

Supported TLS Cipher Suites

AtScale supports a few sets of TLS 1.2 cipher suites: one for the Web front-end, one for the engine, and one for LDAPS connections.

Front-End

The AtScale front-end application supports these cipher suites:

- ▲ TLS_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256



Important: It is not recommended to use the TLS_RSA_WITH_AES_256_GCM_SHA384 cipher.

If you need to configure which of these are enabled:

1. Log in to the system where AtScale is installed.
2. Open the `/opt/atscale/current/conf/modeler/app.conf` file with a text editor.
3. Add the `http.ssl.cipherSuites` setting, as shown in the example below; or update it, if it is present:

```
http.ssl.cipherSuites="TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256,  
TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256"
```

Note the following:

- ▲ This is an example with two suites specified. Set your own suites as needed.
- ▲ The suites must be separated with comma signs (,).
- ▲ The list of suites must be in quotes, as shown in the example.

AtScale Engine

The following JVM cipher suites are supported by the AtSale Engine:

- ▲ TLS_DHE_DSS_WITH_AES_128_CBC_SHA
- ▲ TLS_DHE_DSS_WITH_AES_128_CBC_SHA256
- ▲ TLS_DHE_DSS_WITH_AES_128_GCM_SHA256
- ▲ TLS_DHE_DSS_WITH_AES_256_CBC_SHA
- ▲ TLS_DHE_DSS_WITH_AES_256_CBC_SHA256

- ▲ TLS_DHE_DSS_WITH_AES_256_GCM_SHA384
- ▲ TLS_DHE_RSA_WITH_AES_128_CBC_SHA
- ▲ TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_DHE_RSA_WITH_AES_256_CBC_SHA
- ▲ TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- ▲ TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA
- ▲ TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA
- ▲ TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384
- ▲ TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA
- ▲ TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA
- ▲ TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- ▲ TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDH_ECDSA_WITH_AES_128_CBC_SHA
- ▲ TLS_ECDH_ECDSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_ECDH_ECDSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDH_ECDSA_WITH_AES_256_CBC_SHA
- ▲ TLS_ECDH_ECDSA_WITH_AES_256_CBC_SHA384
- ▲ TLS_ECDH_ECDSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDH_RSA_WITH_AES_128_CBC_SHA
- ▲ TLS_ECDH_RSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_ECDH_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDH_RSA_WITH_AES_256_CBC_SHA
- ▲ TLS_ECDH_RSA_WITH_AES_256_CBC_SHA384
- ▲ TLS_ECDH_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_EMPTY_RENEGOTIATION_INFO_SCSV
- ▲ TLS_RSA_WITH_AES_128_CBC_SHA
- ▲ TLS_RSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_RSA_WITH_AES_256_CBC_SHA
- ▲ TLS_RSA_WITH_AES_256_CBC_SHA256
- ▲ TLS_RSA_WITH_AES_256_GCM_SHA384

LDAPS

AtScale supports the following cipher suites as a client for LDAPS sessions triggered by NTLM requests:

- ▲ TLS_AES_128_GCM_SHA256
- ▲ TLS_AES_256_GCM_SHA384
- ▲ TLS_CHACHA20_POLY1305_SHA256
- ▲ TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256
- ▲ TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256
- ▲ TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- ▲ TLS_DHE_RSA_WITH_CHACHA20_POLY1305_SHA256
- ▲ TLS_DHE_DSS_WITH_AES_256_GCM_SHA384
- ▲ TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- ▲ TLS_DHE_DSS_WITH_AES_128_GCM_SHA256
- ▲ TLS_ECDHE_ECDSA_WITH_AES_256_CBC_SHA384
- ▲ TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- ▲ TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- ▲ TLS_DHE_DSS_WITH_AES_256_CBC_SHA256
- ▲ TLS_ECDHE_ECDSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- ▲ TLS_DHE_DSS_WITH_AES_128_CBC_SHA256
- ▲ TLS_EMPTY_RENEGOTIATION_INFO_SCSV