# Upgrade Checks:

You will need a browser network inspection tool

* Chrome - Chrome Inspector
* Firefox - Firebug or built-in Inspector
* etc.

1. As a user without private repositories permissions:

Open **STASH\_URL/profile**

* There should be no "Create repository" button.
* There should be no visible repositories list.

1. As an administrator

Open **STASH\_URL/profile**

In the inspector Network tab you'll see some calls that have been made to the stash server.

Use XHR filter to get rid of some noise requests (JavaScript files, images etc.).

Currently following requests are made by Stash (repsonse statuses included):

* /rest/shortcuts/latest/shortcuts/ee5019c/bundled 200
* **/users/admin/repos?start=0&limit=50** 200
* /rest/inbox/latest/pull-requests/count 200
* /rest/nav-links-analytics-data/1.0/ 200
* /rest/stp/1.0/license/status 200
* /rest/api/latest/profile/recent/repos?avatarSize=32 200

The one that's interesting for us is ***/users/admin/repos?start=0&limit=50***

This is an URL that should be blocked if the user shouldn't have permissions to use private repositories.

It returns status **200** for an administrator, it should return status **401** for a user who's not allowed to use private repos.

We can check that by logging in as a user who shouldn't have permissions to use private repositories.

Repeating the steps we did for the admin, check if the status of the URL is **401**.

We should also check if there are any new URLs used. If that's the case - there should be some custom analysis made to check if the URL is connected to private repositories in any way.

1. As an administrator

Open **STASH\_URL/profile**

Click „Create repository“ button.

Wait for a page to load and copy the current browser URL.

Go to the URL you’ve just copied as a user **without** private repositories permissions. You shoudn't be able to see anything.

If you can see the repository creation input - **plugin needs an update**.

Additionally - in the inspector check the XHR filter:

Current URLs:

* /rest/shortcuts/latest/shortcuts/ee5019c/bundled 200
* /rest/inbox/latest/pull-requests/count 200
* /rest/nav-links-analytics-data/1.0/ 200
* /rest/stp/1.0/license/status 200
* /rest/api/latest/profile/recent/repos?avatarSize=32 200

Check if any new URLs were used - in this case - further analysis is needed.

1. As an administrator

Open **STASH\_URL/users/admin/repos?create**

Enter any repository name, click "Create repository".

In the inspector Network tab - take a look at the first request.

It's a **POST** sent to **/users/admin/repos?create**.

You have to check if such a **POST** is blocked for the unauthorized users.

To do that, use any tool allowing you to do a HTTP POST.

One sample tool for Chrome:

*https://chrome.google.com/webstore/detail/advanced-rest-client/hgmloofddffdnphfgcellkdfbfbjeloo*

Replicate the post data which were used when you created repository for an administrator. It should give you a 401 status.

If that's not the case - plugin needs updating / checking.

1. Additional checks should be made to verify if the **REST API** internals have changed

Go to **https://developer.atlassian.com/stash/docs/latest/reference/rest-api.html**

Open "Stash Core REST API" link.

Find "Personal Repositories" section on the page. It describes the URLs used to manage Personal Repositories.

We need to check if they are blocked for a user without private repositories permissions.

Interesting URLs at the moment:

**http://example.com/rest/api/1.0/users/{userSlug}/repos** [GET]

**http://example.com/rest/api/1.0/users/{userSlug}/repos/{repositorySlug}** [PUT, POST]

**http://example.com/rest/api/1.0/projects/{projectKey}/repos** [GET, POST]

**http://example.com/rest/api/1.0/projects/{projectKey}/repos/**{repositorySlug} [PUT, POST]

All of these URLs should return status **401** for an unauthorized user.