

# **Definitive OpenSSL for engineers**

A 2 day Hands on training course



# **Description**

A hands on course covering OpenSSL. The course focusses on the use of OpenSSL from the command line as opposed to using its extensive libraries. Certificate authorities are configured along with key generation, HTTPS and a SSL VPN.



# **Key outcomes**

By the end of the course delegates will be able to:

- Describe OpenSSL.
- Use OpenSSL.
- Explain how the various technologies involved in an OpenSSL work.



## Training approach

This structured course uses Instructor Led Training to provide the best possible learning experience. Small class sizes ensure students benefit from our engaging and interactive style of teaching with delegates encouraged to ask questions throughout the course. Quizzes follow each major section allowing checking of learning. Hands on sessions are used throughout to allow delegates to consolidate their new skills.



### **Details**

#### Who will benefit?

Network personnel.

#### **Prerequisites**

IP Security foundation for engineers.

**Duration**: 2 days

**Overall rating:** 



# **Generic training**



Generic training compliments product specific courses covering the complete picture of all relevant devices including the protocols "on the wire".

"Friendly environment with expert teaching that teaches the why before the how."

G.C. Fasthosts

#### **Small class sizes**



We limit our maximum class size to 8 delegates: often we have less than this. This ensures optimal the theory. interactivity between delegates and instructor.

"Excellent course. The small class size was a great benefit..."

M.B. IBM

#### **Hands On training**



The majority of our courses use hands on sessions to reinforce

"Not many courses have practice added to it. Normally just the theoretical stuff is covered."

J.W. Vodafone

#### Our courseware



We write our own courses: courseware does not just consist of slides and our slides are diagrams not bullet point Have the course your text.

"Comprehensive materials that made the course easy to follow and will be used as a reference point."

V.B. Rockwell Collins

#### **Customise your course**



Please contact us if you would like a course to be customised to meet your specific requirements.

"I was very impressed by the combination of practical and theory. Very informative. Friendly approachable environment, lots of hands on."

S.R. Qinetiq

# Definitive OpenSSL for engineers

#### Course content

#### What is OpenSSL?

What is SSL? SSL versions, TLS, TLS negotiation, TLS authentication, What is OpenSSL, Command line tool, SSL library. OpenSSH, OpenVPN. Hands on: TLS packet analysis.

# Getting started with OpenSSL

Downloading, source code, packages, installing, versions, configuration, openssl command. Cipher suite selection. Hands on: Encrypting a file with openssl.

## Public and private keys

Algorithms, creating keys, public keys, private keys, encrypting the private key. Hand on: Encrypting a file with keys.

#### **Digital signatures**

Creating signatures, checking validity of signatures, Self signing SSL certificates. Viewing certificates. Certificate files. Converting between formats. Hands on Securing a web server with HTTPS.

#### Simple PKI with OpenSSL

Root CA, signing CA, configuration files, Certificate signing requests. Email certificates, TLS server certificates. Hands on: Implementing a simple PKI with OpenSSL.

### Third party applications

The OpenSSL library, OpenSSH, OpenVPN. Hands on: Implementing a SSL VPN.

# What our customers say

"Absolutely brilliant, very knowledgeable and helpful trainer would recommend to teach anyone. Kept me interested 100% of the time which is very impressive as this does not happen often, if at all!"

O. B. Network Rail

"The best technical course I've been on!."

L. W. Fujitsu Telecoms Europe

"Very well thought out and structured course. Would recommend 100%. Lots of equipment, good quality."

A.R. Unipart

Course content is interesting. Relevant to current systems and presented well."

S.S-T. Arqiva

