

# WebRTC traffic encryption hardware acceleration

By default, [Bouncy Castle](#) library is used to encrypt WebRTC traffic

```
webrtc_aes_crypto_provider=BC
```

However, if [AES](#) instructions are supported by server CPU, it's recommended to enable [Java Cryptography Extension](#) usage with the following parameter in [flashphoner.properties](#) file

```
webrtc_aes_crypto_provider=JCE
```

and enable AES support in JVM settings in [wcs-core.properties](#) file

```
-server  
-XX:+UnlockDiagnosticVMOptions  
-XX:+UseAES  
-XX:+UseAESIntrinsics
```

In this case, encryption performance increases by 1,8-2 times due to hardware acceleration, that should decrease server CPU load average.

This command should be used to check if server CPU supports AES instructions

```
lscpu | grep -o aes
```

If the command prints

```
aes
```

it means AES instructions are supported

