

## Downloading SSL Certificate to Cisco WLAN Controllers

When you don't want to use self-signed certificate for ssl access or if you want use ssl certificate signed by company CA or Third-party CA do the following steps.

Using openssl:

1. Generate a private/public key pair and generate a csr

```
openssl req -new -newkey rsa:1024 -nodes -keyout wlkey.pem -out wlreq.pem
```

Remember in "common name" field type dns name of your WLC!!!

2. Submit the request to a CA

You can submit to your own CA or to Third-Party CA

3. Combine signed certificate and private key into a pkcs12 file.

```
openssl pkcs12 -export -in wlcert.pem -inkey wlkey.pem -out wlc.p12 -clcerts \
-passin pass:xxx -passout pass:xxx ,where:
```

wlcert.pem – certificate retrieved from CA

passout will be used during transferring ssl certificate to WLAN

4. Convert the pkcs12 file to a privacy enhanced mail (PEM) encoding file.

```
openssl pkcs12 -in wlc.p12 -out wlcsslcert.pem -passin pass:xxx -passout pass:xxx
```

## 5. Upload new certificate onto the WLC using tftp server

On management sheet, choose http and check “Download SSL Certificate \*  
Fill in setting based on your IT infrastructure and click “Apply”

MONITOR WLANS CONTROLLER WIRELESS SECURITY MANAGEMENT COMMANDS HELP

HTTP Configuration Apply Delete Certificate

HTTP Access    
HTTPS Access    
Web Session Timeout  Minutes

Current Certificate

Name:	bsnSslWebadminCert
Type:	3rd Party
Serial Number:	12520828710680192475
Valid:	From 2009 Feb 10th, 11:12:28 GMT Until 2010 Feb 10th, 11:12:28 GMT
Subject Name:	..... MAILTO=adrian.danek@.....
Issuer Name:	..... D=adrian.danek@.....
MD5 Fingerprint:	cd:55:d9:9f:fa:ea:d5:8d:3a:e3:78:11:62:c7:52:7d
SHA1 Fingerprint:	8b:4a:ccc:d1:8a:a4:69:85:42:6c:f3:97:67:a4:47:a4:1d:5e:96:80

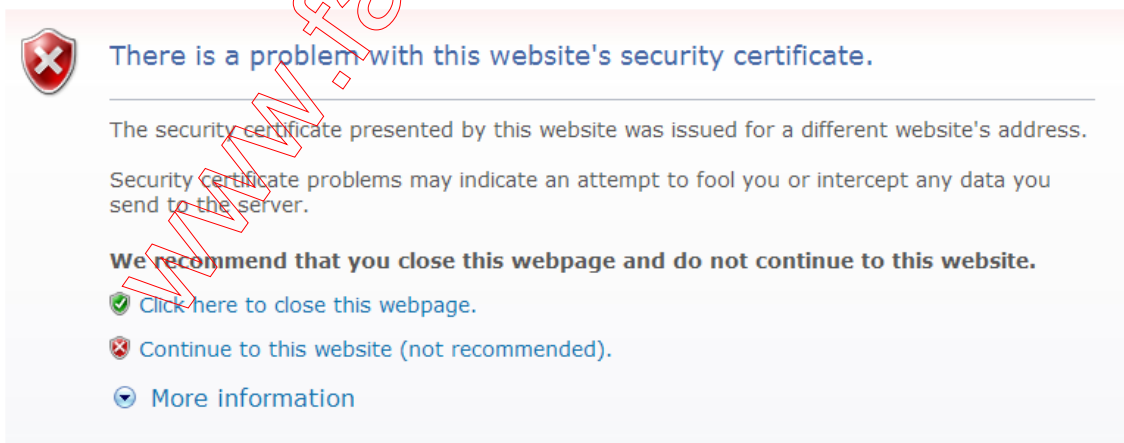
Download SSL Certificate \*  
*\* Controller must be rebooted for the new certificate to take effect.*

Download SSL Certificate From Server

Server IP Address	<input type="text" value="....."/>
Maximum retries	<input type="text" value="10"/>
Timeout (seconds)	<input type="text" value="6"/>
Certificate File Path	<input type="text" value="/"/>
Certificate File Name	<input type="text" value="wlccert.pem"/>
Certificate Password	<input type="password" value="....."/>

## 6. Reboot WLC

To avoid warnings in browser add certificate of CA which signed our wlccert.pem to Trusted Root Certification Authorities



Tested on 5.2.157.0 version

Katowice 10.02.2009  
dzbanek