

Runtime installation troubleshooting

If these troubleshooting items do not help you solve the problem, contact our service desk.

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Restart Apache to uncover errors

If your runtime is in service and otherwise working you may prefer to look only at logs however many problems can be diagnosed by restarting apache and looking at the error messages. If you restart Apache, users will not be able to log in during the restart, but will not otherwise be affected.

```
sudo service httpd restart
```

Apache errors referring to metadata or certificates

Error messages relating to metadata or certificates after an installation or update are usually cache related and clearing the cache is usually the solution. This can be done by going to the temporary files directory (`/var/cache/openathens`) and removing any files starting with `ata-md` and restarting apache. E.g:

```
sudo rm -f /var/cache/openathens/ata-md*
sudo service httpd restart
```

Apache error: Syntax error on line 16 of /etc/openathens/httpd/vhosts/001_proxy_links.conf: Invalid command 'OAProxyLoginLinkPath', perhaps misspelled or defined by a module not included in the server configuration.

This happens if you have changed the hostname associated with the proxy service. To rectify: reattach the runtime to the admin console by selecting it in the interface, clicking on edit and stepping through the wizard. Once done, publish from the admin console again.

Apache error: Couldn't open module: %{ATACAMA_HOME}/modules/encoder_module.so:cannot open shared object file: No such file or directory

This and similar mean that the Atacama home environment variable is unset. To fix, add a line to the following file:

```
sudo nano /etc/sysconfig/httpd
```

Add the line

```
export ATACAMA_HOME=/usr/share/atacama-platform
```

Apache error: *Some of your private key files are encrypted for security reasons*

This indicates that your web certificate has a password on it which means you need to manually restart Apache and enter it every time you publish from the admin console. To remove the password see: [Removing a password from a certificate](#)

If Apache does not start when the server is rebooted

Run the command:

```
sudo chkconfig httpd on
```

This will enable Apache during the startup processes

SE Linux

SE (or Security Enhanced) Linux can sometimes get in the way when you edit or update things. The check to see if it is the general cause is simple - temporarily disable it and see if the problem (usually with starting Apache) goes away. The commands are:

```
sudo setenforce Permissive
sudo setenforce Enforcing
```

If you can restart Apache with SE Linux in permissive mode, but not in enforcing mode, you will likely have some different security contexts set on certificate or cache files - see the section in: [Certificates on the runtime](#)

Other files that can sometimes be affected are:

```
sudo chcon system_u:object_r:httpd_modules_t:s0 /usr/lib/httpd/modules/mod_openathens.so
sudo chcon system_u:object_r:cert_t:s0/etc/pki/tls/certs/*.yourdomain.crt
sudo chcon system_u:object_r:cert_t:s0/etc/pki/tls/private/*.yourdomain.key
sudo chcon system_u:object_r:cert_t:s0/usr/share/atacama-platform/keys/*.yourdomain.crt
sudo chcon system_u:object_r:var_t:s0/var/openathens/www/idp/oala/*
```

A read only filesystem is reported

This has only been observed on VMWare, and restarting the virtual server from the VMWare interface is usually the fix

Adding an additional runtime replaces an existing runtime in the admin console interface

If you have cloned or copied an existing runtime, the admin console will see them as the same because they will have the same OpenAthens system guid. Deploying and configuring a new runtime from our template is the recommended approach.

There is an unsupported workaround if necessary: [Modifying system GUID](#)

After changing the proxy hostname, proxy resources cannot be accessed

Reattach the runtime(s), clear the cache on each runtime and restart Apache. Active users sessions will be lost.

Cannot update the runtime via Yum

As well as the username and password in the `/etc/yum.repos.d/openathens.repo` file, the access to the repository is also IP restricted using the same details as are on the account in the OpenAthens MD administration area. If the runtime is outside of the specified range, the connection will fail. Rectify by checking the credentials and adding the relevant IP address to the account.

Checking the logs

The runtime logs are in `/var/log/openathens`.

The `platform-apache` and `login-apache` files will be most useful. For more detail on the logs see: [Where the logs are on the servers](#)

Published changes do not appear to get applied

Compare the published version number from the admin console with the model number reported by the runtime info page (on each runtime). The page is found at <https://runtimeaddress/oala/info>.

If the numbers differ, this indicates the runtime is using a cached model. Clearing the cache and restarting apache is usually the remedy:

```
sudo rm -f /var/cache/openathens/*
sudo service httpd restart
```

Statistics are not available in the administration console

No statistics are available

Usually a network problem - port 5051 is used for reading the logs and may have been blocked by a firewall setting.

Recent statistics are unavailable but older ones are

Restart the openathensd process:

```
sudo service openathensd restart
```

Targeted ID values for a user change

The targetedID passed to service providers is generated from the user's username, your entityID, the resource's entityID and a salt value. Changes to any of these, including case, will change the targetedID. You should therefore be wary of selecting a username field that is not case normalised by your datastore.

Turn on debug level logging

Debug level logging can generate massive amounts of data on an active server so should be used with caution and turned off afterwards. See [Where the logs are on the servers](#)

Errors when accessing https URLs on proxy sites

This can happen if:

- You do not have an appropriate wildcard SSL certificate installed (should be *.proxy.yourdomain.com)
- You have not enabled SSL/TLS settings on the proxy resource in question

Resource requires Form POST method

Form POST is not supported and workarounds such as find and replace are not secure. Sorry.

Users cannot see any proxy sites

If publishing does not update the page at <http://proxy.yourdomain.com>, reattaching the runtime should eliminate any problems caused by changes to the proxy configuration. To reattach the runtime to the admin console: select the runtime on the overview tab, click on edit and step through the wizard. Once done, publish from the admin console again.

Users continually drop out of a proxied site

This can happen if:

- not all hostnames of the resource are included in the proxy configuration
- hostnames are included, but links have ports specified that are not included

In both cases, add the missing information to the proxy configuration

Users on really old browsers have problems accessing proxied sites

If you have a single runtime and use the same network interface for the proxy and IdP function, the system uses SNI (Server Name Indication) to keep things straight. Some older browsers did not support this (e.g. IE 6 and below).

Resolve by adding a second NIC to the runtime for the proxy to use. See: [Activating the proxy server function](#)