

TeleStrategies®

# ISS World *South Africa*

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

10-12 JULY 2016 • 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<sup>®</sup> South Africa

10-12 JULY 2016 • SANDTON CONVENTION CENTRE • JOHANNESBURG, ZA

**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

### ISS for Money Laundering and Bitcoin Transaction Investigations

## Track 3

### Mobile and Cloud Computing Forensic Product Demonstration

## Track 4

### Encrypted Traffic Monitoring and IT Intrusion Product Training

## Track 5

### LEA and Intelligence Analyst Training and Product Demonstrations

## Track 6

### Social Network Monitoring Product Demonstrations

## Track 7

### Mobile Location, Surveillance and Signal Intercept Product Demonstrations

## Exhibits

11 July 2016, 10:00am - 17:00pm  
12 July 2016, 9:30am - 12:30pm

### Pre-Conference Seminars and Tutorials led by Law Enforcement Officers and Ph.D. Computer Scientists.

#### Seminar #1

8:30 -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***

This one-day seminar gives attendees an up-to-date understanding of how social networking sites work and how members act and interact. Attendees will learn what information is available on various sites and how to integrate that information into criminal investigations and criminal intelligence analysis.

8:30-9:30

#### The role of Online Social Media OSINT in Predicting and Interdicting Spree Killings: Case Studies and Analysis

9:45-10:45

#### OSINT and Criminal Investigations

11:00 -12:00

#### Metadata Exploitation in Criminal Investigations

13:30-14:30

#### EXIF Tags and Geolocation of Devices for Investigations and Operational Security

14:45-15:45

#### Case Studies in Metadata Vulnerability Exploitation and Facial Recognition

16:00-17:00

#### What Investigators Need to Know about Emerging Technologies Used to Hide on the Internet

#### Seminar #2

8:30-17:00

#### Practitioners Guide to Internet Investigations

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

The aim of this one-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. It is aimed primarily at the investigator, delivered from the perspective of detective, to empower them to have the best methodology and tradecraft to profile and catch suspects.

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

8:30-9:30

#### The Internet, and how suspects leave a digital footprint

9:45 -10:45

#### Recognizing Traffic Data and digital profiling

11:00 -12:00

#### WIFI, geolocation, and Mobile Data traces

13:30 -14:30

#### Awareness of Emerging Technologies, Masking Tech and Tools, TOR and proxies

14:45 -15:45

#### Advanced Techniques in Tracing Suspects, and lateral problem solving

16:00 - 17:00

#### Open Source Tools, resources and techniques

For Complete ISS World<sup>®</sup> Conference Session Descriptions, Go To  
[www.issworldtraining.com](http://www.issworldtraining.com)

# ISS World<sup>®</sup> South Africa

## Intelligence Support Systems for Lawful Interception, Electronic Surveillance and CyberIntelligence Gathering

10-12 JULY 2016 • SANDTON CONVENTION CENTRE • JOHANNESBURG, ZA

### Seminar #3

**8:30-12:00**

Understanding ISS Technologies and Products Deployed in Telecommunications Networks for Lawful Interception and Mass Surveillance

*Presented by: Dr. Jerry Lucas, President, TeleStrategies*

This half-day seminar covers how criminals and terrorists communicate over today's public telecommunications wireline and wireless networks, over the top Internet services and social networks. This seminar is ideal for law enforcement, interior security, public safety and others who need to understand the ISS technologies and products used to lawfully intercept electronic communications and conduct mass network surveillance as discussed at ISS World Conference sessions and by exhibitors.

**8:30-9:30**

### Introduction to Wireline Infrastructure and Related ISS Products for Lawful Interception and Mass Surveillance

What technical investigators need to understand about wireline network infrastructure:

- Voice service intercept types (PSTN, VoIP and P2P)
- Internet access intercept points
- Mediation device collection, data retention and CDR transfer to monitoring centers
- SS7 and mass metadata surveillance
- DPI and Optical Probe functions and placement
- ISS products found in wireline networks

**9:45-10:45**

### Understanding Mobile Wireless Infrastructure, and Related ISS Products for Lawful Interception and Mass Surveillance

What technical investigators need to understand about mobile network infrastructure

- What's different about 2G, 3G, 4G and 4.5G from an investigators perspective
- Relevance of SIM card stored data, IMSI, IMEI and other identifying information
- CDR's and suspect tracking, geolocation and data mining
- RF signal tracking, IMSI catchers and international tracking via SS7
- Wi-Fi intercept, MAC address harvesting and Man in the Middle (MITM) hotspot intercept
- ISS products located in wireless networks

**11:00-12:00**

### Understanding the Internet Over-the-Top (OTT) Services and Related ISS Products for Mass Intelligence Gathering and Surveillance

What technical investigators need to know about the Internet and Over the Top (OTT) communications techniques criminals and terrorists use:

- What's OTT and why the telecoms are no help in an investigation
- IP layering architecture and where intercept points are positioned
- ISP infrastructure and where they can be of assistance using temporal analysis to defeat anonymous services
- VOIP OTT service (P2P, Skype & VIBER) investigations
- Social Network and Dark Web monitoring tools
- products available for OTT investigations

### Seminar #4

**13:30 -17:00**

### Technical Surveillance Counter-Measures (TSCM) Workshop:

Does Your Organization Have Cyber TSCM Controls in Place?

*Presented by Steve Whitehead, Managing Director, EDS (Business Division of CBIA) South Africa*

This half day seminar covers the basics of protecting classified and sensitive

government information by conducting regular CyberTSCM and technical surveillance countermeasures surveys.

- Understanding the new wave of wireless sensors that are getting smaller and better
- Understanding sensors collecting and broadcasting in the radio frequency (RF) spectrum around us.
- Conducting appropriate TSCM surveys to identify unauthorized or illegal Internet of Things (IOT) operating in an areas of concern.
- Latest technical surveillance attack methods will be presented with appropriate cyber TSCM countermeasures.

### Seminar #5

**Monday, 11 July 2016**

**16:45-17:45**

### Understanding and Defeating Encryption, TOR and Dark Web Commerce

*Presented by: Dr. Jerry Lucas, President, TeleStrategies*

This session covers how TOR is used to hide IP location of senders, HTTP log of files used and encrypt communications, TOR Hidden Services (Dark Web) and how to find Hidden Services and techniques for defeating TOR and encrypted services such as Telegrams as used by criminals and terrorists.

- What's encryption, Where in the IP layer stack (2, 3, 4 and Applications) do you find encryption. Anonymity Services: Proxy Servers, VPNs and TOR
- How TOR hides IP addresses/identity/location
- TOR hosting, What is .ONION and content analysis
- "De-anonymizing" TOR: Investigation approaches, limitations and case studies
- Defeating Encryption Options: Brute force key cracking (?), force weak encryption, Man in the Middle (MITM) attacks and of course IT Intrusion Systems



- Defeating Apple iPhone encryption and Telegram encrypted services

## Seminar #6

Tuesday, 12 July, 2016

8:30-9:30

### Bitcoin 101: Introduction to What Technical Investigators Need to Know about Bitcoin Transactions, Dark Web Commerce and Money Laundering Investigations

Presented by: Dr. Jerry Lucas, 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 money laundering and why technical investigators need to understand the basic Bitcoin transaction mechanism (Blockchain) to successfully defeat 21st century criminals and terrorist actions. Specifically, 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)
- How criminals and terrorists use bitcoin in money laundering operations
- Bitcoin 2.0 and the New Challenges Facing Law Enforcement

Monday, 11 July 2016

## Welcoming Remarks

8:15-8:30

Tatiana Lucas, ISS World Program Director, **TeleStrategies**

ISS World Conference Overview Addresses

8:30-9:00

### Top Ten Internet Challenges Facing Law Enforcement and the Intelligence Community and Who at ISS World South Africa has Solutions

Dr. Jerry Lucas, President, **TeleStrategies**

#### Track 1

## 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.

Sunday, 10 July 2016

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

### 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**

8:30-12:00 **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**

Monday, 11 July 2016

9:00-9:30

### Data Retention for NAT (Network Address Translation): Why NAT – logging of records is required for LEA investigations

Rudolf Winschuh, **Utimaco LIMS**

11:30-12:00

### Scalable Lawful Interception, Now and into the Future

Presented by **Yaana Technologies**

14:00-14:30

### Deep Packet Inspection in Clouds and NFV

Presented by **Yaana Technologies**

15:30-16:00

### Understanding how Millennials (Gen Y) Communicate and the Impact these Communication Techniques Have on Exploiting Communications

Patrick C. Runyan, Business Development Manager – Global Solutions Group, **PenLink**

#### Track 2

## ISS for Money Laundering and Bitcoin Transaction Investigations

This session is for law enforcement and private enterprise financial analysts: Additional money laundering investigation sessions to be announced

Tuesday, 12 July 2016

8:30-9:30

### Bitcoin 101: Introduction to What Technical Investigators Need to Know about Bitcoin Transactions, Dark Web Commerce and Money Laundering Investigations

Presented by: Dr. Jerry Lucas, 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 money laundering and why technical investigators need to understand the basic Bitcoin transaction mechanism (Blockchain) to successfully defeat 21st century criminals and terrorist actions. Specifically, 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)
- How criminals and terrorists use bitcoin in money laundering operations
- Bitcoin 2.0 and the New Challenges Facing Law Enforcement

10:30-11:30

### Best Practices for Money Laundering Investigations

Panel to be announced

#### Track 3

## Mobile and Cloud Computing Forensic Training and Product Demonstrations

This track is for law enforcement and private enterprise investigators.

Monday, 11 July 2016

9:00 -10:00

### Advanced analytics in mobile forensics - Empowering a collaborative investigation environment with end-to-end forensic

Roy Shamir, **Cellebrite**

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

### Smart analyses tools for mobile forensics

Presented by **MSAB**

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

## The New Forensic Investigator Toolbox: from Tactical to Open Source Investigations

Luca Di Muccio, Business Development Manager, **AREA**

Emanuele Fontana, Senior Program & Solution Architect, **AREA**

15:30-16:30

## Cloud Forensics - Enriching today's investigation with evidence from cloud based services

Roy Shamir, **Cellebrite**

### Track 4

## Encrypted Traffic Monitoring and IT Intrusion Product Training

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

### Sunday, 10 July 2016

8:30-9:30

## Getting Real – OSINT and FinFisher™ in Day to Day Investigations

Presented by **FinFisher**

11:00-12:00

## FinFisher™:End to End approach to IT Investigation

Presented by **FinFisher**

### Monday, 11 July 2016

9:00-10:00

## A World of Possibilities - Remote Exploitation of Smartphones and PCs

Presented by **FinFisher**

16:45-17:45

## Understanding and Defeating Encryption, TOR and Dark Web Commerce

Presented by: Dr. Jerry Lucas, President, **TeleStrategies**

### Track 5

## LEA and Intelligence Analyst Training and Product Demonstration Track

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

### Monday, 11 July 2016

11:30-12:00

## Generating new Intelligence from call data records

Presented by **trovicor**

12:00-12:30

## Identifying suspects through Text Analysis - An introduction to mass email Monitoring

Presented by **trovicor**

### Tuesday, 12 July 2016

8:30-9:30

## Forensic Data Fusion Center: Passive, Active and Tactical in one frame.

Marco Braccioli, Senior Vice President, **AREA**

Emanuele Marcozzi, Presales Engineer, **AREA**

10:30-11:00

## Geographical area monitoring - Using geo-fencing to monitor real time target activities in areas of interest

Presented by **trovicor**

### Track 6

## Social Network Monitoring and Big Data Analytics Product Demonstration

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

### Sunday, 10 July 2016

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

## OSINT LABS from an empty building to a cornerstone of any intelligence organization

Presented by **Gamma Group**

## Exhibits

11 July 2016, 10:00am - 17:00pm

12 July 2016, 9:30am - 12:30pm

### Monday, 11 July 2016

9:00-9:30 **Session A**

## Intelligence in the Era of Global Terror -Using Terrorists' Own Communications in the Battle Against Them

Presented by **Verint**

9:30-10:00 **Session A**

## Comprehensive Intelligence to Protect Your Borders-Intelligence Collection and Operations Intelligence for Rural and Semi-Urban Border Areas

Presented by **Verint**

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

## The Importance of Open Source Data & Analysis in Combatting Crime

Presented by **Chenega Corporation**

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

## The New Forensic Investigator Toolbox: from Tactical to Open Source Investigations

Emanuele Marcozzi, Presales Engineer, **AREA**

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

## Multimedia/lingual OSINT exploitation" to combat global terrorism

Presented by **Gamma Group**

14:00-15:00

## Getting social media data using MSABs Cloud forensics

Presented by **MSAB**

15:30-16:00 **Session A**

## 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**

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

## Post Trojan Infiltration: The new Digital Undercover Agent

Marco Braccioli, Senior Vice President, **AREA**

Emanuele Marcozzi, Presales Engineer, **AREA**

**Tuesday, 12 July 2016**

**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**

**10:30-11:30**

**The Importance of Open Source Data & Analysis in Combatting Crime**

Presented by **Chenega Corporation**

**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 7**

**Mobile Location, Surveillance and Signal Intercept Product Training**

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

**Sunday, 10 July 2016**

**10:15-10:45**

**Covert Surveillance - from the simple to the sophisticated**

Presented by **Gamma Group**

**Monday, 11 July 2016**

**9:00-10:00**

**Advanced analytics to uncover targets and patterns based on mass data from a mobile communications capture system**

Presented by **VASTech**

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

**Carrier in Carrier (Double Talk ®) Satellite Interception**

Presented by **Advanced Systems**

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

**Target Tracking and Surveillance with Gamma Eye**

Presented by **Gamma Group**

**14:00-15:00**

**Advanced analytics to uncover targets and patterns based on mass data from a mobile communications capture system**

Presented by **VASTech**

**15:30-16:30**

**Next-Generation Intelligence (Locate, Monitor targets Invisibly) with A.I Remote Control Intelligence using Automation**

Manish Kumar & Rohitash Bhomia, **Wolf Intelligence**

**Tuesday, 12 July 2016**

**8:30-9:30**

**GSM Tactical Interception System for 3G and 4G**

Presented by **Advanced Systems**

**10:30-11:30**

**Tactical Bag Intercept Solution**

Presented by **EXFO Homeland Security**

**Registration Information**

**Save \$300 by registering before 6 June, 2016**

**Law Enforcement/DHS/IC/DoD Registration\***

ISS World Conference Training Tracks 1-7,  
Pre-Conference Seminars plus Exhibits.....\$995  
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*\*Note: To Attend the LEA/DHS/IC/DoD Training Tracks 3-7 you must be a sworn law enforcement officer or military/intelligence/government employee. Also you must register by 6 July 2016 in order to verify eligibility. Government photo ID required for classroom access.*

**Free Colleague Registration:** Register as paid and you can invite a colleague to join you at ISS World South Africa with a full, free conference pass. If you have not identified your guest at this time, just enter "guest of" followed by your name and complete with your contact information. You can register your guest at no charge at a later time.

**Conference and Exhibition Location**

Sandton Convention Centre Johannesburg  
Physical: 161 Maude St Sandton, 2196  
Postal: PO Box 782553 Sandton 2146 South Africa  
Phone: 55 61 3424 7000 Fax: 55 61 3424  
7001 <http://www.saconvention.co.za/>

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3. Garden Court Sandton: City 3 Cnr West & Maude Streets, Sandton +27 11 269 7000

**International Attendees:** If you need Visa assistance to attend ISS World, please contact Tatiana Lucas at [talucas@telestrategies.com](mailto: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](mailto:talucas@telestrategies.com).

**Registration**

**Phone: 1-703-734-7050 • Fax: 1-703-734-9371  
Online: [www.issworldtraining.com](http://www.issworldtraining.com)**

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AREA, is the Italian leading technology Industry and provider of Unconventional Communication and IP Info-Intelligence solutions. AREA provides an "end to end" Dual Use Info-Intelligence CC for HLS/HLD scenarios; satisfying Government Agencies' need to securely and effectively gather precious information to contrast menaces to Citizen's security and prevent digital attacks.



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.



trovicor is a world leader in lawful intelligence technology, providing end-to-end monitoring and intelligence solutions to more than 35 governments across the globe. Our next generation Monitoring Center captures, monitors, evaluates and sorts vast amounts of communication in one single platform. Our Intelligence Platform fuses and enriches this data with both structured & unstructured data and performs real-time analysis.



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. Our products are fully supported with extensive training given, drawing on 14 years global experience.



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 from virtually any communication network or data source.

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