

# ELECTRONIC EVIDENCE IN CRIMINAL INVESTIGATIONS

OAS-REMJA Working Group on Cybercrime Regional Workshop for Central America  
Panama City, Panama, 25 to 27 August 2009

## Tuesday, 25 August

8:30 Arrival and registration

### 9:00 Opening session

Welcome and introduction by representatives of Panama, the United States, and the Organization of American States

10:00 Break

### 10:20 Investigations involving computers and the Internet

Electronic evidence is likely to exist for most crimes

- The nature and location of electronic evidence
- An overview of investigations involving electronic evidence
- Roles of investigators, analysts, and prosecutors
- Basic training and equipment for police and investigators

Albert Rees  
*Trial Attorney*  
*United States*  
*Department of Justice*

### 11:00 Plenary discussion: legal considerations for gathering electronic evidence

The law shapes the way that investigators gather evidence

- Participants discuss their countries' laws and procedures for obtaining evidence and how this impacts gathering electronic evidence
- Participants describe their countries' legal standards to successfully convict offenders using electronic evidence
- All are encouraged to provide examples from their countries of successes and challenges in using electronic evidence in legal proceedings

### 11:40 Computers, networks, and the Internet

An introduction to computer systems and how the internet works

- Creating and storing information
- Moving information across the Internet; Internet protocol (IP) addresses
- Internet applications: email and web browsers

Luis A. Gorgona S.  
*Deputy Director of*  
*Information Technology*  
*of the Presidential*  
*Ministry of Costa Rica*

13:00 Lunch

### 14:00 First response: before the police arrive

Much may have occurred before a crime involving computers or the Internet is reported to police

- The role of the system administrator in incident response
- The functions and role of the CSIRT
- The goals of incident response
- Assisting law enforcement in investigations

Luis A. Gorgona S.  
*Deputy Director of*  
*Information Technology*  
*of the Presidential*  
*Ministry of Costa Rica*

**15:00 First response: initial stages of the investigation**

Matt Ralls  
*Special Agent  
 United States  
 Secret Service*

Investigators must respond promptly to identify and secure electronic evidence

- Interviewing system administrators and other witnesses
- Identifying sources of electronic and other evidence
- Preserving electronic evidence
- Integrating electronic and other evidence into the investigation
- Case management and investigation plan

16:00 Break

**16:20 Introduction to the case study**

Michelle Kane  
*Trial Attorney  
 United States  
 Department of Justice*

Participants will break into groups to apply principles presented in the workshop to a hypothetical case involving computers and the Internet

**16:30 Breakout group discussions: digital evidence and forming an investigation plan**

17:30 Adjourn

## Wednesday, 26 August

**9:00 Plenary discussion: first response actions and investigation plan**

Participants report on their breakout group discussions, including conclusions, proposed actions, and unresolved issues

**9:30 Collecting digital evidence: e-mail investigations**

To Be Determined

E-mail communications can be a source of evidence for any crime

- The components of e-mail messages
- E-mail headers and other metadata
- Tracing e-mail
- Working with service providers who hold data and records
- International issues

10:30 Break

**10:50 Collecting digital evidence: online investigations**

Matt Ralls

Individuals who use the Internet leave a trail of evidence that can be hard to follow, but valuable

- Common applications: websites, IRC, IM, P2P, VOIP
- Online reconnaissance
- Encryption
- Protecting the investigator's online identity
- Working with service providers
- International issues

13:00 Lunch

14:00 **Collecting digital evidence: computers, networks, and related items**

Matt Ralls

Computers and other electronic devices may contain a wealth of information

- Searching for and seizing computers and related evidence
- Preparing for the search and seizure; reconnaissance and planning
- Securing the computer for analysis and data preservation
- Initial data collection – triage – volatile data collection
- Assistance from the forensic analyst and system administrator
- Imaging and preserving evidence
- Collecting and using non-electronic evidence

15:00 **Computer forensics**

To Be Determined

An introduction for investigators and prosecutors on computer forensics and the evidence available through analysis

- Description of computer forensics
- What computer forensics can provide to the investigator and prosecutor; what it cannot provide
- Common techniques
- Working with the forensic analyst

16:00 Break

16:20 **Breakout group discussions: collecting digital evidence and creating a timeline**

17:30 Adjourn

## Thursday, 27 August

9:00 **Plenary discussion: collecting digital evidence and creating a timeline**

Participants report on their breakout group discussions, including conclusions, proposed actions, and unresolved issues

9:30 **International cooperation**

Albert Rees

The global nature of the Internet requires new thinking in international cooperation

- Applying principles of international legal assistance to electronic evidence
- The need for harmonized laws and procedures – Cybercrime Convention
- Data preservation and the 24/7 Network
- Some solutions; continuing problems

10:30 Break

10:50	<b>Mobile telephones as electronic evidence</b>	Matt Ralls
	<p>The ubiquitous mobile telephone can be a significant source of evidence</p> <ul style="list-style-type: none"> <li>• Evidence residing on mobile phones</li> <li>• Searching and seizing mobile phones</li> <li>• Evidence held by service providers</li> <li>• Mobile phone location</li> </ul>	
12:00	<b>User attribution</b>	Michelle Kane
	<p>Investigators and prosecutors must show that the suspect used the computer</p> <ul style="list-style-type: none"> <li>• Using electronic and other evidence to show that a person was using a computer at a particular time and place</li> <li>• Countering suspects' explanations as to why it was not them</li> </ul>	
13:00	Lunch	
14:00	<b>The OAS Working Group on Cybercrime</b>	Rodrigo Cortés Legal Counsel Department of Legal Cooperation Secretariat for Legal Affairs of the OAS
	<p>The OAS Working Group on Cybercrime is a group of government experts responsible for fostering international cooperation in the investigation and prosecution of cybercrime among the member states of the OAS</p>	
14:30	<b>Plenary discussion: putting it all together and preparing for trial</b>	Michelle Kane
	<p>Participants and facilitators share their requirements, practices, and experiences for bringing an investigation to a conclusion, preparing for legal proceedings, and success at trial</p>	
15:30	<b>Workshop wrap-up and feedback</b>	Albert Rees
16:00	<b>Closing</b>	
17:00	End of workshop	

For information about this workshop and other OAS-REMJA cybercrime programs:

**Department of Legal Cooperation**  
Secretariat for Legal Affairs  
Organization of American States

Rodrigo Cortés: [rcortes@oas.org](mailto:rcortes@oas.org)  
+1 (202) 458-3395

[www.oas.org/juridico/spanish/](http://www.oas.org/juridico/spanish/)  
[www.oas.org/juridico/english/](http://www.oas.org/juridico/english/)

**Computer Crime and Intellectual Property Section**  
Criminal Division  
United States Department of Justice

Albert Rees: [albert.rees@usdoj.gov](mailto:albert.rees@usdoj.gov)  
Jaikumar Ramaswamy: [jaikumar.ramaswamy@usdoj.gov](mailto:jaikumar.ramaswamy@usdoj.gov)  
+1 (202) 514-1026  
[www.cybercrime.gov](http://www.cybercrime.gov)