



Training Courses Spring 2018

Cell Site Analysis Courses

Spring 2018

Our cell site analysis courses aim to provide a basic technical framework for understanding the operation of cellular networks, the capture and meaning of communications billing data, the role of forensic radio surveys and the overall benefit that comms data and cell site analysis can bring to investigations.

Communications Data Overview for Investigators

Level 1
Course Code: FA018
0.5 or 1 day workshop

Suitable for: frontline officers, investigators, TLOs, researchers, supervisors, SIOs, barristers, CPS case workers

Explains the basic workings of a mobile network, discusses the meaning and relevance of comms data evidence – Call Detail Records (CDRs) – obtained from network operators and also shows the investigative links that can be established between CDRs, handset download data, Automatic Number Plate Recognition (ANPR) captures and other forms of evidence.

Workshop: Cell Site Analysis

Level 1
Course Code: FA012
1 day workshop

Suitable for: new analysts, students, investigators, SIOs

This workshop is structured around a realistic robbery case and offers the opportunity to gain an understanding of the operation of a mobile network and the investigative benefits of employing cell site analysis in cases, while gaining hands-on experience of cleansing and analysing comms data and other forms of digital evidence.

Overview: Cell Site Analysis

Level 2
Course Code: FA001
2 day workshop

Suitable for: communications data analysts, intel analysts, cell site analysts, RFPS engineers, SIOs

Provides a deeper understanding of the functions and operation of mobile networks. Explores the role of Radio Frequency Propagation Surveys (RFPS) in cell site analysis. Offers an overview of cell site report writing and the analytical tools employed to make sense of comms data evidence.

Advanced: Cell Site Analysis

Level 3
Course Code: FA002
3 day workshop

Suitable for: experienced analysts & RFPS engineers

Builds on the topics covered in the Overview course and provides a deeper understanding of mobile network operation, the content and meaning of CDRs, the investigative benefit of RFPS surveys and the types of survey that can be undertaken. Provides underpinning technical knowledge for staff who may need to give evidence in court.

Enquiries & bookings

Call: 0800 158 3830

Email: training@forensicanalytics.co.uk

Visit: www.forensicanalytics.co.uk

Radio Frequency Propagation Surveys (RFPS) Spring 2018

Forensic Radio Frequency Propagation Surveys (RFPS) add empirical evidence of the coverage provided by cells used by subject phones in a case. Our RF survey courses range from simple overview sessions up to week-long, City & Guilds accredited workshops, backed up by our best-selling book *Forensic Radio Survey Techniques for Cell Site Analysis* (Joseph Hoy, Wiley, 2015).

RFPS: RF Survey Overview

Level 1
Course Code: FA019
1 day workshop

Suitable for: new RF survey engineers, investigators, researchers, communications data analysts, SIOs

Explains the basic workings of a mobile network, outlines the various types of survey techniques that are employed and offers an insight into how RFPS evidence can strengthen cases that use comms data.

RFPS: Entry Level Training

Level 2
Course Code: FA020
5 day workshop

Suitable for: new RFPS engineers

Provides a basic grounding in radio technologies and the operation and construction of mobile networks. The course then builds on that foundation by teaching RF Survey theory and techniques and offering the opportunity to get hands on practice with a variety of forensic survey device types. We also teach basic report writing skills. This course is designed to provide entry - level training for new surveyors.

RFPS: Experienced Practitioner Training

Level 3
Course Code: FA014
5 day workshop

Suitable for: experienced RFPS engineers

Offers follow-on training for experienced RFPS engineers, who have gained experience of undertaking surveys and now wish to get a more technical understanding of this topic. In-depth overviews of radio technologies, cellular systems and the operation of radio cells are provided along with detailed examinations of survey techniques and survey devices. Successful completion of the course provides a City & Guilds qualification in RFPS.

City & Guilds accredited

RFPS Follow on Training

One-to-one mentoring sessions
1 day sessions

Suitable for: new and experienced RFPS engineers who have specific skills that they wish to enhance

Provides an opportunity to spend a day with an experienced RFPS surveyor to discuss survey techniques, equipment issues, report writing and other complex topics in a focused one-to-one manner.

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Communications Data Analysis & Call Detail Record Processing

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Call Detail Record (CDRs) are the lifeblood of comms data analysis—our range of comms data analysis courses help analysts and investigators to understand the meaning behind the CDR records, so they can piece together the detail of the events described in them and better understand how that data can aid their investigations

CDR Processing Overview

Level 1
Course Code: FA022
1 day workshop

Suitable for: new communications data analysts, new SPoC/CDIU staff, investigators, researchers, SIOs

Provides an overview of the basic operation of communications networks and describes the way that basic services (calls, texts, data sessions) are handled. It then looks at the various CDR types that are generated and explains the meaning & relevance of key data fields. A brief overview of current CDR formats is provided.

CDR Processing and Interpretation

Level 3
Course Code: FA015
3 or 4 day workshop

Suitable for: new communications data analysts

Offers an in-depth exploration of how mobile networks work and how and where call data is captured. We explore the meaning and relevance of the fields found in CDRs and examine the investigative benefits that an understanding of the data can provide. Current CDR formats are examined in depth and exercises that offer hands-on practice of cleansing/parsing that data are undertaken. An optional extra practice day can be added.

Next Generation Comms Data Analysis

Level 3
Course Code: FA017
2 day workshop

Suitable for: new and experienced comms data analysts

This course examines new and upcoming forms of communication, network types and calling techniques - 4G, 5G, VoLTE, SRVCC, Wifi Calling and VoIP among others. It provides an overview of how these new services and technologies work and looks at the CDR data that they provide. The purpose is to prepare CD analysts for the types of data that will become common in the near future and how to extract evidence from them.

CDR Processing Follow on Training

One-to-one mentoring sessions
1 day sessions

Suitable for: new and experienced comms data analysts who have specific skills that they wish to enhance

Provides an opportunity to spend a day with an experienced Communications Data Analyst to discuss cleansing/parsing techniques, analytical methods, report writing and court presentation skills

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CSAS Training Spring 2018

Alongside the free introductory training provided for CSAS users we also offer a range of advanced courses that can help users explore more features of CSAS than can be covered in initial sessions and further develop their knowledge.

CSAS Bootcamp

Level 1
Course Code: FA004
2 day workshop

Suitable for: new CSAS users

Provides an in-depth overview of CSAS Desktop and introduces all modules and features. Users have plenty of opportunities to get hands-on practice with CSAS, using anonymised but real data to gain a thorough understanding of the key operations.

CSAS Parsing & Data Handling

Level 2
Course Code: FA006
1 day workshop

Suitable for: new and experienced CSAS users

This workshop provides an opportunity to gain an understanding of how CSAS processes source comms data. The course is country-specific and provides in-depth details of how the most common CDR formats from the local operators are cleansed or parsed, what the parsing rules are and which are optional. This course is designed to provide users with the details they need to be able to answer questions about their use of CSAS.

CSAS Superuser Training

Level 3
Course Code: FA005
3 day workshop

Suitable for: experienced CSAS users

This course offers experienced CSAS users the opportunity to gain an understanding of the deeper functionality of the system—from improving their understanding of the parsing/cleansing process, to making better use of CSAS Mapping and Analytics, through to being able to recommend the best configurations for CSAS to their IT support team. This course turns CSAS users into CSAS Superusers!

CSAS Follow on Training

One-to-one mentoring sessions
1 day sessions

Suitable for: new and experienced CSAS users who have specific skills that they wish to enhance

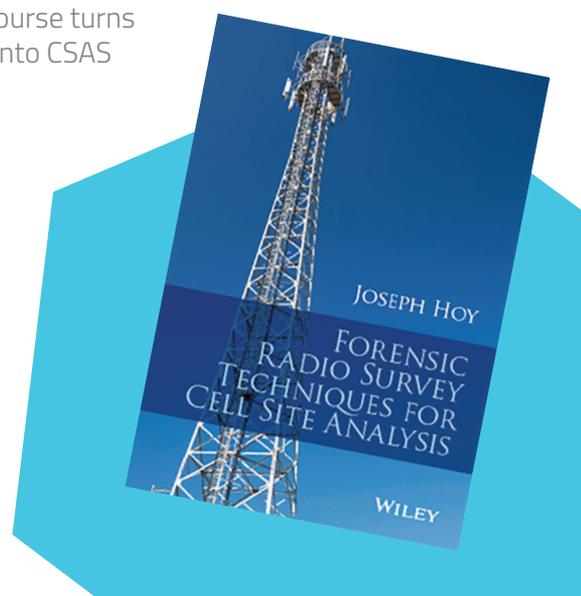
Provides an opportunity to spend a day with an experienced CSAS trainer to discuss parsing, mapping, analytics, report writing and other complex topics in a focused one-to-one manner.

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Telecoms Training Spring 2018

Our background is in telecoms engineering and we understand the great benefits that a good grounding in basic network technologies can provide for analysts, RFPS engineers and other forensic disciplines.

Training Partners

Wray Castle Ltd - are the world-leaders in technical telecoms training, offering courses on topics from 2G to 5G and everything in-between. Wray Castle provide our onward progression path for those who wish to gain more in-depth technical knowledge of telecoms and Internet topics.

Blue Lights Digital Ltd - are market-leaders in open source intelligence and digital investigation training. Their partnerships with universities and other organisations allow them to offer widely-recognised qualifications and unbeatable domain knowledge

Introduction to Telecommunications

Level 3
Course Code: FA016
3 day course

Suitable for: all

This course presents a detailed examination of modern communications networks, looking at the history, development and modern implementations of landline, cellular and data networks. It provides a solid foundation of understanding of the main concepts of telecoms (circuit and packet switching, transmission and switching) and serves to underpin investigative knowledge with a bedrock of technical understanding.

Introduction to Mobile Networks

Level 3
Course Code: FA021
2 day course

Suitable for: all

This course concentrates on the cellular/mobile network aspects of the Intro to Telecoms course and focuses on technical knowledge that is important to analysts and investigators who work with evidence provided from cellular networks.

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Course List, Booking Details & Pricing

Course List

Title	Code	Level	Length
Cell Site Analysis Overview	FA001	2	2 days
Advanced Cell Site Analysis	FA002	3	3 days
CSAS Bootcamp	FA004	2	2 days
CSAS Superuser Training	FA005	3	3 days
CSAS Parsing & Data Handling Overview	FA006	1	3 days
Cell Site Workshop	FA012	1	1 day
RFPS: expert level training	FA014	2	5 days
CDR Processing & Interpretation	FA015	2	3 days
Intro to Telecoms	FA016	2	3 days
Next Generation Comms Data Analysis	FA017	3	2 days
Comms Data Overview for Investigators	FA018	1	0.5 or 1 day
RFPS: RF survey overview	FA019	1	1 day
RFPS: entry level training	FA020	2	3 days
Intro to Mobile Networks	FA021	2	2 days
CDR Processing Overview	FA022	1	1 day
RFPS: One-to-one mentoring sessions	FA023	3	1 day
RFPS: qualification sessions	FA024	3	2 days
CDRs: One-to-one mentoring sessions	FA025	3	1 day
Cell Site Reports: One-to-one mentoring sessions	FA026	3	1 day

Booking Details

UK Locations: courses are delivered at our offices in Letchworth, Hertfordshire or at Hitchin Priory, Hitchin, Hertfordshire.

Closed courses may be delivered at a venue provided by the customer.

Overseas Locations: Courses will generally be delivered at a venue provided by the customer.

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Pricing

Open courses: £400+VAT per person per day.

Discounts offered if multiple delegates sign up

Closed courses: £2,100+VAT per day.

Discounts offered for courses delivered at the customer's premises.

Expenses may be added for overseas deliveries.

We make electronic (pdf) versions of training material available on each course, but recognise that some people prefer a printed copy. To keep our prices down overall we provide printed manuals as an optional extra charged at cost price - please ask when booking your course.



CSAS
Desktop



CDAN
Indexer



CSAS
Parsing API



Cell Site
Analysis



Training
Services

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