

# Total SIPp for engineers

A 2 day **Hands on** training course



## Description

SIPp is a robust performance testing tool designed for evaluating the SIP protocol. This comprehensive course takes you on a journey from the initial installation of SIPp to mastering fundamental scenarios, exploring diverse architectures, delving into statistics analysis, and crafting XML scenario files.



## Key outcomes

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

- ✓ Monitor SIP traffic with SIPp.
- ✓ Use SIPp for performance testing.
- ✓ Use the standard SIPp scenarios.
- ✓ Create custom scenarios in XML for SIPp.



## 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?

Those working with SIP.

### Prerequisites

Definitive SIP for engineers.

**Duration:** 2 days

**Overall rating:** **New course**

### Generic Training



Generic training complements 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 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 the theory.

*"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 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. Have the course your way.

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

S.R. Qinetiq

# Total SIPp for engineers

## Course Content

### Introduction

What is SIPp? SIP review: UAC, UAS, INVITE, BYE. Sample SIP call flows. Hands on: Wireshark, SIP call flow.

### Installing SIPp

Getting SIPp, installing SIPp.

### Using SIPp

Running sipp. sipp with uas scenario, sipp with uac scenario. The integrated scenarios. Online help. Hands on: uac, uas.

### Controlling SIPp

Hot keys, commands, UDP socket. Running SIPp in the background. Traffic control. SIPp performance testing. Hands on: Changing call rates, remote control, pausing traffic.

### Monitoring SIP traffic

Scenario screen, statistics. Response times, counters. Hands on; Monitoring SIP traffic.

### More integrated scenarios

SIPp and media and RTP. 3PCC. 3PCC extended. Transport modes: UDP, TCP, TLS, SCTP, IPv6 mono and multi socket. Hands on: Third Party Call Control.

### XML

What is XML? Content, markup, elements, attributes. Start tags, end tags. Hands on: Displaying embedded scenarios, looking at the XML files of the integrated scenarios.

### Creating your own XML scenarios

<scenario>, message commands, <send>, <recv>, <nop>, <pause>, <sendCmd>, <recvCmd>, common sipp scenario attributes, command specific sipp scenario attributes. XML DTD, jEdit. Hands on: uac and uas scenario XML files.

### Recv actions

Log and warning, exec, variables, variable types, variable scope. External variables. Hands on: RTP streaming, Change a calls network destination, injection files.

### Regular expressions

What is an RE. POSIX 1003.2. Re injection. Validation. Hands on: regex example.

## 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

## Step back

Definitive SIP for engineers

Total SIPp for engineers

## Step forward

SIP security for engineers

Network automation for engineers