Article

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Running the Management Portal (Private Web Server) Over TLS/SSL/HTTPS

Updated Jan 19th, 2023.

Hi all,

I want to share a quick little method you can use to enable ssl with a self signed certificate on your local development instance of IRIS/HealthShare. This enables you to test https-specific features such as OAuth without a huge lift.

1. Install OpenSSL

Windows : Download from https://www.openssl.org or other built OpenSSL Binary.

Debian Linux: \$ sudo apt-get -y install openssl

RHEL : \$ sudo yum install openssl

2. Create a self-signed certificate pair. In your terminal (powershell, bash, zsh, etc)

```
$ openssl req -x509 -nodes -days 365 -newkey rsa:2048 -keyout apache-
selfsigned.key -out apache-selfsigned.crt
```

Note -- This above command will create a certificate that lasts for a year.

3. Edit your private web-server to use the new self-signed certificate pair.

In you instance installation directory, edit your pws config <install-dir>/httpd/conf/httpd-local.conf. Add the following section before the "Include .. " directives.

```
# Port to listen for secure traffic On. The default is 443
# Update Jan 19th, 2023: No longer required to manually load the ssl_module
# LoadModule ssl_module "modules/mod_ssl.so"
Listen 10443
```

Listen Virtual Host Block to define the keys we should use for that port

```
# If you define a different port in the Listen directive, change that here as well
<VirtualHost *:10443>

    # We need a servername, if you have a server name for your certificate, make sure
to match that here.
    ServerName mysecureinstance

# Turn on SSL for this Virtual Host
    SSLEngine on

#key files, replace these paths with the path you generated the keys from in step
2.
    SSLCertificateFile "/path/to/apache-selfsigned.crt"

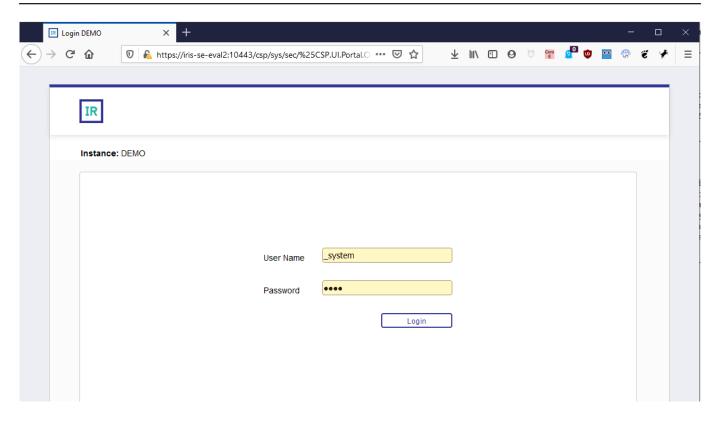
    SSLCertificateKeyFile "/path/to/apache-selfsigned.key"
</VirtualHost>
```

Here is an example of my config file:

```
nmitchko@iris-se-eval2:/demo/httpd/conf
                                                                                                                                                      ×
[nmitchko@iris-se-eval2 IRIS for Health_Keys_(2020)]$ cd /demo/httpd/conf/
[nmitchko@iris-se-eval2 conf]$ cat httpd.conf
ServerRoot "/demo/httpd"
DocumentRoot "/demo/csp"
CSPModulePath /demo/csp/bin/
CSPConfigPath /demo/csp/bin/
LoadModule csp_module_sa /demo/csp/bin/CSPa24.so
User irisusr
Group irisusr
<Location />
     CSP On
     SetHandler csp-handler-sa
</Location>
ServerName localhost
PidFile logs/httpd.pid
TraceEnable off
Timeout 300
KeepAlive On
MaxKeepAliveRequests 0
KeepAliveTimeout 120
UseCanonicalName Off
<Directory />
     Options MultiViews FollowSymLinks
     AllowOverride None
    Require all granted
<filesMatch "\.(log|ini|pid|exe|so)$">
Require all denied
</filesMatch>
</Directory>
TypesConfig conf/mime.types
HostnameLookups Off
ErrorLog logs/error.log
LogLevel error
LogFormat "%h %1 %u %t \"%r\" %>s %b" common
#CustomLog logs/access.log common
StartServers 5
MinSpareThreads 2
MaxSpareThreads 20
ServerLimit 256
ServerTokens Prod
<Location "/csp/bin/Systems/">
     SetHandler csp-handler-sa
</Location>
<Location "/csp/bin/RunTime/">
    SetHandler csp-handler-sa
</Location>
AddHandler csp-handler-sa csp cls cxw zen
Listen 10443
<VirtualHost *:10443>
    ServerName enssecure
SSLEngine on
SSLCertificateFile "/hslda/httpd/keys/public.key"
SSLCertificateKeyFile "/hslda/httpd/keys/private.key"
Include conf/httpd-doc.conf
Include conf/httpd-local.conf
[nmitchko@iris-se-eval2 conf]$
```

In action:

Running the Management Portal (Private Web Server) Over TLS/SSL/HTTPS Published on InterSystems Developer Community (https://community.intersystems.com)



Note: using the private web server for anything other than the server management may encounter performance errors and isn't explicitly supported for a production configuration. A better option would be to configure the apache / httpd or IIS web server using the default web gateway. You can find instructions to configure a dedicated web server in our Web Gateway Guide, or contact someone at InterSystems.

#Best Practices #SSL #HealthShare #InterSystems IRIS #InterSystems IRIS for Health

Source

URL: https://community.intersystems.com/post/running-management-portal-private-web-server-over-tlssslhttps