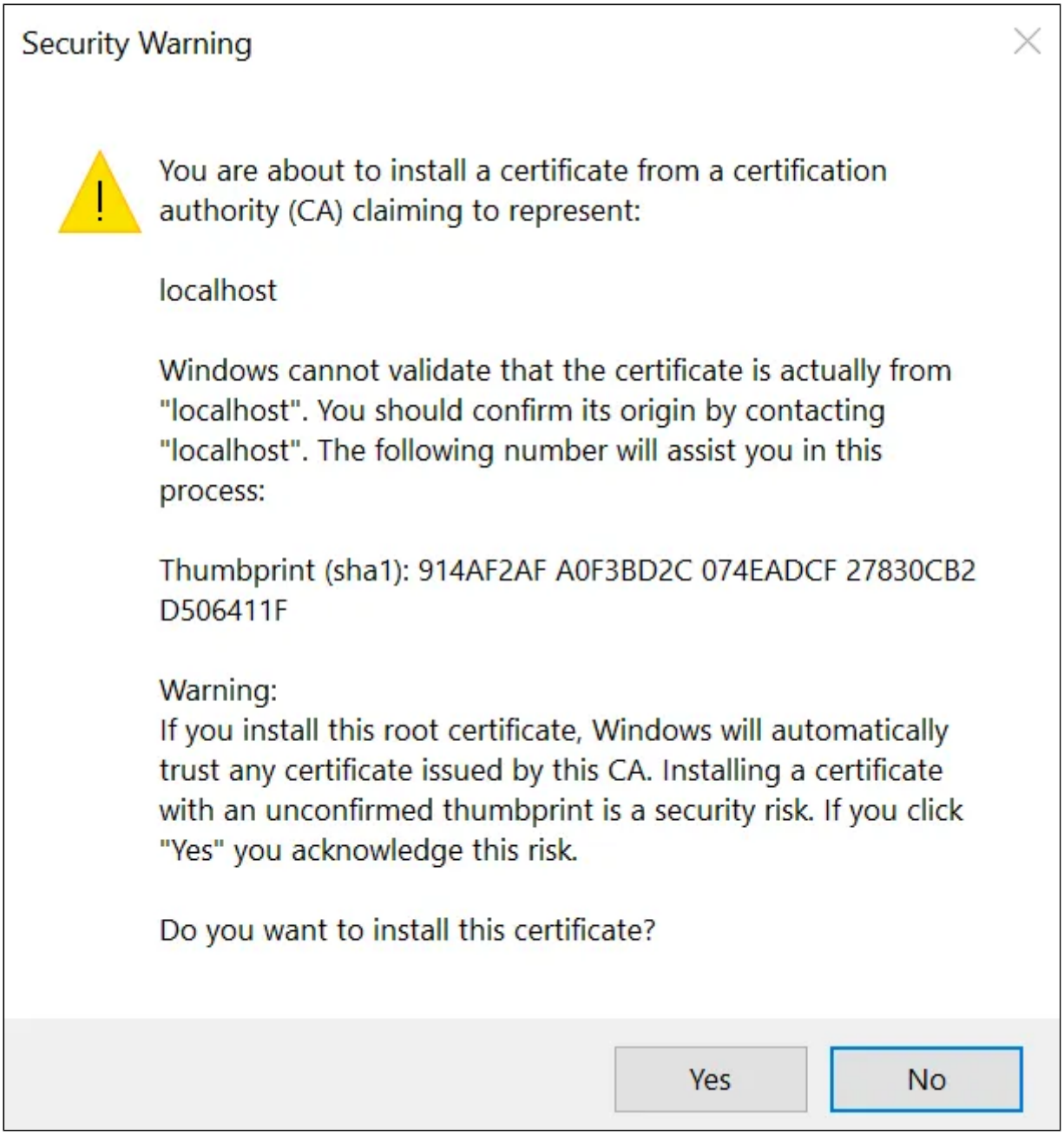
How to Change the HTTPS Certificate in IIS Express

2020-05-05 by Johnny Graber

Visual Studio creates a self-signed certificate for your web application that allows you to access your site over HTTPS. As long as you do not need to change anything, this magical configuration works like a charm. Unfortunately, when you need to change something, it is incredibly hard and the magic turns into a curse.

What happens?

If there is no certificate for localhost, Visual Studio creates one for you. You notice this when a dialog like this one pops up and asks if you allow to install a certificate:



If you agree to install this certificate, it gets installed on your machine and IIS Express magically links that certificate to your application. This happens not only for localhost, but for any domain you configure in Visual Studio.

What is the problem?

If you delete this automatically generated certificate and create a new one in your

get, if any, do not help because they are too general about SSL/TLS problems (like ERR_CONNECTION_RESET).

It took me a while until I found the post Working with SSL at Development Time is easier with IISExpress from Scott Hanselman. It turns out, IIS Express did not much change since 2011 and IisExpressAdminCmd.exe still works and can fix this problem as well.

How to change a certificate?

To make anything with certificates, you should open the certificate snap-in for mmc or Certlm.msc for your local computer. This tool allows you to create backups and import certificates.

1. Create a backup for the old certificate, including the private key.
2. Delete the old certificate for localhost.
3. Import your new certificate for localhost
4. Move the CA-Certificate to the folder Trusted Root Certification Authorities
5. Open the certificate for localhost and copy the Thumbprint
6. Open a Command Prompt (cmd) as administrator and go to the folder **c:\Program Files (x86)\IIS Express**
7. Map your application to the new certificate, replace PORT with the port of your application and THUMB with the Thumbprint from step 5:

```
1 IisExpressAdminCmd.exe setupsslUrl -url:https://localhost:PORT/ -CertHash:
```

If you have multiple applications, you need to repeat step 7 for all of them.

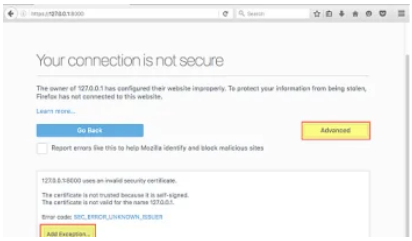
If your certificate is in the personal certificate store and not in the local machine, you will get this error:

> *A specified logon session does not exist. It may already have been*

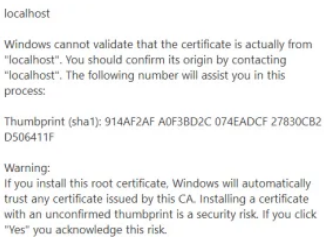
Conclusion

As so often, a magical configuration makes your developer life simpler until you hit an edge case for which you need to know the exact details. Then that magic turns into hours of debugging. I hope I can spare you those hours when you run into a problem of a missing certificate on IIS Express.

Related



Allowing Self-Signed Certificates on Localhost with Chrome and Firefox
2016-09-10
In "Development"



Recreate the Self-Signed HTTPS Certificate for Localhost in IIS Express
2020-05-19
In "Development"

A Simple Way to Fix ssl_error_rx_record_too_long in IIS Express
After deleting the developer certificate in IIS Express I could recreate a new one as described in this post. This approach worked, even when I
2021-01-05
In "Development"

Development

.Net, Security, Web

‹ Python Friday #18: Working With the File System

› Python Friday #19: Working with Packages in Python

Pingback: Recreate the Self-Signed HTTPS Certificate for Localhost in IIS Express – Improve & Repeat

Angel Dinev
2020-07-10 at 15:11

This article is a LIFESAVER! Thanks a LOT Mr.Graber!!!

Reply

Leave a Comment

Name *

Email *

Website

Save my name, email, and website in this browser for the next time I comment.

Post Comment

This site uses Akismet to reduce spam. Learn how your comment data is processed.

Search ...

RSS Feed

RSS - Posts

Archives

Select Month

More Posts

POPULAR LATEST

TODAY WEEK MONTH ALL

Allowing Self-Signed Certificates on Localhost with Chrome and Firefox

How to Activate TLS 1.2 on Windows Server 2008 R2 and IIS 7.5

How to Disable TLS 1.0, 1.1 and SSL on Your Windows Server

Testing a Web API with Postman

Tags

.Net Agile Analytics BDD Book Clean Code Conference Data Migration Debugging dnugbeEdu Docker Git IMHO Learning NoSQL Python Rails RavenDB Refactoring Ruby Security Slides SQL Technology Testing Tools VSCode Web

Subscribe to Blog via Email

Enter your email address to subscribe to this blog and receive notifications of new posts by email.
Join 488 other subscribers

Email Address

Subscribe