



Training
Services

Cell Site Workshop

Training Overview

Version 1.3

Course Code: FA012

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Forensic Analytics
Communications Data Experts

Cell Site Analysis	3
Course Overview	4
Price & Booking	5

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Cell Site Analysis

Introduction

Cell site analysis attempts to provide evidence of where a mobile phone may have been when certain calls were made.

Mobile phone networks consist of a large number of radio 'cells' each of which covers a limited geographical area. Each cell is assigned a unique 'Cell ID', which is captured in the billing record (CDR) when calls are made.

Network operators are able, under tight regulatory guidelines, to provide details of the calls made by 'target' phones and can also provide details of the locations of the cells used by those phones.

Cell site analysis is designed to enable an investigator to determine whether calls made at or around the time of an incident or offence used cells that are located near the location of that offence.

Additional evidence can be provided by undertaking an RFPS (Radio Frequency Propagation Survey) at each significant location. RFPS equipment captures details of the cells that can be detected at a location and can indicate which cells are mostly like to be selected for use by a phone at those locations.

Cell site analysis, based on a combination of a phone's billing records, cell location details and RFPS results, can provide compelling evidence to support an allegation made by investigators.

Forensic Analytics

Forensic Analytics Ltd was formed in 2013, but its principal staff have long experience in the telecoms and forensic industries.

Forensic Analytics' main business area is the development of data processing software tools that automate the most time-consuming aspects of cell site analysis. Our first product was CSAS (the Cell Site Analysis Suite), which provides a range of features designed to process, query, map and present mobile phone call records.

We also make use of our extensive technical backgrounds to provide consultancy, training and competence transfer services to law enforcement and forensic customers.

Forensic Analytics deals with many organisations that are new to cell site analysis. In addition to the training we can provide for users of our software, we are also able to offer training on the wider topics of cell site analysis and telecoms in general.

Our trainers are experienced telecoms engineers with many years of training delivery. Cell site courses are taught (or have input from) experienced expert witnesses, who are able to bring their real-world knowledge of analysis, surveying and report writing to bear and to illustrate their delivery with 'war stories' and anecdotes from court.

Course Overview

Duration: 1 day

Intended audience: all levels of participant

Maximum participants per delivery: 10

Course description: this course provides a non-technical overview of cellular forensics, including cell site analysis and mobile device examination, and introduces some of the activities undertaken to complete a forensic mobile investigation.

It introduces the many different types of information that can be combined to support an investigation; from cellular billing records, to handset examination reports, WiFi session log analysis, ANPR cameras and others.

The workshop is scenario-based, so all subjects will be presented as part of a coherent digital forensics investigation.

One of the objectives of the workshop is to highlight the time savings that can be achieved by using an automated data processing tool, such as Forensic Analytics' CSAS (Cell Site Analysis Suite) tool, the use of which will be demonstrated alongside more traditional manual investigative methods.

We will provide free copies of our *Cell Site Analysis: A Guide for Investigators* booklet at each event.

Pre-requisites: none

Course objectives: to provide participants with basic details of how cellular networks work and with hands-on experience of the basic investigative activities undertaken to progress a digital forensics investigation.

Summary course content:

- Introduction – Forensic Analytics
- Cellular network types & how they work
- Sources of forensic information
- Scenario – bank raid in Letchworth
- Investigative stage 1 – Forensic radio coverage surveys
- Investigative stage 2 – handset download techniques
- Investigative stage 3 – request cellular billing records, perform cell site analysis
- Investigative stage 4 – identify WiFi hotspots used by target phone
- Investigative stage 5 – ANPR requests
- Recap the investigation and show how the dots were joined together
- Review the time taken to manually process the investigation
- Introduce CSAS – reprocess case data using automated methods
- Summary & Questions

A detailed list of course content is available on request

Price & Booking

Pricing

For 'open' deliveries, this course costs £400 per delegate per day (excluding VAT, travel, accommodation, etc) but including lunch each day.

We offer discounts on these prices for 'closed' courses, delivered at the customer's premises.

The quoted prices include electronic versions of the course material. Printed copies of course material can be provided but there is an extra cost for this, please enquire for pricing.

Accommodation

To be booked by attendees as it is not included in the course fees.

The Premier Inn Letchworth Garden City Hotel, Station Rd, Letchworth is located approximately 0.5 miles from The Pixmore Centre and The Broadway Hotel & Carvery, Broadway, Letchworth is located approximately 1 mile away.

Terms & conditions

Full details of our training Terms & Conditions are available on request.

In general, we will require a PO (Purchase Order) number for the full course fees from each customer before a training event can be confirmed. We may require part or full payment in advance in some circumstances.

Unless otherwise agreed, all intellectual property rights, including copyright, patents and design

related to any training material supplied shall belong to and remain vested in Forensic Analytics (or in the copyright holder identified on any training material supplied by Forensic Analytics).

Course delivery location

This course will be delivered at:

Forensic Analytics Ltd
The Pixmore Centre
Pixmore Avenue
Letchworth SG6 1JG

Closed courses may be delivered at the customer's premises or chosen venue. Open courses may be delivered at other locations depending upon requirements.



Booking & queries

Please contact us at:
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