

# Configurare certificati server Web di terze parti per i servizi Web CVP

## Sommario

[Introduzione](#)

[Prerequisiti](#)

[Requisiti](#)

[Componenti usati](#)

[Configurazione](#)

[Installare il certificato in Call Studio per eseguire il debug dell'applicazione.](#)

[Installare il certificato nel server VXML CVP.](#)

[Verifica](#)

## Introduzione

Questo documento descrive la procedura per caricare i certificati per l'applicazione Voice Extensible Markup Language (VXML) di Cisco Customer Voice Portal (CVP) per accedere ai servizi Web.

## Prerequisiti

Fare riferimento alle opzioni del comando `java keytool`.

[Documentazione di Keytool](#)

## Requisiti

Cisco raccomanda la conoscenza dei seguenti argomenti:

- Cisco Unified Customer Voice Portal (CVP)

## Componenti usati

Le informazioni fornite in questo documento si basano sulle seguenti versioni software e hardware:

- Cisco Unified Customer Voice Portal (CVP) versione 11.X o successive

## Configurazione

In questo esempio viene installato un certificato denominato **webserver.cer**. Il certificato viene copiato nella stessa cartella del repository dei certificati. Il repository dei certificati, `cacerts`, la password del keystore è *changeit*.

## Installare il certificato in Call Studio per eseguire il debug dell'applicazione.

L'archivio certificati per Call Studio è %CALLSTUDIO\_HOME%\eclipse\jre\lib\security\cacerts. Il programma Keytool.exe si trova nella cartella %CALLSTUDIO\_HOME%\eclipse\jre\bin.

```
cd %CALLSTUDIO_HOME%\eclipse\jre\lib\security

C:\Cisco\CallStudio\eclipse\jre\lib\security>dir
Volume in drive C has no label.
Volume Serial Number is 1800-FBA8

Directory of C:\Cisco\CallStudio\eclipse\jre\lib\security

07/17/2019  11:03 AM    <DIR>          .
07/17/2019  11:03 AM    <DIR>          ..
12/23/2018  08:33 AM                4,054 blacklist
12/23/2018  08:33 AM                1,253 blacklisted.certs
12/23/2018  08:33 AM            114,757 cacerts
12/23/2018  08:33 AM                2,466 java.policy
12/23/2018  08:33 AM            42,624 java.security
12/23/2018  08:33 AM                 98 javaws.policy
02/19/2019  03:38 PM    <DIR>          policy
12/23/2018  08:33 AM                 0 trusted.libraries
03/24/2016  12:45 PM            2,090 webserver.cer
           8 File(s)            167,342 bytes
           3 Dir(s)   54,560,612,352 bytes free
```

```
C:\Cisco\CallStudio\eclipse\jre\lib\security>..\..\bin\keytool.exe -importcert -file
webserver.cer -keystore cacerts -alias somewebserver
Enter keystore password:changeit
Trust this certificate? [no]:yes
Certificate was added to keystore
```

## Installare il certificato nel server VXML CVP.

L'archivio certificati per il server VXML CVP è %CVP\_HOME%\jre\lib\security\cacerts. Il programma Keytool.exe si trova nella cartella %CVP\_HOME%\jre\bin.

```
cd %CVP_HOME%\jre\lib\security\

C:\Cisco\CVP\jre\lib\security>dir
Volume in drive C has no label.
Volume Serial Number is 1800-FBA8

Directory of C:\Cisco\CVP\jre\lib\security

07/17/2019  11:46 AM    <DIR>          .
07/17/2019  11:46 AM    <DIR>          ..
12/23/2018  08:37 AM                4,054 blacklist
12/23/2018  08:37 AM                1,253 blacklisted.certs
12/23/2018  08:37 AM            114,757 cacerts
12/23/2018  08:37 AM                2,466 java.policy
12/23/2018  08:37 AM            42,624 java.security
12/23/2018  08:37 AM                 98 javaws.policy
02/12/2019  12:45 PM    <DIR>          policy
12/23/2018  08:37 AM                 0 trusted.libraries
03/24/2016  12:45 PM            2,090 webserver.cer
           8 File(s)            167,342 bytes
           3 Dir(s)   54,558,191,616 bytes free
```

```
C:\Cisco\CVP\jre\lib\security>..\..\bin\keytool.exe -importcert -file webserver.cer -keystore cacerts -alias somewebserver
Enter keystore password:changeit
Trust this certificate? [no]: yes
Certificate was added to keystore
```

## Verifica

Per controllare i certificati installati nel repository nella cartella in cui si trova il repository dei certificati cacerts, eseguire il comando:

```
..\..\bin\keytool.exe -list -keystore cacerts -storepass changeit -v
Keystore type: jks
Keystore provider: SUN
```

Your keystore contains 106 entries

```
Alias name: verisignclass2g2ca [jdk]
Creation date: Aug 25, 2016
Entry type: trustedCertEntry
```

```
Owner: OU=VeriSign Trust Network, OU="(c) 1998 VeriSign, Inc. - For authorized use only",
OU=Class 2 Public Primary Certification Authority - G2, O="VeriSign, Inc.", C=US
Issuer: OU=VeriSign Trust Network, OU="(c) 1998 VeriSign, Inc. - For authorized use only",
OU=Class 2 Public Primary Certification Authority - G2, O="VeriSign, Inc.", C=US
Serial number: b92f60cc889fa17a4609b85b706c8aaf
Valid from: Sun May 17 17:00:00 PDT 1998 until: Tue Aug 01 16:59:59 PDT 2028
Certificate fingerprints:
  MD5:  2D:BB:E5:25:D3:D1:65:82:3A:B7:0E:FA:E6:EB:E2:E1
  SHA1: B3:EA:C4:47:76:C9:C8:1C:EA:F2:9D:95:B6:CC:A0:08:1B:67:EC:9D
  SHA256:
3A:43:E2:20:FE:7F:3E:A9:65:3D:1E:21:74:2E:AC:2B:75:C2:0F:D8:98:03:05:BC:50:2C:AF:8C:2D:9B:41:A1
Signature algorithm name: SHA1withRSA
Subject Public Key Algorithm: 1024-bit RSA key
Version: 1
```

```
*****
*****
```

```
Alias name: digicertassuredidg3 [jdk]
Creation date: Aug 25, 2016
Entry type: trustedCertEntry
```

```
Owner: CN=DigiCert Assured ID Root G3, OU=www.digicert.com, O=DigiCert Inc, C=US
Issuer: CN=DigiCert Assured ID Root G3, OU=www.digicert.com, O=DigiCert Inc, C=US
Serial number: ba15afa1ddfa0b54944afcd24a06cec
Valid from: Thu Aug 01 05:00:00 PDT 2013 until: Fri Jan 15 04:00:00 PST 2038
Certificate fingerprints:
  MD5:  7C:7F:65:31:0C:81:DF:8D:BA:3E:99:E2:5C:AD:6E:FB
  SHA1: F5:17:A2:4F:9A:48:C6:C9:F8:A2:00:26:9F:DC:0F:48:2C:AB:30:89
  SHA256:
7E:37:CB:8B:4C:47:09:0C:AB:36:55:1B:A6:F4:5D:B8:40:68:0F:BA:16:6A:95:2D:B1:00:71:7F:43:05:3F:C2
Signature algorithm name: SHA384withECDSA
Subject Public Key Algorithm: 384-bit EC key
Version: 3
```

Extensions:

#1: ObjectId: 2.5.29.19 Criticality=true

BasicConstraints:[

CA:true

PathLen:2147483647

]

#2: ObjectId: 2.5.29.15 Criticality=true

KeyUsage [

DigitalSignature

Key\_CertSign

Crl\_Sign

]

#3: ObjectId: 2.5.29.14 Criticality=false

SubjectKeyIdentifier [

KeyIdentifier [

0000: CB D0 BD A9 E1 98 05 51 A1 4D 37 A2 83 79 CE 8D .....Q.M7..y..

0010: 1D 2A E4 84 .....\*

]

]

.....

..\..\bin\keytool.exe -list -keystore cacerts -storepass changeit -alias somewebserver -v

Alias name: somewebserver

Creation date: Jul 17, 2019

Entry type: trustedCertEntry

Owner: CN=.....