Qlik Sense: Set Up Header Auth Virtual Proxy

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ⓘ **Assumptions**
- Valid for Qlik Sense 1.0 GA
- Qlik Sense server up, running, and licensed
- Configured User Directory with users allocated tokens (or login access token allocation)
- Fiddler installed on the system accessing Qlik Sense (use of Postman in Google Chrome can work too) http://www.telerik.com/download/fiddler.
- Postman Chrome extension is installed in the browser.
- This instruction does not account for multi-node configuration of virtual proxies (for now).

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Introduction

This document uses words and pictures to describe setting up Qlik Sense for http header injected authorization. Documentation may call it header authentication, and while Qlik Sense maintains a list in the repository of the configured User Directory users, the platform does not perform traditional authentication (userid and password against an identity management solution). To set up http header injection in Qlik Sense, a virtual proxy will be created to handle requests and digest the header resulting in access to the Qlik Sense platform.
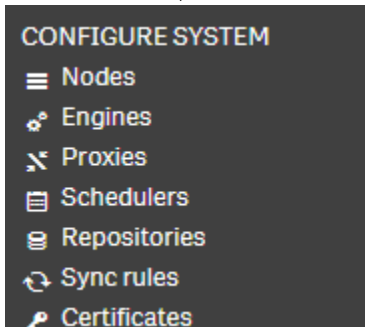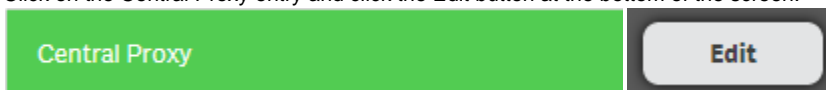
Instructions

Setting up the virtual proxy

1. Launch the Qlik Management Console (QMC).
2. On the left side list, click on **Proxies** under **Configure System.**

3. Click on the Central Proxy entry and click the Edit button at the bottom of the screen.

4. In the Proxy edit window on the right side, make sure a check mark sits next to **Virtual proxies**. If the check mark is missing, click on **Virtual proxies**.
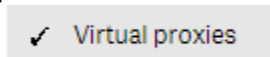
5. In the Proxy edit window, scroll down until the Virtual proxies section appears.

Virtual proxies	Actions ▾
Prefix	▾
custom	
CustomHeader	

6. Click on Actions and choose **Create new**.

Actions ▾
- Create new
- Edit
- Delete

7. The Virtual proxy window appears.
8. Enter a prefix for the virtual proxy you wish to create. This prefix will be added to the url used to connect to Qlik Sense. For example, if the prefix is named "excelsior", the url to navigate to would look like this: **http://%senseServerName%/excelsior/%senseLocation%**. For demonstration purposes, the %senseServerName%==sense10 and the %senseLocation% could be the following: [qmc, hub, qrs]. For this document, the prefix name will be "**demo**".

Prefix*   ↵ | demo

The prefix of a virtual proxy must be a unique value as this differentiates the virtual proxies and will be a part of the URL.

9. The Authentication module redirect URI is the address the proxy will go to before accessing Sense content. this could be a page for authentication to a host application, an identity management page, or a page with a prepackaged list of users to choose from. For the purposes of this document, the redirect uri will be the sense server itself.

Authentication module redirect URI*   ↵ | https://sense10

10. There are a number of other settings to enter if required. For the purposes of this document, move onto the Header authentication mode dropdown list. Set the mode to **Dynamic user directory**.

Header authentication mode*   ↵ | Dynamic user directory ▾

Dynamic user directory will allow multiple user directories to be used for this connection. It is possible to set a static user directory for a virtual proxy using header injection. Depending on the deployment specifications, this may be the appropriate configuration.

11. For Header authentication header name enter the name of the header key that will be used to inject the header. For this document, enter "**hdr-sense-demo**".

Header authentication header name*   ↵ | hdr-sense-demo

12. Header authentication dynamic user directory configuration is the pattern the hdr-sense-demo value will be formatted. Enter **$ud\\$id**.

Header authentication dynamic user directory*   ↵ | $ud\\$id

Use $ud[sep]$id or $id[sep]$ud where [sep] is one or more characters. Backslashes (\) must be escaped with an additional \. Example 1: $ud\\$id; example 2: $id@$ud; example 3: $ud:::$id.
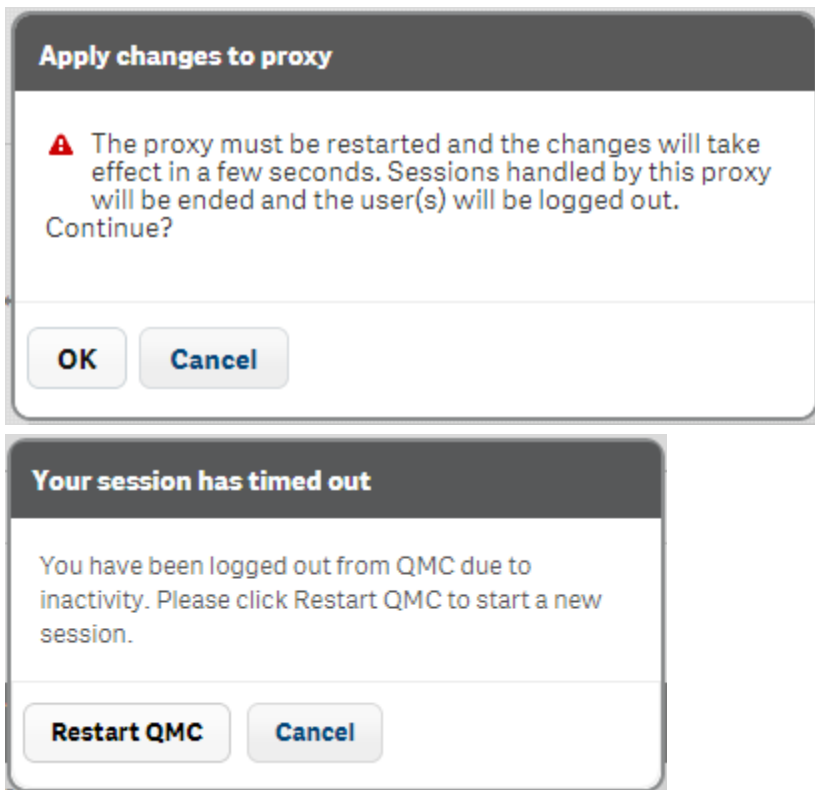
13. The Session cookie header name needs to be unique for the virtual proxy so Qlik Sense knows how to manage sessions. Enter "**X-Qlik-Session-demo**".

Session cookie header name*   ↵ | X-Qlik-Session-demo

The session cookie header name of a virtual proxy must be a unique value

14. Scroll to the bottom of the entry screen and click OK.
15. Click Apply to apply the changes to the Central Proxy. After clicking Apply, the QMC will have to restart the proxy service and the QMC.

Apply changes to proxy

⚠ The proxy must be restarted and the changes will take effect in a few seconds. Sessions handled by this proxy will be ended and the user(s) will be logged out. Continue?

OK   **Cancel**

Your session has timed out

You have been logged out from QMC due to inactivity. Please click Restart QMC to start a new session.
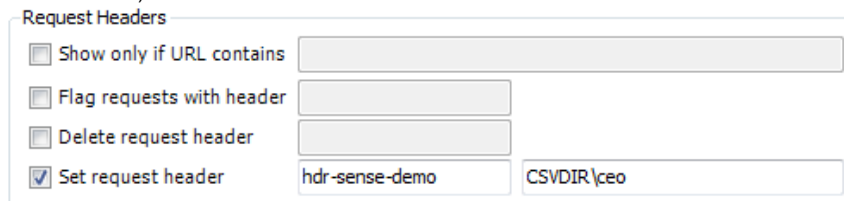
Restart QMC   **Cancel**

Testing the virtual proxy with Fiddler

1. Launch Fiddler
2. Click on the Filters tab on the right side pane.
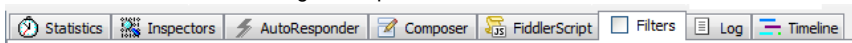
3. Click the Use Filters check box. ☑ Use Filters
4. Under the Request Headers section, check the box for Set request header and enter the key (**hdr-sense-demo**) and a user with the user directory name and the userid like this (**Domain\UserId**).

5. Click on the Composer tab and under the Parsed sub tab type in the following url: **https://%senseServerName%/demo/hub**. Recall that for this demo the %senseServerName%==sense10.
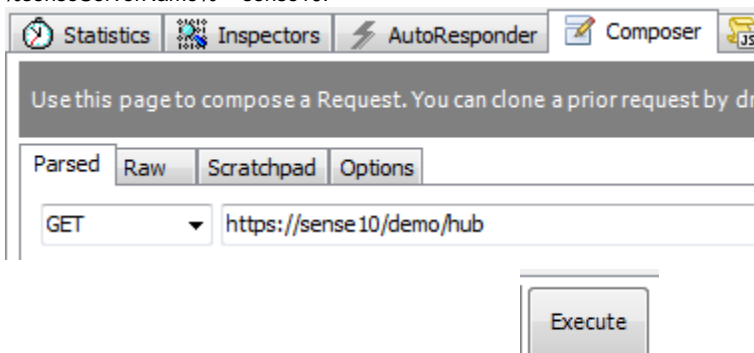
6. Click the Execute button to have fiddler go to the site.
7. Upon clicking Execute, a log entry will appear that looks like this:
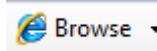
Highlight this and click the browse button on the menu bar. The result will be that the browser opens to the Qlik Sense hub logged in as the supplied user in the header.

Testing virtual proxy with Qlik Sense Repository Service API (QRS) using Postman

1. Launch Postman from the apps page in Chrome.
2. Under the Normal tab, enter the url to navigate to. In this case, navigate to **https://%senseServerName%/demo/qrs/app/?xrfkey=ABCDEFG123456789**. Recall that for this demo the %senseServerName%==sense10.

   https://sense10/demo/qrs/app/?xrfkey=ABCDEFG123456789

   Why the xrfkey parameter? The xrfkey will allow entry and eliminate cross-site scripting issues that may arise during the connection.
3. Add a header with the following:
   a. Header ==**X-Qlik-xrfkey**, Value==**ABCDEFG123456789** Make sure this matches the parameter xrfkey.
   b. Header ==**hdr-sense-demo**, Value==**Domain\UserId**

   | X-Qlik-xrfkey | ABCDEFG123456789 | ⊗ |
   | hdr-sense-demo | sense10\qvservice | ⊗ |

4. Click the Send button and observe the results.

```json
[
    {
        "name": "Operations Monitor",
        "appId": "",
        "publishTime": "2014-09-17T01:56:39.328Z",
        "published": true,
        "stream": {
            "name": "Administration",
            "privileges": null,
            "id": "a70ca8a5-1d59-4cc9-b5fa-6e207978dcaf"
        },
        "privileges": null,
        "id": "0d69ccdf-7bc4-44a4-a6e2-b0f5cc4f9033"
    },
    {
        "name": "New App",
        "appId": "",
        "publishTime": "1753-01-01T00:00:00.000Z",
        "published": false,
        "stream": null,
        "privileges": null,
        "id": "e6df6785-0b2a-4185-862a-ff191ec9af72"
    },
    {
        "name": "MyApp",
        "appId": "",
        "publishTime": "1753-01-01T00:00:00.000Z",
        "published": false,
        "stream": null,
        "privileges": null,
        "id": "921b71e4-0cd8-4d38-8003-82542adfa86d"
    },
    {
        "name": "Executive Dashboard",
        "appId": "",
        "publishTime": "2014-09-17T05:07:26.724Z",
        "published": true,
        "stream": {
            "name": "Executive",
            "privileges": null,
            "id": "459571f9-80bf-49e6-a52d-b13a24bfa11a"
        },
        "privileges": null,
        "id": "b17dc181-c1c5-45d1-9a51-ae95d042247c"
    },
```