

REST proof of concept

HTTP request

Method

POST

URL

https://XXXXXXX.com/authentication

Headers

Content-Type: application/json

Body

{ "userName": "XXXXXXXX", "password": "*****" }

[-] Response

Response Headers

Response Body (Raw)

Response Body (Highlight)

Response Body (Preview)

```
{
  "refresh_token":
"eyJ0eXAiOiJKV1QiLA0KICJhbGciOiJSUzI1NiJ9.eyJqdGkiOiJwMDAwMDE1YWJiMjJmMmI5ZGU2YmM3WTlWY2RjN2FIZGU2YmM3YTJmM2MzNDIzMzcwNjQlLCJzY29wZSI6WjYyYXV0aC5hcHB3ZhbHMiLC
oicGFzc3dvcmQlLCJ1c2VyX2lkIjoiaMDAwMDAwNWFIMGNkYzdhZWRIbmJjN2EyZjNjMzQyMzY0Iiw
haWwiOiJ5dml2YW5vdkB5YWVhby5jb20iLCJwYXJlbnRfYWVhbnVudF9pZCI6bnVsbCwiaWF0IjoxNDYxM
A6Ly9sb2NhbGhvc3QvdWFhL29hdXRoL3Rva2VuliwiYXVkljpbm9hdXRoLmFwcHJvdmFscyl9wZW
ghSwJSF6va4EdQMj6cJHtMxxOQfy4ETggIPcauMTguxqaYrh5Whu-rlyDAYwyLU4mHaVafjQptJMV28hb
8RTlp9F-GI_5XBfulcFPZQR1nM7RWV15e7gz7nrBf0jtkE0kFLorwf9nPJxPGBwFCgCyQw3sGdHZcvyU_
IjYkcsqLr00000WutW2iZawiZAKRzfEdnlZWIQodNrqq1UCacR1n19yTLwUEXfsML2bjPKnj3jxdcHH0
"access_token":
"eyJ0eXAiOiJKV1QiLA0KICJhbGciOiJSUzI1NiJ9.eyJqdGkiOiJwMDAwMDE1YWJiMjJmMmI5ZGU2YmM3WTlWY2RjN2FIZGU2YmM3YTJmM2MzNDIzMzcwNjQlLCJzY29wZSI6WjYyYXV0aC5hcHB3ZhbHMiLC
```

BASE64 “access-token”

Decoded

EDIT THE PAYLOAD AND SECRET (ONLY HS256 SUPPORTED)

HEADER: ALGORITHM & TOKEN TYPE

```
{
  "typ": "JWT",
  "alg": "RS256"
}
```

PAYLOAD: DATA

```
{
  "jti": "00000",
  "sub": "00000",
  "scope": [
    "oauth.approvals",
    "openid"
  ],
  "cid": "login",
  "grant_type": "password",
  "user_id": "00000",
  "user_name": "yvivanov@",
  "email": "yvivanov@",
  "parent_account_id": null,
  "iat": 1461082816,
  "exp": 1461126016,
  "iss": "http://localhost/uaa/oauth/token",
  "aud": [
    "oauth.approvals",
    "openid"
  ]
}
```

VERIFY SIGNATURE

Selenium Grid configuration

```
java -jar selenium-server-standalone-3.1.0.jar -role hub -port 8844 -browserTimeout 69 -timeout 96
```

```
java -Dwebdriver.chrome.driver=chromedriver.exe -Dwebdriver.ie.driver=IEDriverServer.exe -jar selenium-server-standalone-3.1.0.jar -role node -hub http://localhost:8844
```

```
Command Prompt - java -jar selenium-server-standalone-3.1.0.jar -role hub -port 8844 -browserTimeout 69 -timeout 96

C:\Users\root>cd Downloads

C:\Users\root\Downloads>java -jar selenium-server-standalone-3.1.0.jar -role hub -port 8844 -browserTimeout 69 -timeout 96
14:43:44.985 INFO - Selenium build info: version: '3.1.0', revision: '86a5d70'
14:43:44.985 INFO - Launching Selenium Grid hub
2017-03-11 14:43:45.952:INFO::main: Logging initialized @1329ms
14:43:45.968 INFO - Will listen on 8844
2017-03-11 14:43:46.014:INFO:osjs.Server:main: jetty-9.2.15.v20160210
2017-03-11 14:43:46.061:INFO:osjs.ContextHandler:main: Started o.s.j.s.ServletContextHandler@7c31dbb
2017-03-11 14:43:46.077:INFO:osjs.ServerConnector:main: Started ServerConnector@7c31dbb
2017-03-11 14:43:46.077:INFO:osjs.Server:main: Started @1462ms
14:43:46.077 INFO - Nodes should register to http://192.168.0.189:8844/grid/register/
14:43:46.077 INFO - Selenium Grid hub is up and running
14:44:47.837 INFO - Registered a node http://192.168.0.189:5555
```

hub

```
Command Prompt - java -Dwebdriver.chrome.driver=chromedriver.exe -Dwebdriver.ie.driver=IEDriverServer.exe -jar selenium-server-standalone-3.1.0.jar -role node -hub http://localhost:8844

C:\Users\root>cd Downloads

C:\Users\root\Downloads>java -Dwebdriver.chrome.driver=chromedriver.exe -Dwebdriver.ie.driver=IEDriverServer.exe -jar selenium-server-standalone-3.1.0.jar -role node -hub http://localhost:8844
14:44:46.620 INFO - Selenium build info: version: '3.1.0', revision: '86a5d70'
14:44:46.620 INFO - Launching a Selenium Grid node
2017-03-11 14:44:47.556:INFO::main: Logging initialized @1315ms
14:44:47.603 INFO - Driver class not found: com.opera.core.systems.OperaDriver
14:44:47.603 INFO - Driver provider com.opera.core.systems.OperaDriver registration is skipped:
Unable to create new instances on this machine.
14:44:47.603 INFO - Driver class not found: com.opera.core.systems.OperaDriver
14:44:47.603 INFO - Driver provider com.opera.core.systems.OperaDriver is not registered
14:44:47.603 INFO - Driver provider org.openqa.selenium.safari.SafariDriver registration is skipped:
registration capabilities Capabilities [{browserName=safari, version=, platform=MAC}] does not match
14:44:47.650:INFO:osjs.Server:main: jetty-9.2.15.v20160210
2017-03-11 14:44:47.681:INFO:osjs.ContextHandler:main: Started o.s.j.s.ServletContextHandler@7ce3c
2017-03-11 14:44:47.697:INFO:osjs.ServerConnector:main: Started ServerConnector@1622f1b(HTTP/1.1){0}
2017-03-11 14:44:47.697:INFO:osjs.Server:main: Started @1448ms
14:44:47.697 INFO - Selenium Grid node is up and ready to register to the hub
14:44:47.712 INFO - Starting auto registration thread. Will try to register every 5000 ms.
14:44:47.712 INFO - Registering the node to the hub: http://localhost:8844/grid/register
14:44:47.837 INFO - The node is registered to the hub and ready to use
14:44:53.094 INFO - SessionCleaner initialized with insideBrowserTimeout 69000 and clientGoneTimeout 6900
```

node

TestNG tests

IntelliJ IDE TestNG run-time report

OK SUITE	1m 28s 455ms
OK TEST	1m 28s 455ms
OK Tests	1m 28s 455ms
OK RestAPI_correct_username_password	2s 104ms
OK RestAPI_failed_username_password	414ms
OK RestAPI_access_token_has_three_parts_separated_by_period	605ms
OK Selenium_Chrome_login_successfully	12s 363ms
OK Selenium_Chrome_login_unsuccessfully	10s 705ms
OK Selenium_Chrome_after_successful_login_the_user_is_taken_to_Dashboard	18s 706ms
OK Selenium_Explorer_login_successfully	16s 594ms
OK Selenium_Explorer_login_unsuccessfully	12s 43ms
OK Selenium_Explorer_after_successful_login_the_user_is_taken_to_Dashboard	14s 921ms

TestNG final report

SUITE

Info

- C:\Users\root\IdeaProjects\rest-selenium-grid-tests\TEST.xml
- 1 test
- 0 groups
- Times
- Reporter output
- Ignored methods
- Chronological view

Results

- 9 methods, 9 passed
- Passed methods (hide)
 - RestAPI_access_token_has_three_parts_separated_by_period
 - RestAPI_correct_username_password
 - RestAPI_failed_username_password
 - Selenium_Chrome_after_successful_login_the_user_is_taken_to_Dashboard
 - Selenium_Chrome_login_successfully
 - Selenium_Chrome_login_unsuccessfully
 - Selenium_Explorer_after_successful_login_the_user_is_taken_to_Dashboard
 - Selenium_Explorer_login_successfully
 - Selenium_Explorer_login_unsuccessfully

Gradle final report

Class Tests

all > default-package > Tests

9	0	0	1m15.24s
tests	failures	ignored	duration

100%
successful

Tests Standard error

Test	Duration	Result
RestAPI_access_token_has_three_parts_separated_by_period	0.640s	passed
RestAPI_correct_username_password	1.466s	passed
RestAPI_failed_username_password	0.390s	passed
Selenium_Chrome_after_successful_login_the_user_is_taken_to_Dashboard	9.793s	passed
Selenium_Chrome_login_successfully	10.293s	passed
Selenium_Chrome_login_unsuccessfully	8.665s	passed
Selenium_Explorer_after_successful_login_the_user_is_taken_to_Dashboard	16.732s	passed
Selenium_Explorer_login_successfully	14.022s	passed
Selenium_Explorer_login_unsuccessfully	13.243s	passed

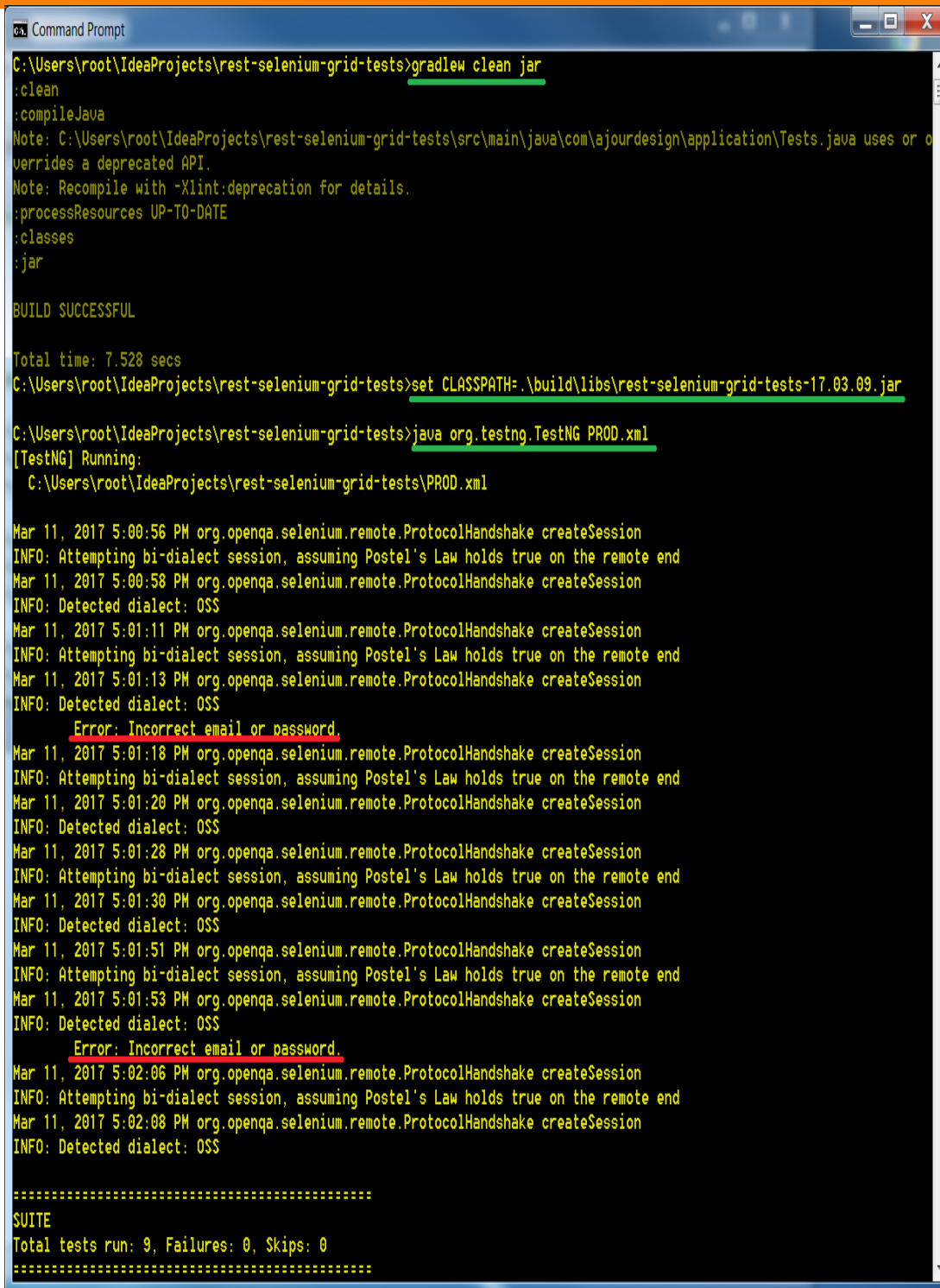
Wrap lines
Generated by Gradle 3.1

Gradle run-time

```
set|export AURL=<authentication_url>
set|export SURL=<selemium_test_url>
set|export HURL=<selemium_grid_hub_url>
set|export USER=<e-mail>
set|export PSWD=<password>

cd <project_folder>
gradlew clean jar
set CLASSPATH=.\build\libs\rest-selenium-grid-tests-17.03.09.jar
java org.testng.TestNG PROD.xml
```

```
...
=====
SUITE
Total tests run: 9, Failures: 0, Skips: 0
=====
```



```
Command Prompt
C:\Users\root\IdeaProjects\rest-selenium-grid-tests>gradlew clean jar
:clean
:compileJava
Note: C:\Users\root\IdeaProjects\rest-selenium-grid-tests\src\main\java\com\ajourdesign\application\Tests.java uses or overrides a deprecated API.
Note: Recompile with -Xlint:deprecation for details.
:processResources UP-TO-DATE
:classes
:jar
BUILD SUCCESSFUL

Total time: 7.528 secs
C:\Users\root\IdeaProjects\rest-selenium-grid-tests>set CLASSPATH=.\build\libs\rest-selenium-grid-tests-17.03.09.jar
C:\Users\root\IdeaProjects\rest-selenium-grid-tests>java org.testng.TestNG PROD.xml
[TestNG] Running:
  C:\Users\root\IdeaProjects\rest-selenium-grid-tests\PROD.xml

Mar 11, 2017 5:00:56 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
Mar 11, 2017 5:00:58 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Mar 11, 2017 5:01:11 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
Mar 11, 2017 5:01:13 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Error: Incorrect email or password.
Mar 11, 2017 5:01:18 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
Mar 11, 2017 5:01:20 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Mar 11, 2017 5:01:28 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
Mar 11, 2017 5:01:30 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Mar 11, 2017 5:01:51 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
Mar 11, 2017 5:01:53 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
Error: Incorrect email or password.
Mar 11, 2017 5:02:06 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Attempting bi-dialect session, assuming Postel's Law holds true on the remote end
Mar 11, 2017 5:02:08 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS

=====
SUITE
Total tests run: 9, Failures: 0, Skips: 0
=====
```