Jenkins says my reverse proxy setup is broken

Since Jenkins 1.572 this message can also appear if you don't access Jenkins through a reverse proxy: Make sure the Jenkins URL configured in the System Configuration matches the URL you're using to access Jenkins.

Symptoms

An error message is displayed in the "Manage Jenkins" page - "It appears that your reverse proxy set up is broken"

Background

For a reverse proxy to work correctly, it needs to rewrite both the request and the response. Request rewriting involves receiving an inbound HTTP call and then making a forwarding request to Jenkins (sometimes with some HTTP headers modified, sometimes not). Failing to configure the request rewriting is easy to catch, because you just won't see any pages at all.

But correct reverse proxying also involves one of two options, EITHER

- rewriting the response (for more information see Hyperlinks in HTML). The primary place where this needs to happen is the "Location" header in the response, which is used during redirects. Jenkins will send back "Location: http://actual.server:8080/jenkins/foobar" and the reverse proxy needs to rewrite this to "Location: http://nice.name/jenkins/foobar". Unfortunately, failing to configure this correctly is harder to catch; OR
- Setting the X-Forwarded-Host (and perhaps X-Forwarded-Port) header on the forwarded request. Jenkins will parse those headers and generate all the redirects and other links on the basis of those headers. Depending on your reverse proxy it may be easier to set X-Forwarded-Host and X-Forwarded-Port to the hostname and port in the original Host header respectively or it may be easier to just pass the original Host header through as X-Forwarded-Host and delete the X-Forwarded-Port header from the request. You will also need to set the X-Forwarded-Proto header if your reverse proxy is changing from https to http or vice-versa

So Jenkins has a proactive monitoring to make sure this is configured correctly. It uses XmlHttpRequest to request a specific URL in Jenkins (via relative path, so this will always get through provided the request is properly rewritten), which will then redirect the user to another page in Jenkins (this only works correctly if you configured the response rewriting correctly), which then returns 200.

This error message indicates that this test is failing - and the most likely cause is that the response rewriting is misconfigured. See the Server Configuration Guides (below) for additional tips about configuring a reverse proxy.

Note. The reverse proxy tests were improved in release 1.552 so users with previously working proxy setups may start to receive proxy warnings.

Further Diagnosis

For further diagnosis, try using cURL:

```
curl -il -e http://your.reverse.proxy/jenkins/manage \
```

(assuming your Jenkins is located at http://your.reverse.proxy/jenkins/ - and is open to anonymous read access)

Server Configuration Guides

While the pages talk primarily about Apache / NGinX / HAProxy / Squid, they also have information that applies to other reverse proxies.
Running Jenkins behind Apache
Running Jenkins behind Nginx
Running Jenkins behind HAProxy
Running Jenkins behind Squid
Running Jenkins behind IIS

If using Apache check that `nocanon` is set on `ProxyPass` and that `AllowEncodedSlashes` is set as per the Apache link above.

`AllowEncodedSlashes` is not inherited in Apache configs, so this directive must be placed inside the `VirtualHost` definition.