

Name: Michael Lawrie
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Date of birth: 17th April, 1968.
Citizenship: British – EU passport and Canadian Residency.

Michael Lawrie is one of the most experienced Commercial Security Specialists in the industry with over thirty years of expertise. He spent much of this time at a senior level in some of the world's largest IT and Telecoms companies. He is a former head of Commercial Security at British Telecom and has dealt extensively with a range of customers and sectors including Government, Police, Education, Banking, Insurance, Internet, Telecoms, Retail and Manufacture and also some Smaller to Medium Enterprise customers. He was among the first to build and manage BT's Internet Services and is considered one of the foremost pioneers of the British Internet. He was one of the first professional computer-misuse investigators, working with universities, police agencies and for corporations such as DEC and Hughes.

Concentrating on Commercial Security, rather than just IT and Network security, has provided him with a breadth of experience; from sanity checking IT security solutions to protecting organisations against threats ranging from internal issues to risks of global terrorism, organised crime and "cyberwarfare". In addition to his practical experience, he has undertaken various training programmes run by military and government organisations in topics such as personnel and asset protection, counter-espionage, terrorist risk and more general real-world risk awareness. The combination of training and experience makes him a specialist in threat-assessment, counter-surveillance and some of the more esoteric aspects of "real-world security". He has worked on a number of high-profile international hacking cases as an investigator and forensic and legal expert.

Michael is highly skilled at designing and building large-scale networks and systems, having been involved with Internet and Computer Internetworking for more than three decades, since well before its general take-up in the UK. After creating one of the UK's first Internet-based companies, he was asked to become Systems and Applications manager for BTnet, BT's commercial Internet service, and later also became the lead Applications and Services designer for Cellnet's Genie Internet Service. He has also designed and built a number of custom Internet-service and Internet-facing applications systems for large companies over a wide range of sectors. He has many years of hands-on systems, personnel, operational, network and security and disaster management and also previous in-depth systems programming experience, which give him a very practical awareness of the real world implementations of such projects.

As the creator of one of the first ever domain-name registration companies, Michael has also been involved in some high profile legal battles over trademark law on both sides of the fence, from protecting BT customer's trademark interests to his own cases, including his own well-known two year case against British Airports Authority over an internet site for sheep.

He is accustomed to working on large and small projects, with a diverse client-base (often in parallel) and also with single customers for long periods of time. He has worked at an executive level within companies, managed departments and teams and worked both within groups and completely alone. The nature of the business usually requires a large degree of autonomy, often involving seeking out tasks that need to be done as opposed to doing set tasks to a schedule. His practical capabilities and depth of theoretical understanding are both outstanding. He is also a practised troubleshooter and when required is generally able to create novel and unique solutions using just the tools at hand.

Michael's hobbies are also practised at a high level of competence. Among other qualifications, he holds Rescue, Nitrox and Master Free Diver certifications and is proficient in both combat handgun and black-powder shooting. He is also interested in social and recycling issues and created one of Europe's largest and most successful Freecycle groups in Cambridge, England. These days he spends much of his time investigating off-the-grid living in Atlantic Canada but has so far (mostly) managed to avoid turning into a mad old hippie. He still keeps abreast with the security industry, gives occasional lectures and works as a consultant, particularly on projects of interest to him. He is currently working on a book on Historic European Castle design and function and its relevance to modern security design.

Career History:

2004 - Present: Semi-Retired Consultancy.

In the last ten years of theoretical retirement Michael has taken on various independent consultancy roles across many diverse fields - Though mostly trying to pick up the things that interest him and allow him to work from the middle of nowhere. His past security and forensic skills seem to fit quite well into the area of web traffic analytics and large-data analysis and he likes to keep himself current with systems management and network and applications design. He runs a few large systems providing mostly free services so that he can stay familiar with the changes in existing technologies (Email, DNS, Web, Clouds etc.) and also the newer web applications such as forums, blogsites, wiki technologies, collaboration tools and statistics / analytics. These also keep him up to date on the current trends in user-interface design and HCI. Occasionally he does some training and support, advises on IT and employment law, gives domain-name consultancy, talks to startups about technology ideas and fixes and maintains people's servers and networks. Somewhat going back to his early 80s roots he also built and managed a small moderation and content provision company and spent a few years designing and implementing forum and chat moderation tools and procedures and also doing online moderation for various organisations.

In a volunteer role, he is the founder and coordinator of Cambridge Freecycle, one of the largest Freecycle groups in the world with over 30,000 active members and he also owns and maintains Caresana which is one of Britain's Historic "Little Ships"; a former Dunkirk vessel and was Britain's longest serving active lifeboat.

2002 – 2004: Middlesex University Professional – Visiting Lecturer in Risk and Security and IT Law.

Delivering courses in Technology Risk, Disaster Planning, Commercial Security, Security Law and Security Policy and composing articles and materials to accompany these courses. Teaching company managers how to assess the security needs of their organisation and how to plan for future technology needs.

1999 – 2001: Recruitment.com Ltd. - Chief Technical Officer.

Responsible for all technical aspects of launching a large Internet based Recruitment company. This involved design, build, delivery, protection and management of the infrastructure, website, software and IT management and technical staff management for a number of working recruitment companies with hundreds of staff. Also board-level management of the commercial aspects of the company including business planning, commercial modelling and controlling all the external technical supplier relationships.

1998 – 1999: British Telecom Syncordia Solutions – Commercial Security Manager.

Working with internal engineers and customers to design secure networking solutions and large-scale applications architectures, consulting on best practices and policies, examining security implications, preparing disaster-recovery procedures, developing and implementing internal solutions for BT itself and working closely with customer engineers to review, correct and support existing problematic customer solutions. Responsible for the overall security signoff on all commercial networking projects.

Major Clients for security design and consultancy included: Lloyds-TSB Bank, Halifax Bank, Abbey National Bank, HSBC Bank, Marks & Spencer, Tesco, BACS/CHAPS, The UK Emergency Communications Network, British Police and National Crime Squad, Marconi, Cellnet and The Body Shop as well as a number of other major corporations and government bodies in an advisory or overseeing capacity.

The work with government and police projects opened up more awareness and involvement in anti-terrorism and organised crime and led to some intensive military based training in close-protection; mostly focusing on surveillance, counter-surveillance and risk assessment. On a more technical level he also initiated the development of a Tiger-Team and Penetration Systems unit within BT.

1998: British Telecom Genie (now O2) – Internet Services Architect.

Six month secondment to the Cellnet team to design build, install, launch and implement user and management systems for their new free Internet and Mobile Phone based ISP called Genie Internet.

Created one of the first "Off the Shelf" Internet Service Providers using bolt-together systems and applications which involved interoperability with many other diverse applications and systems to create an ultra-resilient ISP platform supporting millions of users. Bringing together the network for these and the interfaces to mobile phones, implementing both the automated technical management systems and the human management and support systems; liaising with, and occasionally training content and systems managers, user support / call-centre staff and product and marketing managers.

This role also required Michael to qualify as an MCSE and a technical trainer so he could provide hands-on training to support staff to MCSE passing level as well as general training in all of the application systems.

1997 – 1998: British Telecom Managed Network Systems - Commercial Security Consultant.

This role involved taking a broad view of security, mainly from an operational and applications viewpoint and providing consultancy and hands-on help to customer engineering teams and operational units for large-scale network architectures. There was also a degree of internal security and consultancy to other areas of BT, such as BT Investigations and BT Group Legal.

1995 – 1997: British Telecom BNet and BT Internet - Systems, Applications and Security Manager.

Bought in as half of a two person team managing all of the internal Unix servers and building and managing the public facing Mail, DNS, Web, FTP, Proxy, IRC and News servers for BT's first Internet Service Provider. The varied workload included design and implementation, policy and procedures for the ever growing operations centres, creating systems that were resilient and as disaster-proof as possible, securing and monitoring the Internet facing systems and dealing with security compromises and alerts for both BT and its customers. This role grew to include advising and training other BT departments on Internet, security, applications design and management issues and dealing with BT's external relations with other areas of the Internet-backbone industry around the world. Also managed network application systems and domain name services for the (then new) National Health Service's NHS-Net.

1995: Hughes Networks Services. Systems Manager / Internet Consultant.

This contract was to manage the existing VMS systems and, whilst doing so, to implement a secure and feature rich mail system for Hughes in Europe so that various different types of mail could be handled by PMDF running on the central VMS systems and passed on to cc:Mail and Microsoft, Unix, Internet and VMS/PCSA mail systems within the organisation. Many of these systems were networked over satellites and some were based wholly in space. Also responsible for designing and building a number of monitoring and validation systems to conform to both internal and US Defence Department specifications.

1994: Swiss Bank. Security Consultant.

Short term independent review of Swiss Bank's British Trading systems, including a full risk and threat analysis and identification of possible areas for fraudulent financial loss. Advising on audit systems and anti-fraud requirements for their trading floors and some advisory on staffing and recruitment policies.

1994: Credit Suisse Financial Products. VMS Systems Security Manager.

A short term project, taking overall security authority for CSFP's VMS systems preparing them for their audit requirements.

1993 - 1995: Digital Equipment Co, USA. External Security Consultant.

Worked with DEC on the well-publicised Kevin Mitnick hacking case, tracking and monitoring Mitnick's activities in the UK and in instances where he was using the UK as a base for other activities. This was an opportunity to work with international law enforcement organisations including the FBI and the US Marshall's office and to work closely with DEC security in the US and occasionally the UK Police.

1993 – 1995: UK Network Services. Managing Director.

UK Network Services (UKnet) was one of the first companies of its type, created to provide Internet and Web consultancy in conjunction with Hicom and some of the then new Internet Service Providers. The company provided Consultancy, Internet connectivity, security, email and web page design and later concentrated more on computer misuse investigative and forensics work with DEC including creating and refining some of the first lexical forensic tools for identifying and tracking online hackers. The company mostly wound down when Michael went to work for BTnet full-time.

1989 - 1996: Hicom Services. Board member, Systems, Operations and Security Manager.

Hicom was a joint project between Digital Equipment Co., British Telecom, the British Computer Society, the British Psychological Society and Loughborough University to research all aspects of Human Computer Interaction and information provision over computer networks. It was also the first system in the UK to offer free Internet access to anyone (including non-academics) with a legitimate interest.

1993 – 1995: British Rail, Railfreight. IT Manager and Network Consultant.

Responsible for managing all of the internal systems, including the VMS / CODA based finance systems, the HPUNIX based train operations systems and the Novell and Windows based office systems. Later on became responsible for design, field-installation, testing and commissioning of the infrastructure for the Channel Tunnel freight systems operational network.

1989 - 1994: DECUS (UK). Conference Coordinator and creator of UK North DECUS.

DECUS was the world's largest computer user group, aimed at users of DEC computers. Responsible for arranging the VMS aspects of the annual conference for two years and many VMS and Security seminars on topics including MIT's Project Athena systems, the then new UK Computer Misuse Act, forensic examination of computer data and how the new Alpha architectures and OpenVMS would differ from the VAX ones. Also organised and gave talks on networks comprised of co-operating but diverse operating systems, which was very much new territory in those days. This role in DECUS included leadership, organisational and presentation training and provided a wealth of experience in running events ranging from small meetings to major three-day conferences with many thousands of delegates.

1993: DEC Lisbon. Systems and Network Manager.

Contracted out by Digital to the Portuguese Government to manage their network, consisting of hundreds of VAX 9000, 6000 and 4000 systems connected by X.25 throughout Portugal. The machines supported tens of thousands of users and Digital had a need to put proper professional management in place, to repair and automate current processes and to re-train the existing government systems and operations staff prior to full membership of the European Union.

1990 – 1993: Leeds University/NHS – Leukaemia Research. Systems and Information Manager.

VMS Systems and Database Management, statistical programming and somewhere along the way, accidentally becoming the NHS's resident expert on tape media and data format conversion. Also carrying on previous Social and Statistical Psychology postgraduate doctoral research from Leicester University.

1987 – 1992: Online games management and the Edinburgh University Tardis Project.

Took over the management, code-base and game maintenance of Essex MUD and the other Essex University multi-user games in 1987 and then carried on this, and managing or supervising most of the public access systems on the UK academic network. These UK sites were essentially the only public-access leisure systems available on the whole of the Internet for many years. He was heavily involved in the start of Internet-Relay-Chat and is still the longest acting server-operator on any IRC network having been so since 1989.

The Tardis project was a staff-led volunteer project created by Edinburgh University who donated a small network of old Unix based machines and a network-link with the aim of letting students get experience using larger machines with a degree of freedom, in some cases even systems-managing these machines. This was many years before anybody dreamed of running Unix on a desktop computer and until Tardis there was no practical way for people to learn systems management skills in any academic environment. Michael was one of the founders and senior systems and management people within the project and co-author of the first ever academic paper on remotely managing computer systems called "Electronic Messaging Systems and Devolved Systems Administration", presented at DECUS in 1991.

1989 – 1990: Leicester Royal Infirmary / University – Dept. of Psychiatry - Research Assistant.

Initially working on computer based psychometric questioning systems, leading to original research on monitoring a subject in a controlled environments to record their actions and reactions to specific situations and scenarios. The observed responses were evaluated in a less direct but more practical manner than the former psychometric questioning approach. This was arguably the first use of virtual worlds for anything other than simple games.

1988: Leeds University – Programmer.

Converting PRIMOS Fortran applications to run on VMS systems.

1987: Leeds University – Dept. of Organic Chemistry (Orac Ltd.) – Programmer

FORTRAN IV and FORTRAN 77 on VMS.

1984: Lambert Howarth Footwear, Burnley, Lancashire - Freelance Programmer

Injection Moulding Plastic machine control and optimisation system, written in Turbo Pascal 2.

References, Qualifications etc. can be supplied as required.