C34 Instagram™ Forensic Artifacts on Windows® Systems

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Learning Overview: After attending this presentation, attendees will understand the features of the Instagram™ web app, will know what (and where) possible forensic artifacts may be left on the Windows® systems by the Instagram™ users, and how those artifacts may be retrieved.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by introducing knowledge regarding the Instagram™ forensic artifacts on Windows® systems. This knowledge will help digital forensic investigators in their investigations involving the Instagram™ app.

Social networking sites and applications have changed the way people share information and communicate with each other. With the popularity and intensive use of these sites and apps, more and more investigations of the criminal and civil cases involve the forensic analysis of user profiles and activities created in the social networking sites and apps. However, the existence of the many different social networking sites and apps, as well as the fact that they run on various platforms that are changed and updated (usually within a short period of time), has created a great challenge for those investigations. With this challenge, it is important for digital forensic investigators to have updated knowledge regarding what and how the forensic artifacts existing in the social networking sites and apps can be discovered and retrieved.

Instagram™ is one of the most popular social networking apps used among young people. It can be used to share photos and videos through users' smart phones. When an Instagram™ account is created for a user, a user profile and a news feed are also created and associated with the account. The photos and videos the users post are displayed on their profiles and can be seen and commented on by their followers in their own news feed. Therefore, when a civil or criminal case involves the Instagram™ app, accessing the user's profile and analyzing his or her Instagram™ activities will provide valuable information for the investigation. However, today's smart phones are getting more and more secure and the information on them has become more and more difficult to retrieve. This has presented a challenge for an investigation involving the Instagram™ app. Fortunately, the account of each Instagram™ user can also be accessed through Instagram.com using a web browser. This provides an alternate way for retrieving the profile information of the Instagram™ users as well as their Instagram™ activities.

This presentation will provide an overview of Instagram's™ features in both the mobile and web versions. Focusing on Instagram's™ web app, this presentation will discuss what and how forensic artifacts, such as login information, profile information, and user activities, can be retrieved. This presentation will also discuss the retrieval of possible artifacts in the third-party apps that are used to upload photos to user's Instagram™ account.

Instagram, Forensic Artifacts, Windows Systems