

TeleStrategies®

Register 1
and 2nd FREE

ISS World[®] America

Intelligence Support Systems for Lawful Interception,
NSA Data Retention, Cyber Threat Detection and Information Sharing

SEPTEMBER 29 – OCTOBER 1, 2015 • WASHINGTON DC



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EXCELLENCE IN
IT INVESTIGATION



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SEPTEMBER 29 – OCTOBER 1, 2015 • WASHINGTON DC

ISS World America is the world's largest gathering of North American Law Enforcement, Intelligence and Homeland Security Analysts as well as Telecom Operators responsible for Lawful Interception, NSA Data Retention, Hi-Tech Electronic Investigations and Network Intelligence Gathering and Sharing.

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 networks, the Internet and Social Networks.

Track 1

ISS for Lawful Interception and Criminal Investigation

Track 2

ISS for Telecom Metadata Retention and NSA Access

Track 3

ISS for Cyber Threat Detection and Information Sharing

Track 4

Encrypted Traffic Monitoring and IT Intrusion Product Training

Track 5

LEA, Defense and Intelligence Analyst Training and Product Demonstrations

Track 6

Social Network Monitoring and Big Data Analytics Product Demonstrations

Track 7

ISS for Dark Web, TOR and Bitcoin Investigation

Advanced Hi-Tech, Cyber Crime Investigation Training:

31 classroom training hours, scheduled over 3 days, presented by sworn law enforcement officers, Ph.D. Computer Scientists and nationally recognized cybercrime textbook authors and instructors. Distinguished ISS World Training Instructors include:

Charles Cohen, *Cohen Training and Consulting*, also holds the position of Commander, Cyber Crimes Investigative Technologies Section, **Indiana State Police** (6 classroom hours, Tuesday)

Mark Bentley, *Communications Data Expert, National Cyber Crime Law Enforcement, UK Police* (7 classroom hours, Wednesday and Thursday)

Todd G. Shipley CFE, CFCE, President and CEO of Vere Software, Co-Author of, *Investigating Internet Crimes: An Introduction to Solving Crimes in Cyberspace* and Retired **Reno NV Police Officer** (6 classroom hours, Tuesday)

Stephen Arnold, Managing Partner, **ArnoldIT** and author of *Beyond Search: What To Do When Enterprise Search System Doesn't Work*, **Cyber OSINT: Next Generation Information Access and Searching The Dark Web** (2 classroom hours, Tuesday and Thursday)

Christopher Westphal, **Raytheon** Visual Analytics and author of *Data Mining for Intelligence, Fraud and Criminal Detection*. (3 classroom hours, Thursday)

Matthew Lucas (Ph.D., Computer Science), Vice President, **TeleStrategies** (4 classroom hours, Wednesday and Thursday)

Jerry Lucas (Ph.D., Physics), President, **TeleStrategies** (4 classroom hours, Tuesday)

Tuesday, September 29, 2015

Seminar #1

9:00-5:00 pm

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 pm

Metadata Exploitation in Criminal Investigations

1:30-2:30 pm

EXIF Tags and Geolocation of Devices for Investigations and Operational Security

2:45-3:45 pm

Case Studies in Metadata Vulnerability Exploitation and Facial Recognition

4:00-5:00 pm

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

Seminar #2

09:00-5:00 pm

A Real World Look at Investigations in the Dark Web

Presented by: Todd G. Shipley CFE, CFCE, President and CEO of Vere Software, Co-Author of, *Investigating Internet Crimes: An Introduction to Solving Crimes in Cyberspace* and Retired **Reno NV Police Investigator**

The aim of this 1 day seminar is to take the attendees from the basics of understanding the Dark Web, how to access it to how to finding information hidden within it. The attendees will learn the best practices for the internet investigator when working in the Deep Web and the tools available to assist their investigations into the Deep Web. This exclusively Law Enforcement only, as Practical examples, covert and investigative methods will be given throughout the seminar.

9:00-10:00

The Dark Web, what it is and what it is not

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10:15-11:15

To Tor or not to Tor

11:30-12:30 pm

CryptoCurrency and its use in the Dark Web

13:30-14:30 pm

Going Undercover on the Dark Web

14:45-15:45 pm

Using web bugs and other technology to locate a suspect

16:00-17:00 pm

Advanced Dark Web Investigations, identifying the anonymous user

Seminar #3

9:00-2:30 pm

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 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 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 well as an understanding of the buzz words and jargon used by telecom operator engineers and their vendors.

9:00-10:00

Introduction to Telecom Infrastructure, Interception and Related ISS Products

10:15-11:15

Understanding Mobile Wireless Infrastructure, Interception and Related ISS Products

11:30-2:30 pm

Understanding the Internet Over-the-Top (OTT) Interception and Related ISS Products

Seminar #4

2:45-3:45 pm

CyberOSINT: Available OSINT Tools for Real Time Automated Threat Detection

Presented by: Stephen Arnold, Managing Partner, ArnoldIT

Wednesday, September 30

Seminar #5

9:00-5:00 pm

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.

9:00-10:00

The World Wide Web and the Internet

11:00-12:00 pm

Recognizing Traffic Data

1:00-2:00 pm

WIFI and Mobile Data

2:45-3:45 pm

Emerging Technologies, Masking Tech and Tools

4:00-5:00 pm

Advanced Techniques in Tracing Suspects

Seminar #6

Understanding Bitcoin, Blockchain and Available Analytic Tools for Criminal Investigators

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

This seminar presents the basics of Bitcoin, Blockchain and Available tools for criminal investigators. Beginning with how you get started with a Bitcoin Wallet, how transactions flow from wallet to Bitcoin miners finding their way to the Blockchain Ledger. Why Bitcoin is becoming the currency of the Internet and why there use is championed by criminals and fund raising terrorists. More in-depth investigator material covers how to

conduct Bitcoin Blockchain Investigations and what tools are available.

9:00-10:00

Bitcoin 101: What Investigators Need to Know about Bitcoin, TOR and Dark Web Commerce: Bitcoin basics, Miners, Blockchain and Cryptography Demystified and more.

11:00-12:00 pm

Blockchain 201: What Investigators Need to know about Bitcoin Blockchain: What is it, obtaining a copy, open source Bitcoin/Blockchain software and more.

1:00-2:00 pm

Bitcoin Blockchain Forensics 301: Available Tools and Techniques to Navigate and Investigate Bitcoin Blockchain; linking IP/Bitcoin addresses, correlating transactions and industry tools.

Thursday, October 1, 2015

Seminar #7

8:30-9:30

Bitcoin 101: What Investigators Need to Know about Bitcoin, TOR and Dark Web Commerce: Bitcoin basics, Miners, Blockchain and Cryptography Demystified and more.

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

Seminar #8

8:30-1:00 pm

Visualizing Fraud Patterns: Exposing The Hidden Threats,

Christopher Westphal, Raytheon Visual Analytics

This presentation overviews a number of real-world fraud patterns and presents their common traits through the use of visual diagrams. See how many of these patterns are found through common sense (verses complex algorithms) and learn about how new methods, derived content, and external data help expose new fraud patterns. Presentation topics will cover:

- Methods for exposing generalized fraud patterns
- Reviewing repeated claims and multiple filings
- Use of meta-data content for adding analytical value
- Performing consistency checks on the data

- Integrating multiple sources of disparate data
- Using visualization techniques for showing fraud patterns
- Performing look-backs on the data to see the big picture

Seminar #9

10:30-11:30

Mock Dark Web, TOR and Bitcoin Investigation*

A Moch Investigation: Starting with the detection of an illegal, Dark Web operation, back tracking TOR messaging, Bitcoin transaction traceback to criminal apprehension.

Mark Bentley, Communications Data Expert,
National Cyber Crime Law Enforcement,
UK Police

Seminar #10

12:00-1:00 pm

Use of Hacking Techniques to Crack Dark Web Anonymity: Two Case Studies

Presented by: Stephen Arnold, Managing Partner, **ArnoldIT**

Wednesday, September 30, 2015

8:15-8:30

Welcoming Remarks

Tatiana Lucas, ISS World Program Director,
TeleStrategies

8:30-9:00

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

Presented by: Dr. Jerry Lucas, President,
TeleStrategies

Track 1

ISS for Lawful Interception and Criminal Investigation

Tuesday, September 29, 2015

11:00 12:00 pm

Zero In On Your Target: Advanced Social Engineering Techniques

Presented by **Hacking Team**

Wednesday, September 30, 2015

9:00-10:00

Current and Future Standardization Challenges: Encryption, Network Function Virtualization, Cloud Computing and More

Alex Leadbeater, Chairman, SA3 LI and EU
Data Retention Compliance Manager, **BT**

11:00-11:30

100 Gbit Capture is Different

Presented by **CSPI's** High Performance Products

1:00-2:00 pm

Signals Intelligence and Interception for DWDM Networks

Presented by **NetQuest**

2:45-3:15 pm

Scalable LI Solutions for dealing with LTE/VoLTE Roaming and OTT Encryption

Presented by **Yaana Technologies**

3:15-3:45 pm

Understanding the challenge of full VoLTE visibility on 10/40/100G interfaces in the mobile core network

Presented by **Fiberblaze**

Thursday, October 1, 2015

10:30-11:30

Incorporating DPI within the NFV Architecture while adhering to LI/DR/Cyber Standard initiatives

Presented by **Yaana Technologies**

Track 2:

ISS for Telecom Metadata Retention and NSA Access

Wednesday, September 30

11:30-12:30

Implementing The USA Freedom Act: What The Telecoms Need to Know

Moderator:

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

Panelists:

Tony Rutkowski, Senior VP Regulatory, **Yaana Technologies**

Adam Bowser, Associate, **Arent Fox**

Kelley Drye & Warren LLP Presenter to be Announced

1:30-2:00 PM

"Finding the Crown Jewels": An Insight Into How UK Law Enforcement Obtain Metadata Held by the Telcos

Presented by **CTG**

Track 3:

ISS for Cyber Threat Detection and Information Sharing

Tuesday, September 29 2015

2:45-3:45 pm

CyberOSINT: Available OSINT Tools for Real Time Automated Threat Detection

Stephen Arnold, Managing Partner, **ArnoldIT**

Wednesday, September 30, 2015

9:00-10:00

Why STIX and TAXII and Why Organizations and Vendors Should Adopt Them

Bret Jordan, Director of Security Architecture and Standards, Office of the CTO, **Blue Coat Systems**

11:00-12:00 pm **SESSION A**

Best Practices for Sharing CTI in Financial Services

David Henry Eilken, VP Strategies, **Soltra**, an FS-ISAC & DTCC Company

11:00-11:30 **SESSION A**

Communications Insight: Identify Leaks, Threats, and Cyber Attacks More Quickly, Easily, and Cost-Effectively

Presented by **SS8**

11:30-12:00 pm **SESSION B**

Finding, Investigating, and Stopping Stealthy Persistent Threats

Presented by **SS8**

1:00-1:30 pm

Using Tom Sawyer perspectives to Connect the Dot

Presented by **Tom Sawyer Software**

1:30-2:00 pm

Identifying important patterns in your communications data using network visualization

Corey Lanum, **Cambridge Intelligence**

1:00-2:00 pm **SESSION B**

International Cyber Threat Standards and New OASIS Cyber Threat Intelligence (CTI) Initiative and Other International Standard Activities

Tony Rutkowski, EVP, Standards & Regulatory Affairs, **Yaana Technologies** and other OASIS CTI Members Invited

2:45-3:45 pm

Overview and Status of Facebook's ThreatExchange

Facebook ThreatExchange Presenter invited

Thursday, October 1

10:30-11:30

Memex Overview: DARPA's Dark Web Search Engine

DARPA presenter invited

Track 4:

Encrypted Traffic Monitoring and IT Intrusion Product Training

Some track sessions are for LEA and other government attendees only as indicated by *

Wednesday, September 30, 2015

9:00-10:00

Covert IT Operations with OSINT and FinFisher - Real Scenarios*

Presented by **FinFisher**

1:00-2:00 pm

FinFisher: Maximum Impact - The Evolution of IT Investigation*

Presented by **FinFisher**

2:45-3:45 pm

Solving the Impossible: A Live Demonstration of Unconventional Surveillance Tools from HackingTeam

Presented by **Hacking Team**

Track 5:

LEA, Defense and Intelligence Analyst Training and Product Demonstrations

Some track sessions are for LEA and other government attendees only as indicated by *

Wednesday, September 30, 2015

9:00-10:00 **SESSION A**

Analyzing Multiple Data Sources in One Application*

Presented by **SS8**

9:00 to 10:00

New Cutting-Edge Surveillance Tools from Hacking Team

Presented by **Hacking Team**

9:00-5:00 pm **SESSION B**

Practitioners Guide to Internet Investigations

Mark Bentley, Communications Data Expert,
National Cyber Crime Law Enforcement,
UK Police

11:00-12:00 pm

Applying Instant Insight Security Analytics to Identify and Track Persons of Interest*

Presented by **Glimmerglass** Cyber Solutions

Thursday, October 1, 2015

10:30-11:30

Nomadic equipment, wearable monitoring and field Command Centre*

Presented by **AREA**

12:00-1:00 pm

Top 20 Open Source Tools (OSINT) Used in Cybercrime Investigations*

Mark Bentley, Communications Data Expert,
National Cyber Crime Law Enforcement,
UK Police

Track 6:

Social Network Monitoring and Big Data Analytics Product Demonstrations

Some track sessions are for LEA and other government attendees only as indicated by *

Tuesday, September 29, 2015

9:00-5:00 pm

Online Social Media and Internet Investigations

Charles Cohen, **Cohen Training and Consulting, LLC**

Wednesday, September 30, 2015

9:00-10:00

Applying DPI for Social Network and other OTT Application Monitoring*

Presented by **Yaana Technologies**

11:00-12:00 pm

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

Presented by **AREA**

1:00-2:00 pm

Crime, Security & Digital Intelligence: Best Practices for Social Media*

Presented by **Geofeedia**

2:45-3:45 pm

Virtual Human Intelligence: be inside, stealth, future and technology proof. Some use cases*

Presented by **AREA**

Thursday, October 1, 2015

8:30-1:00 pm

Visualizing Fraud Patterns: Exposing The Hidden Threats

Christopher Westphal, **Raytheon** Visual Analytics

Track 7:

ISS for Dark Web, TOR and Bitcoin Investigation

Tuesday, September 29, 2015

9:00-5:00 pm

A Real World Look at Investigations in the Dark Web*

Todd G. Shipley CFE, CFCE, President and CEO of **Vere Software**, Co-Author of ,
Investigating Internet Crimes: An Introduction to Solving Crimes in Cyberspace and retired **Reno, NV, Police Officer**

Wednesday, September 30, 2015

9:00-10:00

Bitcoin 101: What Investigators Need to Know about Bitcoin, TOR and Dark Web Commerce: Bitcoin basics, Miners, Blockchain and Cryptography Demystified and more.

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

11:00-12:00 pm

Blockchain 201: What Investigators Need to know about Bitcoin Blockchain: What is it, obtaining a copy, open source Bitcoin/Bockchain software and more.

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

1:30-2:30 PM

Can Bitcoin Be Taken Down Overnight by Hackers or CyberSaboteurs Because of Software Flaws or Injected Malware in Bitcoin Core Technologies

Moderator:

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

Panelists:

Bitcoin Technology Experts to be Announced

3:00-4:00 PM

Analyzing Bitcoin Transactions to Detect Fraud and Other Financial Crimes

Moderator:

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

Panelists:

Panel of **Financial Security Executives** to be Announced

Thursday, October 1, 2015

8:30-9:30

Bitcoin 101: What Investigators Need to Know about Bitcoin, TOR and Dark Web Commerce: Bitcoin basics, Miners, Blockchain and Cryptography Demystified and more.

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

10:30-11:30

Mock Dark Web, TOR and Bitcoin Investigation*

A Mock Investigation: Starting with the detection of an illegal, Dark Web operation, back tracking TOR messaging, Bitcoin transaction traceback to criminal apprehension.

Mark Bentley, Communications Data Expert,
National Cyber Crime Law Enforcement,
UK Police

12:00-1:00 pm

Use of Hacking Techniques to Crack Dark Web Anonymity: Two Case Studies

Stephen Arnold, Managing Partner, **ArnoldIT**

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SS8 is a leading worldwide provider of end-to-end communications and cyber intelligence solutions. We enable LEAs and national governments to collect and monitor current and evolving voice and IP data communications in accordance with local laws and standards. Our solutions empower telecommunications providers to get the most return on their compliance investments, and we efficiently support a wide range of protocols, applications and communication methods, regardless of what device, application, or network type today's terrorist or criminals use. We recognize that in today's world of known threats, new approaches are necessary to uncover the unknown.



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.



Founded in 2008 Fiberblaze has rapidly grown to become a significant OEM supplier of FPGA based high performance Network Interface Cards for the Financial, Telecommunications and Cyber Security sectors. Our growth is fueled by our ability to provide solutions which match customer requirements, from unconfigured hardware platforms to fully configured solutions with focus on ultra-low latency and no loss data handling at full line rate.



For 10 years Hacking Team has been helping law enforcement stop crime and terrorism. In an age of universal encryption, our technology gives government agencies the ability to see communications of suspects in the clear. The latest version, "Galileo" enables examination of the contents of endpoint devices and offers the widest selection of infection vectors available, all without protection systems being able to detect the investigation in progress. Find out more at www.hackingteam.com.



Yaana Technologies is a leading global provider of intelligent Compliance Solutions with accurate data retention, sophisticated security, and unique analytical capabilities. Our solutions offer our customers a cost-effective path to address the complexities related to meeting compliance needs in the rapidly evolving information-communications and cloud markets worldwide.

Exhibitors and Sponsors

Exhibit Hours:

Wednesday, September 30, 2015:
10:00 -5:00 p.m.

Thursday, October 1, 2015:
9:30- 12:00 p.m.

