TEST

# TEST CASE 1

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant, Plant1 2 rows and 3 columns | Create Plant as name Plant1 with 2 rows and 2 columns | OK |
| 2 | Add 1 row and one column | Plant1 with 3 rows and 31 columns | OK |
| 3 | Save as Plant1 as Plant\_1 | Find Plant\_1 into browser | OK |
| 4 | Open Plant\_1 | Open Plant1 with 3 rows and 31 columns. All menu into Plant mune are enabled. | OK |
| 5 | Add an F411\_1 in Plant1 | See F411\_1 in Plant1. F411\_1 must be unconfigured (led in red). | OK |
| 6 | Add Gateway in plant1 | See Gateway in Plant1. | OK |
| 7 | Add Camera to plant1 | See Camere in Plant1. Camera must be unconfigured (led in red). | OK |
| 8 | Add F411\_2 in Plant1 | See F411\_2 in Plant1. F411\_4 must be unconfigured (led in red). | OK |
| 9 | Add F411\_4 in Plant1 | See F411\_4 in Plant1. F411\_4 must be unconfigured (led in red). | OK |
| 10 | Save Plant1 | Plant1 must be save in Plant\_1 | OK |
| 11 | Open Plant\_1 | Open Plant1 with 3 rows and 31 columns. All menu into Plant are enabled. All Devices are present | OK |
| 13 | Destroy all items and press Options/Clear Screen | Plant1 is empty | OK |

# TEST CASE 2

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant1 and create an F411\_1 | Plant1 with an F411\_1 unconfigured ( red led) | OK |
| 2 | Configure F411\_1 as A=[1-9] PL=[1-9] GRP=[1-9] | Plant1 with an F411\_1 configured ( black led) | OK |
| 3 | Open configure menu | F411\_1 is configured with A==[1-9] PL==[1-9] GRP==[1-9] | OK |
| 4 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 5 | Click Blue button | F411\_1 black led becomes Yellow and receive OPEN frame (\*1\*1\*APL##) on TCP client | OK |
| 6 | Click Blue button | F411\_1 Yellow led becomes black and receive OPEN frame (\*1\*0\*APL##) on TCP client | OK |
| 7 | Send frame \*1\*1\*APL## from TCP client. A=[0-9] PL=[0-9]. | F411\_1 black led becomes Yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*APL##) on monitor channel | OK |
| 8 | Send frame \*1\*0\*APL## from TCP client A=[0-9] PL=[0-9]. | F411\_1 yellow led becomes black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*APL##) on monitor channel | OK |
| 9 | Send frame \*1\*1\*APL## from TCP client. A+PL out off range (EX. \*1\*1\*100##) | F411\_1 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 10 | Send frame \*1\*0\*APL## from TCP client. A+PL out off range (EX. \*1\*0\*100##) | F411\_1 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 11 | Configure F411\_1 to different address from TCP Client frame sent. Send frame \*1\*1\*APL## from TCP client. | F411\_1 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 12 | Configure F411\_1 to different address from TCP Client frame sent. Send frame \*1\*0\*APL## from TCP client. | F411\_1 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 13 | Destroy F411\_1 | Plan1 is empty | OK |

# TEST CASE 3

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant1 and create an F411\_2 | Plant1 with an F411\_2 unconfigured ( red led) | OK |
| 2 | Configure F411\_2 as "L1" A=[1-9] PL=[1-9] GRP=[1-9] "L2" as A==[1-9] PL==[1-9] GRP==[1-9] | Plant1 with an F411\_2 configured ( black led) | OK |
| 3 | Open configure menu | F411\_2 is configured with "L1" as A==[1-9] PL==[1-9] GRP==[1-9] "L2" as A==[1-9] PL==[1-9] GRP==[1-9] | OK |
| 4 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 5 | Click Blue button | F411\_2 black led becomes Yellow and receive OPEN frame (\*1\*1\*APL##) on TCP client | OK |
| 6 | Click Blue button | F411\_2 Yellow led becomes black and receive OPEN frame (\*1\*0\*APL##) on TCP client | OK |
| 7 | Send frame \*1\*1\*APL## from TCP client. A=[0-9] PL=[0-9]. | F411\_2 black led becomes Yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*APL##) on monitor channel | OK |
| 8 | Send frame \*1\*0\*APL## from TCP client A=[0-9] PL=[0-9]. | F411\_2 yellow led becomes black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*APL##) on monitor channel | OK |
| 9 | Send frame \*1\*1\*APL## from TCP client. A+PL out off range (EX. \*1\*1\*100##) | F411\_2 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 10 | Send frame \*1\*0\*APL## from TCP client. A+PL out off range (EX. \*1\*0\*100##) | F411\_2 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 11 | Configure F411\_2 to different address from TCP Client frame sent. Send frame \*1\*1\*APL## from TCP client. | F411\_2 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 12 | Configure F411\_2 to different address from TCP Client frame sent. Send frame \*1\*0\*APL## from TCP client. | F411\_2 nothing happens on led, r receive ecive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 13 | Destroy F411\_2 | Plan1 is empty | OK |

# TEST CASE 4

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| 1 | Create Plant1 and create an F411\_4 | Plant1 with an F411\_4 unconfigured ( red led) | OK |
| 2 | Configure F411\_4 as "L1" A=[1-9] PL=[1-9] GRP=[1-9] "L2" as A==[1-9] PL==[1-9] GRP==[1-9] "L3" as A==[1-9] PL==[1-9] GRP==[1-9], "L4" as A==[1-9] PL==[1-9] GRP==[1-9] | Plant1 with an F411\_4 configured ( black led) | OK |
| 3 | Open configure menu | F411\_4 is configured with "L1" as A==[1-9] PL==[1-9] GRP==[1-9] "L2" as A==[1-9] PL==[1-9] GRP==[1-9], "L3" as A==[1-9] PL==[1-9] GRP==[1-9], "L4" as A==[1-9] PL==[1-9] GRP==[1-9] | OK |
| 4 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 5 | Click Blue button | F411\_4 black led becomes Yellow and receive OPEN frame (\*1\*1\*APL##) on TCP client | OK |
| 6 | Click Blue button | F411\_4 Yellow led becomes black and receive OPEN frame (\*1\*0\*APL##) on TCP client | OK |
| 7 | Send frame \*1\*1\*APL## from TCP client. A=[0-9] PL=[0-9]. | F411\_4 black led becomes Yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*APL##) on monitor channel | OK |
| 8 | Send frame \*1\*0\*APL## from TCP client A=[0-9] PL=[0-9]. | F411\_4 yellow led becomes black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*APL##) on monitor channel | OK |
| 9 | Send frame \*1\*1\*APL## from TCP client. A+PL out off range (EX. \*1\*1\*100##) | F411\_4 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 10 | Send frame \*1\*0\*APL## from TCP client. A+PL out off range (EX. \*1\*0\*100##) | F411\_4 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 11 | Configure F411\_4 to different address from TCP Client frame sent. Send frame \*1\*1\*APL## from TCP client. | F411\_4 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 12 | Configure F411\_4 to different address from TCP Client frame sent. Send frame \*1\*0\*APL## from TCP client. | F411\_4 nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 13 | Destroy F411\_4 | Plan1 is empty | OK |

# TEST CASE 5

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant1 and create a F411\_1, F411\_2, F411\_1 | Plant1 with a F411\_4, F411\_2, F411\_1 unconfigured ( red led) | OK |
| 2 | Configure F411\_1, F411\_2, F411\_4 as the previous test case, but every slots must be different from the others | Plant1 with an F411\_1, F411\_2, F411\_4 configured ( black led) | OK |
| 3 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 4 | Send frame \*1\*1\*0## from TCP client. It is frame of "generale on". | Every led must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*0##) on monitor channel | OK |
| 5 | Send frame \*1\*0\*0## from TCP client. It is frame of "generale off". | Every led must be black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*0##) on monitor channel | OK |
| 6 | Send frame \*1\*1\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*A##) on monitor channel | OK |
| 7 | Send frame \*1\*0\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*A##) on monitor channel | OK |
| 8 | Send frame \*1\*1\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*GRP##) on monitor channel | OK |
| 9 | Send frame \*1\*0\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*GRP##) on monitor channel | OK |
| 10 | Send frame \*1\*1\*A## from TCP client. With A out off range (EX. \*1\*1\*10##) | Nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 11 | Send frame \*1\*0\*A## from TCP client. With A out off range (EX. \*1\*1\*10##) | Nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 12 | Send frame \*1\*1\*#GRP## from TCP client. With A out off range (EX. \*1\*1\*#10##) | Nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |
| 13 | Send frame \*1\*0\*#GRP## from TCP client. With A out off range (EX. \*1\*1\*#10##) | Nothing happens on led, receive OPEN\_NACK (#\*0##) on Command Channel and receive nothing on monitor channel | OK |

# TEST CASE 7

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 2 | Send frame \*1\*1\*0## from TCP client. It is frame of "generale on". | Every led must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*0##) on monitor channel | FAIL |
| 3 | Send frame \*1\*0\*0## from TCP client. It is frame of "generale off". | Every led must be black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*0##) on monitor channel | FAIL |
| 4 | Send frame \*1\*1\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*A##) on monitor channel | FAIL |
| 5 | Send frame \*1\*0\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*A##) on monitor channel | FAIL |
| 6 | Send frame \*1\*1\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*GRP##) on monitor channel | FAIL |
| 7 | Send frame \*1\*0\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*GRP##) on monitor channel | FAIL |

# TEST CASE 8

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 2 | Create a F411\_1, leave it to unconfigured status | Plant1 with an F411\_1 unconfigured ( red led) | OK |
| 3 | Send frame \*1\*1\*0## from TCP client. It is frame of "generale on". | Every led must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*0##) on monitor channel | OK |
| 4 | Send frame \*1\*0\*0## from TCP client. It is frame of "generale off". | Every led must be black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*0##) on monitor channel | OK |
| 5 | Send frame \*1\*1\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*A##) on monitor channel | OK |
| 6 | Send frame \*1\*0\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*A##) on monitor channel | OK |
| 7 | Send frame \*1\*1\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*GRP##) on monitor channel | OK |
| 8 | Send frame \*1\*0\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*GRP##) on monitor channel | OK |

# TEST CASE 9

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 2 | Create a F411\_2, leave it to unconfigured status | Plant1 with an F411\_2 unconfigured ( red led) | OK |
| 3 | Send frame \*1\*1\*0## from TCP client. It is frame of "generale on". | Every led must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*0##) on monitor channel | OK |
| 4 | Send frame \*1\*0\*0## from TCP client. It is frame of "generale off". | Every led must be black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*0##) on monitor channel | OK |
| 5 | Send frame \*1\*1\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*A##) on monitor channel | OK |
| 6 | Send frame \*1\*0\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*A##) on monitor channel | OK |
| 7 | Send frame \*1\*1\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*GRP##) on monitor channel | OK |
| 8 | Send frame \*1\*0\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*GRP##) on monitor channel | OK |

# TEST CASE 10

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 2 | Create a F411\_4, leave it to unconfigured status | Plant1 with an F411\_4 unconfigured ( red led) | OK |
| 3 | Send frame \*1\*1\*0## from TCP client. It is frame of "generale on". | Every led must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*0##) on monitor channel | OK |
| 4 | Send frame \*1\*0\*0## from TCP client. It is frame of "generale off". | Every led must be black, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*0##) on monitor channel | OK |
| 5 | Send frame \*1\*1\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*A##) on monitor channel | OK |
| 6 | Send frame \*1\*0\*A## from TCP client. With A=[1-9] | Every led, with A corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*A##) on monitor channel | OK |
| 7 | Send frame \*1\*1\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, receive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*1\*GRP##) on monitor channel | OK |
| 8 | Send frame \*1\*0\*#GRP## from TCP client. With GRP=[1-9] | Every led, with GRP corresponding to the frame, must be yellow, recive OPEN\_ACK (#\*1##) on Command Channel and (\*1\*0\*GRP##) on monitor channel | OK |

# TEST CASE 11

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection FAIL | OK |
| 2 | Create Gateway, connect e TCP client to IP=<PC address>, PORT=20000, on Bticino protocol | Watch on TCP Client connection OK | OK |
| 3 | Configure Gateway, add password | No error appear | OK |
| 4 | Reopen Configure menu | Watch Password tag set | OK |

# TEST CASE 12

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant1 and create a Gateway | Plant1 with a Gateway, connect a TCP client on "PC IP address" port 20000 | OK |
| 2 | Create a Camera | Plant1 with a Camera unconfigured (red led) | OK |
| 3 | Open a browser, write on address bar "http://<PC IP Address>:8001/telecamera.php" and update the page few time | Receive, on browser, a black JPEG 320x240. | OK |
| 4 | Open a browser, write on address bar "https://<PC IP Address>:8001/telecamera.php" and update the page few time | Receive, on browser, a black JPEG 320x240. | OK |
| 5 | Configure Camera, idcam=[0-99], dir="resources folder" | Camera is configured (black led ) and in configuration idcam is setting to [0-99], dir is set to "resources folder" | OK |
| 6 | Send, from TCP server the frame \*6\*0\*40XX##. XX=[0-99] | recive OPEN\_ACK (#\*1##) on Command Channel | OK |
| 7 | Open a browser, write on address bar "http://<PC IP Address>:8001/telecamera.php" and update the page few time | Receive, on browser, the first image in folder | OK |
| 8 | Update browser page | Receive, on browser, the second image | OK |
| 9 | Open a browser, write on address bar "https://<PC IP Address>:8001/telecamera.php" and update the page few time | Receive, on browser, the first image in folder | OK |
| 10 | Update browser page | Receive, on browser, the second image | OK |
| 11 | Destroy Camera | Plant1 with a Gateway only | OK |

# TEST CASE 13

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant1 and create a Gateway | Plant1 with a Gateway, connect a TCP client on "PC IP address" port 20000 | OK |
| 2 | Open a browser, write on address bar "http://<PC IP Address>:8000/telecamera.php" and update the page few time | Receive, on brwoser, a black JPEG 320x240. | OK |
| 3 | Open a browser, write on address bar "https://<PC IP Address>:8000/telecamera.php" and update the page few time | Receive, on brwoser, a black JPEG 320x240. | OK |
| 4 | Create a Camera | Plant1 with a Camera unconfigured (red led) | OK |
| 5 | Configure Camera, idcam=1, dir="resources folder" | Camera is configured (black led ) and in configuration idcam is setting to 1, dir is set to "resources folder" | OK |
| 6 | Create a Camera | Plant1 with a Camera unconfigured (red led) | OK |
| 7 | Configure Camera, idcam=2, dir="resources folder" | Camera is configured (black led ) and in configuration idcam is setting to 2, dir is set to "resources folder" | OK |
| 8 | Send, from TCP server the frame \*6\*0\*4001##. XX=[0-99] | recive OPEN\_ACK (#\*1##) on Command Channel and Yellow led is appered in Camera (idcam = 1) image | OK |
| 9 | Open a browser, write on address bar "http://<PC IP Address>:8000/telecamera.php" and update the page few time | Receive, on brwoser, the first image in folder | OK |
| 10 | Open a browser, write on address bar "https://<PC IP Address>:8000/telecamera.php" and update the page few time | Receive, on browser, the first image in folder | OK |
| 11 | Send, from TCP server the frame \*6\*0\*4002##. Before timeout is elapsed | recive OPEN\_ACK (#\*1##) on Command Channel and Yellow led is appered in Camera (idcam = 2) image and black led is appered in Camera (idcam = 2) image | OK |
| 12 | Open a browser, write on address bar "http://<PC IP Address>:8000/telecamera.php" and update the page few time | Receive, on brwoser, the first image in folder | OK |
| 13 | Open a browser, write on address bar "https://<PC IP Address>:8000/telecamera.php" and update the page few time | Receive, on browser, the first image in folder | OK |

# TEST CASE 14

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Open menu Plant/Default Plant | Create default plant with: 1 gateway, 2 F411\_2, 1 F411\_4, 1 Camera | OK |
| 2 | Add a Gateway | Fail error code 101 | OK |
| 3 | Add a F411\_1 | Default Plant with F411\_1 | OK |
| 4 | Try to save | menu File/Save is disable | OK |
| 5 | Open menu save as… | Browser windows is open and can save Default Plant on disk | OK |
| 6 | Open new default plant | Default Plant is open with last configuration | OK |
| 7 | Open menu Option/Clear Screen | Default Plant is empty | OK |
| 8 | Exit without save | Exit from the plant | OK |
| 9 | Open new default plant | Default Plant is open with last configuration | OK |

# TEST CASE 15

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Create Plant1 and create a Gateway | Plant1 with a Gateway, connect a TCP client on "PC IP address" port 20000 | OK |
| 2 | Configure Gateway, password="PSW" |  |  |
| 3 | Open a browser, write on address bar "http://<PC IP Address>:8000/telecamera.php?CAM\_PASSWD=PSW" and update the page few time | Nothing on browser | OK |
| 4 | Open a browser, write on address bar "https://<PC IP Address>:8001/telecamera.php?CAM\_PASSWD=PSW" and update the page few time | Nothing on browser | OK |
| 5 | Create a Camera | Plant1 with a Camera unconfigured (red led) | OK |
| 6 | Configure Camera, idcam=1, dir="resources folder" | Camera is configured (black led ) and in configuration idcam is setting to 1, dir is set to "resources folder" | OK |
| 7 | Create a Camera | Plant1 with a Camera unconfigured (red led) | OK |
| 8 | Configure Camera, idcam=2, dir="resources folder" | Camera is configured (black led ) and in configuration idcam is setting to 2, dir is set to "resources folder" | OK |
| 9 | Send, from TCP server the frame \*6\*0\*4001##. XX=[0-99] | recive OPEN\_ACK (#\*1##) on Command Channel and Yellow led is appered in Camera (idcam = 1) image | OK |
| 10 | Open a browser, write on address bar "http://<PC IP Address>:8000/telecamera.php?CAM\_PASSWD=PSW" and update the page few time | Receive, on browser, the first image in folder | OK |
| 11 | Open a browser, write on address bar "https://<PC IP Address>:8001/telecamera.php?CAM\_PASSWD=PSW" and update the page few time | Receive, on browser, the first image in folder | OK |
| 12 | Send, from TCP server the frame \*6\*0\*4002##. Before timeout is elapsed | Receive OPEN\_ACK (#\*1##) on Command Channel and Yellow led is appered in Camera (idcam = 2) image and black led is appered in Camera (idcam = 2) image | OK |
| 13 | Open a browser, write on address bar "http://<PC IP Address>:8000/telecamera.php?CAM\_PASSWD=PSW" and update the page few time | Receive, on browser, the first image in folder | OK |
| 14 | Open a browser, write on address bar "https://<PC IP Address>:8001/telecamera.php?CAM\_PASSWD=PSW" and update the page few time | Receive, on browser, the first image in folder | OK |

# TEST CASE 16

|  |  |  |  |
| --- | --- | --- | --- |
|  | TEST | EXPECTED RESULT | RESULT |
|  |  |  |  |
| 1 | Load default plant | Default plant is loaded: on plant are present a Gateway, a Cam, one F411/4, two F411/2 | OK |
| 2 | Drag Gateway from the first din down to the second | The Gateway will return to its position because the place is already filled. | OK |
| 3 | Drag Gateway to the right of the Cam | The Gateway will be on the right of the cam | OK |
| 4 | Add a new CAM | The new Cam is added on the first din on the left | OK |
| 5 | Add a new F411/1 | The device is added next to the Cam | OK |
| 6 | Add a new F411/1 | The device is added next to the Gateway on the first din | OK |