



Test. Improve. Repeat.

VantageManager (v4.0)

A STEP-BY-STEP GUIDE

CONTENT

Login

 Login **Add Test Configuration**

 **Configuration**

 **Telnet feature**

 **Reserved Ports**

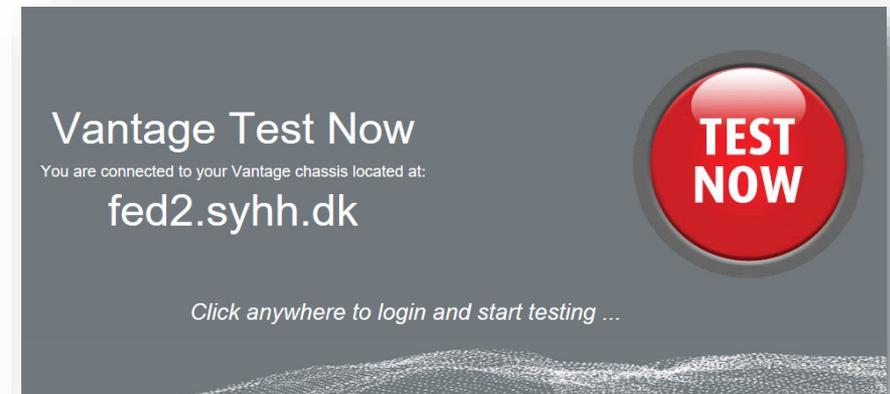
 **Add Test and Start**

 **Test Window and Filter**

 **Test Result**

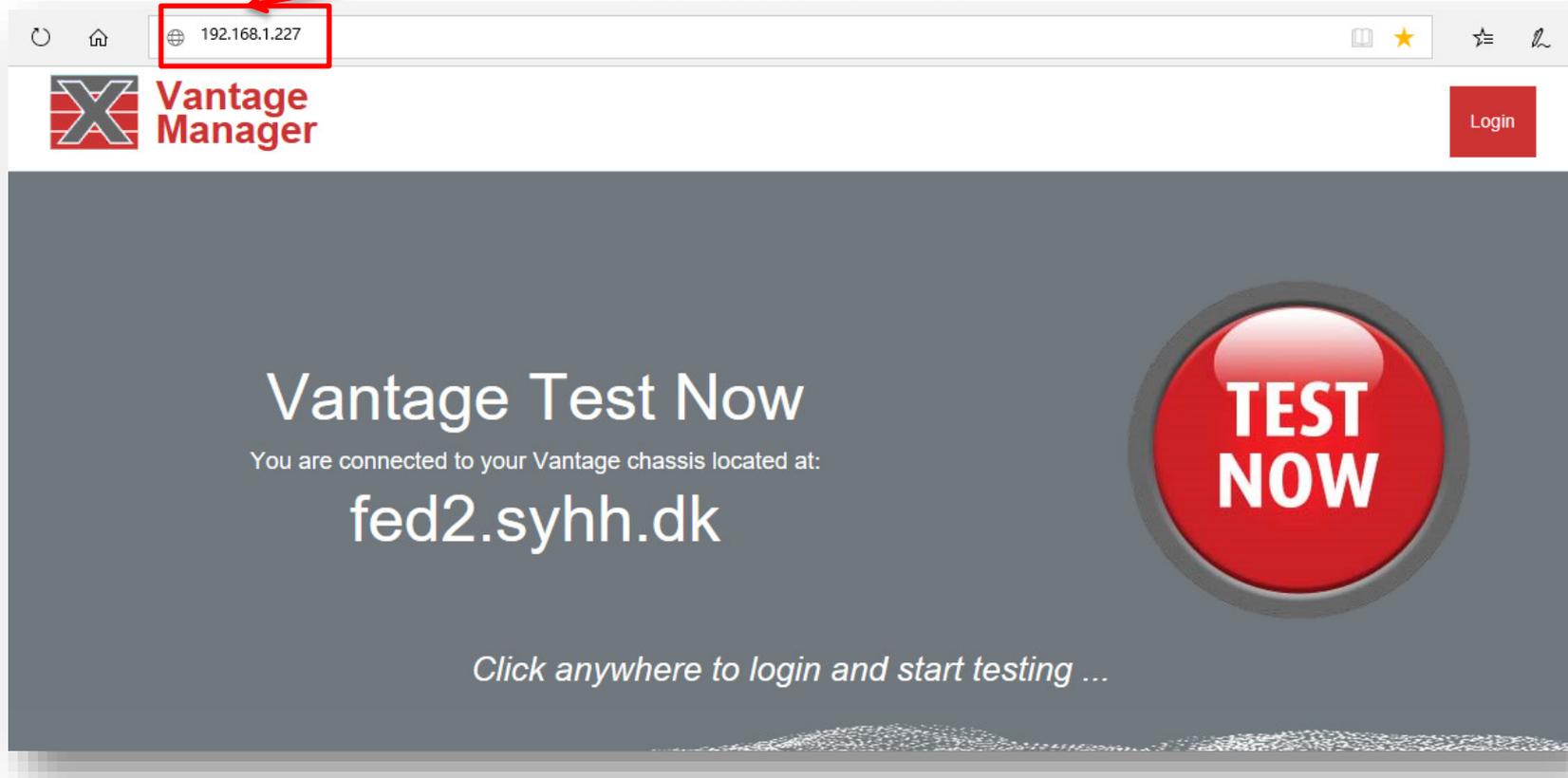
 **User Administration**

Change IP and upgrade



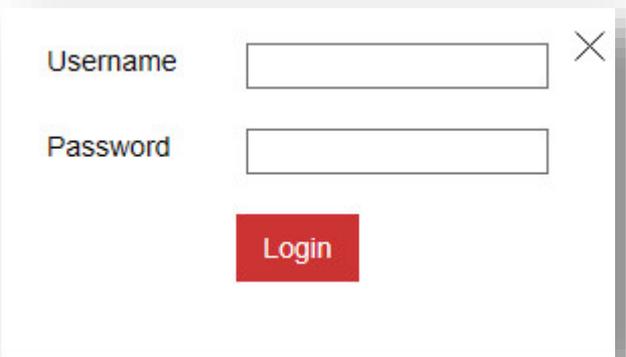
LOGIN

Open the browser and input the IP address. The default IP address is 192.168.1.227



LOGIN

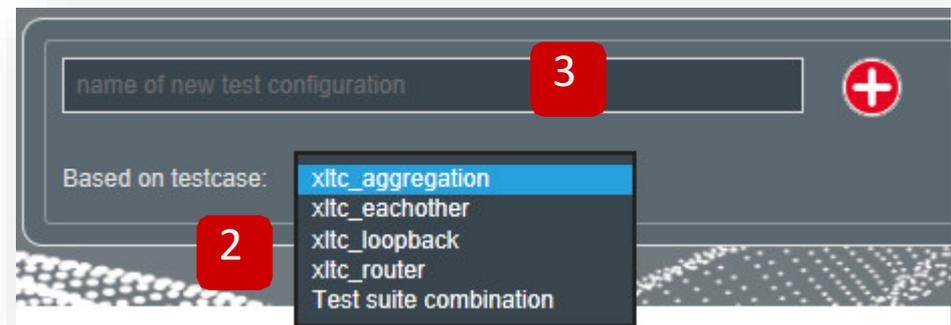
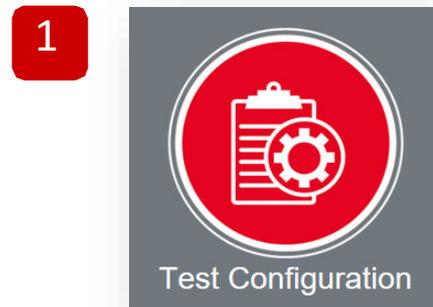
Enter the “Username” and the “Password”
Administrator User: demoa
Password:Xena2018



A screenshot of a login form window. The window has a white background and a thin grey border. It contains two input fields: one for 'Username' and one for 'Password'. Below the input fields is a red button with the text 'Login' in white. A small 'X' icon is located in the top right corner of the window, indicating a close button. The window is centered on the page and has a slight shadow effect.

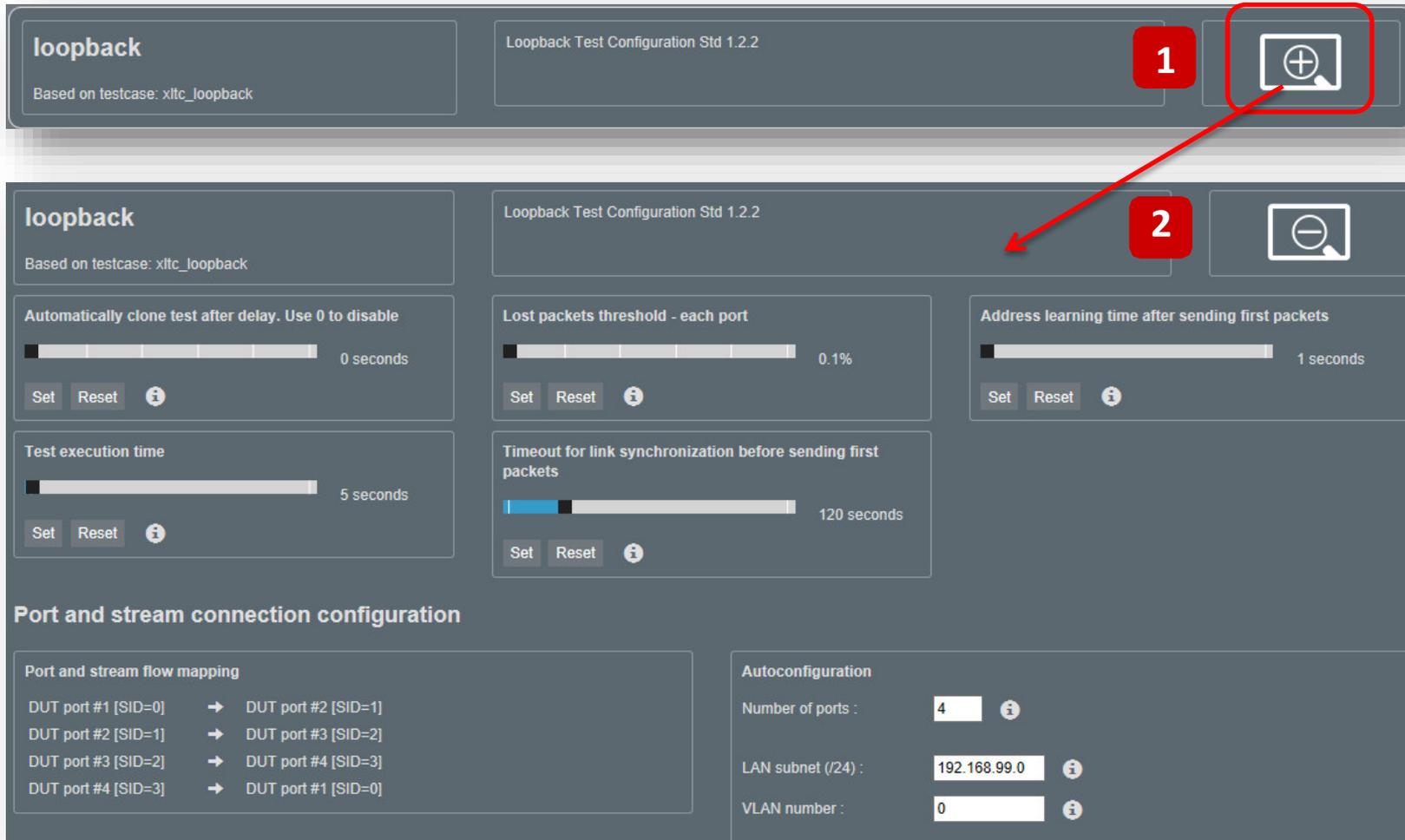
ADD TEST CONFIGURATION

- 1 Click “Test Configuration” into the Test Configuration interface
- 2 Select the template testcase and click  to add a new configuration
- 3 Enter the name of new test configuration



CONFIGURATION

- 1 Click  to spread out the Testcase configuration
- 2 Config the value of the testcase



loopback
Based on testcase: xltc_loopback

Loopback Test Configuration Std 1.2.2

1 

loopback
Based on testcase: xltc_loopback

Loopback Test Configuration Std 1.2.2

2 

Automatically clone test after delay. Use 0 to disable
0 seconds
Set Reset 

Lost packets threshold - each port
0.1%
Set Reset 

Address learning time after sending first packets
1 seconds
Set Reset 

Test execution time
5 seconds
Set Reset 

Timeout for link synchronization before sending first packets
120 seconds
Set Reset 

Port and stream connection configuration

Port and stream flow mapping

DUT port #1 [SID=0] → DUT port #2 [SID=1]
DUT port #2 [SID=1] → DUT port #3 [SID=2]
DUT port #3 [SID=2] → DUT port #4 [SID=3]
DUT port #4 [SID=3] → DUT port #1 [SID=0]

Autoconfiguration

Number of ports : 4 
LAN subnet (/24) : 192.168.99.0 
VLAN number : 0 

CONFIGURATION

3 Testcase Properties

Column	Explanation
Automatically clone	When program detect the select port reconnected, the test will automatically clone and start again. Set 0 to disable the feature.
Lost packets threshold	The threshold of loss packets per ports. If the loss rate over this value, the test result will display "Failed".
Autolearn time and MAC detection	The max time of the mac learning. If enable the "Enable MAC address detection for SN", program will detect the DUT's mac address as SN number.
Test execution time	The duration of the real test.
Timeout for link synchronization	Timeout for link synchronization before sending first packets, once the link sync timeout, the test will failure. Port(s) to await: Program will detect the link sync of the select if enable "Automatically clone"
Port and stream connection configuration	The port and stream flow mapping of the testcase.
Autoconfiguration	The global value of the testcase. Port number, Vlan and Lan subnet.

CONFIGURATION

3 Testcase Properties

Column		Explanation	
Port configuration		IP address, mask, gateway and port speed of each port.	
Stream configuration	MAC address		Sets the source and destination MAC address inserted in the header of test packets.
	Protocol	IP	Define the stream packet into IP packet. Allow customer define the src and dst ip address.
		TCP	Define the stream packet into IP packet. Allow customer define the src and dst port id.
		UDP	Define the stream packet into UDP packet. Allow customer define the src and dst port id.
		-	Define the stream packet into Ethernet packet.
	VLAN		Enables and sets the VLAN tag for insertion of VLAN headers in the stream packets
	Packet lengths		Enter desired length of stream packets
	Rate		Set the maximum rate fraction for this stream on the port. If the sum of fractions for streams on a port is above 100%, actual traffic rate will be lower.
	Distr		Set the type of the packet length. Random, BTFly(Butterfly), INCR(Incrementing) , MIX, Fixed.
	Payload type		Set the type of byte pattern used for payload data in test packets.

CONFIGURATION

4 Test Suite combination

Test Suite combination is a special test case which could allow customer generate a list of test case into one test. Customer could select the previous define test case and add it into the list. The program will start the test case in sequence(parallel).

Call sequence

Execution:

# 0:	<input type="text" value="Loopback"/>	<input type="text" value="v"/>
# 1:	<input type="text" value="Pon"/>	<input type="text" value="v"/>
# 2:	<input type="text" value="Router"/>	<input type="text" value="v"/>
# 3:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>
# 4:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>
# 5:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>
# 6:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>
# 7:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>
# 8:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>
# 9:	<input type="text" value="- select a configuration or a suite -"/>	<input type="text" value="v"/>

CONFIGURATION

5 What's "Automatically clone test"

"Automatically clone test" is a very useful feature when customer do the repeatability test. The program process will go as the below picture. It will save the control step and time in the repeatability test task.

1. Complete configuration file and assign the port map.
2. Connect the DUT port with Xena tester.
3. Start the test
4. Test complete and wait tester replace DUT
5. Tester replace DUT, in this moment, program will detect the link status to confirm customer has changed another DUT.
6. Program detect the ports reconnected and then start new test automatically.

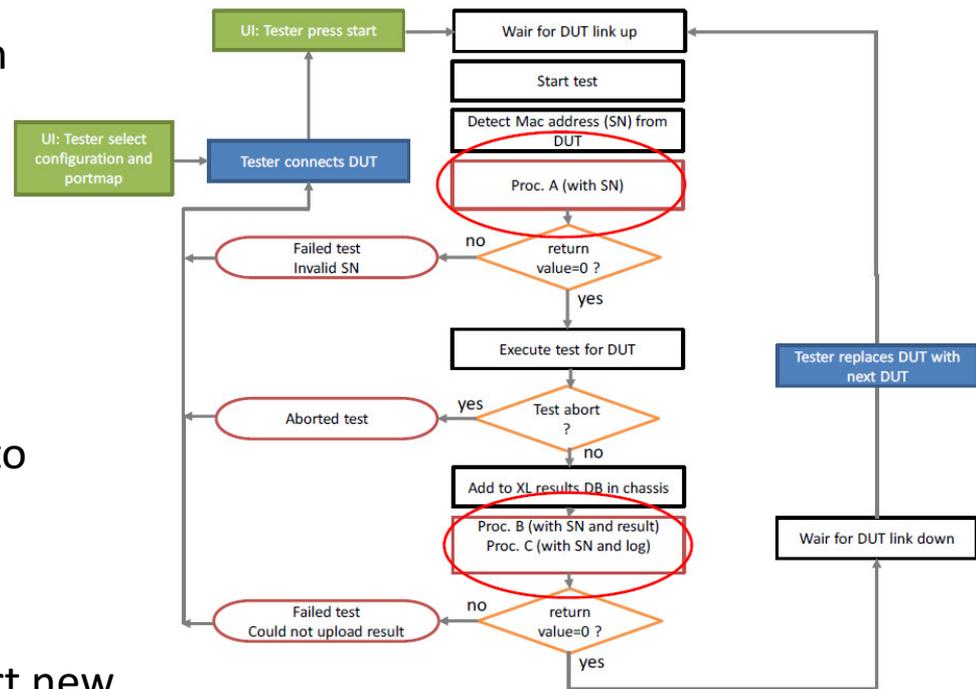


Figure 3. Sample tester workflow

CONFIGURATION

6 Test cases save and download

View : View the raw test configuration.

Download : Download the test configuration to the manage PC.

Upload : Upload the test configuration from the manage PC.

Delete : Delete the test configuration.

The screenshot displays a configuration management interface with the following details:

- Config ID : ae278a6e47cd4ec59d3f6ed9cdad6928
- Created by : demoa on 2018-10-09 08:45
- Updated by : on 2018-10-09 08:45

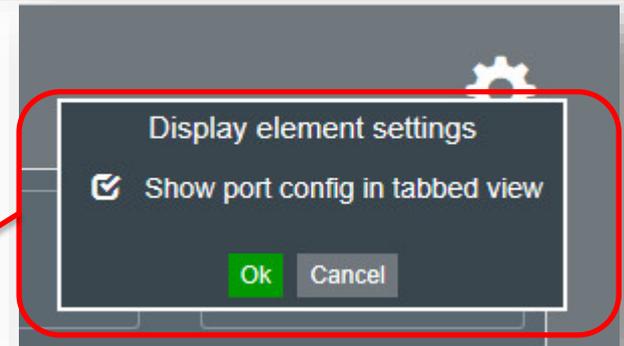
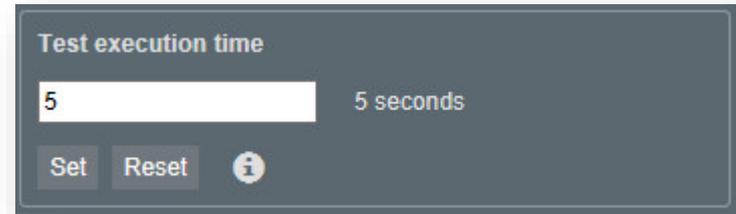
Below the details, there is a list of actions:

- View**: View the raw test configuration
- Download**: Download the test configuration
- Upload**: Includes a file input field and a **Browse...** button.
- Delete**: Delete the test configuration

CONFIGURATION

7 Tips

- Customer could double click the current value, then the slider will change to an input field
- Click  button, customer could change the display types about the “Port and Stream configuration”



Port and stream configuration

All ports | Port config | Stream address config | Stream packet config | Save configuration

Port	IP address	Mask	Gateway	Speed	BroadR-Reach
DUT WAN port 1	192.168.5.1	255.255.255.0	192.168.5.1	default	default
DUT LAN port 2	192.168.4.2	255.255.255.0	192.168.4.1	default	default
DUT LAN port 3	192.168.4.3	255.255.255.0	192.168.4.1	default	default
DUT LAN port 4	192.168.4.4	255.255.255.0	192.168.4.1	default	default

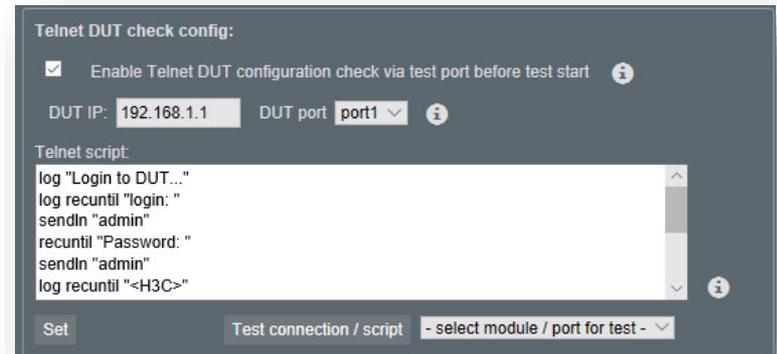
Save configuration

TELNET

Telnet is a very strong feature which could simplify the testing process, implement more advanced test scenarios.

What we could do with telnet feature:

1. Get the serial number from the DUT
2. Change the configuration
3. Get DUT status via telnet
4. Reboot DUT
5. Reset the DUT



In the past, if your PON device need to test traffic both in GPON mode and EPON mode. You need to test it in GPON mode and then change it into EPON mode manually, it will waste too much time.

But now, with Vantage Telnet feature, Vantage could telnet to the DUT and change it into EPON mode and then test the traffic automatically. It will save your time and make the Work efficient.

Or you could even telnet to the DUT to get the serial number instead of scan the serial number manually.

TELNET

send <str-exp>

Send a string to the DUT via telnet

Returns the same string as sent.

sendln <str-exp>

Send a string followed by CRLF to the DUT via telnet

Returns the same string as sent.

recuntil <str-exp>

Receive data from the DUT until it contains the string specified

Return the received data up to but not including the string.

wait <int-exp>

Wait the specified number of seconds

Returns 1

failif <int-exp>

Will abort script execution (and also test execution) with an error message if <int-exp> is not 0.

Returns 0 if the script is not aborted. Does not return if it is aborted.

TELNET

log <str-exp>

Prints the specified expression to the test log on the UI

Returns the same string..

match <str-exp-1> , <str-exp-2>

Matches two expressions.

Returns 1 if <str-exp-1> is contained in <str-exp-2> and 0 otherwise.

<str-exp-1> may be a regular expression with usual wildcards, regex syntax etc.

set <varid> = <str-or-int-exp>

Assign the value to the variable specified which may be used in other expressions.

Returns the value of the expression.

Examples of scripts:

```
; script that will login to DUT
```

```
log "Login to DUT..."
```

```
log recuntil "login: "
```

```
sendln "admin"
```

```
recuntil "Password: "
```

```
sendln "12345" recuntil ">"
```

```
log "Login successfull..."
```

RESERVED PORTS

1



Click and enter “XenaLine Chassis Administration page”

2

Rescan ports

Click to refresh the ports link status

The port information below is from the last scan performed and may be out of date. To update the information press the button.

3

Reserve the ports to the users

Administrator could reserve the ports to different users. Each user could only use the ports which are served by himself.

Test port information

The port information below is from the last scan performed and may be out of date. To update the information press the button.

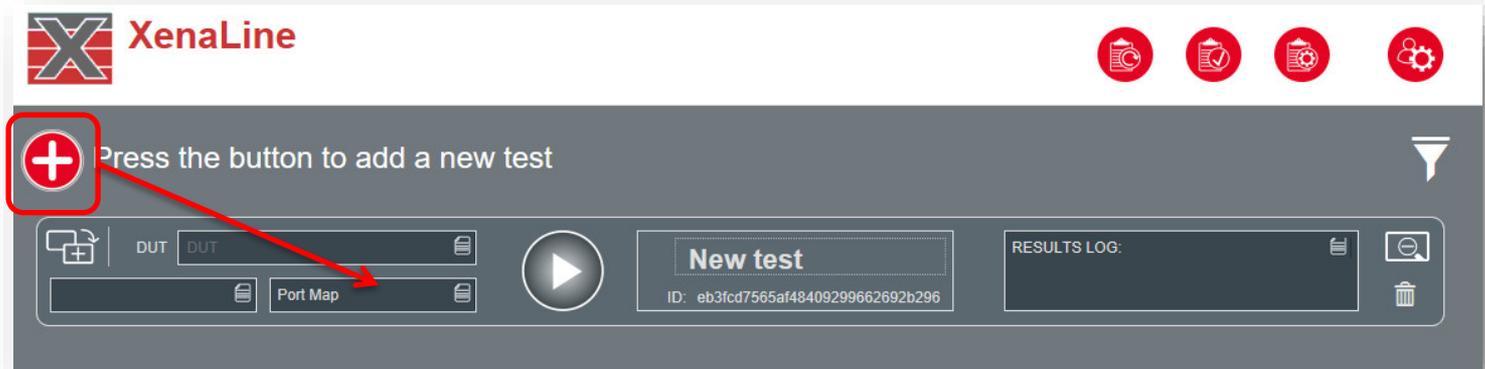
Rescan ports

Chassis	Module	Port	Status	Reserved	Link	Port information
127.0.0.1	0	0	online	demoa	up	"SFP-E 10/100/1000M [Triple] [Auto]"
127.0.0.1	0	1	online	demoa	up	"SFP-E 10/100/1000M [Triple] [Auto]"
127.0.0.1	0	2	online	free	up	"SFP-E 10/100/1000M [Triple] [Auto]"
127.0.0.1	0	3	online	demo1	up	"SFP-E 10/100/1000M [Triple] [Auto]"
127.0.0.1	0	4	online	demo2	down	"SFP empty cage"
127.0.0.1	0	5	online	demoa	down	"SFP empty cage"
127.0.0.1	0	5	online	free	down	"SFP empty cage"
127.0.0.1	2	1	online	free	down	"SFP empty cage"
127.0.0.1	2	3	online	free	down	"SFP empty cage"
127.0.0.1	2	4	online	free	down	"SFP empty cage"
127.0.0.1	2	5	online	free	down	"SFP empty cage"
127.0.0.1	4	0	online	free	down	"SFP empty cage"
127.0.0.1	4	1	online	free	down	"SFP empty cage"
127.0.0.1	4	2	online	free	down	"SFP-O SR 850 nm"
127.0.0.1	4	2	online	free	down	"SFP-O SR 850 nm"

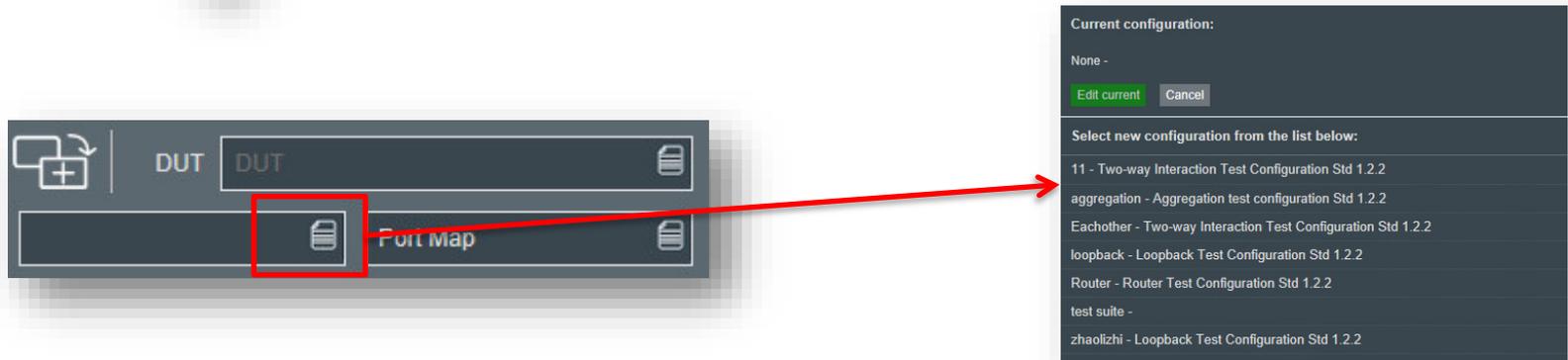
ADD TEST AND START

1 Click  and enter Test page

2 Click  to add a new test

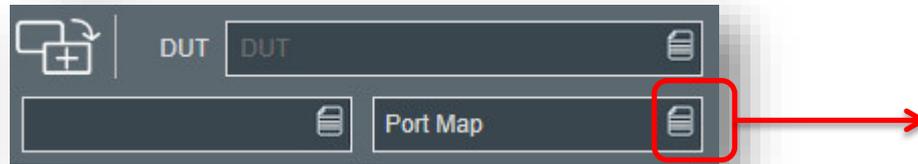


3 Click  to select the testcase which tester has configured



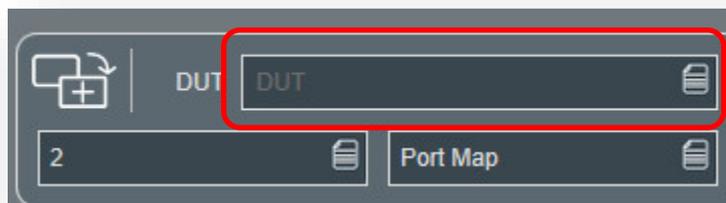
ADD TEST AND START

4 Click  to select configure the port map



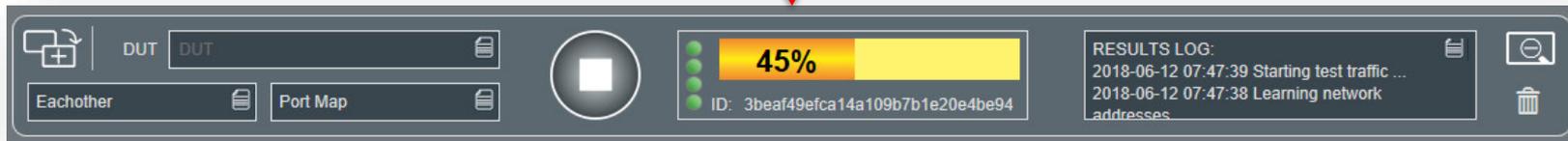
Testbed (window):	0
aggrport1:	DUT Aggregation port 1
Port mapping:	- 0/0
port2:	DUT LAN port 2
Port mapping:	- 0/1
port3:	DUT LAN port 3
Port mapping:	- 0/2
port4:	DUT LAN port 4
Port mapping:	- 0/3
<input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

5 You could input the S/N of the DUT in the “DUT” pattern. If you enable “Enable MAC address detection for SN”, you don’t need to input the S/N, the program will input it automatically.



ADD TEST AND START

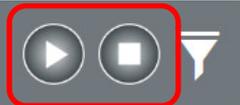
6 Click  start button to start the test



PS: You could also click the top “  ” button to start the whole test case.

Those two buttons are the global control of the whole test.

 Press the button to add a new test

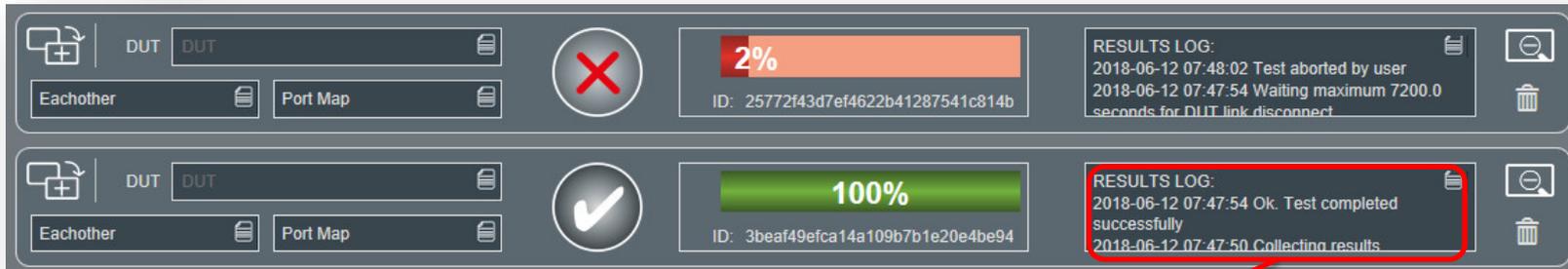


ADD TEST AND START

7 Test status

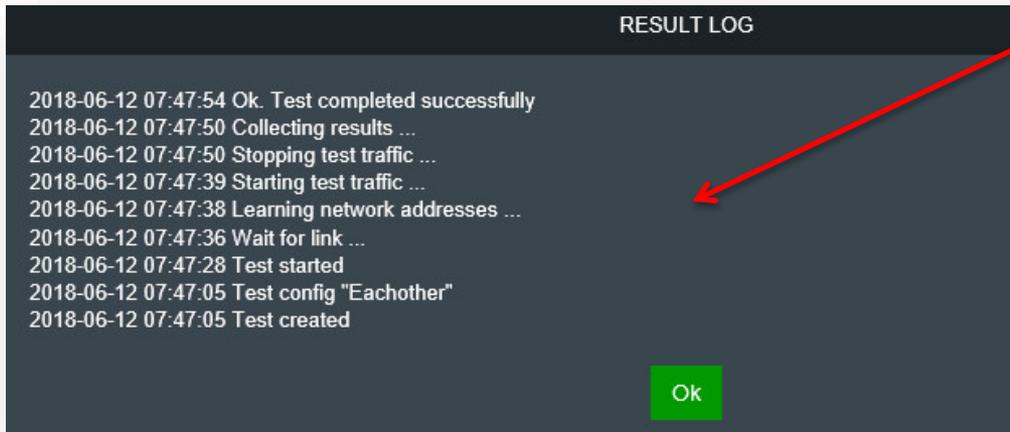
 This icon means the test failed

 This icon means the test passed



The screenshot displays two test cards. The top card shows a failed test with a red 'X' icon and a progress bar at 2%. The bottom card shows a passed test with a green checkmark icon and a progress bar at 100%. A red box highlights the 'RESULTS LOG' section of the passed test card, which contains the following text:

```
RESULTS LOG:  
2018-06-12 07:47:54 Ok. Test completed successfully  
2018-06-12 07:47:50 Collecting results
```



The 'RESULT LOG' window displays the following log entries:

```
2018-06-12 07:47:54 Ok. Test completed successfully  
2018-06-12 07:47:50 Collecting results ...  
2018-06-12 07:47:50 Stopping test traffic ...  
2018-06-12 07:47:39 Starting test traffic ...  
2018-06-12 07:47:38 Learning network addresses ...  
2018-06-12 07:47:36 Wait for link ...  
2018-06-12 07:47:28 Test started  
2018-06-12 07:47:05 Test config "Eachother"  
2018-06-12 07:47:05 Test created
```

An 'OK' button is located at the bottom center of the window.

7 Results Log

Customer could click this area to check the log information about the test.

TEST WINDOWS AND FILTERS

Testbed windows: User could set different number of test window on the UI page.

Hide successfully completed tests:

Hide all the successful test, only display the failed ones.

Hide failed and completed tests:

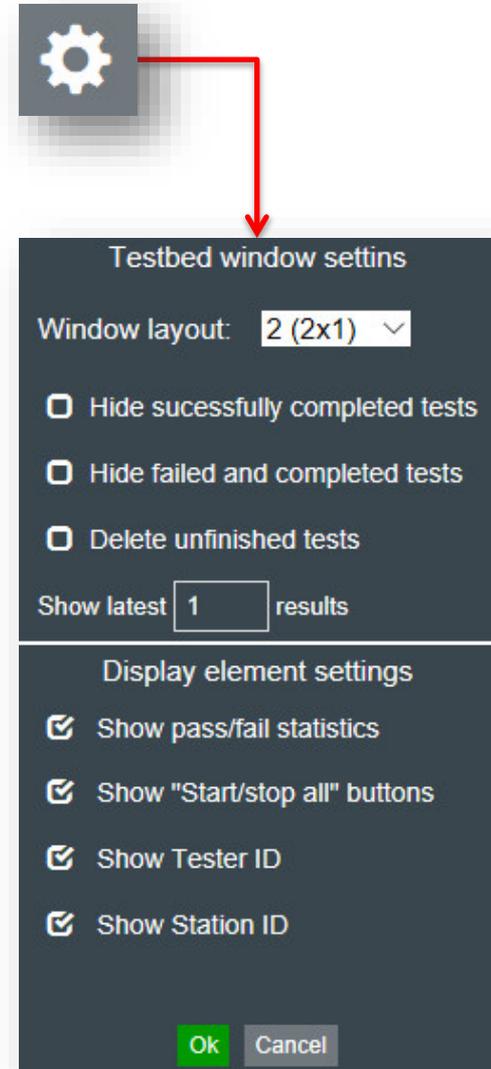
Hide all the failed test, only display the success ones.

Delete unfinished test: Delete all the test which is unfinished.

Show latest x results: Only display the latest x tests

Show pass/fail statistics: Display the global test statistics of pass and fail.

Show “Start/stop all” button: Customer could hide the “Start/stop all” button



TEST WINDOWS AND FILTERS

Example:

- Set “Windows layout” into “2(2x1)”
- set “Show last * result ” into “1”
- Enable “Show “Start/stop all” button”
- Enable “Show Tester ID”
- Enable “Show Station ID”
- Enable “Show pass/fail statistics”

The screenshot displays the XENA Networks test interface. At the top left, there is a red button with a white plus sign and the text "Add new test". To the right of this button is a control bar containing a "Passed" counter (13), a "Failed" counter (12), "Station ID" and "Tester ID" input fields, and "Start" and "Stop" buttons. Below the control bar, two test windows are visible. The first window, labeled "0", shows a "Config." button, a "RESULTS LOG:" section with the date "2018-11-13" and time "07:36:59 Test", and a "DUT" field with the ID "f4134f7d". The second window, labeled "1", shows a "Config." button, a "RESULTS LOG:" section with the date "2018-11-14" and time "08:06:02 Test", and a "DUT" field with the ID "53eabac". Colored arrows from the list above point to these elements: a red arrow points to the "Add new test" button; a blue arrow points to the "Passed" counter; a purple arrow points to the "Tester ID" field; a green arrow points to the "Start" button; and a yellow arrow points to the "Stop" button.

TEST RESULT

Click  to enter the “View test Result” page

View test results 

 2018-10-09 08:48	1 : [port2, '1'] -> [port3, '2'] Lost packets rate 1	DUT:	CFG: new_demo_loopnacl	 	
 2018-10-08 16:20	0 : Lost packets rate 0.0 percent is below limit 0	DUT:	CFG: uiytui	 	

-  This icon indicates that this test result is “failed”
-  This icon indicates that this test result is “passed”
-  Download the PDF test report
-  Download the Text test report

TEST RESULT

Click  to check the detail information about the test

2018-06-12 07:47 0 : Lost packets rate 0.0 percent is below limit 0 DUT: CFG: Eachother  

Test result summary

Test identifier	: 3beaf49efca14a109b7b1e20e4be942a	Test chassis	: localhost.localdomain
Test DUT id	:	Test started	: 2018-06-12 05:47:28
Test configuration	: Eachother	Test duration	: 0:00:26
Test result	: PASS	Tester (userid)	: demob

Port/stream mapping	Sent packets	Received packets	Lost packets
port4/3 → port3/2	1605879	1605879	0
port1/0 → port2/1	1561367	1561367	0
port2/1 → port1/0	1576124	1576124	0
port3/2 → port4/3	1591026	1591026	0

Test result raw data

port/stream	tbytes	tpackets	dummy	seq	mis	pld	rbytes	rpackets	min	avg	max
port4/3	1270026702	1605879	0	0	0	0	1270026702	1605879	18	72	154
port1/0	1234942269	1561367	0	0	0	0	1234942269	1561367	50	95	171
port2/1	1246517352	1576124	0	0	0	0	1246517352	1576124	66	118	187
port3/2	1258237074	1591026	0	0	0	0	1258237074	1591026	18	69	138

USER ADMINISTRATION

Click  -> “User administration”

1

Enter the user’s name and click  to add a new user

2

Set the password of the user and click  button to ensure



3

Set user’s roles

Test : User could login the “Test” interface and test

Config : User could login the “Configuration” interface, add and configure the Test configuration

Result : User could open and download the test result

Admin : User has Admin privileges

USER ADMINISTRATION

User administration

Active and login name: **2**

First name, last name and email:

Roles: Test Config Result Admin **3**

Active and login name:

First name, last name and email:

Roles: Test Config Result Admin

Active and login name:

First name, last name and email:

Roles: Test Config Result Admin

Active and login name:

First name, last name and email:

Roles: Test Config Result Admin

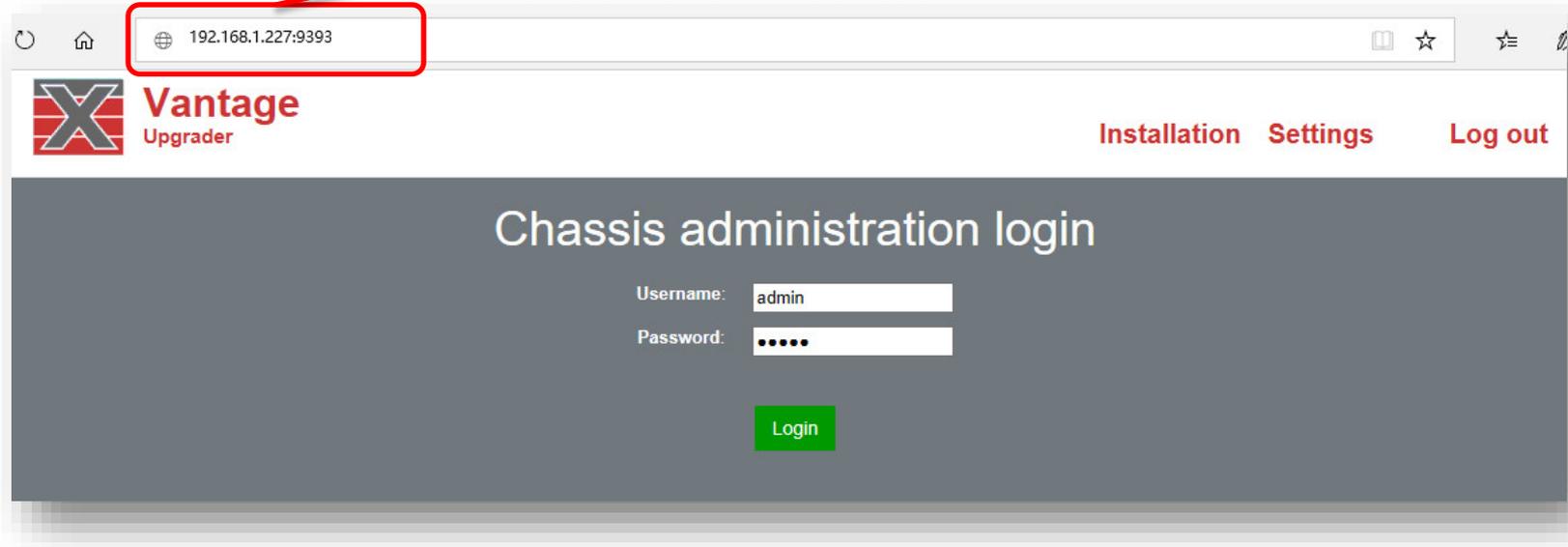
New user login name: **1**

First name, last name and email:

Roles: Test Config Result Admin

VANTAGE CHASSIS MANAGER

Input “:9393” which follow the chassis IP address



Visit the IP: “192.168.1.227:9393” to enter the Vantage Chassis Manager page.

The user name and password is “admin”

In this page, you could manage the version and the chassis IP address.

VANTAGE CHASSIS MANAGER



Installation Settings Log out

Installed software versions

[+ Click here to upload and install a new version](#)

You could upgrade the release via click this button

Vantage Manager

Vantage Upgrader

Installed Vantage Manager versions

Appl. ID	Version	Release date	Install date	Status	Action
xl2_3_0_6_d	3.0	2019-04-30	2019-05-01 00:05	Active and running	Stop
xl2_3_0_5_d	3.0	2019-04-28	2019-04-29 00:04	Configured, ready to start	Start
xl2_2_5_1_d	2.5	2019-03-10	2019-03-10 00:03	Configured, ready to start	Start
xl2_2_4_2_d	2.4	2018-02-05	2019-02-06 00:02	Configured, ready to start	Start
xl2_2_4_1_d	2.4	2018-02-01	2019-02-04 00:02	Configured, ready to start	Start

To enter the “Installation” page, you could manage the Vantage versions.

Of course you could downgrade or upgrade the version which you have installed into the chassis with “start/stop” action.

VANTAGE CHASSIS MANAGER

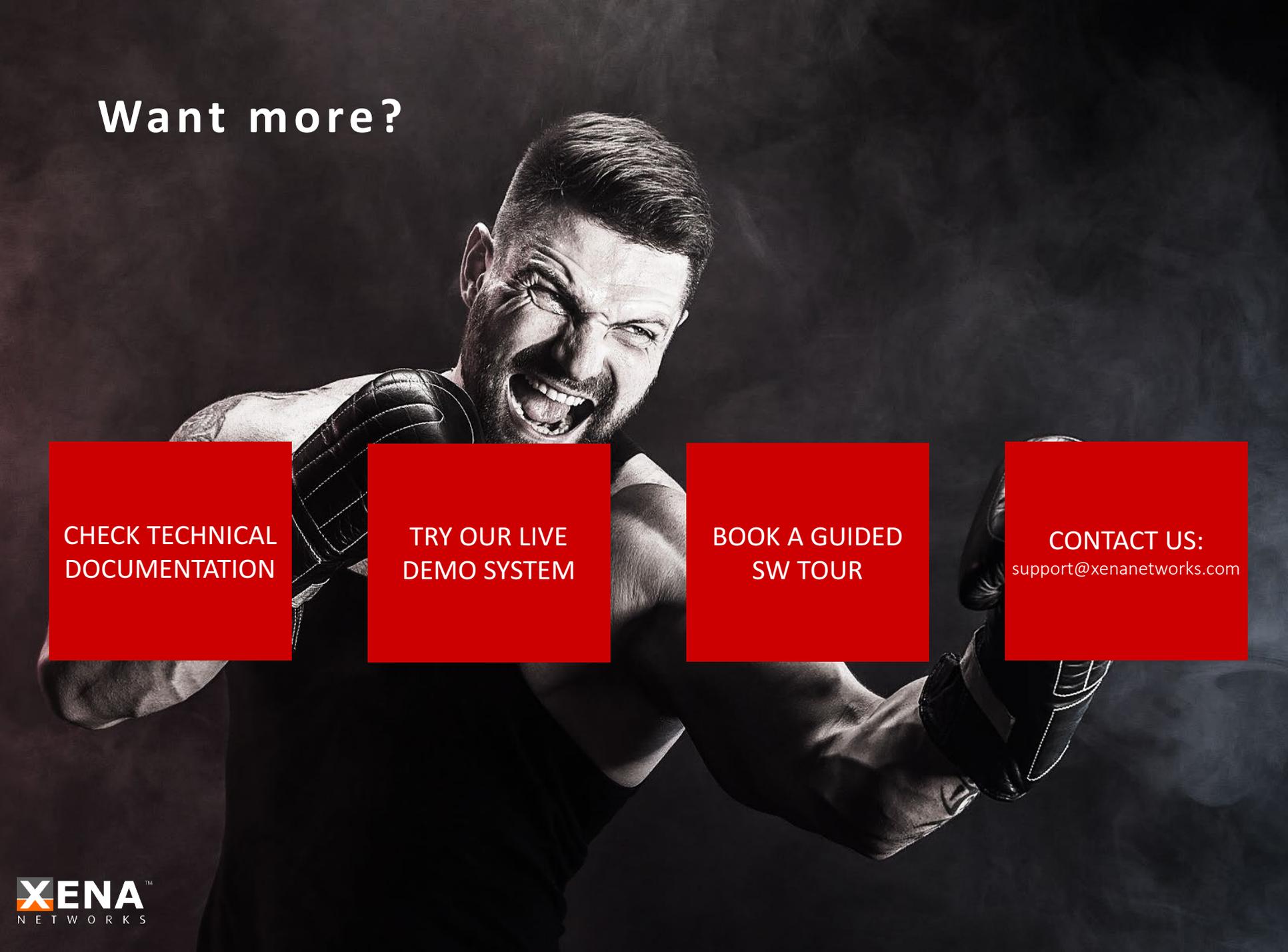
The screenshot displays the 'Settings' page of the Vantage Chassis Manager. At the top right, there are two tabs: 'Installation' and 'Settings', with 'Settings' being the active tab. The main heading is 'Chassis settings'. Below the heading, a message states: 'Change network settings for the chassis. The chassis will automatically reboot after the changes have been saved.' The configuration fields are as follows:

Chassis hostname	fed2.syhh.dk
Use DHCP	<input type="checkbox"/>
IP address	212.99.250.115
Network mask	255.255.255.0
Gateway	212.99.250.113
DNS1	8.8.8.8
DNS2	

At the bottom of the form, there are two buttons: 'Save settings and restart chassis' (highlighted in green) and 'Cancel'.

To enter the “Setting” page, you could manage the chassis ip address.

Modify the ip address and then click the “Save settings and restart chassis” button,
the chassis new ip address will active after the chassis reboot.

A muscular man with a beard and short hair, wearing black boxing gloves, is shown from the chest up. He has a determined, shouting expression with his mouth wide open and eyes squinted. The background is dark and smoky.

Want more?

CHECK TECHNICAL
DOCUMENTATION

TRY OUR LIVE
DEMO SYSTEM

BOOK A GUIDED
SW TOUR

CONTACT US:
support@xenanetworks.com