Stress test for SIP calls

Overview

SIP calls stress test is carried out according to the following scenario:

1. Server 1 creates SIP calls from specified range of SIP accounts to the specified SIP account on server 2 with 1 second interval.
2. Server 2 makes SIP calls from specified range of SIP accounts to the specified SIP account.

SIP registration stress test is carried out according to the following scenario:

1. Server 1 creates connections for SIP calls from specified range of SIP accounts to the specified SIP account on server 2 with 1 second interval.
2. Server 2 connects to SIP server and registers on it.

SIP server to use as proxy for SIP calls is necessary to carry out those tests. The SIP server should be set up as follows:

- SIP logins must be digital, 10001, 10002 etc for example
- it must be possible to accept any password for SIP logins, or to set the same password for all SIP accounts, Abcd1111 for example

SIP accounts password is set in Console web application sourcecode:

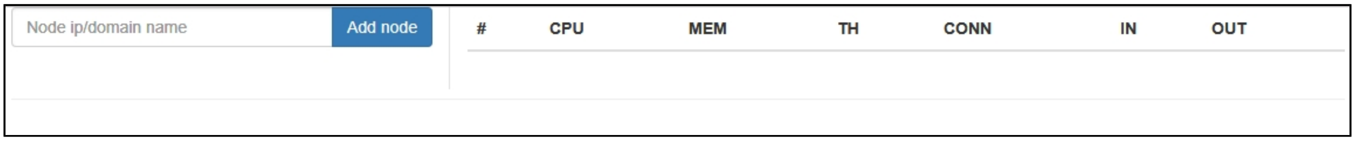
```
    var password = "Abcd1111";
```

Stress SIP calls test

1. For test we use:

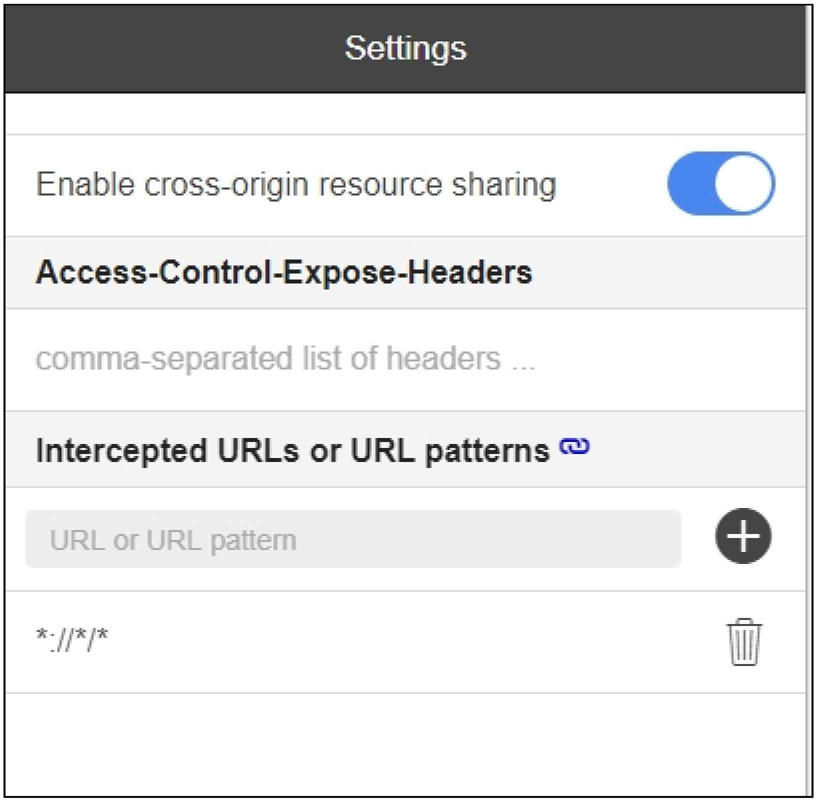
- two WCS servers, for example test1.flashphoner.com и test2.flashphoner.com
- Consoleweb application to carry out the test;
- Chrome browser withAllow-Control-Allow-Originextension for Console web application to work.

2. Open Console application over HTTP (not HTTPS!)http://test1.flashphoner.com:9091/client2/examples/demo/streaming/console/console.html



#	CPU	MEM	TH	CONN	IN	OUT

3.Install ACAO extension, allow Cross-Origin-Resource-Sharing



Settings

Enable cross-origin resource sharing

Access-Control-Expose-Headers

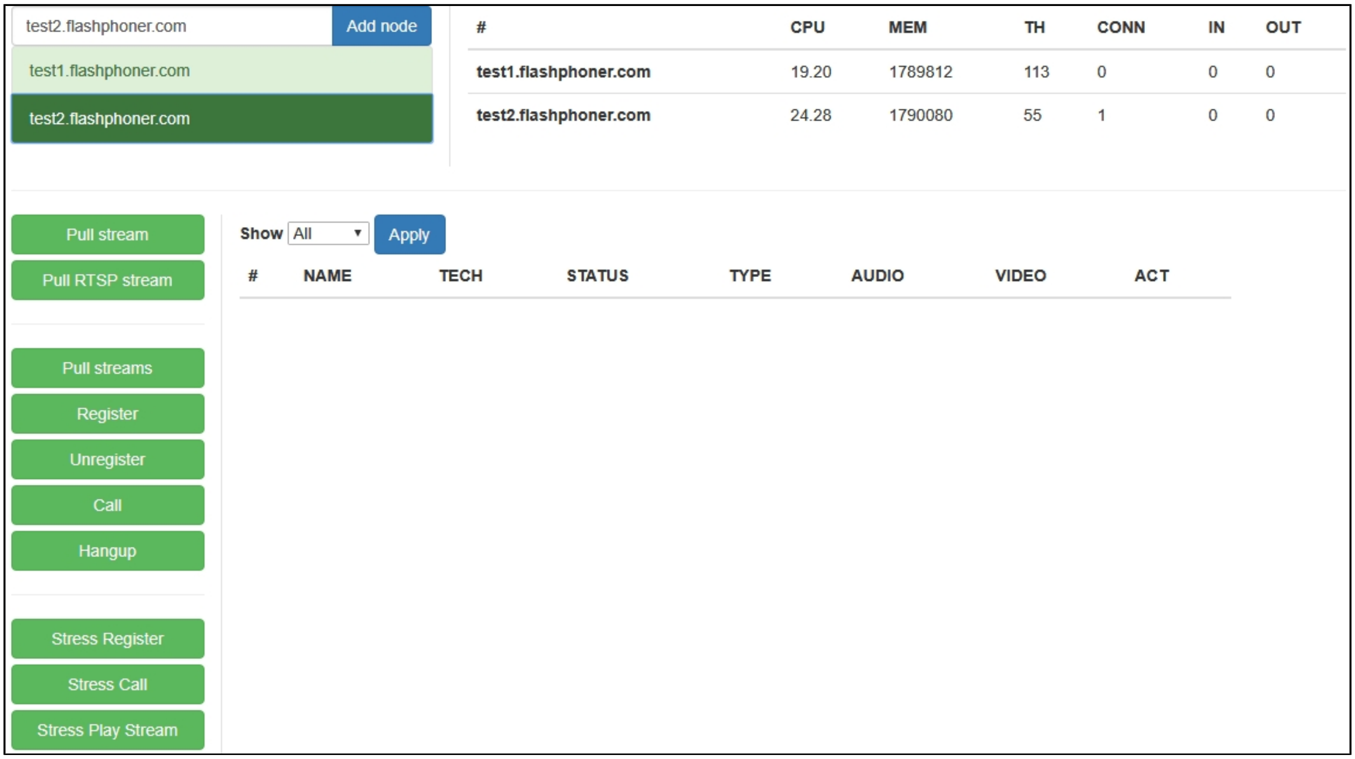
comma-separated list of headers ...

Intercepted URLs or URL patterns

URL or URL pattern

:///*

4. Enter server nametest1.flashphoner.com and press 'Add node'. This server will be tested. Then, add the servertest2.flashphoner.com, which will create SIP calls on server to test.

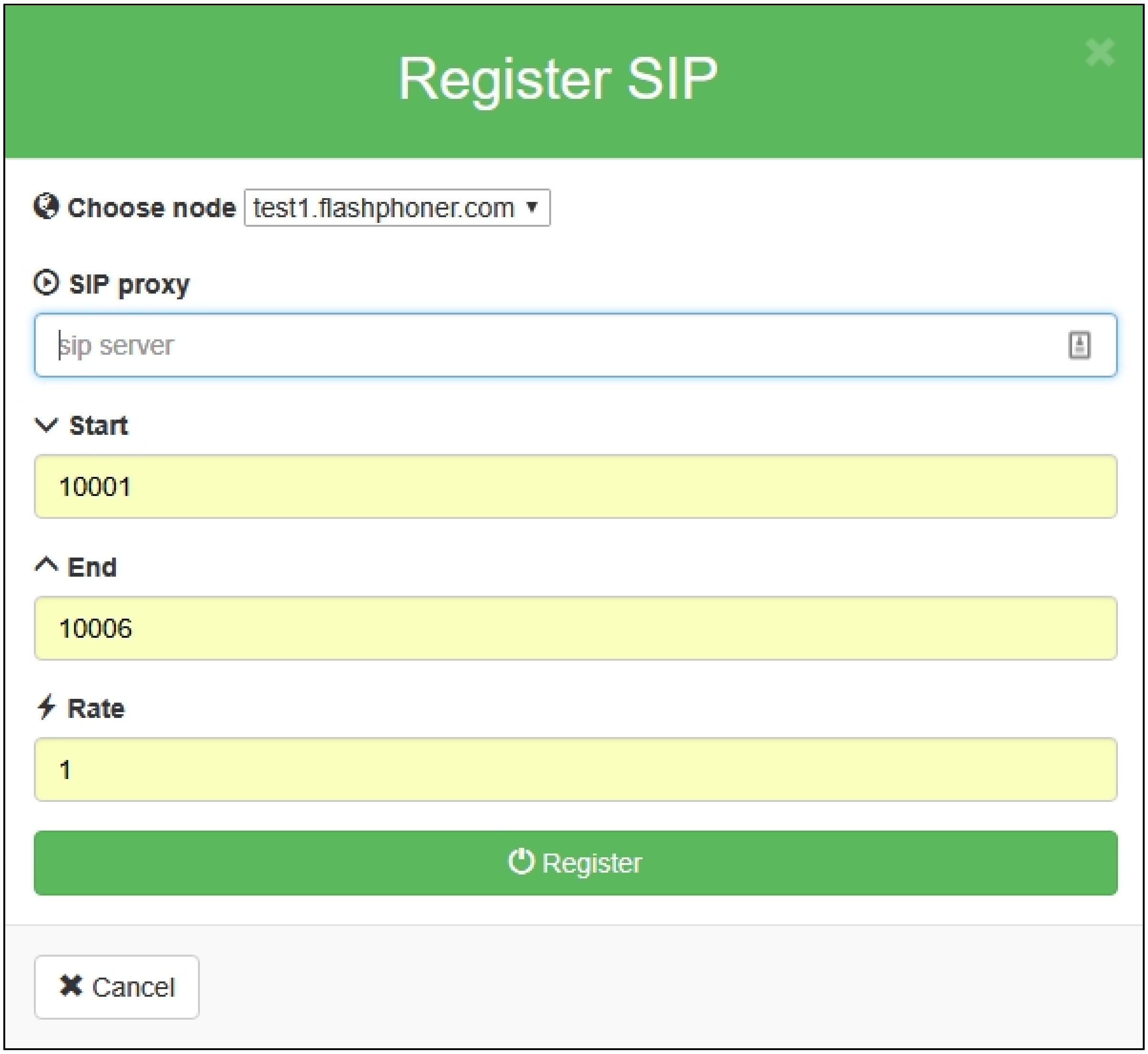


#	CPU	MEM	TH	CONN	IN	OUT
test1.flashphoner.com	19.20	1789812	113	0	0	0
test2.flashphoner.com	24.28	1790080	55	1	0	0

#	NAME	TECH	STATUS	TYPE	AUDIO	VIDEO	ACT

5. Selecttest2.flashphoner.com in Console application, press 'Register' button, set SIP server registration parameters:

- Choose node - choose server to test test1.flashphoner.com
- Sip proxy - set SIP server name
- Start - set the SIP account number to be callee for test
- End - set the last of test participants SIP account number
- Rate - set the test rate



Register SIP

Choose node: test1.flashphoner.com

SIP proxy: sip server

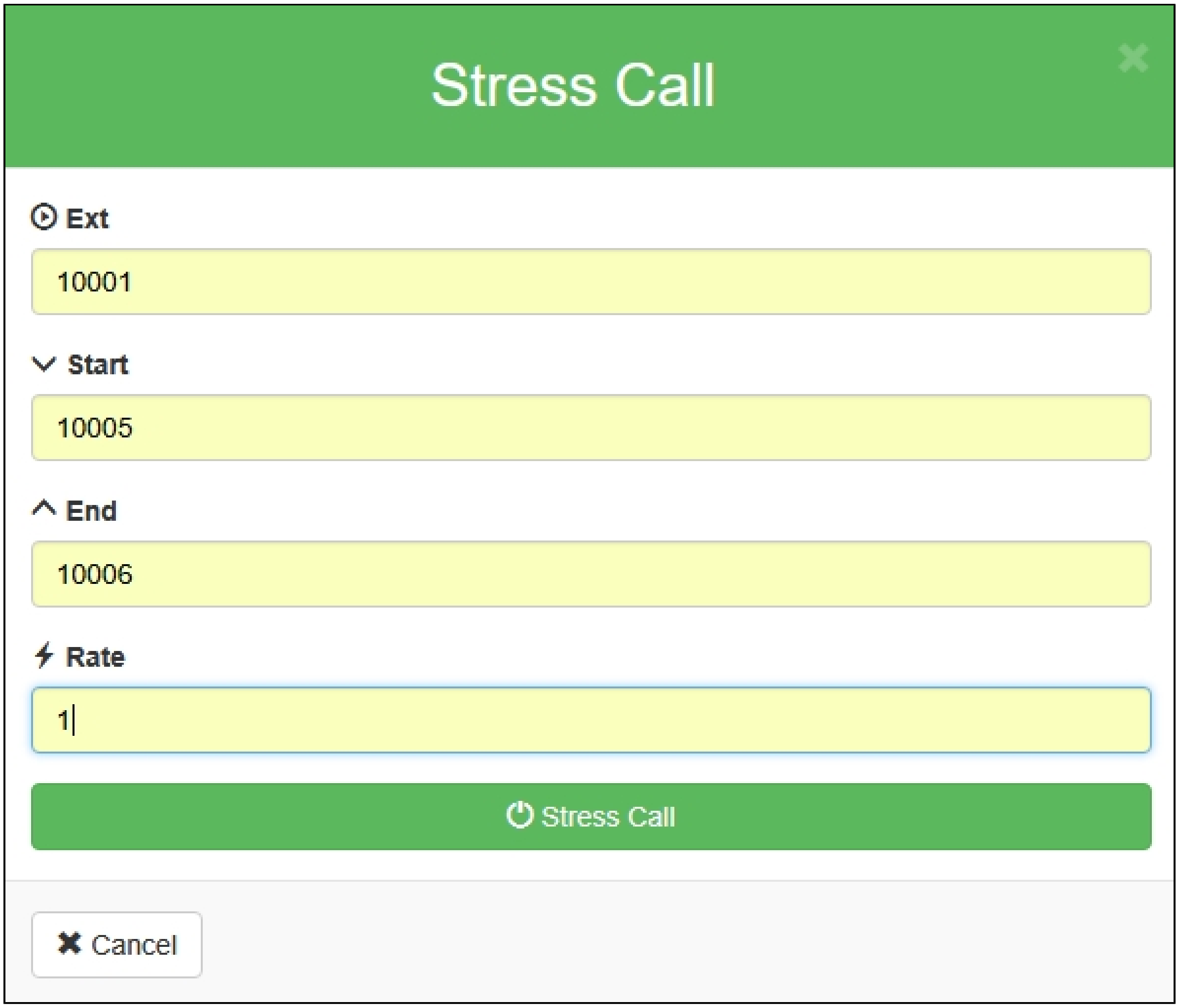
Start: 10001

End: 10006

Rate: 1

6. Press 'Stress Call', set the test parameters:

- Ext -set the SIP account number to be callee for test
- Start -set the first SIP account number to be caller for test
- End -set the last SIP account number to be caller for test
- Rate - set the test rate.



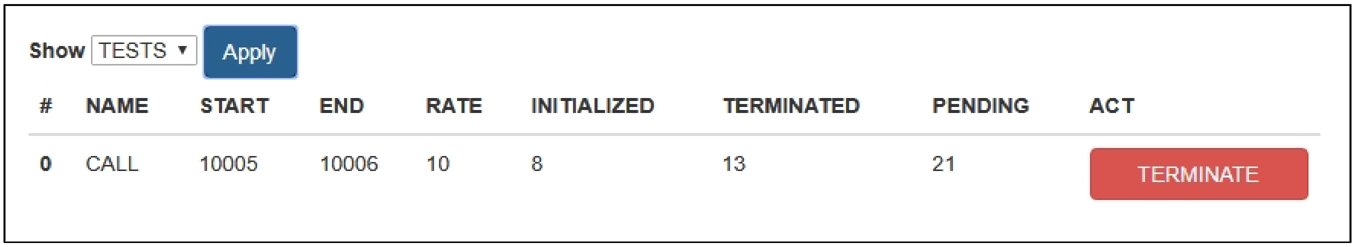
Ext: 10001

Start: 10005

End: 10006

Rate: 1

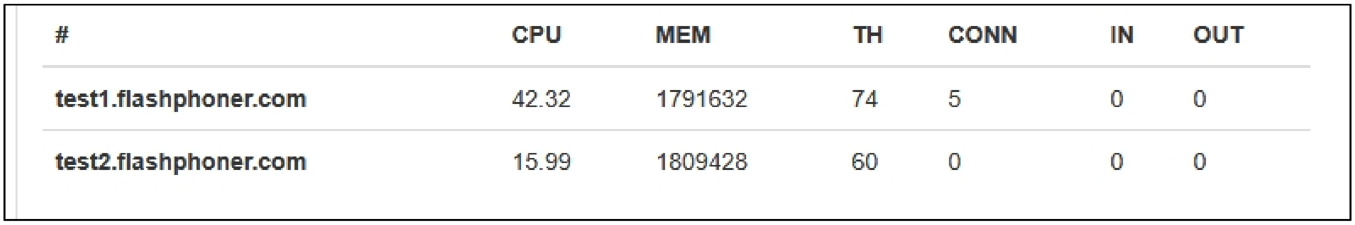
7. Press 'Stress Call' button. The test begins. In 'Show' dropdown select 'TESTS' and press 'Apply'. The information about test passing will be displayed on the page:



Show: TESTS

#	NAME	START	END	RATE	INITIALIZED	TERMINATED	PENDING	ACT
0	CALL	10005	10006	10	8	13	21	TERMINATE

8.Current servers load information is displayed at top right corner



#	CPU	MEM	TH	CONN	IN	OUT
test1.flashphoner.com	42.32	1791632	74	5	0	0
test2.flashphoner.com	15.99	1809428	60	0	0	0

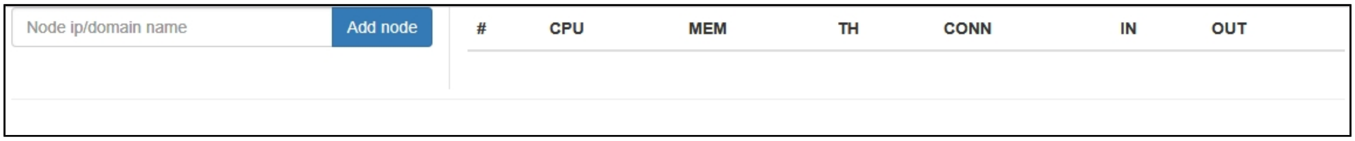
After finishing the test, it is recommended to restart WCS on both servers.

Stress SIP registration test

1.For test we use:

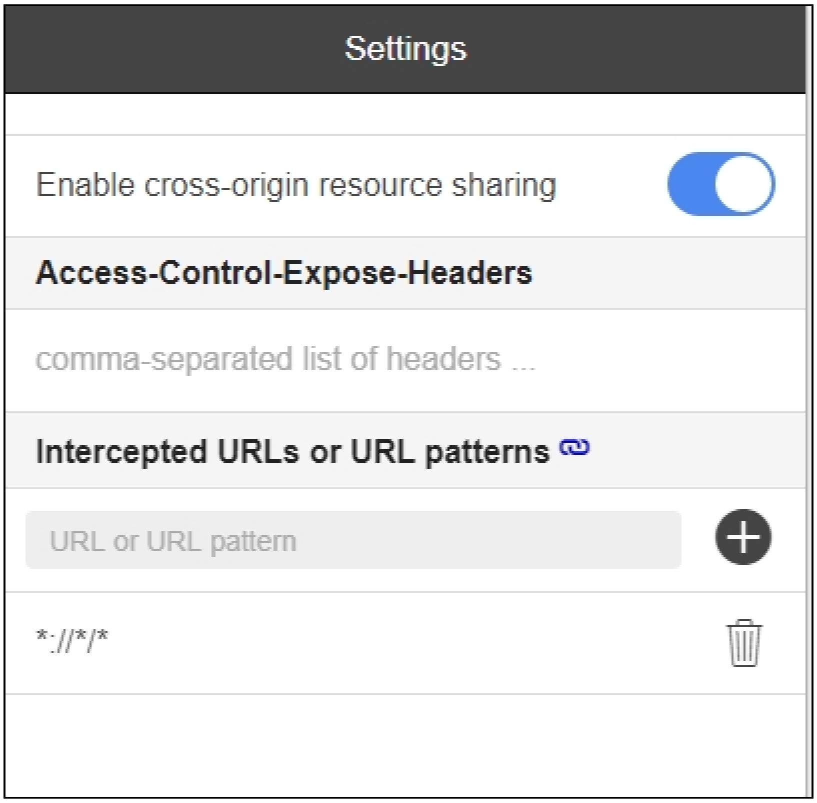
- two WCS servers, for exampletest1.flashphoner.comиtest2.flashphoner.com
- Consoleweb application to carry out the test;
- Chrome browser withAllow-Control-Allow-Originextension for Console web application to work.

2.Open Console application over HTTP (not HTTPS!)http://test1.flashphoner.com:9091/client2/examples/demo/streaming/console/console.html



#	CPU	MEM	TH	CONN	IN	OUT

3.Install ACAO extension, allow Cross-Origin-Resource-Sharing



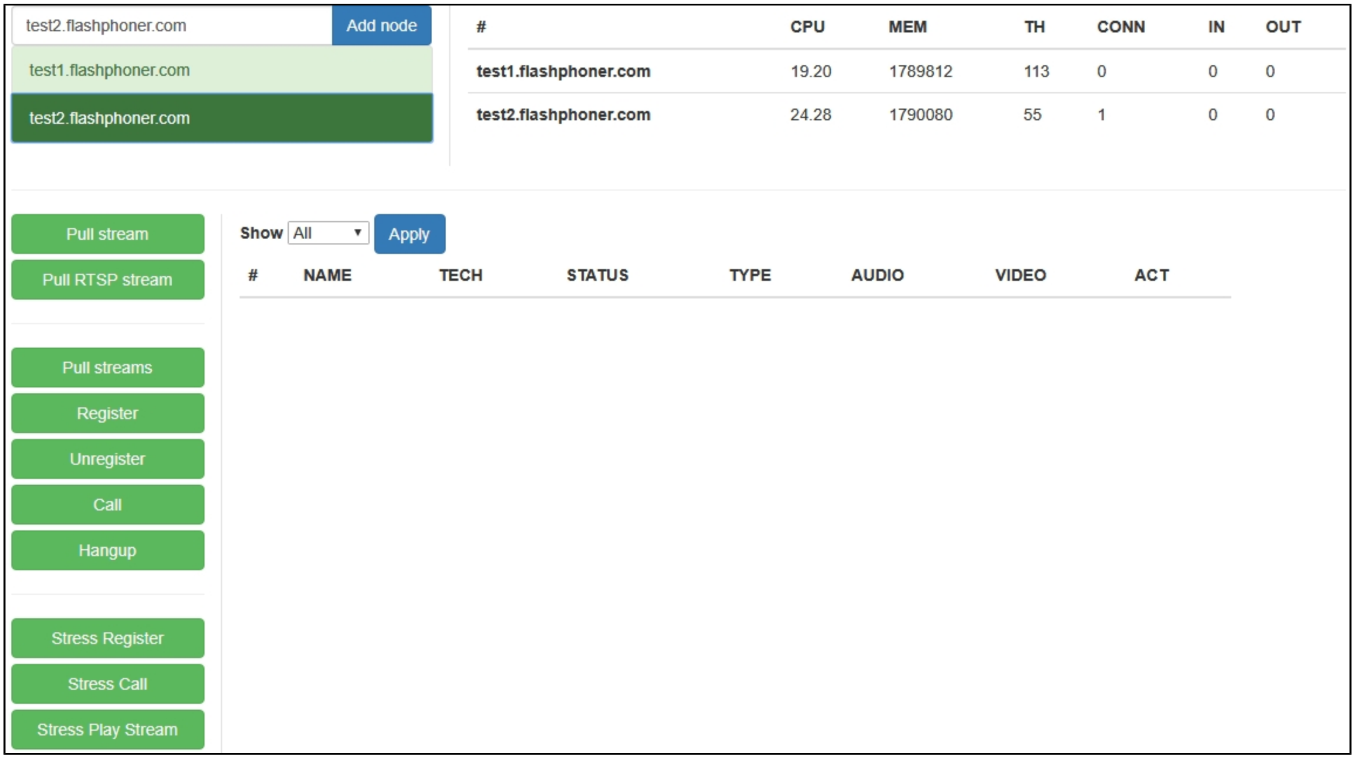
Enable cross-origin resource sharing ●

Access-Control-Expose-Headers

Intercepted URLs or URL patterns

:///*

4. Enter server nametest1.flashphoner.comand press 'Add node'. This server will be tested. Then, add the servertest2.flashphoner.com, which will create connections to server to test.

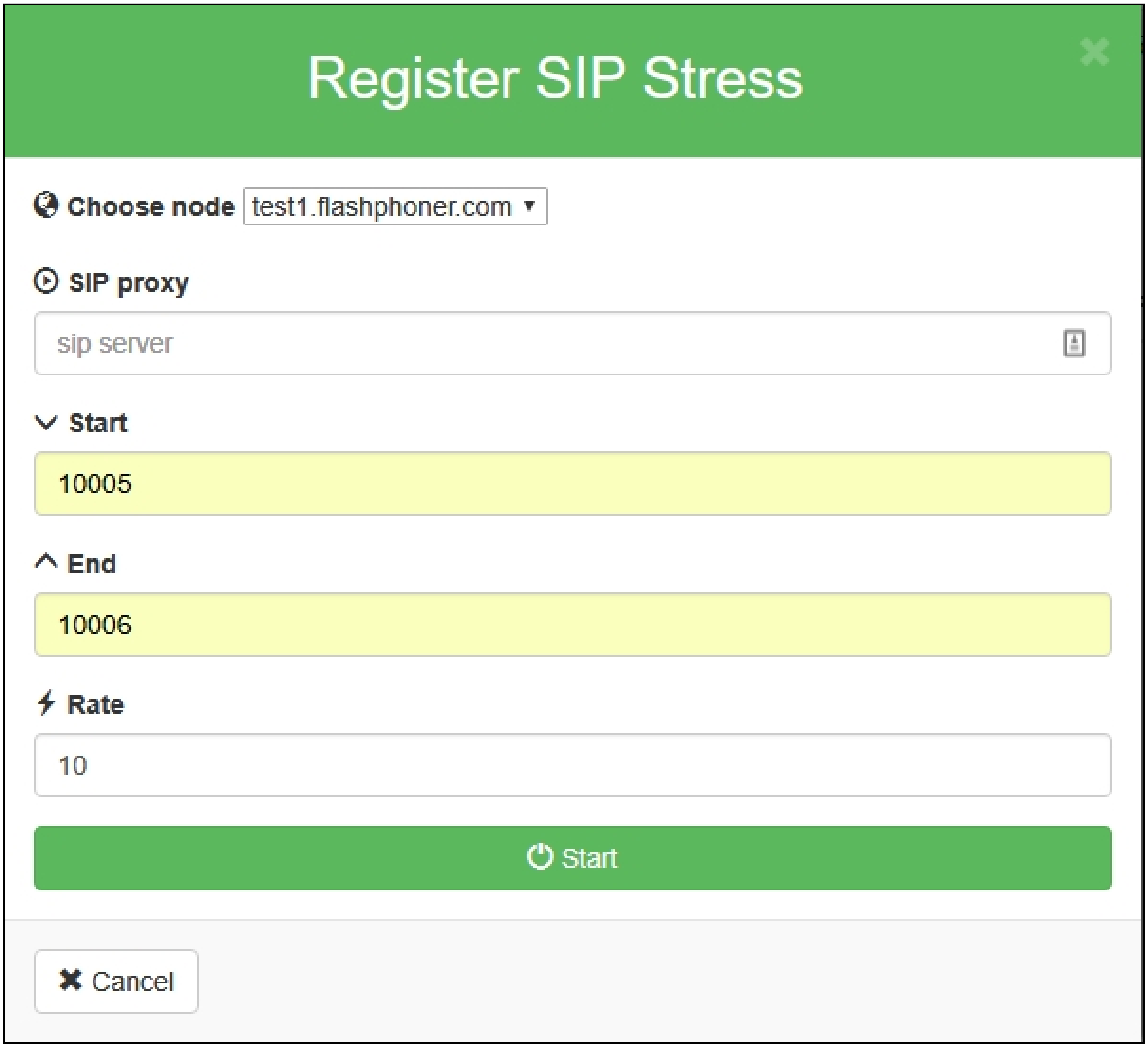


#	CPU	MEM	TH	CONN	IN	OUT
test1.flashphoner.com	19.20	1789812	113	0	0	0
test2.flashphoner.com	24.28	1790080	55	1	0	0

#	NAME	TECH	STATUS	TYPE	AUDIO	VIDEO	ACT

5. Selecttest2.flashphoner.com in Console application, press 'Stress register' button, set SIP registration parametes:

- Choose node - choose server to test test1.flashphoner.com
- Sip proxy - set the SIP server name
- Start -set the first SIP account number to be caller for test
- End -set the last SIP account number to be caller for test
- Rate - set the test rate



Register SIP Stress

Choose node: test1.flashphoner.com

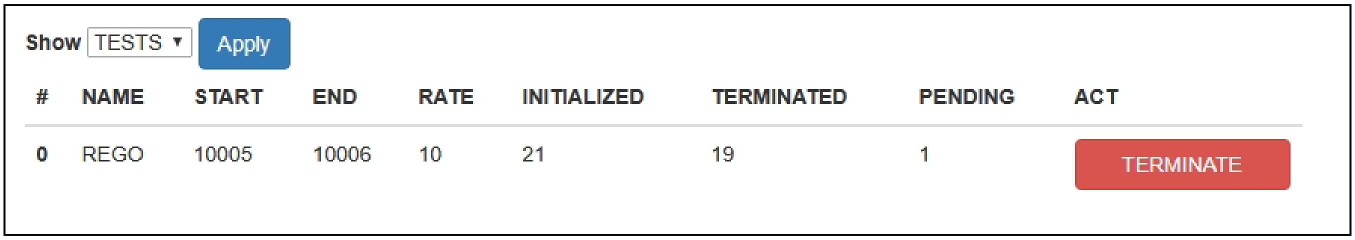
SIP proxy: sip server

Start: 10005

End: 10006

Rate: 10

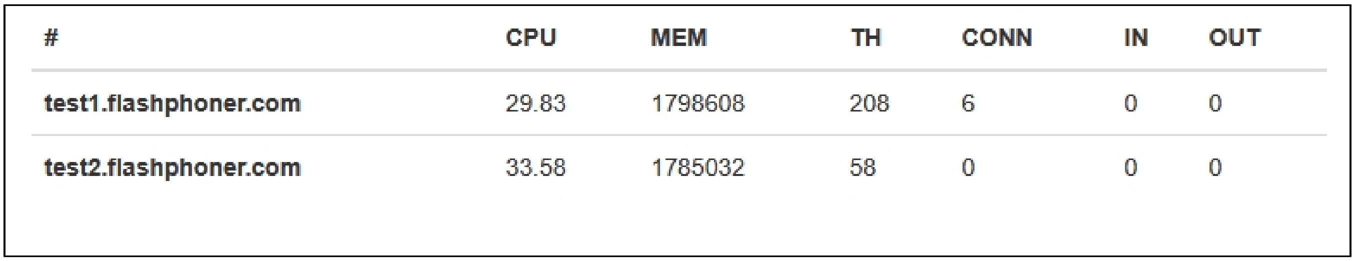
7. Press 'Start' button. The test begins.In 'Show' dropdown select 'TESTS' and press 'Apply'. The information about test passing will be displayed on the page:



Show: TESTS

#	NAME	START	END	RATE	INITIALIZED	TERMINATED	PENDING	ACT
0	REGO	10005	10006	10	21	19	1	TERMINATE

8.Current servers load information is displayed at top right corner



#	CPU	MEM	TH	CONN	IN	OUT
test1.flashphoner.com	29.83	1798608	208	6	0	0
test2.flashphoner.com	33.58	1785032	58	0	0	0

After finishing the test, it is recommended to restart WCS on both servers.

Tuning recommendations

If the load test was failed, it is recommended to change the following setver settings.

1. Inwcs-core.propertiesfile extend heap memory limits. It is recommended to set the limit in half of physical RAM, for example, set 16 Gb while physical RAM is 32 Gb.Make sure you have enough RAM:

```
-Xmx16g -Xms16g
```