JclientOpen
User Manual

History

Version	*Date*	*Author*	*Description of the modifications*
1.0	***04/07/2005***	M. Sarchi	FIRST RELEASE
1.1	29/09/2005	M. Sarchi	Added Video control Section

INDICE

1. Introduction

This document is meant to give a detailed description of the functions included in the JclientOpen.

The application allows, through a suitable graphic interface, to communicate with a web server with the OPEN commands.
The main functions available in the software are:

- Sending a single open command;
- Sending of an OPEN-command sequence read from an outside file;
- Checking the timeouts during the open commands sent in sequence;
- Activating the monitoring function;
- Viewing pictures from a camera;
- Saving into a log file.

2. Start the program

A java virtual machine (the 1.4. version is recommended).is required to run the application*

The executable (already compiled) code is available in the directory 'classes'.

To run the application it's required:

- Windows environment:
  to double-click on the '*clientOpen.bat*' file in the directory '*classes/client_java_core*'.

- Linux environment:
  to double-click on the script '*clientOpen.sh*' in the '*classes/client_java_core*' directory, after having entered the user password, as the '*clientOpen.sh*' script runs the *'sudo'* command.

3. Graphics interface description

The graphical interface of the JclientOpen is divided into two main sections: "check open" and "check display".
Both sections are analyzed in detail in the next paragraphs.

3.1 Check Open

The 'Check Open' section is divided into these areas:

- Data panel.
- OPEN command panel.
- OPEN Sequence panel.
- Viewing panel.
- Log file panel.

The position of the various sections is highlighted inside the graphical interface of the JclientOpen in figure 3.1.1.

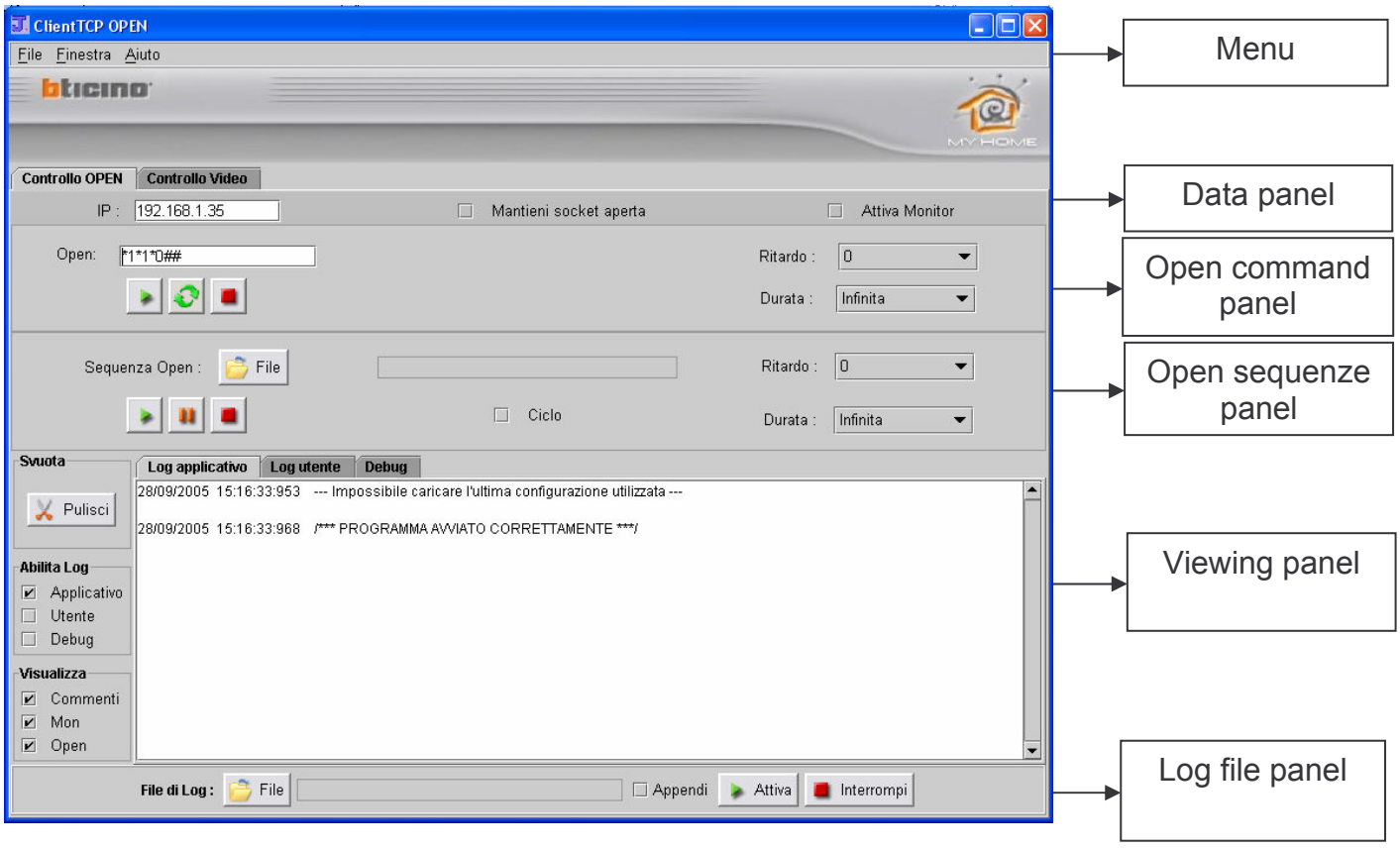


Figure 3.1.1

Menu

This section allows to perform the following operations:

- File: the '*chiudi'* command (*figure 3.1.2)* allows to quit the program.

Figure 3.1.2

- Finestra: by enabling or disabling the two check-boxes inside this menu it is possible, respectively, to show/hide the *'OPEN command'* panel and the *'OPEN Sequence'* panel, *figure 3.1.3*.

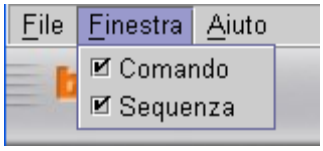


Figure 3.1.3

- Aiuto: the *'Versione JclientOpen'* command allows to see the version of the software, *figure 3.1.4*.

Figure 3.1.4

Data Panel

In this section must be inserted the required value to connect the client to the webserver, *figure 3.1.5*.

Figure 3.1.5

- IP: insert the ip address of the webserver (ex: 10.39.10.67).
- Mantieni socket aperta: if disabled, the socket is closed every dispatch. Otherwise it remains open after the dispatch of an OPEN command.
- Attiva monitor: if enabled, the socket monitor is opened .

Open command panel

This section allows to specify the OPEN command to send. It is possible to send a command in loop with a specified timeout between two commands, *figure 3.1.6*.

Figure 3.1.6

- Open: insert the command to be sent (ex. *1*1*0##).
- Ritardo: select the timeout between two commands sent in loop.
- Durata: select the 'end time' after which the loop is finished.
- Invia: click on the button to send the open command.
- Ciclo: click on the button to activate the loop.
- Stop: click on the button to stop the loop.

Open sequence panel

This section allows to specify a file in which there is a sequence of OPEN commands to send, *figure 3.1.7*.

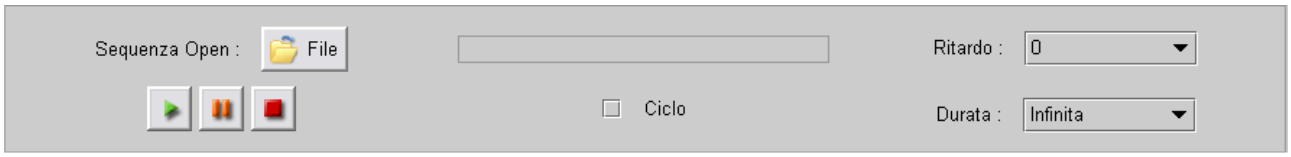


Figure 3.1.7

- File: this button allows to select the file which contains the OPEN commands, the syntax of the file is described in the Chapter 4. A few seconds may be required to load the file, according to the number of OPEN commands to load.
- Ritardo: select the timeout to use between two commands.
- Durata: after this time the loop is interrupted.
- Ciclo: if enabled, when the end of the file is reached, the program automately restarts from the first command in the file.
- Avvia: this button activates the sequence to send the OPEN command.
- Pausa: this button interrupts the sequence, a next restart will set out again from the position reached previously.
- Stop: this button interrupts the sequence, a next restart sends the first command in the file.

Viewing panel

This section allows to view the informations about the sent command and the received frame from the webserver. *figure 3.1.8*.

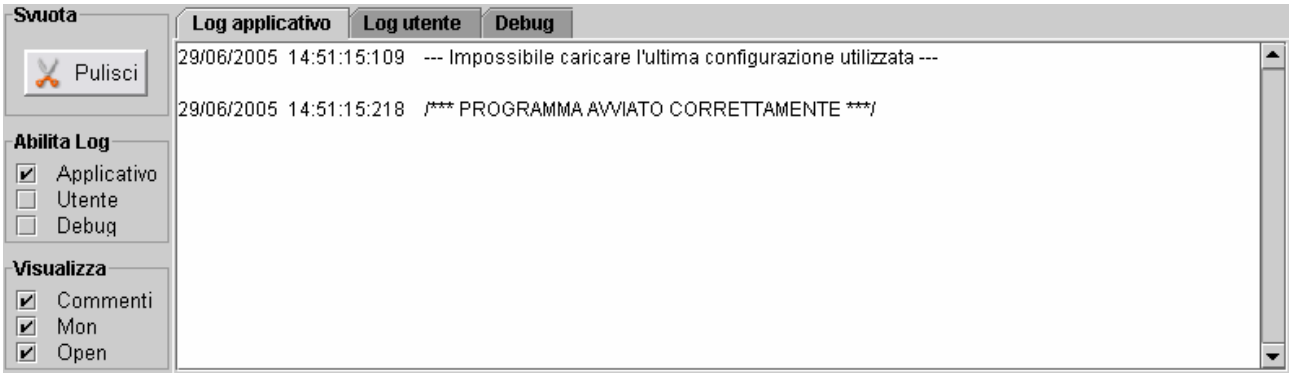


Figure 3.1.8

- Pulisci: clear all the information in the three viewing panels.
- Applicativo: this button enables the “log applicativo”.
- Utente: this button enables the “log utente”.
- Debug: this button enabledsthe “log debug”.
- Log applicativo: this log shows the main information, sent command, answer from the webserver (ack o nack), monitor.
- Log utente: this log shows also the information about the connection steps.
- Log debug: this log shows the information required to debug some problems.
- Commenti: shows the comments in the log.
- Mon: shows monitor messages.
- Open: shows the OPEN commands.

The possible comments shown in the log are described in Chapter 6.

Log file panel

This section allows to select the file to save all the required information, *figure 3.1.9*.

Figure 3.1.9

- File: this button allows to select the file to activate the log function.
- Appendi: if enabled, the new information to be saved into the log file will be added to the current data in the file. Otherwise the log file will be cleared before writing the new log data.
- Attiva: this button activates the log function.

- Interrompi: this button interrupts the log function. This function must be activated to read the log file.

3.2 Check Video

This section allows to show the incoming pictures from video cameras. The latters are positioned on the bus if you use the MHSERVER / MHSERVER2 gateway. Otherwise if you use the F452V gateway the video cameras are directly connected to the device.
If you use the F452V gateway you can only configure the video camera with the address: 00, 01, 02, 03.
You can see on the *figure 3.1.9* the window structure of the video control page.

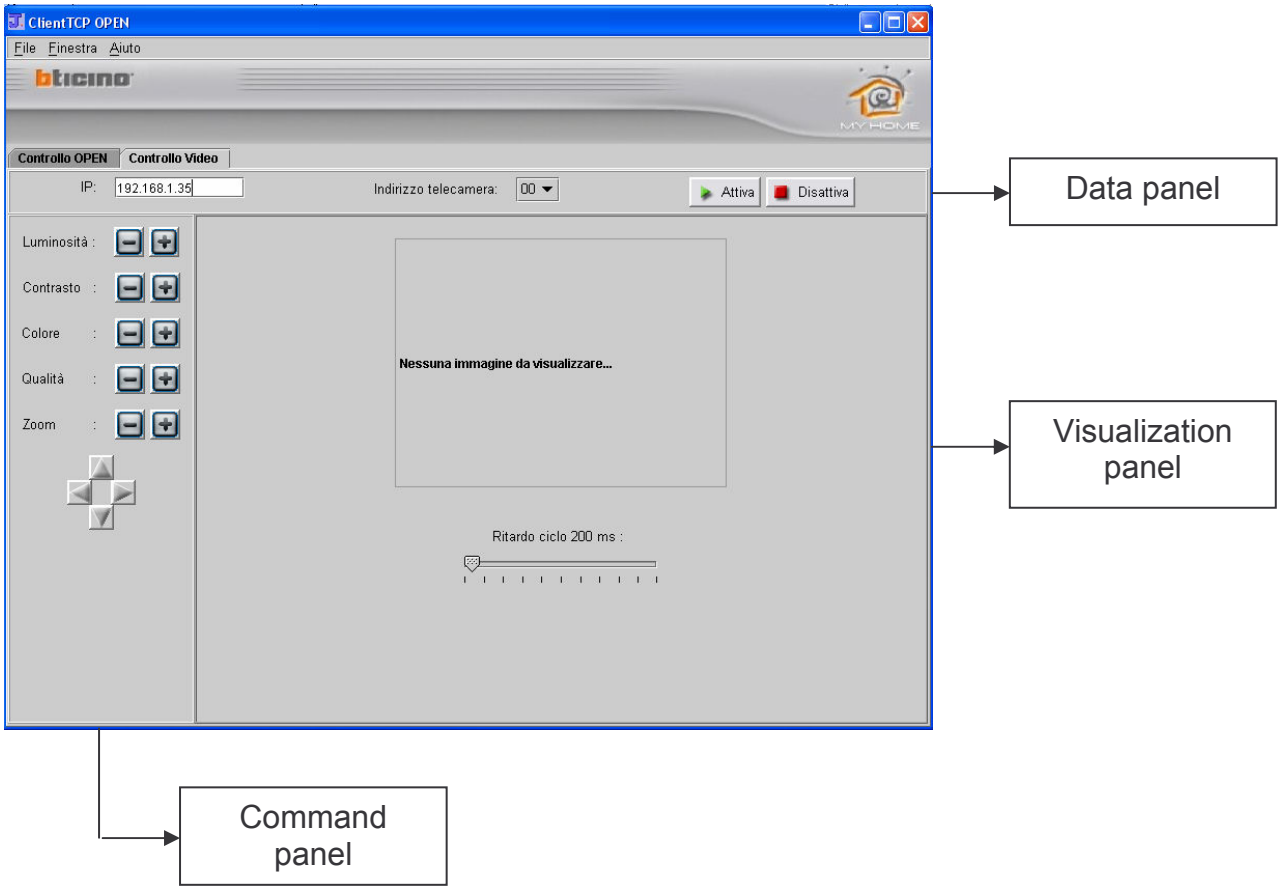


Figure 3.2.1

Data panel

In this section must be specified the required values to activate the video camera; the IP address of the gateway and the address of the video camera, *figure 3.2.2.*
There are two buttons to activate and deactivate the video camera.

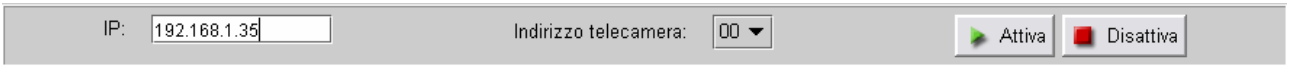


Figure 3.2.2

1. IP: insert the IP address of the webserver to be connected to (ex. 192.168.1.35).
2. Indirizzo telecamera: specify the address of the video camera to activate. This value must be between 00 and 99.
3. Attiva: this button activates the video camera.
4. Disattiva: this button deactivates the video camera.

Visualization panel

In this section is shown the incoming picture from the previously activated video camera. It is possible to set a refresh timeout to the video camera.

Figure 3.2.3

Command panel

In this section it is possible to change the characteristics of the picture by increasing or decreasing some parameters:
In questa sezione è possibile modificare l'immagine visualizzata andando ad agire sui seguenti parametri: brightness, contrast, color, quality, zoom. The color parameter has not effect on the gateway F452V.

With the four arrows displayed in *figure 3.2.4* it is possible to move inside the zoom image.

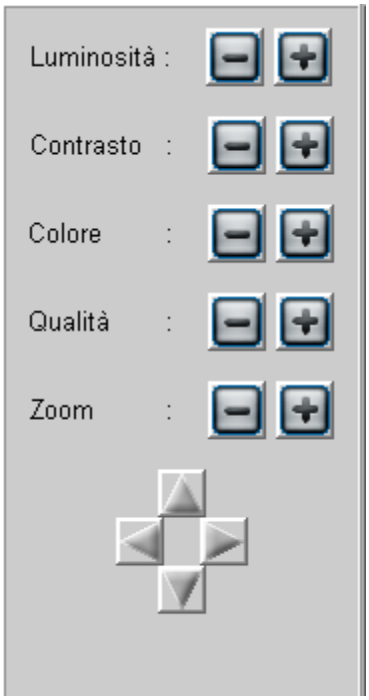


Figure 3.2.4

4. Syntax of the file with open sequence

The used file to run more OPEN commands in sequence must have a specific syntax:

- Don't leave white rows.
- Comments start with "//".
- To assemble several open commands inside a single command use [num1-num2].

Esempi:

1)

```
// Example 1
// switch on light 11
*1*1*11##
// switch on light 15
*1*1*15##
// switch on light 17
*1*1*17##
// switch on light from address 31 to 37
*1*1*[31-37]##
// End example 1
```

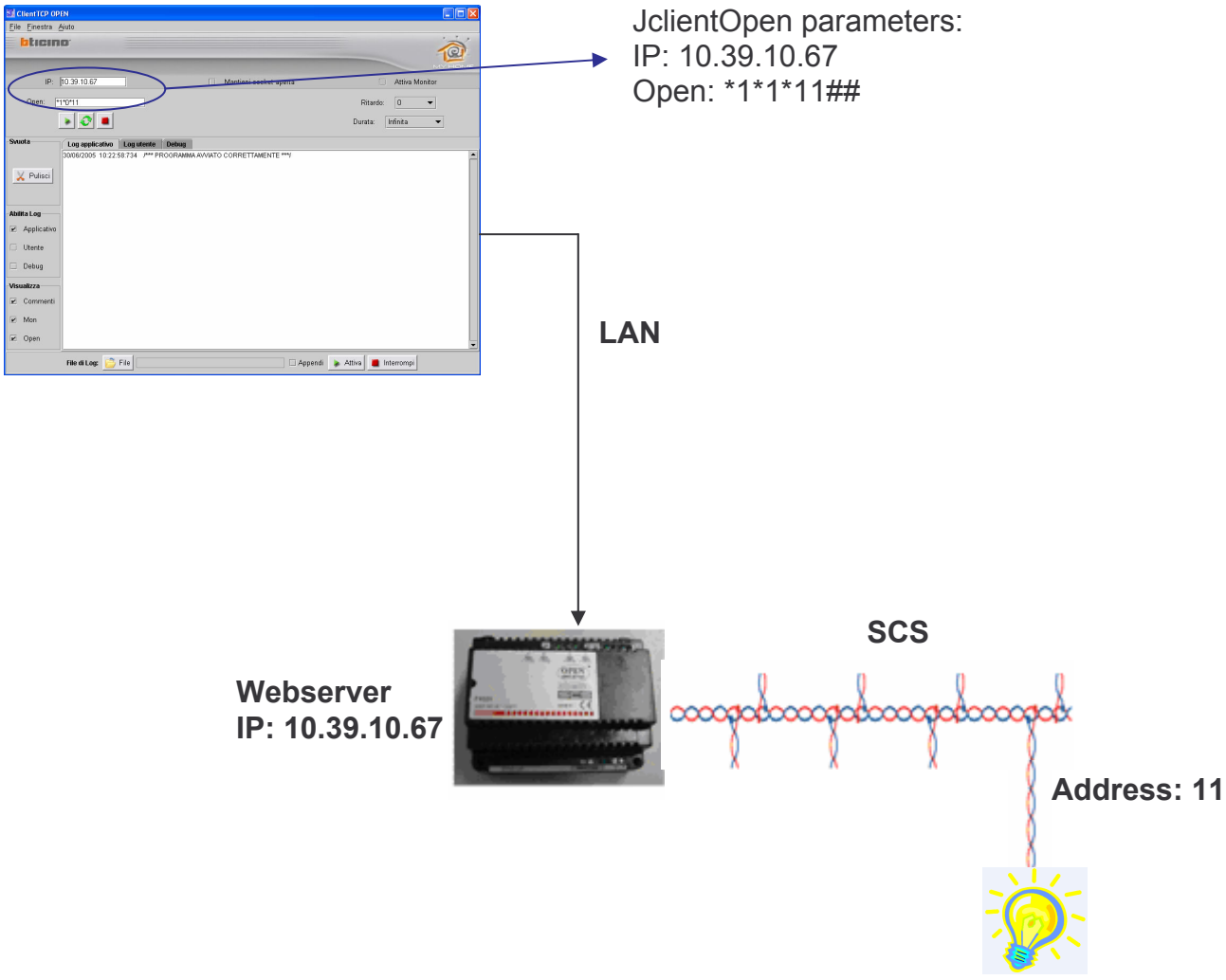
The last command in the example 1 generates these commands to be sent:
*1*1*31##; *1*1*32##; 1*1*33##.....* 1*1*37##

2)

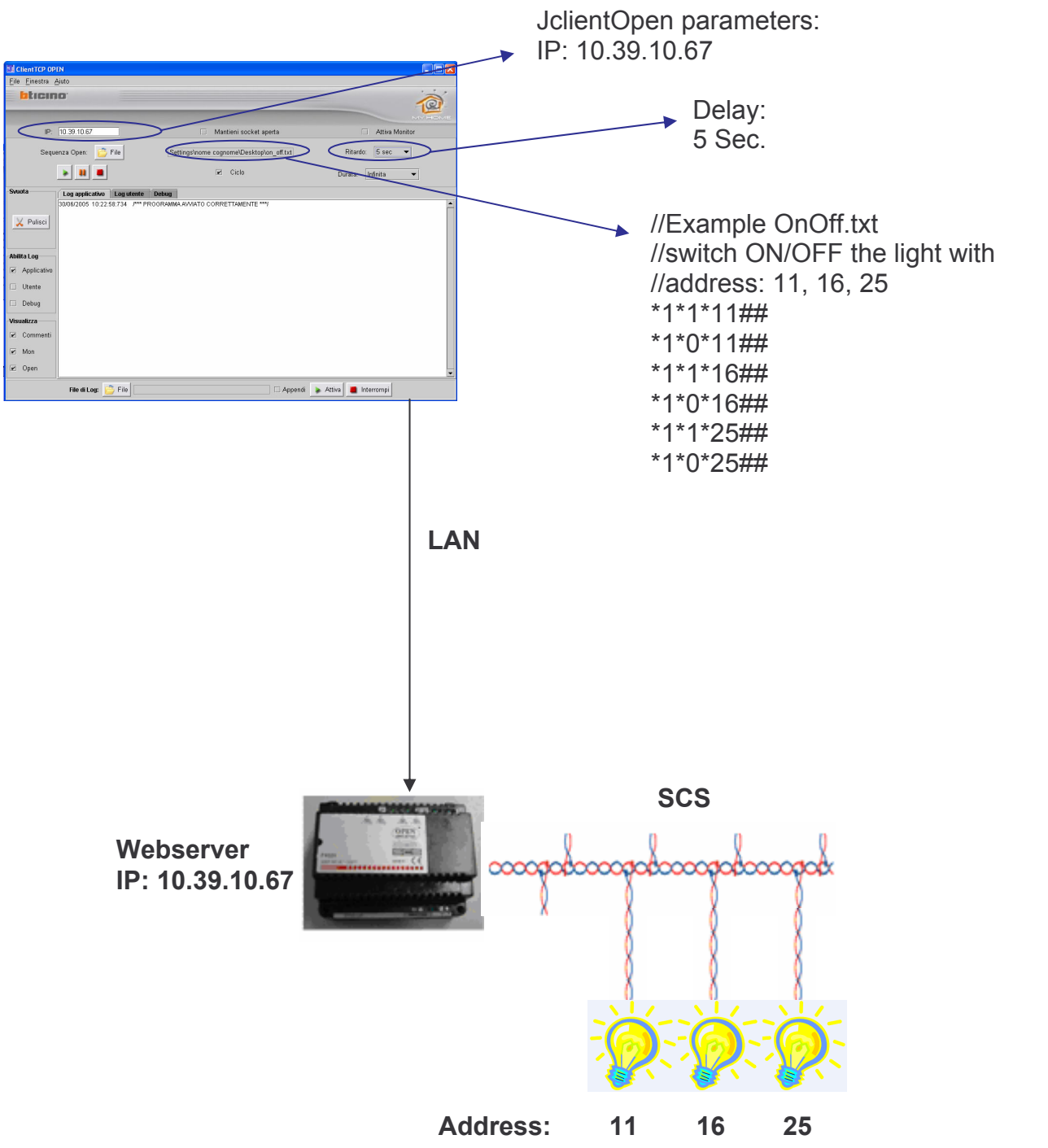
```
//  Example 2
// state request of light from address11 to 16
*#1*[11-16]##
// Send in sequence ON/OFF command to the light from address 37 to 39
*1*[0-1]*[37-39]##
// End example 2
```

5. Use examples

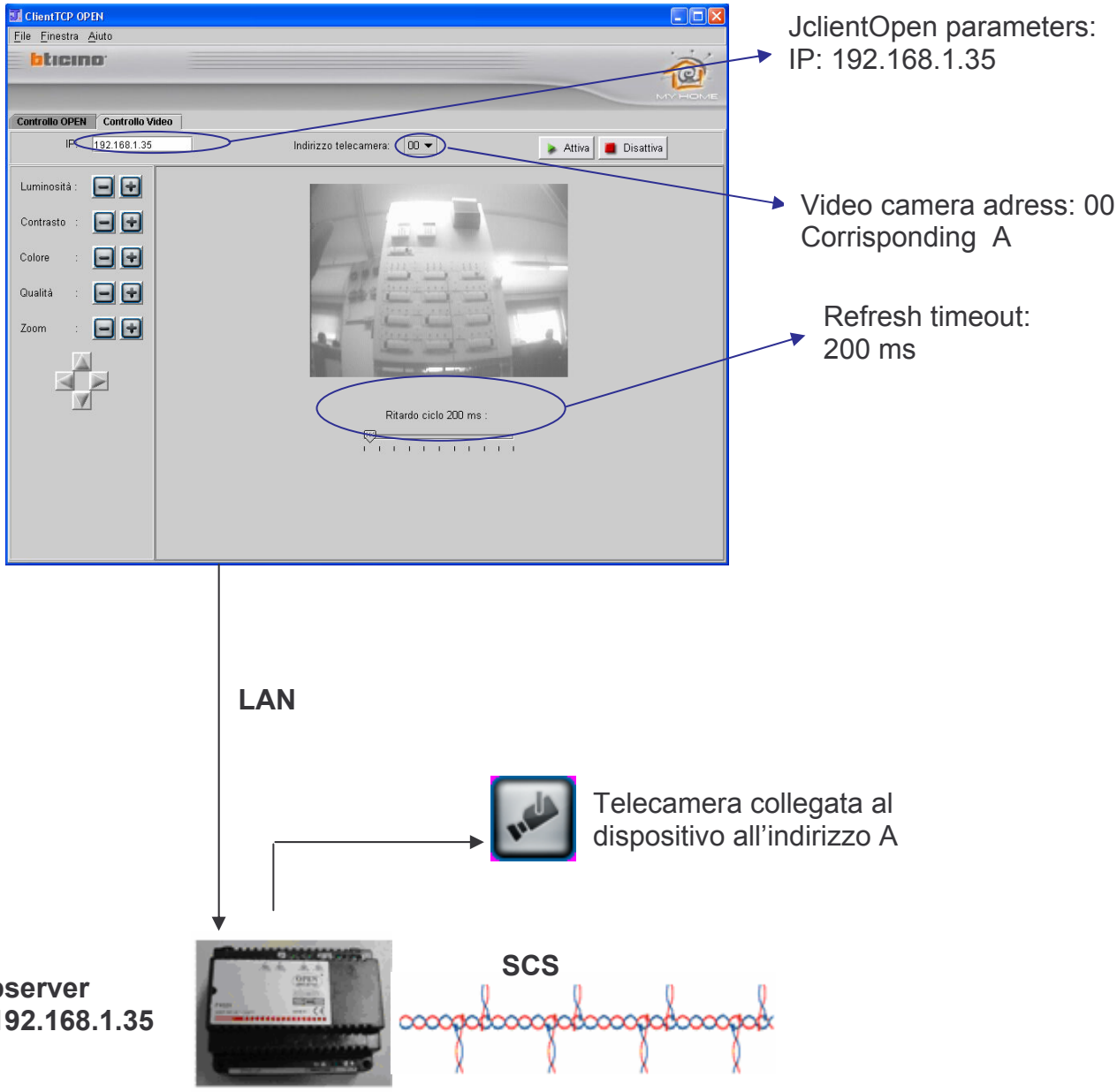
a) The purpose of this example is to use the JclientOpen to switch on the light 11, connected with an scs bus to the webserver 10.39.10.67.



b) The aim of this example is to use the JclientOpen to switch ON/OFF the light with this address: 11, 16, 25. Between two consecutively commands we set 5 seconds of timeout.



c) The following example illustrates how to activate a video camera connected to the gateway F452V. Between two pictures coming from the video cameras we have set a refresh of 200 ms.



6. Explanation comments

In this section are described all the messages that can be displayed on the *'visualization panel'*.

Comment	Description
--- Impossibile caricare l'ultima configurazione utilizzata ---	This message can be displayed when the program is loading, it indicates that it's impossible to preload the IP and OPEN command values.
/*** PROGRAMMA AVVIATO CORRETTAMENTE ***/	The program is loaded and ready to be used.
Tentativo connessione a <ip> Port: 20000	JclientOpen is trying to connect to the webserver with address <IP> on port 20000.
NON effettuo il controllo sulla password - mi aspetto ACK	JclientOpen is trying to connect to the webserver without any authentication, no password is required.
Impossibile connettersi!!	JclientOpen can't establish a connection to the webserver.
-----Socket chiusa correttamente-----	The socket is correctly closed.
Connessione OK	JclientOpen is connected to the webserver.
Tx: <open>	JclientOpen transmits (*Tx*) to the webserver the command <open>.
Rx: <open>	JclientOpen receives (*Rx*) from the webserver the command <open>.
Comando inviato correttamente	The open command has been correctly sent, the webserver has received *ack* or *nack*.
Impossibile inviare il comando	JclientOpen has not send the OPEN command.
ERRATA frame open <frame> , la invio comunque!!!	The OPEN command is not a valid frame. However it is sent to the webserver.

Some messages can be preceded by the *Mon* suffix:; this suffix means that the messages refer to the monitoring function.