



future
thinking
technology

Clean and dirty phones

Case study

The case

As a forensic counter measure many criminals use two mobile phones: often termed 'clean' and 'dirty' phones. As the terms suggest the 'clean' phone is their everyday phone, used for legitimate purposes and the 'dirty' phone is used for the commission of crime. Despite adopting this counter measure it is possible, using cell site analysis, to prove that the 'clean' and 'dirty' phones have travelled together and consequently to attribute a phone used in criminal activity to a particular individual.

In this case, police raided a number of premises as part of an investigation into large scale organised drug dealing. A number of mobile phones were seized, and the contents searched, revealing a handful of common phone numbers which had either made calls to, or received calls from the seized handsets. The phones bearing the numbers of interest were not found during the raid and the owners of the handsets had yet to be traced.

Some time later, police were given the name of a potential suspect in the case, and the enquiry took a different direction. The suspect's phone was examined and the call data records were obtained.

What CCL did

The police called in CCL's cell site experts, who analysed the call data from the suspect's phone in conjunction with the data records already obtained. The aim was to determine whether the phones were moving together with the suspect's 'clean' phone.

The cell site team paid particular attention to the patterns of usage – where the phones were used first thing in the morning and last thing at night. They also analysed the location of the handsets in relation to the suspect's workplace, home address and other notable locations in the investigation.

The Outcome

By carrying out measurements at all these locations, it was possible to assess the movement and areas of common usage of the phones which were prevalent in communicating about the drugs operation. In addition,

CCL was able to take concerns raised by the defence cell site expert, and prove scientifically that their claims were not valid. We were able to link the 'clean' and 'dirty' phones by demonstrating, via their observed movements, that the probability of the phones moving together if controlled by unconnected individuals, was infinitesimal.

Search Order Services

- Early Scoping
- Technical guidance on the Application
- Evidence collection
- Analysis/ file searching
- Flexible review options

Other CCL Services

- Full digital forensics capabilities
- Cell site analysis
- Social media data collection
- E-disclosure

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