

Server SSL certificates checking while Websocket connection establishing

By default, Android SDK delegates SSL certificates checking to the system level while establishing secure Websocket connection to a server. On the system level, in its turn, server certificate is compared with system certificate storage content.

In this case, if the server uses self-signed certificate (for debugging purposes), this certificate will not pass the checking. Use the following ways to bypass this depending on Android SDK build.

Not recommended: Trust all the certificates

Since build **1.1.0.18** the session option `SessionOptions.trustAllCertificates` is added, `false` by default. To accept any certificates including self-signed ones, this option should be set to `true`

```
SessionOptions sessionOptions = new SessionOptions(url);
sessionOptions.trustAllCertificates(true);
```

Usage example:

[code](#)

```
private CheckBox mTrustAllCer;
...
mTrustAllCer = (CheckBox) findViewById(R.id.trust_all_certificates_default);
...
/**
 * The options for connection session are set.
 * WCS server URL is passed when SessionOptions object is created.
 * SurfaceViewRenderer to be used to display video from the camera is set with
 * method SessionOptions.setLocalRenderer().
 * SurfaceViewRenderer to be used to display preview stream video received
 * from the server is set with method SessionOptions.setRemoteRenderer().
 */
SessionOptions sessionOptions = new SessionOptions(url);
sessionOptions.setLocalRenderer(localRender);
sessionOptions.setRemoteRenderer(remoteRender);
sessionOptions.trustAllCertificates(mTrustAllCer.isChecked());
```

 **Warning**

Today, Google Play security requirements does not allow to publish an application with such code. Use the recommended way below.

Recommended: Add self-signed certificate to application resources

Since Android SDK build [1.1.0.56](#) `X509TrustManager` class implementation is removed from Android SDK code. For testing purposes, self-signed certificate must be added to application resources. Also, the configuration file `network_security_config.xml` containing certificate file description must be added:

[code](#)

```
<network-security-config>
  <base-config>
    <trust-anchors>
      <certificates src="@raw/my_ca" />
      <certificates src="system" />
    </trust-anchors>
  </base-config>
</network-security-config>
```