

Newly installed AppMon component cannot connect to server

Information:

Environment	
AppMon version	Date
6.5	Sun Oct 28 11:44:30 CET 2018
7.0, 7.1	Thu Mar 07 11:37:35 CET 2019

Symptoms
<p>A newly installed AppMon deployment may run into this problem after Sun Oct 28 11:44:30 CET 2018 (version 6.5) and after Thu Mar 07 11:37:35 CET 2019 (versions 7.0 and 7.1).</p> <p>Frontend Server is not connecting to Backend Server, Collector is not connecting to Backend Server, Backend Server is not connecting to Memory Analysis Server and log entries similar to those below can be found in the corresponding logs:</p> <p>FrontendServer.0.0.log</p> <pre>2018-10-29 14:07:25 SEVERE [ImportCertificateStrategy] certificate is expired and not already accepted for [localhost:2031_client]: com.dynatrace.diagnostics.httpClient.ssl.ImportCertificateStrategy handleExpiredCertificate:154 java.security.cert.CertificateExpiredException: NotAfter: Sun Oct 28 11:44:30 CET 2018 2018-10-29 14:07:25 SEVERE [ImportCertificateStrategy] client did not accepted ssl client certificates. will not establish trust for [localhost:2031_client]: com.dynatrace.diagnostics.httpClient.ssl.ImportCertificateStrategy handleExpiredCertificate:165 java.security.cert.CertificateExpiredException: NotAfter: Sun Oct 28 11:44:30 CET 2018 2018-10-29 14:07:25 WARNING [DynaTraceSSLSocketFactory] Unable to connect to :2031 probably untrusted certificate: com.dynatrace.diagnostics.communication.tcp.socket.ssl.DynaTraceSSLSocketFactory openAndConnectSocket:336 javax.net.ssl.SSLHandshakeException: java.security.cert.CertificateExpiredException: client did not accepted ssl client certificates. will not establish trust for [localhost:2031_client]</pre>
<p>Server.0.0.log when trying to connect to Dynatrace Memory Analysis Server</p>

```
2018-10-29 14:18:53 SEVERE [ImportCertificateStrategy] certificate
is expired and not already accepted for [127.0.0.1:7788_client]:
com.dynatrace.diagnostics.httpclient.ssl.ImportCertificateStrategy
handleExpiredCertificate:154
```

```
java.security.cert.CertificateExpiredException: NotAfter: Sun Oct
28 11:44:30 CET 2018
```

```
2018-10-29 14:18:53 SEVERE [ImportCertificateStrategy] client did
not accepted ssl client certificates. will not establish trust for
[127.0.0.1:7788_client]:
```

```
com.dynatrace.diagnostics.httpclient.ssl.ImportCertificateStrategy
handleExpiredCertificate:165
```

```
java.security.cert.CertificateExpiredException: NotAfter: Sun Oct
28 11:44:30 CET 2018
```

```
2018-10-29 14:18:53 WARNING [DynaTraceSSLSocketFactory] Unable to
connect to 127.0.0.1:7788 probably untrusted certificate:
```

```
com.dynatrace.diagnostics.communication.tcp.socket.ssl.DynaTraceSS
LSocketFactory openAndConnectSocket:336
```

```
javax.net.ssl.SSLHandshakeException:
```

```
java.security.cert.CertificateExpiredException: client did not
accepted ssl client certificates. will not establish trust for
[127.0.0.1:7788_client]
```

Collector.0.0.log

```
2018-10-29 14:21:53 SEVERE [ImportCertificateStrategy] certificate
is expired and not already accepted for [localhost:6699_client]:
com.dynatrace.diagnostics.httpclient.ssl.ImportCertificateStrategy
handleExpiredCertificate:154
```

```
java.security.cert.CertificateExpiredException: NotAfter: Sun Oct
28 11:44:30 CET 2018
```

```
2018-10-29 14:21:53 SEVERE [ImportCertificateStrategy] client did
not accepted ssl client certificates. will not establish trust for
[localhost:6699_client]:
```

```
com.dynatrace.diagnostics.httpclient.ssl.ImportCertificateStrategy
handleExpiredCertificate:165
```

```
java.security.cert.CertificateExpiredException: NotAfter: Sun Oct
28 11:44:30 CET 2018
```

```
2018-10-29 14:21:53 WARNING [DynaTraceSSLSocketFactory] Unable to
connect to localhost:6699 probably untrusted certificate:
```

```
com.dynatrace.diagnostics.communication.tcp.socket.ssl.DynaTraceSS
LSocketFactory openAndConnectSocket:336
```

```
javax.net.ssl.SSLHandshakeException:
```

```
java.security.cert.CertificateExpiredException: client did not
accepted ssl client certificates. will not establish trust for
[localhost:6699_client]
```

Solution

There are multiple options available to solve the problem depending on the used AppMon version:

Renew the certificate on the server (6.5, 7.0, 7.1)

1. Windows:

- Download the AppMon KeyTool [here](#).
- The affected component(s) must have been started once, but for applying the fix, please stop the component.
- Extract appmon-keytool.zip
- Open **Administrator** cmd
- Go into appmon-keytool\bin folder
- Run the AppMon KeyTool like `c:\appmon-keytool\bin>appmon-keytool.bat "C:\Program Files\Dynatrace\Dynatrace 6.5\server\conf"` (Hint: The JRE running the AppMon KeyTool must have the same security policy as the JRE running the AppMon server. Most likely limited, otherwise a corresponding error message is logged)
- Above steps are only required to be done on the server.

2. Linux:

- Download the AppMon KeyTool [here](#).
- The affected component(s) must have been started once, but for applying the fix, please stop the component.
- Extract appmon-keytool.zip
- Set the APP_HOME variable (pointing to appmon-keytool\bin)
- Run the linux script from `./appmon-keytool /opt/dynatrace-7.1/server/conf`
- Above steps are only required to be done on the server.

Sample console output:

```
Okt 29, 2018 3:58:09 PM
com.dynatrace.diagnostics.keystore.security.SecurityProvider
ensureBCProviderIsAvailable
INFO: Security provider 'BC' has been added successfully at pos 11
Okt 29, 2018 3:58:17 PM
com.dynatrace.diagnostics.keystore.AppMonKeyTool main
INFO: Successfully added newly generated private key and
certificates to ServerKeyStore
Okt 29, 2018 3:58:17 PM
com.dynatrace.diagnostics.keystore.AppMonKeyTool main
INFO: Successfully added newly generated private key and
certificates to FrontendServerKeyStore
Okt 29, 2018 3:58:17 PM
com.dynatrace.diagnostics.keystore.AppMonKeyTool main
INFO: Successfully added newly generated private key and
certificates to AnalysisServerKeyStore
Okt 29, 2018 3:58:17 PM
com.dynatrace.diagnostics.keystore.AppMonKeyTool main
SEVERE: Failed to add newly generated private key and certificates
to CollectorKeyStore: Keystore files do not exist.
Okt 29, 2018 3:58:17 PM
com.dynatrace.diagnostics.keystore.AppMonKeyTool main
SEVERE: Failed to add newly generated private key and certificates
to ClientKeyStore: Keystore files do not exist.
```

Use updated installers (7.0, 7.1)

For AppMon 7.0 and 7.1, new "full install", "collector", "server" and "analysis server" packages have been published.

AppMon	Old GA version	New GA version
7.0 (2017 May)	7.0.0.2469	7.0.0.2474
7.1 (2018 April)	7.1.0.1803	7.1.0.1902

The new binaries are available at downloads.dynatrace.com.

Root Cause

The shipped certificate is expired and thus no initial connection can be established for non-interactive components.