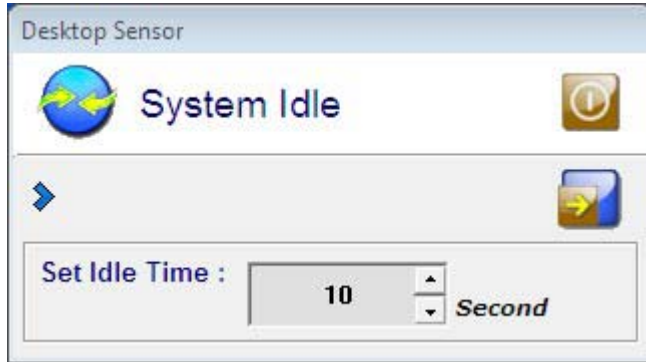


Group – Desktop Sensor



A “**System Idle**” Desktop sensor is a Mouse & Keyboard monitor action. When doing nothing on the system, the computer is referred to as being in an “Idle” state. By using the Idle trigger to check the system and then trigger any action.

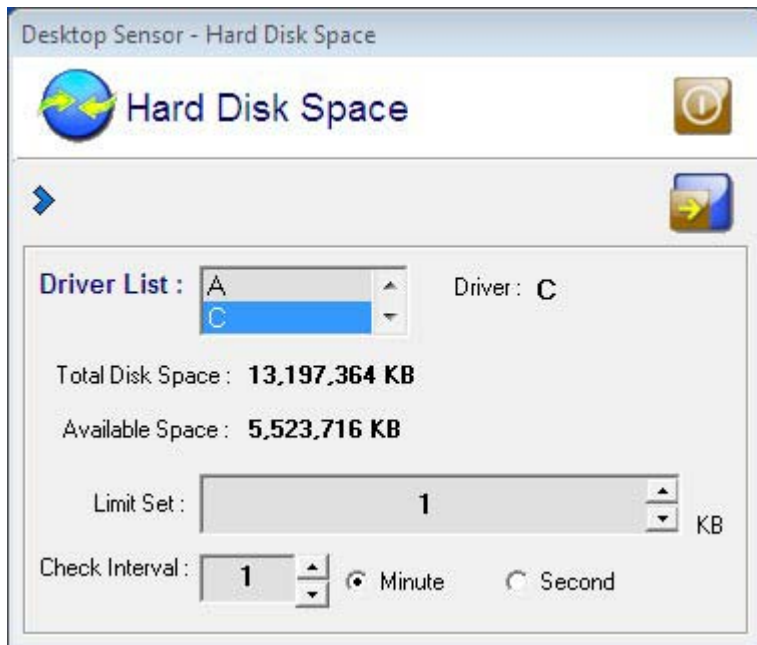
Figure C.1 Desktop Sensor - System Idle window.



A “**Hard Disk Space**” Desktop sensor is a Hard Disk monitor action. By using the Hard Disk Space trigger to check the Hard Disk space and then trigger any action.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.2 Desktop Sensor - Hard Disk Space window.



Memory Monitor Sensors

Physical memory (Real memory) (RAM): The amount of Real memory installed in computer.

Page File memory (Swap file): A page file is a reserved portion of a hard disk that is used as an extension of random access memory for data in RAM that has not been used recently. A page file can be read from the hard disk as one contiguous chunk of data and thus is faster than re-reading data from many different original locations.

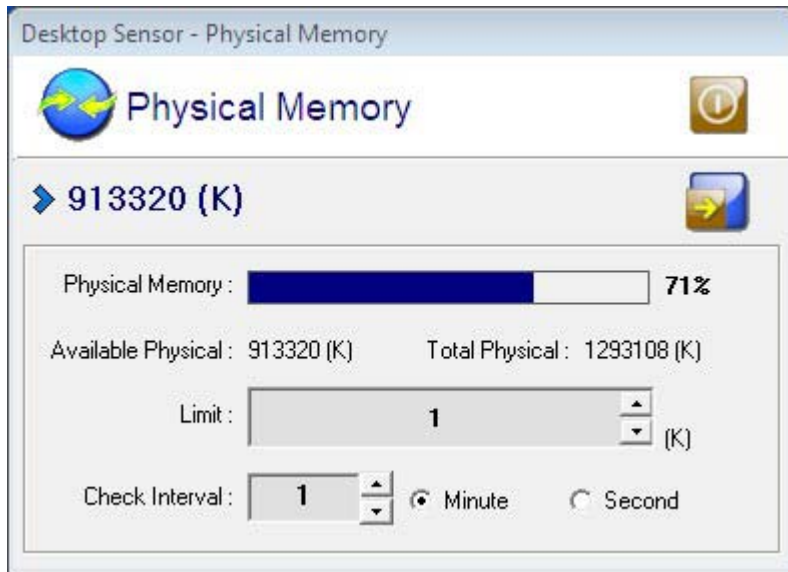
Virtual memory: Virtual memory is a concept that, when implemented by a computer and its operating system, allows programmers to use a very large range of memory or storage addresses for stored data. The computing system maps the programmer's virtual addresses to real hardware storage addresses. (The OS maps the virtual memory addresses to Physical memory locations.)



A “**Physical Memory**” Desktop sensor is a system Physical Memory monitor action. By using the Memory Status trigger to check the system memory using status and then trigger any action.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.3 Desktop Sensor - Physical Memory Status window.

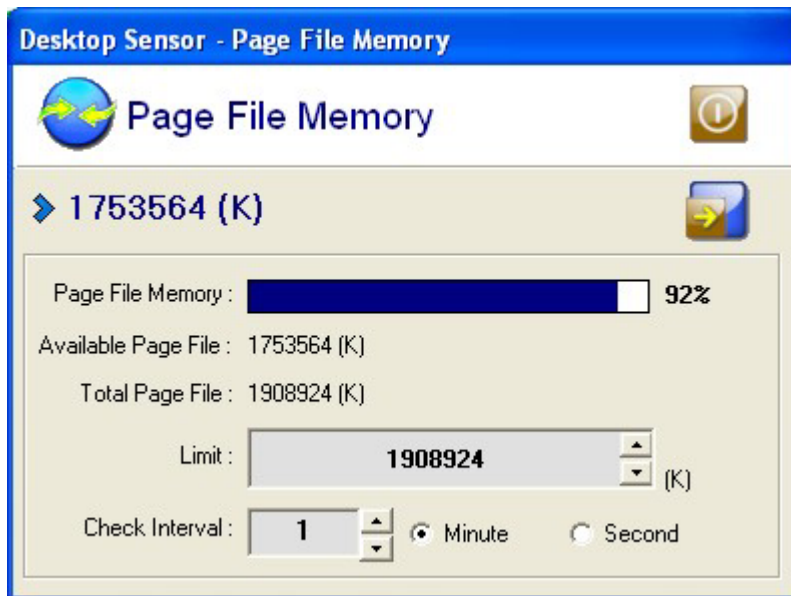




A “**Page File Memory**” Desktop sensor is a system Page file Memory monitor action. By using the Memory Status trigger to check the system memory using status and then trigger any action.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.4 Desktop Sensor – Page File Memory window.



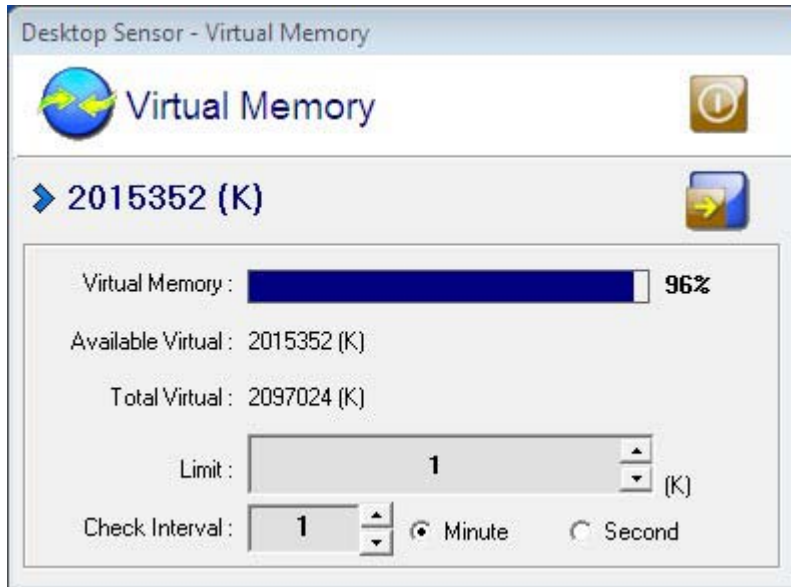
(*) Note: Page File Sensor (Not available for Windows Vista/7)



A **“Virtual Memory”** Desktop sensor is a system Virtual Memory monitor action. By using the Memory Status trigger to check the system memory using status and then trigger any action.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.5 Desktop Sensor - Virtual Memory window.

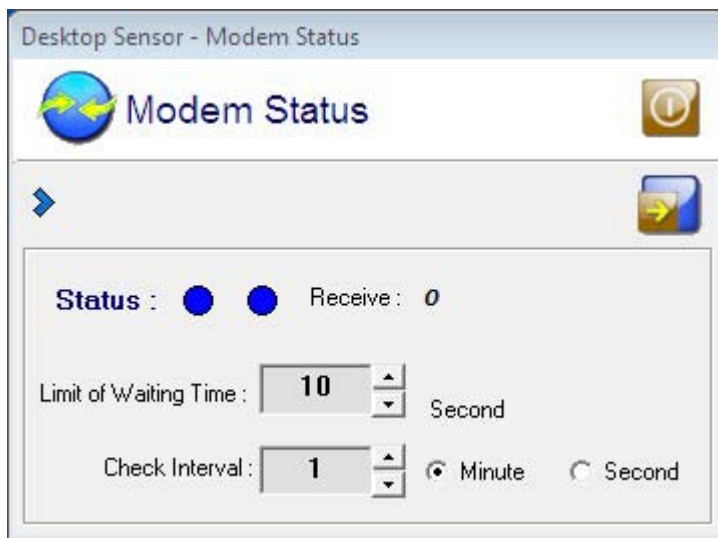




A “**Modem Status**” Desktop sensor is a Modem Transfer Data monitor action. When Modem transfer data is unoccupied, the limit of waiting time will start to count down. By using the Modem Status trigger to check the data transfer status under Modem and then trigger any action.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.7 Desktop Sensor – Modem Status window.

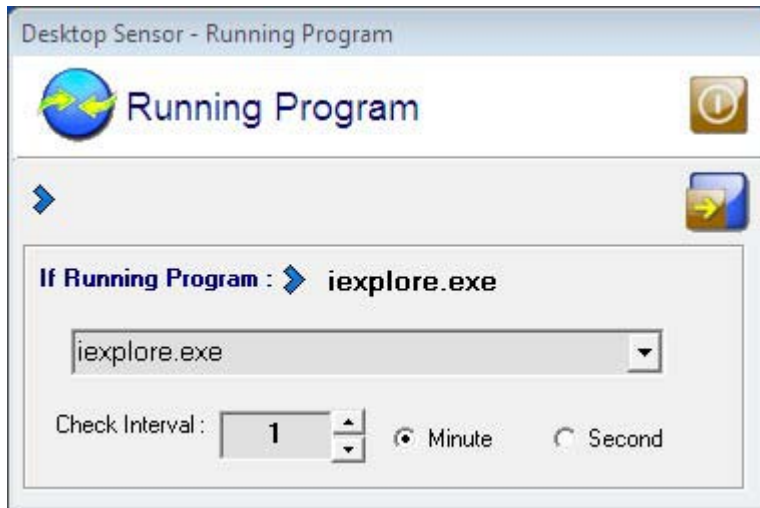




A “**Running Program**” Desktop sensor is a running program monitor action. If the program starts to run, the trigger will be detected and then trigger.

Check Interval: next scan time by minute, or second, (Default: Minute)

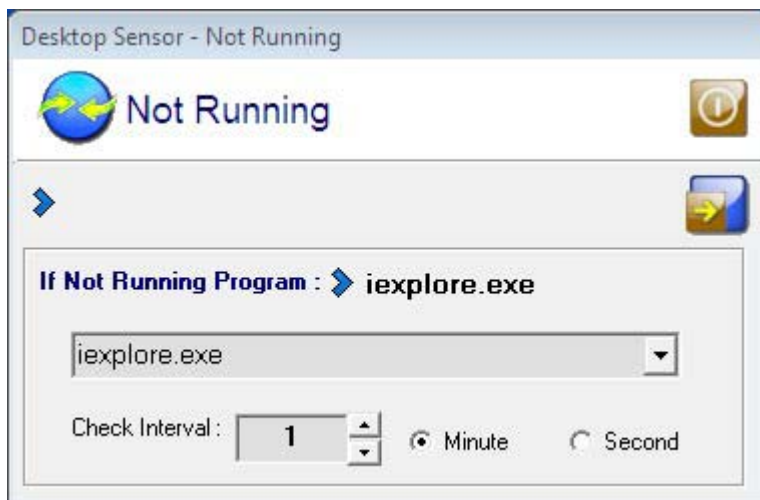
Figure C.8 Desktop Sensor – Running Program window.



A “**Not Running**” Program Desktop sensor is a **Not** running program monitor action. If the program is not existed, the trigger will detect and then trigger.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.9 Desktop Sensor – Not Running window.

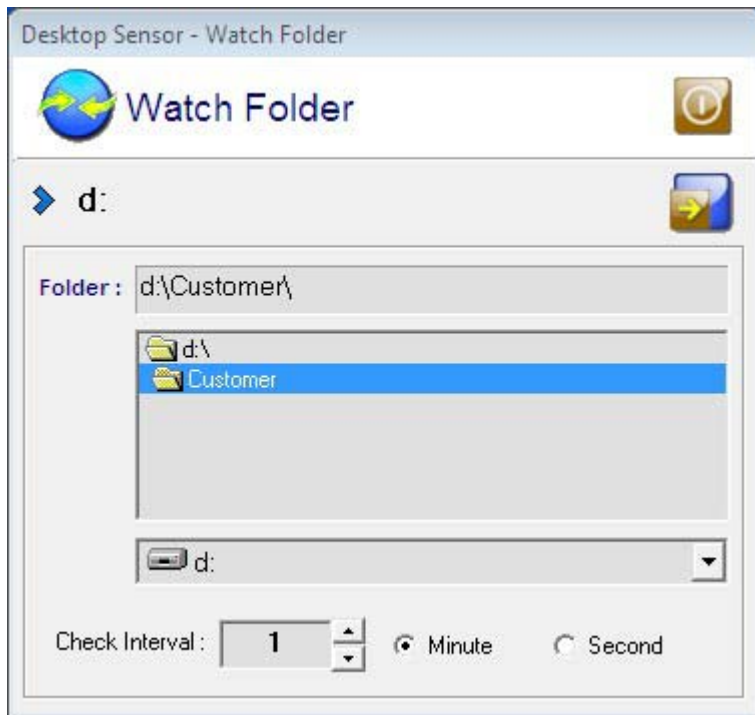




A **“Watch Folder”** Desktop sensor is a Folder monitor action. Watching for certain Folder and then trigger

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.10 Desktop Sensor – Watch Folder window.

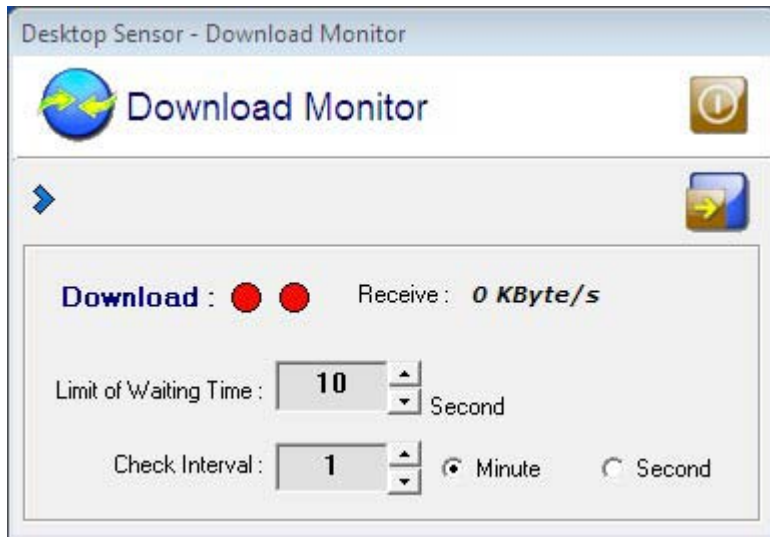




A “**Download Monitor**” Desktop sensor is a monitor action to check the data download transformation status of Network between two machines.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.11 Desktop Sensor – Download Monitor window.

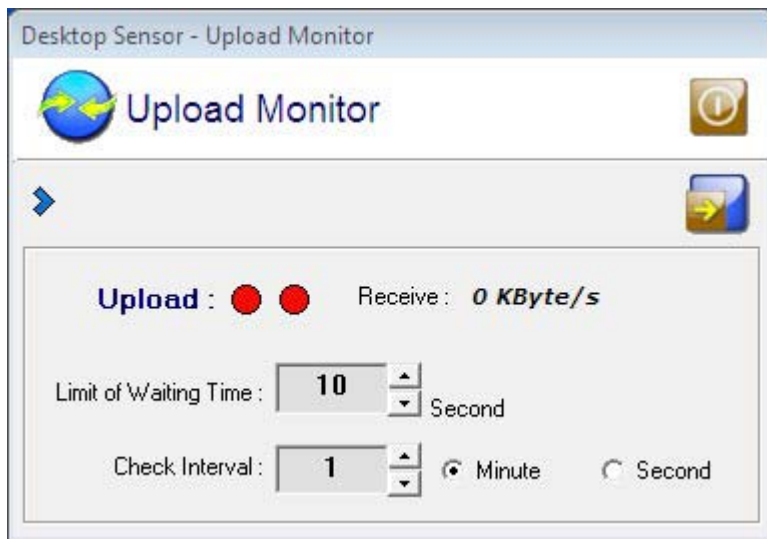




An “**Upload Monitor**” Desktop sensor is a monitor action to check the data upload transformation status of Network between two machines.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure C.12 Desktop Sensor – Upload Monitor window.



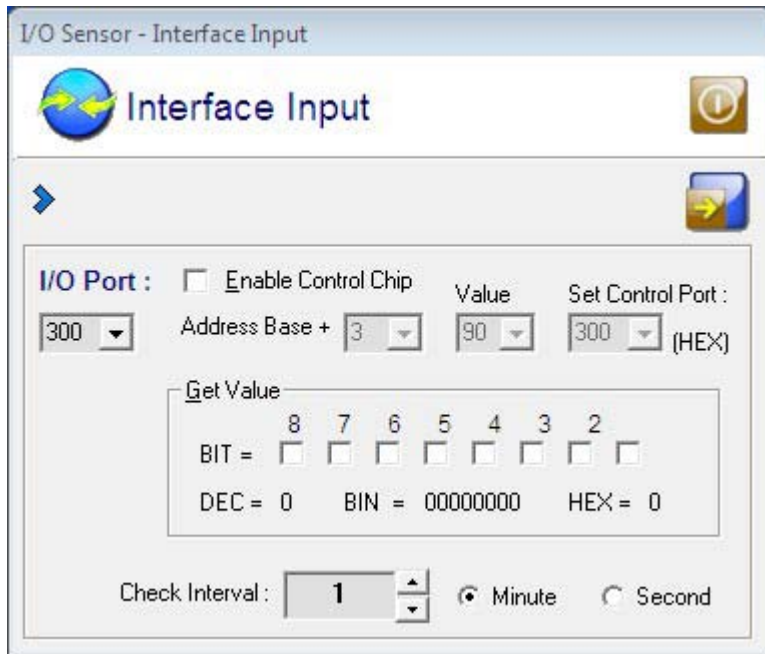
Group – I/O Sensor



An “**Interface Input**” sensor is a Hardware Interface Signal Detect monitor action. You could build your Interface card then pass the signal to trigger.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure D.1 I/O Sensor – Interface Input window.

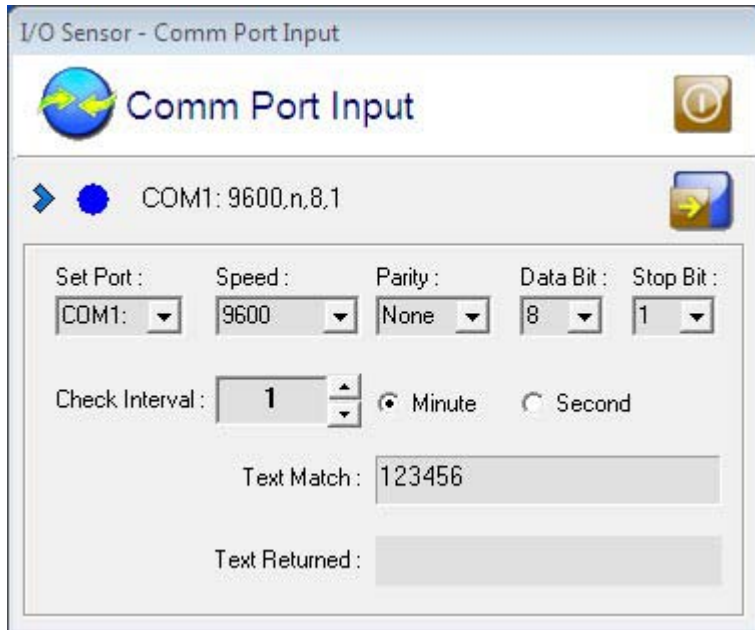




A “**Comm Port Input**” sensor is a Com Port Signal Detect monitor action. You could connect 2 systems and monitor the signal to trigger.

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure D.2 I/O Sensor – Com Port Input window.



Group – Remote Sensor



A “**Web Remote**” sensor allows user to trigger sensor via internet.

Figure E.1 Remote Sensor – Web Remote window.

Remote Sensor - Web Remote

Web Remote

Web Remote :

TCP / IP Address : 192.168.0.1

TCP / IP Port : 1026

User : user

Password : xoxoxox

Host PC (Desktop Operation Sensor):

Set:

- ◆ IP Address: this is the Internet connection IP address of system (default: 192.168.0.1.)
- ◆ Set IP to : 74.222.149.30
- ◆ Select Port: select Port to be the monitor service port (default: 1026).

User name / password:

- ◆ User Name: set user name (default: user).
- ◆ Password: set user password (default: user).

Guest PC (Web browser):

1. Open a Web browser, such as Netscape Communicator 4.0 or Internet Explorer 4.0, on a guest PC.
2. Input the IP address with Port number (follow with ":") of the host PC into the address field of your Web browser. In this case: type **http://74.222.149.30:1026**
3. Input your user name and password when log in (a Log In popup window will be displayed). Such as: user type **user**, password type **user**.
4. A host PC (Desktop Operation Sensor) will be triggered.

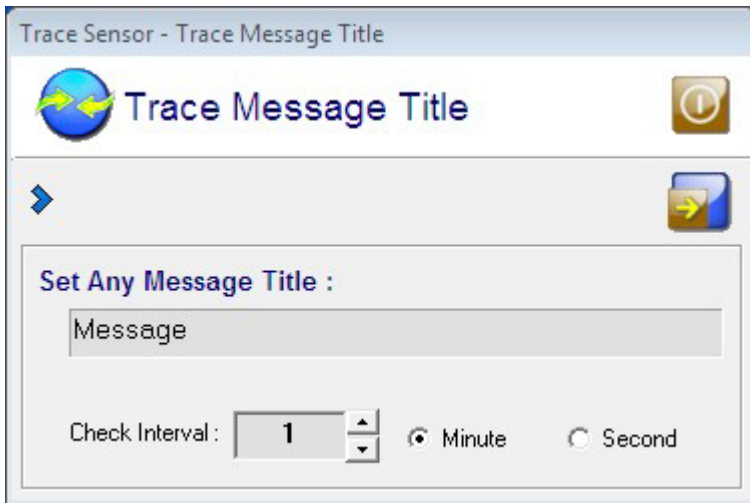
Group – Trace Sensor



A “Trace Message Title” sensor allows user to trigger any popup Windows (Selected Windows title text).

Check Interval: next scan time by minute, or second, (Default: Minute)

Figure F.1 Trace Sensor – Trace Message Title.



Group – Network Sensor

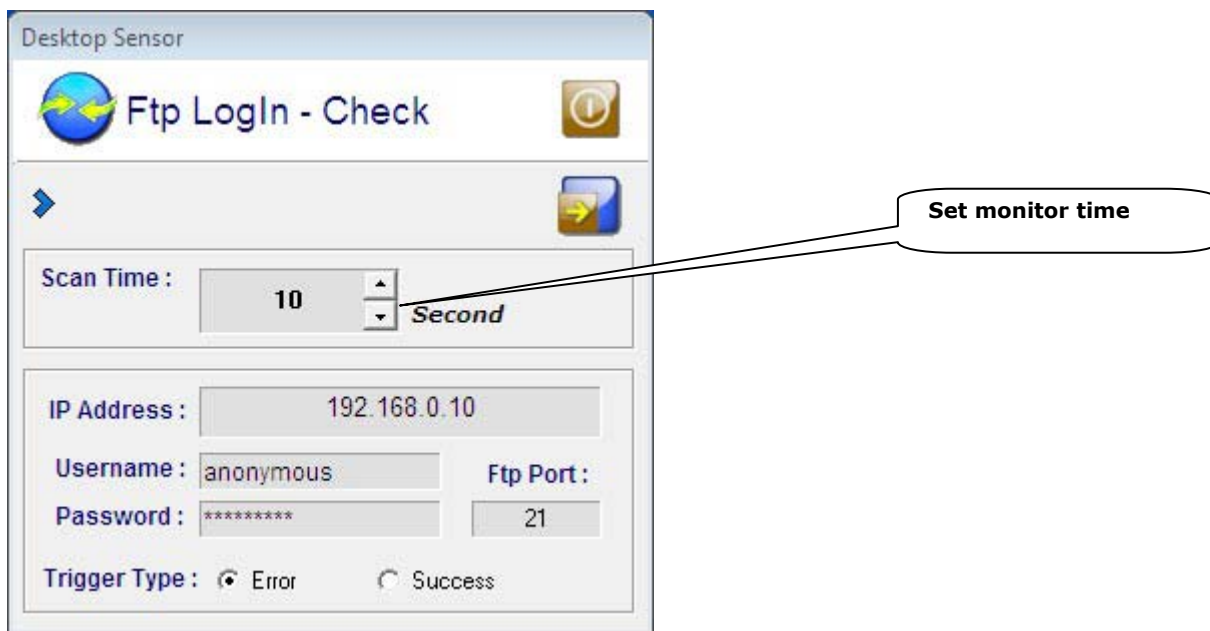


“Ftp Check” Sensor

“Ftp Check” sensor is a monitor tool for FTP server. It makes an FTP connection and login. Returns an error if FTP server is not respond.

Trigger Type: Trigger by Error (not respond) or Success (respond).

Figure G.1 Scam Sensor – Ftp Check sensor window.



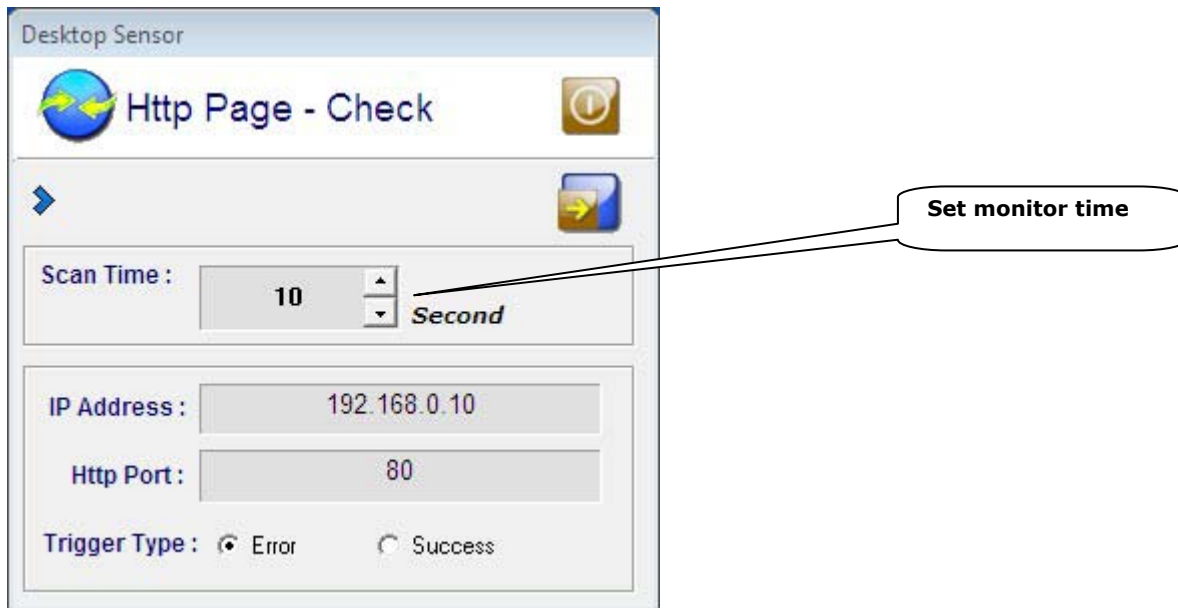


“Http Check” Sensor

“Http Check” sensor is a monitor tool for HTTP server. It verifies the HTTP status code returned by the web server. Returns an error if HTTP server is not respond.

Trigger Type: Trigger by Error (not respond) or Success (respond).

Figure G.2 Scam Sensor – Http Check sensor window.



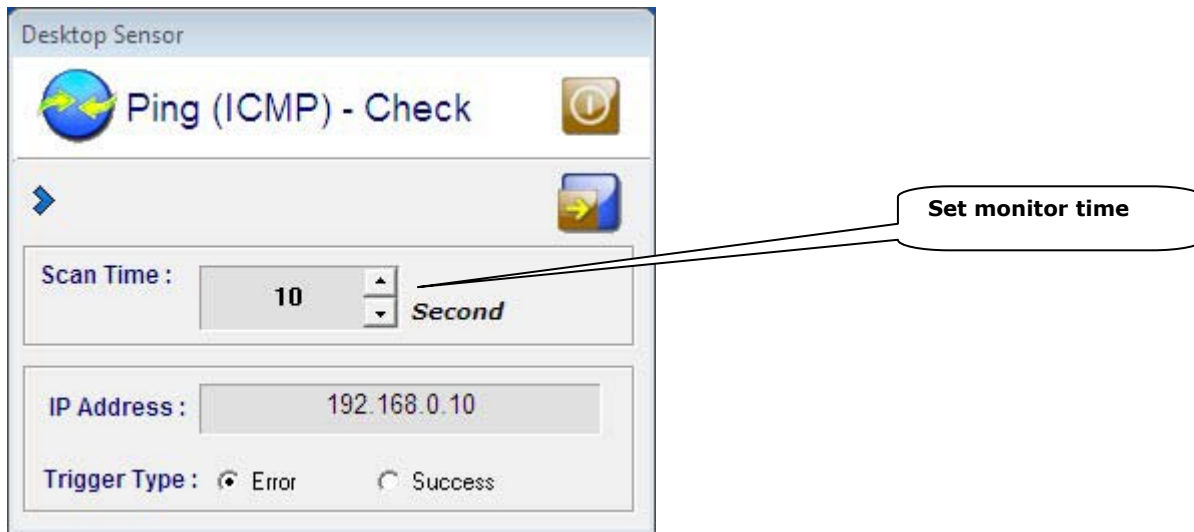


“Ping (ICMP)” Sensor

“Ping (ICMP)” sensor is a monitor tool for servers. It sends a ping command and retrieves response status. Returns an error if servers is not respond.

Trigger Type: Trigger by Error (not respond) or Success (respond).

Figure G.3 Scam Sensor – Ping Check sensor window.



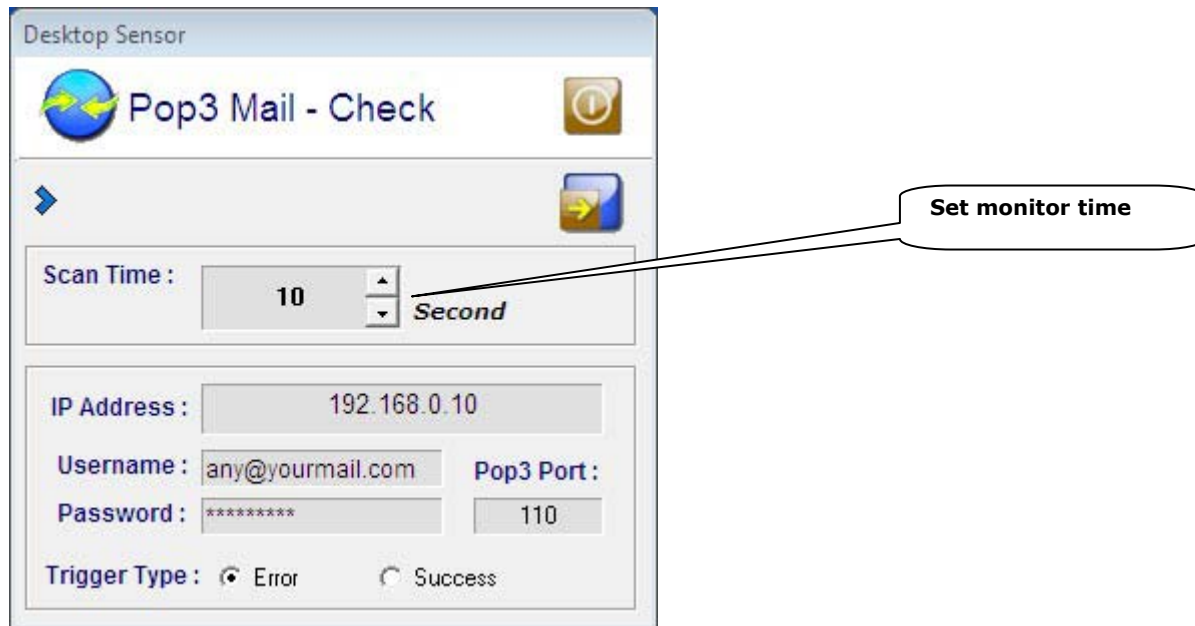


“Pop3 Mail Check” Sensor

“Pop3 Mail Check” sensor is a monitor tool for POP3 Mail server. It makes a POP3 connection and login to a mailbox. Returns an error if POP3 Mail server is not respond.

Trigger Type: Trigger by Error (not respond) or Success (respond).

Figure G.4 Scam Sensor – Pop3 Mail Check sensor window.



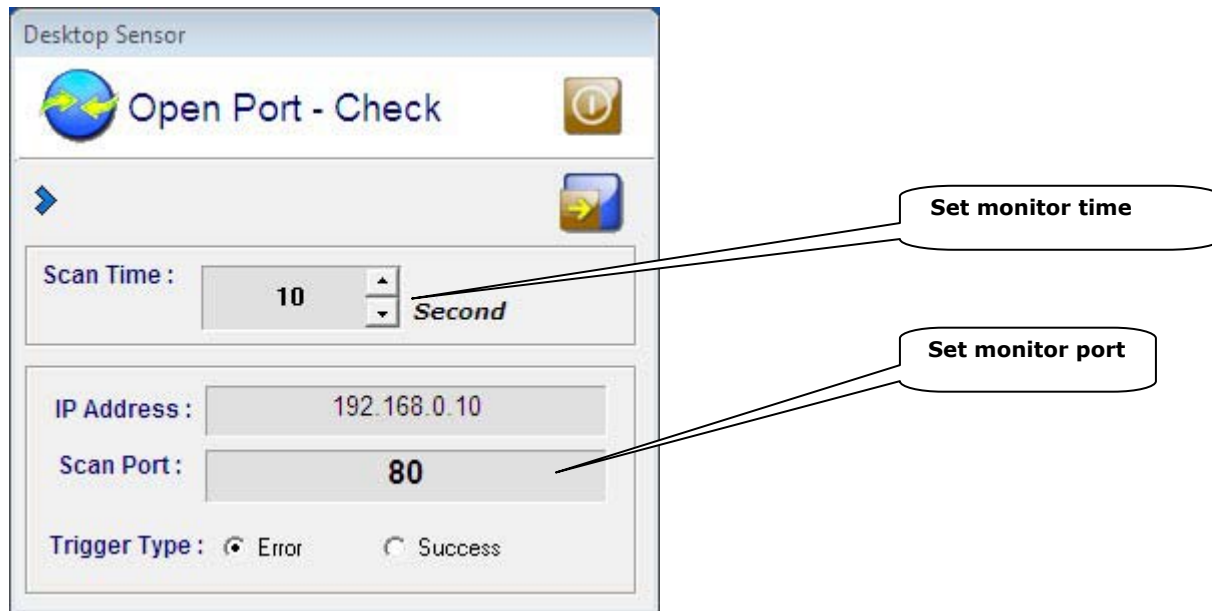


“Open Port Check” Sensor

“Open Port Check” sensor is a monitor tool for opened server port. It verifies if a computer responds on a certain port. Returns an error if opened port is not respond.

Trigger Type: Trigger by Error (not respond) or Success (respond).

Figure G.5 Scam Sensor – Open Port Check sensor window.



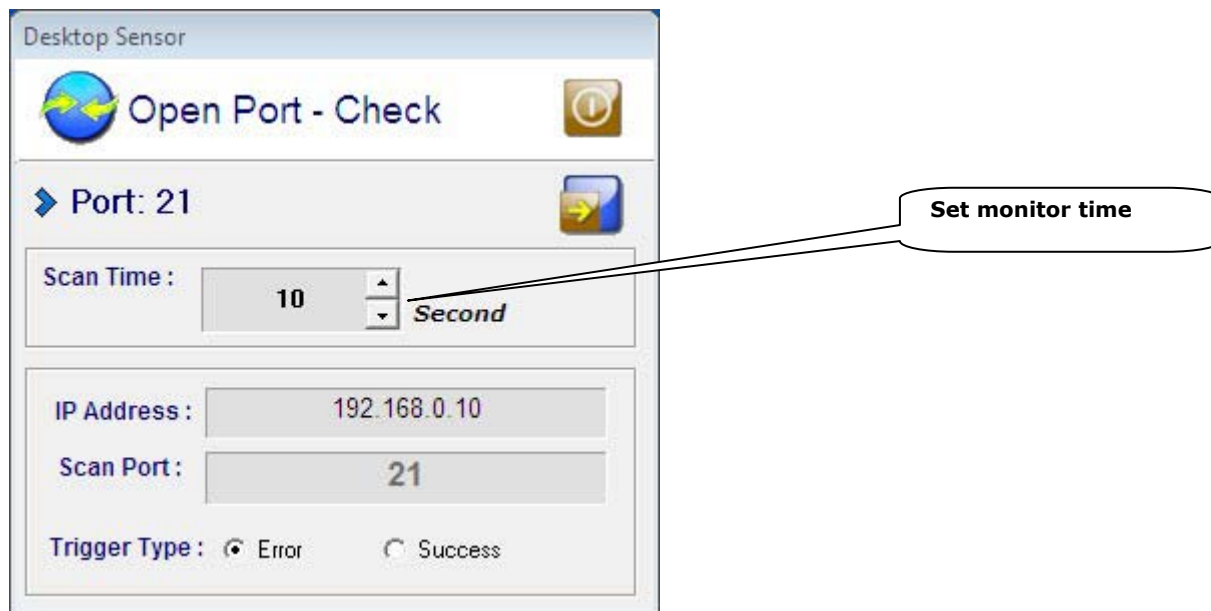


“Open Port Check” Sensor – Port “21”

“Open Port Check” sensor is a monitor tool for opened server port. It verifies if a computer responds on a port “21”. Returns an error if opened port “21” is not respond.

Trigger Type: Trigger by Error (not respond) or Success (respond).

Figure G.6 Scam Sensor – Open Port Check sensor window.



“Open Port Check” Sensor – Port “20” (~ Port “3306”)

Returns an error if opened port “20” (~ “3306”) is not respond.

Sensor Network Communication



“Enable edit”:

Contains sub window and enable for edit (such as, Timer Sensor, Desktop Sensor, I/O Sensor, Remote Sensor ...etc)

Any “Editable” type of sensor has a network setting that could directly trigger other Desktop Operation Sensor remotely via network.



Figure H.1 Sensor

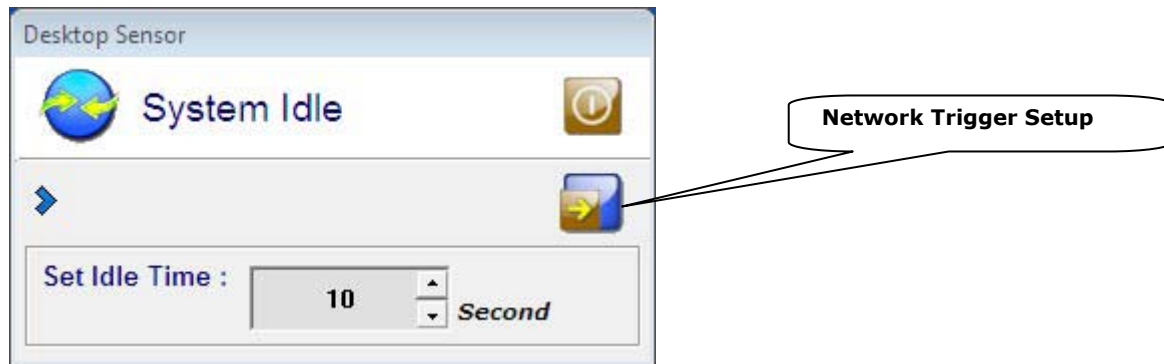


Figure H.2 Network Trigger Setup – Sensor



Remote IP: Desktop Operation Sensor (Server) IP Address.

Port: Open ports for Sensor

Password: Password for Sensor

Figure H.3 Server – Desktop Operation Sensor

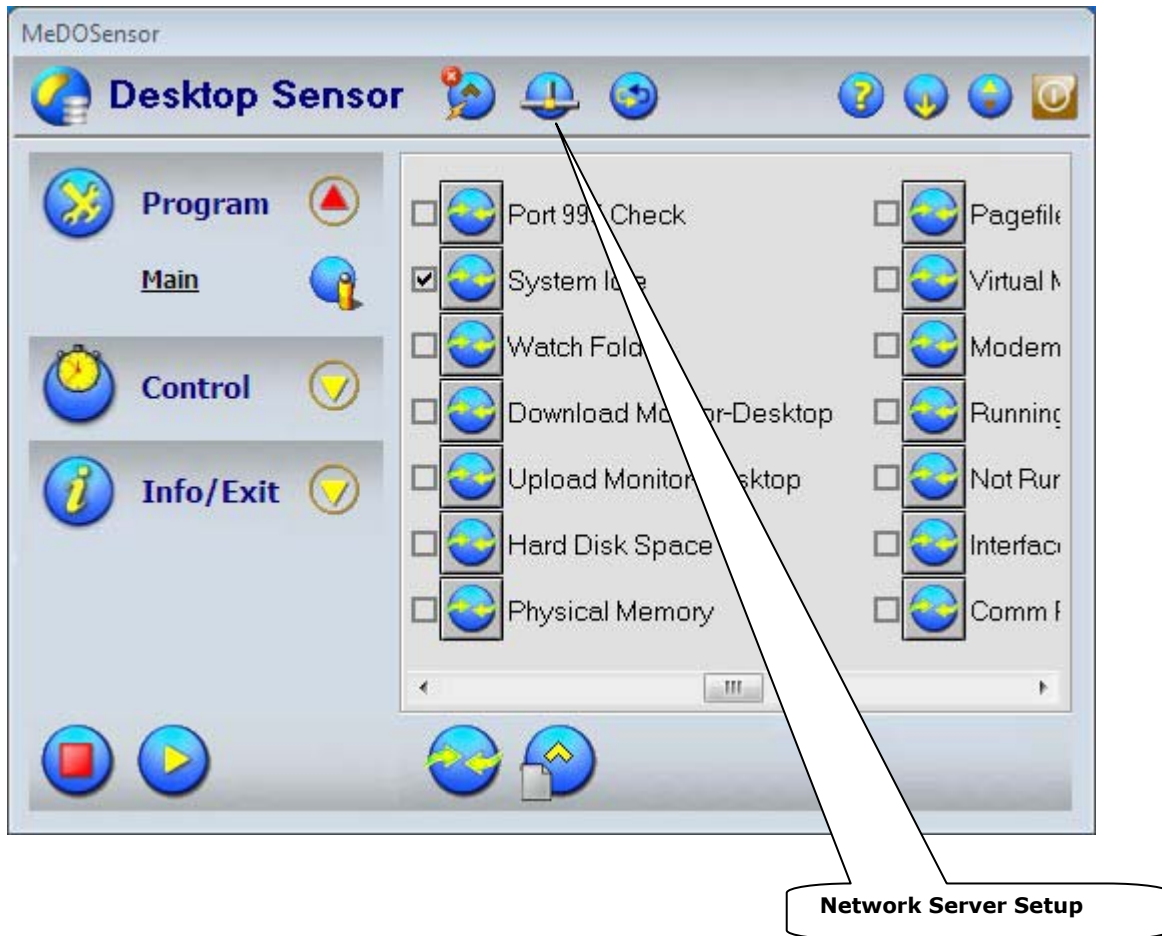
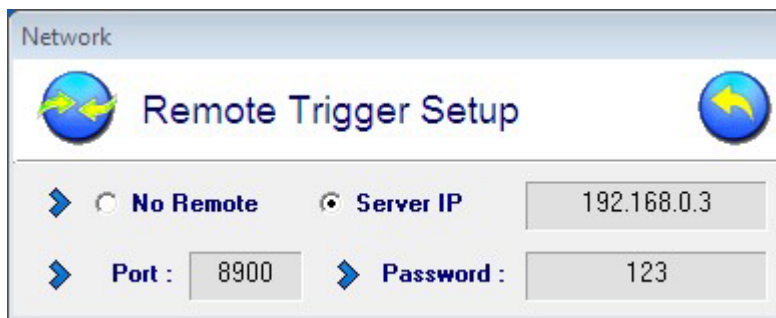


Figure H.4 Server Setup – Desktop Operation Sensor



Server IP: Desktop Operation Sensor (Server) IP Address.
 Port: Open ports for Sensor
 Password: Password for Desktop Operation Sensor