# **TLSv1.2 Changes**

# **IBM console changes:**

<u>SSL certificate and key management</u> > <u>SSL configurations</u> > <u>CellDefaultSSLSettings</u> > Quality of protection (QoP) settings

Specifies the security level, ciphers, and mutual authentication settings.

Specifies the security level, ciphers, and mutual authentication settings. General Properties Client authentication None Protocol TLSv1.2 Provider Predefined JSSE provider Select provider IBMJSSE2 ▼ Oustom JSSE provider Cipher suite settings Cipher suite groups Update selected ciphers Strong ▼ Cipher suites Selected ciphers Add >> SSL\_RSA\_WITH\_AES\_128\_CBC\_SHA256 SSL\_DHE\_RSA\_WITH\_AES\_128\_CBC\_SHA256
SSL\_DHE\_DSS\_WITH\_AES\_128\_CBC\_SHA256
SSL\_RSA\_WITH\_AES\_128\_CBC\_SHA
CCL\_DUE\_DEA\_MITH\_AES\_120\_CBC\_SHA << Remove

SSL certificate and key management > SSL configurations > NodeDefaultSSLSettings > Quality of protection (QoP) settings

Specifies the security level, ciphers, and mutual authentication settings.

General Properties Client authentication None • Protocol TLSv1.2 • Provider Predefined JSSE provider Select provider IBMJSSE2 ▼ Custom JSSE provider Cipher suite settings Cipher suite groups Update selected ciphers Strong ▼ Cipher suites Selected ciphers Add >> SSL\_RSA\_WITH\_AES\_128\_CBC\_SHA256 SSL\_DHE\_RSA\_WITH\_AES\_128\_CBC\_SHA256 SSL\_DHE\_DSS\_WITH\_AES\_128\_CBC\_SHA256 SSL\_RSA\_WITH\_AES\_128\_CBC\_SHA << Remove

SSL\_DHE\_RSA\_WITH\_AES\_128\_CBC\_SHA

SSL certificate and key management > SSL configurations > XDADefaultSSLSettings > Quality of protection (QoP) settings

Specifies the security level, ciphers, and mutual authentication settings.

General Properties

Client authentication Required ▼	
Protocol  TLSv1.2 ▼	
Provider  ● Predefined JSSE provider Select provider  IBMJSSE2 ▼  ● Custom JSSE provider  Custom provider	
Cipher suite settings Cipher suite groups Strong ▼	Update selected ciphers
Cipher suites  Add >>  < Remove	Selected ciphers  SSL_RSA_WITH_AES_128_CBC_SHA256  SSL_DHE_RSA_WITH_AES_128_CBC_SHA256  SSL_DHE_DSS_WITH_AES_128_CBC_SHA256  SSL_RSA_WITH_AES_128_CBC_SHA  SSL_DHE_RSA_WITH_AES_128_CBC_SHA
Apply→ ok	

# **Appserver settings:**

/opt/apps/IBM/WebSphere/AppServer/profiles/Dmgr01/properties

/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/properties

```
[wcsuser@g9t3902 properties]$ pwd
/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/properties
[wcsuser@g9t3902 properties]$ vi ssl.client.props
```

```
com.ibm.ssl.alias=DefaultSSLSettings
com.ibm.ssl.protocol=TLSv1.2
com.ibm.ssl.securityLevel=HIGH
com.ibm.ssl.trustManager=IbmPKIX
com.ibm.ssl.keyManager=IbmX509
com.ibm.ssl.contextProvider=IBMJSSE2
com.ibm.ssl.enableSignerExchangePrompt=gui
```

## **Solr Appserver settings:**

/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE\_solr/properties

```
[wcsuser@g9t3901 apps]$ cd /opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE_solr/properties [wcsuser@g9t3901 properties]$
```

### vi ssl.client.props

```
com.ibm.ssl.alias=DefaultSSLSettings
com.ibm.ssl.protocol=TLSv1.2
com.ibm.ssl.securityLevel=HIGH
com.ibm.ssl.trustManager=IbmPKIX
com.ibm.ssl.keyManager=IbmX509
com.ibm.ssl.contextProvider=IBMJSSE2
com.ibm.ssl.enableSignerExchangePrompt=gui
```

# **Webserver Changes:**

```
[wcsuser@g9t3900 conf]$ pwd
/opt/apps/IBM/HTTPServer/conf
[wcsuser@g9t3900 conf]$ vi httpd.conf
```

```
SSLEnable

SSLProtocolDisable SSLv2 SSLv3 TLSv10 TLSv11

SSLClientAuth none

ServerName g9t3900.houston.hpicorp.net

</VirtualHost>
```

### **Agent Server settings:**

1) Add this property in **-Dhttps.protocols=TLSv1.2** in file /opt/apps/IBM/Sterling93/bin/agentserver.sh

### **WESB Appserver**

/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/properties/ssl.client.props

```
com.ibm.ssl.alias=DefaultSSLSettings
com.ibm.ssl.protocol=TLSv1.2
com.ibm.ssl.securityLevel=HIGH
com.ibm.ssl.trustManager=IbmPKIX
com.ibm.ssl.keyManager=IbmX509
com.ibm.ssl.contextProvider=IBMJSSE2
com.ibm.ssl.enableSignerExchangePrompt=gui
```

Restart the dmgr using stopmanger and startmanager

Stop the node: WAS\_install\profiles\AppSrv01\bin\stopNode.bat -username -password

Stop all Application Servers running on this node using stopserver command

Synchronize the node using synchode command in each app servers & solr servers

./syncNode.sh g9t3902.houston.hpicorp.net 8879 -username configadmin -password \*\*\*\*

From WAS\_install\profiles\AppSrv01\bin\syncNode.bat dmgrhostname dmgrsoapport -username consoleadminuser -password consoleuserpassword

Start the node: From WAS\_install\profiles\AppSrv01\bin\startNode.bat

Check the Sync status of node from console.. and then start the application server from console.

### **Changes in Job server:**

/opt/apps/IBM/WebSphere/AppServer/profiles/ETRLIVE/properties/ssl.client.props

```
com.ibm.ssl.alias=DefaultSSLSettings
com.ibm.ssl.protocol=TLSv1.2
com.ibm.ssl.securityLevel=HIGH
com.ibm.ssl.trustManager=IbmPKIX
com.ibm.ssl.keyManager=IbmX509
com.ibm.ssl.contextProvider=IBMJSSE2
com.ibm.ssl.enableSignerExchangePrompt=gui
```