



CELLEBRITE ADVANCED VIDEO ANALYSIS (CAVA)

Mobile Forensics, Investigative, Computer
Forensics



Level

Advanced



Length

Five-Day (35 hours)



Training Track

Mobile Forensics
Investigative
Computer Forensics



Delivery Mode

Instructor-Led
Live Online

Course Description

Cellebrite Advanced Video Analysis (CAVA) is a five (5) day advanced course designed to serve as the next step for students who have successfully completed any of Cellebrite's courses, a vendor-specific training offering in multimedia forensics, or students new to multimedia forensics who are seeking to dive right into processing a complex case. The course covers evidence handling, complex work flows around codec management within virtual machines, comparative analysis files retrieved from multiple locations, troubleshooting problematic file types, as well as the creation of demonstrative exhibits and testimonial preparation for the eventual testimonial experience.

The curriculum is presented with strong emphasis on the workflow required to process this unique type of evidence within the justice context. Beginning with the end in mind, each example is presented, and students work from the standpoint of an eventual testimonial experience. Thus, the workflow serves to both build the experience (and memory reinforcement) of performing the actions of analysis whilst preparing the student to eventually present the work to the trier of fact.

The course materials, sample working files, and helper software will be provided via shared drive in the classroom. Students are encouraged to bring their own samples / examples to see the demonstrated products and workflows in action on familiar content.

Computer Forensics, Mobile Forensics, Investigative

Cellebrite aims to support learners in the pursuit of excellence in Digital Intelligence specialty areas without the need to commit to any degree program. Cellebrite's Academic & Learning Paths provide guided training programs and continuous skill set development to achieve various levels of educational or professional goals. Below are general audiences and focus areas relative to this course.

By following a learning path, students can target personal, professional, and leadership skills in a Digital Intelligence career for law enforcement, military, intelligence, and private sector practitioners. Cellebrite's curriculum reflects its commitment to digital intelligence excellence by helping training forensics examiners, analysts, investigators and prosecutors around the world to achieve a higher standard of professional competence and success. Below are general audiences and focus areas relative to this course.

- Digital Forensic Examiners
- Corporate Investigators

Course Learning Objectives

Upon successful completion of this course, students will be able to:

Identify, given multiple evidence items, the appropriate workflow and use the appropriate tool set to answer quantitative questions and fulfill qualitative requests in a standards-compliant manner within an investigative context.

This objective includes three tasks.

1. Learners will be able to identify the relevant data and appropriate work flow for the processing of a given evidentiary item.
2. Learners will be able to summarize (verbally and in writing) the relevant standards and best practices of this discipline so that a person without advanced legal and technical knowledge will understand the presented results.
3. Learners will be able to demonstrate their understanding of the presented facts and ideas by interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining their coursework.

Important: Successful completion of this course is defined as the student being able to demonstrate proficiency in the Course Learning Objectives by passing a Final Exam assessment with a minimum score of 80.00% or higher to be awarded a Certificate of Completion.

INTRODUCTION



In this module, you will learn about Cellebrite's products, services, training, and certification processes available under Cellebrite's Training programs. Learners will be introduced to the course objectives, requirements, and administrative options to establish the foundation to succeed in your educational or professional goals. You will use the Cellebrite Learning Center and CelleConnect Portal to connect with various resources.

INTRODUCTION TO THE CASE



- Determine key evidentiary elements and considerations of the presented major crime inquiry.
- Determine appropriate tools and techniques to process the recovered evidence for the presented major crime inquiry.

EVIDENCE HANDLING/PROCESSING CONSIDERATIONS



- Summarize the foundational standards for Forensic Multimedia Analysis and explain their relevance to the presented major crime inquiry.
- Organize and make use of a standards-compliant evidence collection and processing reports.

GETTING STARTED: SETTING UP THE VIRTUAL MACHINE



- Create, configure, and validate a virtualized Windows environment utilizing Virtual Box.

CODECS AND GUIDED SOFTWARE INSTALLTIONS



- Summarize the technical considerations for multimedia evidence and explain their relevance to the presented major crime inquiry.
- Summarize the quality management standards for Forensic Multimedia Analysis and explain their relevance to the presented major crime inquiry.
- Plan, organize, and make use of FOSS tools and codecs within a virtualized Windows environment.

RECEIVING, HANDLING, AND DOCUMENTING EVIDENCE RETRIEVED DIRECTLY FROM DVRS/NVRS



- Summarize the foundational standards for retrieval, handling, and documenting of digital multimedia evidence and explain their relevance to the presented major crime inquiry.

INTRODUCTION TO THE EVIDENCE PROCESSING WINDOW



- Summarize the foundational standards for the processing of digital multimedia evidence and explain their relevance to the presented major crime inquiry.
- Plan, organize, and make use of FOSS image processing tools within a virtualized Windows environment.

HUMAN FACTORS IN MULTIMEDIA EVIDENCE PROCESSING AND ANALYSIS



- Summarize the influence of human factors in the handling and processing of digital multimedia evidence and explain methods for their mitigation.

LEGAL CONSIDERATIONS IN MULTIMEDIA EVIDENCE PROCESSING AND ANALYSIS



- Summarize the global and local legal landscape, statutes, and precedents for the handling and processing of digital multimedia evidence in both the civil and criminal contexts.

FILE TRIAGE



- Examine and break file-level information into parts by identifying key structures and relationships.
- Make inferences and find evidence to support generalizations about key file-level attributes.

CONTENT TRIAGE



- Examine, identify, and quantify key contextual information within a given evidence file.
- Make inferences and find evidence to support generalizations about key contextual attributes.

FRAME ANALYSIS



- Examine, identify, and quantify key structural information within a given evidence file.
- Make inferences and find evidence to support generalizations about key structural attributes.

MULTIMEDIA PROCESSING TECHNIQUES



- Design and execute complex workflows and analytical experimental procedures across a variety of digital multimedia evidence types.
- Make inferences and find evidence to support generalizations about key structural attributes.
- Organize and make use of a standards-compliant evidence collection and processing reports.

COMPARATIVE ANALYSIS CONSIDERATIONS



- Compile, generate, or view information or files together in a different way by combining elements in a new pattern or by proposing alternative explanations to proposed sequences of events.

COMMON ISSUES WITH AUDIO TRACKS



- Summarize the foundational standards and techniques for the processing of digital audio evidence and explain their relevance to the presented major crime inquiry.
- Plan, organize, and make use of FOSS audio processing tools for the clarification of digital audio-based evidence files.

OVERCOMING COMMON AND UNCOMMON OBSTACLES



- Summarize the common and uncommon obstacles to the successful processing and analysis of digital multimedia evidence files and explain their relevance to the presented major crime inquiry.

PRESENTING ONE'S WORK



- Summarize the foundational standards for formal reports in Forensic Multimedia Analysis and explain their relevance to the presented major crime inquiry.
- Plan, organize, create, and present a formal report of their work in the analysis of digital multimedia evidence files.



Get skilled. Get certified.

"Every day around the world, digital data is impacting investigations. Making it intelligent and actionable is what Cellebrite does best. The Cellebrite Academy reflects our commitment to digital forensics excellence; training forensics examiners, analysts, investigators and prosecutors around the world to achieve a higher standard of professional competency and success."

Learn more at: cellebritelearningcenter.com



Cellebrite Advanced Video Analysis

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