Intelligence Support Systems for Electronic Surveillance,
Social Media/DarkNet Monitoring and Cyber Threat Detection

Where Law Enforcement, Government Intelligence Agencies and
Financial Crime Investigators turn for Technical Training and Product Selection

14-16 JUNE 2022 • CLARION CONGRESS HOTEL • PRAGUE, CZ

151 LEA/Interior/DoD Training Sessions and Courses to Choose From
**ISS World Europe** is the world's largest gathering of Regional Law Enforcement, Intelligence and Homeland Security Analysts, Telecoms as well as Financial Crime Investigators responsible for Cyber Crime Investigation, Electronic Surveillance and Intelligence Gathering.

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

**ISS WORLD EUROPE 2022 PROGRAM AGENDA**

**Training Seminars Led by Law Enforcement Officers and Ph.D., Computer Scientists**

20 classroom training hours, presented by Law Enforcement Officers and Ph.D. Scientists

- **Charles Cohen**, Vice President at NW3C, the National White Collar Crime Center, Professor in Practice Criminal Justice, Indiana University and Retired Captain, Indiana State Police. USA (6 classroom hours)
- **Charles Cohen**, Vice President at NW3C, the National White Collar Crime Center, Professor in Practice Criminal Justice, Indiana University and Retired Captain, Indiana State Police (6 classroom hours)
- **Mark Bentley**, Communications Data Expert, National Cyber Crime Law Enforcement, UK Police (7 classroom hours)
- **Jerry Lucas** (Ph.D., Physics), President, TeleStrategies (2 classroom hours)
- **Matthew Lucas** (Ph.D., Computer Science), VP, TeleStrategies (3 classroom hours)
- **Vladimir Vesely** (Ph.D., Computer Science) Researcher, Brno University of Technology (2 classroom hours)

**Tuesday, 14 June 2022**

**SEMINAR #1**

08:30-15:05

Online Social Media and Internet Investigations

- Presented by: Charles Cohen, Vice President at NW3C, the National White Collar Crime Center, Professor in Practice Criminal Justice, Indiana University and Retired Captain, Indiana State Police

08:30-09:20

Collecting Evidence from Online Social Media: Building a Cyber-OSINT Toolbox (Part 1)

09:25-10:15

Collecting Evidence from Online Social Media: Building a Cyber-OSINT Toolbox (Part 2)

10:35-11:25

Collecting Evidence from Online Social Media: Building a Cyber-OSINT Toolbox (Part 3)

11:30-12:20

Collecting Evidence from Online Social Media: Building a Cyber-OSINT Toolbox (Part 4)

13:20-14:10

Collecting Evidence from Online Social Media: Building a Cyber-OSINT Toolbox (Part 5)

14:15-15:05

Collecting Evidence from Online Social Media: Building a Cyber-OSINT Toolbox (Part 6)

**SEMINAR #2**

08:30-15:05

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, building their OSINT toolbox, and 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.

08:30-09:20

The Internet, and how suspects leave a Digital Footprint. How the system works for us, as investigators

09:25-10:15

Recognizing Traffic Data and digital profiling via social networks and devices - digital shadows

10:35-11:25

WIFI, geolocation, and Mobile Data traces and tracking

11:30-12:20

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

13:20-14:10

Advanced Techniques in Tracing Suspects, and lateral problem solving

14:15-15:05

Open Source Tools, resources and techniques - A walk through my free law enforcement open source tools site

**SEMINAR #3**

08:30-09:20

Understanding Mobile 2G, 3G, 4G & 5G NSA Infrastructure and Law Intercept for Technical Investigators

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

This session addresses the infrastructure evolution of 2G to 3G to 4G to 5G NSA and the impact on lawful interception.
SEMINAR #4
09:25-10:15
Understanding 5G Stand Alone NFV, Edge Computing and Network Slicing
• Presented by: Matthew Lucas (Ph.D, Computer Science), VP, TeleStrategies

Cellular market analysts collectively have identified 5G services deployed in over 400 cities spread over 30 or so countries. The one common feature of all these operations is that they are providing 5G services with a 4G/5G hybrid network infrastructures or so called non-Stand Alone (NSA) architecture. This session addresses the transition to 5G stand alone. (Full description below Track 9)

SEMINAR #5
10:35-11:25
Understanding Advanced Techniques to Defeat (or Work Around) Encrypted Third Party Services, Bitcoin Anonymity, TOR/HS and iPhone Encryption
• Presented by: Matthew Lucas (Ph.D, Computer Science), VP, TeleStrategies

You can’t defeat today’s encryption (at least not that we know of) but law enforcement and the government intelligence community can “Work around encryption” for a price. Once you identify a target using commercially available encryption products or services (and with enough resources or money) government can defeat the target near 100% of the time.

SEMINAR #6
11:30-12:20
Locating and Tracking Devices by MAC Addresses and App-Based SDKs plus Privacy Measures by Apple & Google
• Presented by: Matthew Lucas (Ph.D, Computer Science), VP, TeleStrategies

Thursday, 16 June 2022
SEMINAR #7
13:00-14:00
Top 20 Open Source Tools (OSINT) Used in Cybercrime Investigations
• Presented by: Mark Bentley, Communications Data Expert, National Cyber Crime Law Enforcement, UK Police

Wednesday, 15 June 2022
8:30-9:10
Lawful Interception and Criminal Investigation Training
This track is for Telecom Operators and Law Enforcement/Intelligence/Defense Analysts who are responsible for specifying or developing lawful intercept network infrastructure.

Tuesday, 14 June 2022
15:25-16:05
SEMINAR B
Accelerating investigation workflows with specially designed IT-forensic laboratories
• Presented by mh Service GmbH

Wednesday, 15 June 2022
09:00-10:00
Lawful Interception and Communication Data, Current & Future Challenges: Mobile, Cyber Security, Virtualization and AI - An industry view
• Alex Leadbeater, 3GPP SA3-LI and ETSI TC Cyber Chairman and Head of Global Obligations Future and Standards, BT Security

15:00-15:40
Flow aware scalability across servers
• Presented by Napatech

Thursday, 16 June 2022
8:30-9:10
Password Cracking in Practice
As more and more traffic and data on the Internet are being protected end-to-end, decrypting information becomes more critical than ever before. The presentation outlines password-cracking use-cases, employed formats, current GPU/FPGA performance limits, and existing (non-) commercial cracking tools. Speaker will show how to: a) automatically extract hashes from encrypted documents; b) prepare and evaluate password keyspace (e.g., generate passwords using Markov chains / rule-based grammars and handling of passwords containing national characters); c) orchestrate various cracking strategies (e.g., a combination of dictionaries). Participants will be provided with tips and tricks on how to use Hashcat more effectively and how to distribute password cracking task on their infrastructure.

• Vladimir Vesely (Ph.D., Computer Science) and Jan Pluskal, Researchers, Brno University of Technology

Wednesday, 15 June 2022
09:15-10:00
Cyber Threat Intelligence in Context of Counterterrorism
• Presented by Resecurity

11:45-12:30
Intercepting and Collecting Web Evidence in the Times of TLS1.3 and HTTP3.0
The end-to-end HTTPS encryption and the volatile nature of web content make any interception and collection of data on the Internet a challenge. The presentation introduces methods addressing both of these phenomena – intercepting TLS/SSL connections with the help of man-in-the-middle attack employing proxy and automatically creating snapshots of problematic web pages. Speakers outline necessary theory (including news about TLS 1.3, HSTS, HTTPS0), well-known attacks (e.g., renegotiation, downgrade, cipherspec change and others), and industry-standard tools for traffic analysis (such as Wireshark, Fiddler proxy, SSL-Split) and decoding (e.g., Selenium, Scrapy). The session will include a live demo of MitM attack on HTTPS connection enhanced with covert extraction of form data, which would be later used to periodically web scrape and archive protected content.

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Lawful Interception and Communication Data, Current & Future Challenges: Mobile, Cyber Security, Virtualization and AI - An industry view
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09:25-10:15
Understanding 5G Stand Alone NFV, Edge Computing and Network Slicing
• Presented by: Matthew Lucas (Ph.D, Computer Science), VP, TeleStrategies

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Wednesday, 15 June 2022

09:00-10:00 SESSION A
A new dawn of AI, analytics and intelligence: Are you ready for it?
- Presented by NSO Group

09:00-09:30 SESSION B
Breaking down organized crime by mastering WEBINT thinking
- Presented by Cognyte (Formerly a Verint company)

09:00-10:00 SESSION D
Cutting through the noise with intelligent data acquisition
- Jez Nelmes, BAE Systems AI

13:00-13:45 SESSION A
Intelligence IoT: Networked Tactical Intelligence
- Presented by Ateros

13:00-13:40 SESSION C
Taking Control with Drone Takeover C-UAS technology for sensitive and urban environments
Simply resolving a rogue drone incident is not enough for many organizations, especially if the resolution includes collateral damage resulting from shooting down an unauthorized drone. During his session, “A Safe Landing-Based Approach to Sensitive & Urban Scenario Counter-Drone Defense,” Amit Haimovich, VP Sales, D-Fend Solutions, will offer best practices on how organizations can safely land rogue drones. He will also explain why organizations should focus their counter-drone efforts on truly dangerous drones
- Amit Haimovich, VP Sales, D-Fend

13:45-14:30 SESSION B
GeoGence – National level, non-intrusive and independent accurate geo-monitoring and profiling covering all device types and networks (3/4/5G and WIFI) globally
- Presented by GeoGence

13:45-14:30 SESSION D
Challenges to Consider when preparing for the 5G Lawful Interception Era
- Presented by Cognyte (Formerly a Verint company)

15:00-15:45 Next Generation of Data Convergence, Analytics, and Intelligence
- Kevin Metcalf, SS8

15:45-16:30 SESSION A
Every piece of data tells a story – combine and analyze data from any source in your digital investigation
- Mark Uldahl, CTO, XCI A/S

16:30-17:15 SESSION C
Advanced data exfiltration on modern smartphones: inside the targets compromised
- Presented by MOLLITIAM CYBERINTELLIGENCE

Thursday, 16 June 2022

08:30-09:10 SESSION A
A light in the darkness of Encrypted Communications
- Presented by AREA

08:30-09:10 SESSION B
FibreSignal Analysis: What intelligence value does a fibre link contain?
- Presented by VASTech

09:15-10:00 SESSION A
Real Time Application Forensics: Finding suspects and evidence on an encrypted internet
- Presented by Sandvine

09:15-10:00 SESSION B
Practical and creative example of modifying Android OS by HEX editing system files, and having regular applications to achieve surveillance.
- Denis Cuculic, CEO ex. Head of Technical Department, PRO4SEC

11:00-11:40 SESSION A
A new perspective for field operations - supporting Cyber operations in the field
- Presented by Tovi

13:00-14:00 SESSION B
Memento Labs - Live Demo
- Presented by Memento Labs

11:45-12:30 SESSION A
Data Enrichment Techniques and Sources for Internet Investigations
- Presented by Packet Forensics

Track 3
Social Network Monitoring, Artificial Intelligence and Analytics Product Training
Sessions in this track are only open to Law Enforcement, Public Safety and Government Intelligence Community Attendees, unless marked otherwise.

Tuesday, 14 June 2022

08:30-09:20 Massive Social Media data collection and analysis for Counter-Terrorism Intelligence Activities
- Presented by IPS

09:25-10:15
WhatsApp, Telegram, Facebook...how IPS helps you to locate most wanted targets with LI
- Presented by IPS

13:20-14:10 SESSION B
Multi-Source-Analytics: Mastering constant changing communication patterns and ever growing sources.
- Presented by Innosystec

14:15-14:40 SESSION B
Automatic Exploitation of Social Network, Deep and Dark Web to complement traditional Lawful Interception Infrastructure for Target Profiling.
- Presented by IPS

14:40-15:05 SESSION B
Machine Learning in a Command and Control Centre for covert field operations and situation awareness
- Presented by IPS

15:25-16:05 SESSION A
Looking into the future of investigations with big data analytics and ML
- Presented by Cognyte (Formerly a Verint company)

16:10-17:00 SESSION A
Social Media as the new passport for illegal immigration
- Presented by Cognyte (Formerly a Verint company)
**Wednesday, 15 June 2022**

9:00-10:00  
**Tactical Web Intelligence (WEBINT): Gathering Actionable Intelligence via a powerful WEBINT platform**  
• Presented by Cobwebs

13:00-13:40  
**Location & Open Source Intelligence: Real Life Case Studies & Live Demonstration**  
• Presented by Cobwebs

13:45-14:30  
**Discover the Unknows of the Digital Sphere**  
• Presented by Ultra

15:00-15:45  
**Supercharged IPDR extraction and analysis - Advanced Mass Internet Activity Analytics**  
• Presented by Trovicor

15:45-16:25  
**Encryption vs. You: 3 Ways to Combat Threats at a Nationwide Scale**  
• Presented by ClearTrail

16:30-17:15  
**VoIP Forensics: Revealing encrypted VoIP communication network of criminal organizations**  
• Presented by Sandvine

**Thursday, 16 June 2022**

09:15-10:00  
**Information overkill: finding the relevant pieces of the puzzle across multiple data sources to detect and prevent terror and crime.**  
• Presented by Innosystec

09:15-10:00  
**How to Protect the Status of Data Traffic Without Changing the Status Quo**  
• Presented by Allot

13:00-14:00  
**Top 20 Open Source Tools (OSINT) Used in Cybercrime Investigations**  
• Mark Bentley, Communications Data Expert, National Cyber Crime Law Enforcement, UK Police

16:10-17:00  
**Hushmeeting: creating an iron-clad environment**  
• Presented by Feedback Italia

16:10-17:00  
**Workshop on Correlating Blockchain Activity with Real-Life Events and Users**  
• Presented by MOLLITIAM CYBERINTELLIGENCE

**Tuesday, 14 June 2022**

10:35-11:25  
**Maximize Geolocation Intelligence to Investigate the Past & Prevent Future Crimes (DEMO)**  
• Presented by Rayzone Group

11:30-12:20  
**Hushmeeting: creating an iron-clad and quantum-safe communication environment**  
• Presented by Feedback Italia

16:10-17:00  
**Obtaining valuable information from information from the latest versions of MacOS**  
• Presented by MOLLITIAM CYBERINTELLIGENCE

**Wednesday, 15 June 2022**

9:00-10:00  
**Construct, Visualize and Analyze Digital Trails through Big Data (DEMO)**  
• Presented by Rayzone Group

13:00-13:40  
**Hushmeeting: creating an iron-clad and quantum-safe communication environment**  
• Presented by Feedback Italia

15:00-15:45  
**Secure National Critical Infrastructure and Organizational IT**  
• Presented by Rayzone Group

15:45-16:30  
**Exploitation & Operations Security (OpSec) in Cyber Intelligence Ops**  
• Presented by Secfense

**Thursday, 16 June 2022**

11:45-12:30  
**Riots in Colombia: crowd control on the internet**  
• Presented by MOLLITIAM CYBERINTELLIGENCE

**Notes:**
- Some sessions are only open to LEA and Government. These sessions are marked accordingly.
- This track is for law enforcement and private enterprise investigators who have to monitor and investigate the DarkNet along with Bitcoin transactions associated with criminal activities.
- This track is only open to LEA, Public Safety and Government Intelligence Community Attendees.
- This session is exclusively available to law enforcement agencies.
Tuesday, 14 June 2022

8:30-9:20 SESSION B
Understanding Mobile 2G, 3G, 4G and 5G NSA Infrastructure, Intercept and Cryptography
• Dr. Jerry Lucas, President, TeleStrategies
9:25-10:15
Detect & Prevent Communication Interception Systems in Real-Time
• Presented by Rayzone
10:35-11:25
VSAT Networks: Tactical and Strategic Threat Detection and Geolocation
• Presented by Kratos
11:30-12:20 SESSION B
SCPC/VSAT Interception in CIC/CuC Scenarios
• Presented by Rohde Schwarz

Wednesday, 15 June 2022

9:30-10:00
(TI) Tactical Intelligence solutions for evolving threats and technologies
• Presented by Cognyte (Formerly a Verint company)
13:45-14:30
Overcoming geolocation challenges in a complex mobile world
• Ahmed Hamza, Intersec

Thursday, 16 June 2022

09:15-10:00
5G Tactical solutions and interoperability
• Presented by EXFO

11:00-11:40
Mobile Radio Analysis Solutions with 5G for Government
• Presented by Rohde Schwarz

11:45-12:30
An Entirely New Approach for Digital Forensics and Intelligence-collection from IoT Devices
Connected-devices store vast amount of data, that may be game changing in the fight against terror and crime. However, security, defense and law enforcement agencies face a great number of challenges in gaining access and extract digital data in a quick, simple and effective manner. In this session, Toka will introduce its groundbreaking software-based platforms for obtaining digital forensics and ongoing intelligence from highly demanding devices, using advanced cyber technologies.
• Presented by Toka

Track 7
Electronic Surveillance Training and Product Demonstrations
This track is for law enforcement investigators and the government intelligence community who are responsible for deploying video, audio and GPS surveillance products and only open to Law Enforcement, Public Safety and Government Intelligence Community Attendees.

Tuesday, 14 June 2022

9:25-10:15
Understanding 5G Stand Alone NFV, Edge Computing and Network Slicing
• Matthew Lucas (Ph.D, Computer Science), VP, TeleStrategies
10:35-11:25
Interception Systems in Real-Time
• Presented by Rayzone
11:00-11:40
Mobile Radio Analysis Solutions with 5G for Government
• Presented by Rohde Schwarz

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To reserve a room at the early bird rate of 115 EUR ($125 US) go to www.issworldtraining.com and select ISS World Europe 2022 or call 420 211 131 119 and reference ISS World 2022. Early bird rate expires 1 May 2022.

International Attendees:
If you need a Visa to attend ISS World, please contact Tatiana Lucas at talucas@telestrategies.com.

Conference by Invitation Only:
To attend ISS World you must be a Private Enterprise Investigator, 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.

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Registration after 1 May 2022 $1,295

*Note: To Attend the LEA/DHS/IC/DoD Training Tracks 2, 3, 4, 6 and 7 you must be a sworn law enforcement officer or military/intelligence/government employee. Also you must register by 10 June 2022 in order to verify eligibility. Government photo ID required for classroom access.
Intelligence Support Systems for Real-Time Threat Intelligence Gathering, Cyber Security and Cyber Crime Investigations

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