Intelligence Support Systems for Lawful Interception, Electronic Surveillance and Cyber Intelligence Gathering

27-29 JULY 2015 • JOHANNESBURG, ZA

Where Law Enforcement, Public Safety, Telecoms and the Intelligence Community turn for Technical Training and Product Selection

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ISS World South Africa is the world’s largest gathering of Southern Africa Law Enforcement, Intelligence and Homeland Security Analysts as well as Telecom Operators responsible for Lawful Interception, Hi-Tech Electronic Investigations and Network Intelligence Gathering.

ISS World Programs present the methodologies and tools for Law Enforcement, Public Safety and Government Intelligence Communities in the fight against drug trafficking, cyber money laundering, human trafficking, terrorism and other criminal activities conducted over today’s telecommunications network and the Internet.

Track 1
ISS for Lawful Interception and Criminal Investigations

Track 2
Encrypted Traffic Monitoring and IT Intrusion Product Training

Track 3
LEA and Intelligence Analyst Training and Product Demonstrations

Track 4
Social Network Monitoring and Big Data Analytics Product Demonstrations

Track 5
Mobile Location, Surveillance and Signal Intercept Product Demonstrations

Monday, 27 July 2015

Pre-Conference Training Seminars

Seminar #1
09:00-17:00
Online Social Media and Internet Investigations
Presented by Charles Cohen, Cohen Training and Consulting, LLC
Charles Cohen also holds the position of Commander, Cyber Crimes Investigative Technologies Section, Indiana State Police, USA

09:00-10:00
The Role of Online Social Media OSINT in Predicting and Interdicting Spree Killings: Case Studies and Analysis
10:15-11:15
OSINT and Criminal Investigations
11:30-12:30
Metadata Exploitation in Criminal Investigations
13:30-14:30
EXIF Tags and Geolocation of Devices for Investigations and Operational Security
14:45-15:45
Advanced Techniques in Tracing Suspects
16:00-17:00
Open Source Intelligence Training (OSINT)

Seminar #2
09:00-17:00
Practitioners Guide to Internet Investigations
Presented by: Mark Bentley, Communications Data Expert, National Cyber Crime Law Enforcement, UK Police

The aim of this 1 day seminar is to take the attendees from the basics of understanding the internet, how to find data, through to a full understanding of best practice of an internet investigator, having awareness and knowledge of all the tools available to achieve this.

This is exclusively Law Enforcement only, as Practical examples, covert and investigative methods will be given throughout the seminar.

09:00-10:00
The World Wide Web and the Internet
10:15-11:15
Recognizing Traffic Data
11:30-12:30
WiFi and Mobile Data
13:30-14:30
Emerging Technologies, Masking Tech and Tools
14:45-15:45
Advanced Techniques in Tracing Suspects
16:00-17:00
Open Source Intelligence Training (OSINT)

Seminar #3
09:00-12:30
Understanding ISS Technologies and Products Deployed in Telecommunications Networks and Monitoring Centers for Law Enforcement and Intelligence Analysts
Presented by: Dr. Jerry Lucas, President, TeleStrategies

This half one day, pre-conference seminar covers the spectrum of ISS Technologies and Products deployed in today’s fixed wire, mobile wireless and Internet Service Provider networks and LEA Monitoring and Intelligence Gathering Centers. This half day seminar is ideal for those law enforcement, public safety and intelligence analysts who need an understanding of the ISS technologies to be discussed in the conference sessions and the ISS products displayed at the exhibit hall as

Exhibits
28 July 2015, 10:00am - 17:00pm
29 July 2015, 9:30am - 12:30pm

For Complete ISS World® Conference Session Descriptions, Go To www.issworldtraining.com
well as an understanding of the buzz words and jargon used by telecom operator engineers and their vendors.

**09:00-10:00**

**Introduction to Telecom Infrastructure, Interception and Related ISS Products**
- Lawful Intercept Standards and Architectures (CALEA, ETSI and SWORM) and Telecom to LEA Monitoring Center Interconnection
- Basic ISS Components: Probes (DPI and Fiber Optics), Mediation/Collection Devices and LEA Monitoring Center Infrastructure
- Mass Intercept of MetaData using SS7 Telco Database access and More.

**10:15-11:15**

**Understanding Mobile Wireless Infrastructure, Interception and Related ISS Products**
- Why Understanding the wireless generation (2G, 3G and 4G) is important regarding Intercept
- Wireless CDR analysis features: What’s easily attainable from the telco’s, for tracking and target profiling.
- Location tracking using off-the-air signals (IMSI Catchers), WiFi MITM attacks, SS7 Monitoring for International Roamer Tracking and Social Network Apps for Tracking

**11:30-12:30**

**Understanding the Internet, Interception and Related ISS Products**
- IP Basics for LEAs; IP Addressing, ISP and NSP operations and Intercept Points
- Types of Encryption: End user terminal, wireless and LEA methods of Defeating Encryption
- Anonymous Communication, TOR Basics, Dark Web and Bitcoin Transactions Demystified for Technical Investigators
- Specifics this introduction to Bitcoin for technical investigators addresses:
  - Bitcoin Basics for Technical Investigators
  - Understanding Bitcoin Infrastructure, Blockchain and Bitcoin Mining
  - How Criminals and Terrorists Use TOR and Dark Web
  - Bitcoin Cryptography Demystified (For Non-Math Majors)
  - Bitcoin 2.0 and the New Challenges Facing Law Enforcement

**13:30-14:30**

**Seminar #4**

**Bitcoin 101: Introduction to What Technical Investigators Need to Know about Bitcoin Transactions, Dark Web Commerce and Blockchain Analysis**

*Presented by: Matthew Lucas (Ph.D, Computer Science), Vice President, TeleStrategies*

This 101 training seminar is an introduction to Bitcoin, how the system is used to support criminal activities (e.g. Dark Web) and why technical investigators need to understand the basic Bitcoin transaction mechanism (Blockchain) to successfully defeat 21st century criminals and terrorist actions.

**14:45-15:45**

**Seminar #5**

**Bitcoin 201: Setting Up a Live, Classroom Bitcoin Mining Platform in Order to Demonstrate Online, the Underlying Mechanisms of the Bitcoin System for Technical Investigators**

*Presented by: Matthew Lucas (Ph.D, Computer Science), Vice President, TeleStrategies*

Bitcoin 201 provides a hands-on demonstration of how to set up a Bitcoin platform in order to investigate Bitcoin Transactions and gather intelligence on criminal and terrorist activities via monitoring Bitcoin Blockchain archives and real-time ledger record flow. Specifically Technical Investigators will learn how to set up a Bitcoin Investigation Platform.

- Setting up a Full Function Bitcoin Platform: Where do you go to download Bitcoin software, Computer Platform and Internet Connection Required
- Setting up the Bitcoin Platform regarding private and public keys and transaction address creation.
- Creating a Bitcoin Transaction to send to a merchant’s account via the P2P Bitcoin Miner Network.

**16:00-17:00**

**Seminar #6**

**Bitcoin 301: Classroom Demonstration of Submitting a Real Bitcoin Transaction to P2P Miners and Viewing the Recording in the Most Recent Blockchain Plus Online Event Capturing Demonstrated**

*Presented by: Matthew Lucas (Ph.D, Computer Science), Vice President, TeleStrategies*

With a running Bitcoin Platform as established in the previous session (Bitcoin 201), the operation will transmit to the Bitcoin P2P network demonstrating transaction processing and intelligence gathering capabilities.

This session will demonstrate:
- Submitting a Bitcoin Transaction to the P2P Network, demonstrating the output and input message and viewing online the blockchain recording the transaction
- Analyzing the resident blockchain (year 2009 to present) and past examples of Silk Road Transactions
- Demonstrating Bitcoin blockchain Apps that are designed to trace sources and destination of Bitcoin transactions as used by technical investigators.
ISS for Lawful Interception
This track is for Telecom Operators and Law Enforcement/Intelligence/Defense Analysts who are responsible for specifying or developing lawful intercept network infrastructure.

Monday, 27 July 2015

09:00-12:30 Session B
Understanding ISS Technologies and Products Deployed in Telecommunications Networks and Monitoring Centers for Law Enforcement and Intelligence Analysts
Presented by: Dr. Jerry Lucas, President, TeleStrategies

13:30-17:00 Session B
Understanding Bitcoin Infrastructure and Operations for Technical Investigators
Presented by: Matthew Lucas (Ph.D, Computer Science), Vice President, TeleStrategies

Tuesday, 28 July 2015

9:00-10:00 Session A
Today’s Interception in an Encrypted, Social and Clouded World
Presented by Hacking Team

9:00-9:30 Session B
Identifying Criminal Suspects - An Event Based Analytical Approach
Presented by trovicor

11:30-12:00 Session A
LI in Clouds, SDN & NFV
This presentation discusses the consequences of cloud-based telecommunication services for LI. It will especially take a closer look at recent developments of SDN/NFV (software defined networking/network functions virtualization) and their relationship to clouds.
Presented by Rudolf Winschuh, Ultimaco TS GmbH

Wednesday, 29 July 2015

9:00-9:30
The Battle for Communication Security Is Lost, Or Is It?
Presented by Mills Electronic

9:30-10:00
Enterprise-Level Intercept Technology for the Edge User
Presented by Ultra Electronics

12:15-13:15
Understanding Bitcoin Along with TOR and Dark Web
Matthew Lucas (Ph.D, Computer Science) and Vice President, TeleStrategies
### Track 4

**Social Network Monitoring and Big Data Analytics Product Demo Track**

This track is only open to Law Enforcement, Public Safety and Government Intelligence Community Attendees.

#### Monday, 27 July 2015

**8:30-17:00  |  Session A**

**Practitioners Guide to Internet Investigations**

*Presented by: Mark Bentley, Communications Data Expert, National Cyber Crime Law Enforcement, UK Police*

**9:45-10:15  |  Session B**

**OSINT LABS from an Empty Building to a Cornerstone of Any Intelligence Organization**

*Presented by Gamma Group*

#### Tuesday, 28 July 2015

**9:00-10:00  |  Session A**

**Mobile Monitoring Solution: Find the Needle in the Haystack. Use Cases for Law Enforcement Agencies Using Location Information and Speaker Identification.**

*Presented by VASTech*

**9:00-10:00  |  Session B**

**The New Investigator Toolbox: from Tactical to Open Source Investigations**

*Presented by AREA*

**11:30-12:00  |  Session A**

**Live Demonstration of SnapTrends: Real-Time Location-Based Social Intelligence**

*Presented by Chenega International*

**11:30-12:00  |  Session B**

**What OSINT Can Do Especially When Multilingual and Multimodal**

*Presented by Gamma Group*

**14:00-15:00  |  Session A**

**SIGINT, OSINT, HUMINT: Massive Data Fusion, Search & Analytics in 3 Clicks**

*Presented by Advanced Systems*

**14:00-15:00  |  Session B**

**Virtual Human Intelligence: Be Inside, Stealth, Future and Technology Proof. Some Use Cases**

*Presented by AREA*

**14:30-15:00  |  Session C**

**Intelligence In the Era of Global Terror—Using Terrorists’ Own Communications in the Battle Against Them**

*Presented by Verint*

**15:30-16:30  |  Session A**

**Big Data; Mass & Targeted Interception for National Security**

*Julian Fellow, Executive Product Manager, AQSAACOM*

**15:30-16:00  |  Session B**

**Gathering Intelligence from Prisons—Exploiting a Unique Information Source to Create Valuable Intelligence**

*Presented by Verint*

**16:00-16:30  |  Session B**

**Intelligence Collection and Fusion—By Land, By Air, and By Web-Verint Intelligence Monitoring Center as a Platform for Integrating Network, Off-Air, and OSINT Sources**

*Presented by Verint*
Wednesday, 29 July 2015

9:00-10:00 Session A
Live Demonstration of SnapTrends: Real-Time Location-Based Social Intelligence
Presented by Chenega International

9:00-9:30 Session B
Turning Intelligence Into Action—Versatile and Interconnected Intelligence Solutions for Operational Units
Presented by Verint

9:30-10:00 Session B
Cyber Security: The Last Line of Defense for Your Critical National Assets-Fighting Targeted and Well-Funded Advanced Cyber Attacks Launched by Criminals, Hacktivists, or Nation States
Presented by Verint

11:00-12:00
DPI and Social Media Analytics
Curt Schwaderer, VP of Engineering, Yaana Technologies

12:15-13:15
Top 20 Open Source Tools (OSINT) Used in Cybercrime Investigations
Mark Bentely, Communications Data Expert, National Cyber Crime Law Enforcement, UK Police

Track 5

Mobile Location, Surveillance and Signal Intercept Product Training
This training is only open to Law Enforcement, Public Safety and Government Intelligence Community Attendees

Monday, 27 July 2015

10:15-10:45
GPS Tracking and the M2M for Surveillance Operations
Presented by Gamma Group

Tuesday, 28 July 2015

9:00-10:00 Session A
High Accuracy Location Intelligence for Predicting and Preventing Crime
Pratik Dhebr, Director, Product Management, Polaris Wireless

9:00-10:00 Session B
Tactical Audio Monitoring Via IP
Presented by Seartech

11:30-12:30 Session A
Presented by VASTech

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Sandton Convention Centre Johannesburg
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International Attendees: If you need Visa assistance to attend ISS World, please contact Tatiana Lucas at talucas@telestrategies.com

Conference by Invitation Only: To attend ISS World you must be a Telecommunications Service Provider, government employee, LEA or vendor with LI, surveillance or network products or services. If you have questions e-mail Tatiana Lucas at talucas@telestrategies.com.

Registration Information
Save $300 by registering before 6 June, 2015

Law Enforcement/DHS/IC/DoD Registration*
ISS World Conference (Tracks 1), Training Tracks 2-5,
Pre-Conference Seminars plus Exhibits..............................................$995
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Pre-Conference Seminars and Exhibits.............................................$995
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Registration after 6 June 2015 ......................................................$1,295

*Note: To Attend the LEA/DHS/IC/DoD Training Tracks 2-5 you must be a sworn law enforcement officer or military/intelligence/government employee. Also you must register by 22 July 2015 in order to verify eligibility. Government photo ID required for classroom access.

Registration
Phone: 1-703-734-7050 • Fax: 1-703-734-9371
Online: www.issworldtraining.com
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VASTech (Pty) Ltd, an independent company, created in 1999, with the head office in South Africa, and offices located in Dubai and Switzerland, is recognized internationally as a leading edge innovator and preferred independent global supplier of massive data acquisition, utilization and value extraction solutions. We provide solutions to governments not under United Nations or other security sanctions. Selected solutions to the commercial market are also available. VASTech also offers supplementary turnkey services in terms of system engineering, project management, as well as implementation. Our products are fully supported with extensive training given, drawing on 14 years global experience.

**Associate Lead Sponsors**

AQSACOM is a global leader in Telecommunications Security Solutions, providing real-time Lawful Interception, Data Retention, Mobility Tracking and Surveillance Solutions. AQSACOM’s core business focuses upon end-to-end, turnkey systems for fulfilling Lawful Interception requirements and specializes in work involving highly heterogeneous networking and service environments. AQSACOM’s diverse customer portfolio includes clients from more than 35 countries spanning 5 continents. Regional offices are located in Paris, Dubai, Hyderabad, Melbourne, Florianopolis, and New York City.

AREA is a market-leading independent provider of turn-key, fully integrated end-to-end communication surveillance solutions for law enforcement organizations worldwide. The MCR solution portfolio ranges from interception/mediation to collection/retention as well as data analysis. Leveraging our extensive track-record and field experience, we aim to provide solutions which simplify complexity.

FinFisher solutions help government law enforcement and intelligence agencies to identify, locate and convict serious criminals. With innovative products, tailor-made solutions and end-to-end services, FinFisher closes the gap in traditional investigative methods. Its portfolio allows governments to gain access to protected, offline information and relevant web-based communication channels.

Gamma Group is an international manufacturer of surveillance & monitoring systems with technical and sales offices in Europe, Asia, the Middle East and Africa. We provide advanced technical surveillance, monitoring and Media Mining/OSINT solutions, advanced government training, as well as international consultancy to National and State Intelligence Departments and Law Enforcement Agencies.

Hacking Team provides the premier offensive technology solution: Remote Control System. Proven by more than 10 years of worldwide adoption and designed to fulfill LEAs and Security Agencies highest expectations, newly released version 8 “Da Vinci” gives you total control over endpoint devices, offering the widest selection of infection vectors, showing total invisibility to protection systems and implementing the most sophisticated data gathering techniques. Find out more at www.hackingteam.com.

Since 1994 Utimaco has been developing lawful interception and data retention systems for telecom operators and Internet service providers. Utimaco is the preferred partner of many of the world’s leading network equipment manufacturers. With around 250 installations in over 80 countries, Utimaco is a leading global supplier in the Lawful Interception and Data Retention market. Utimaco participates in LI standardization and supports international standardization institutes and telecom associations, such as, ETSI, 3GPP, ANSI/ATIS, and Bitkom. For more information visit www.utimaco.com.

Verint Communications and Cyber Intelligence Solutions™ help law enforcement, national security and other government agencies neutralize terror and crime, facilitate communications service provider compliance with lawful interception mandates, and assist public sector organizations in detecting and thwarting cyber-attacks. Using Verint solutions, organizations can efficiently collect, monitor and analyze Big Data in Motion from virtually any communication network or data source.