

## Antoine Normand, CEO of BlueBear "data sharing at the international level would advance the fight against pornography"

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*Antoine Normand, CEO of Bluebear LES, and Eric Duflos, Economic Attaché, Délégation Générale du Québec*

***Created by BlueBear, the LACE program allows law enforcement agencies to classify images and videos of child exploitation from online sources or computers seized during investigations. This tool significantly reduces the time and stress of manual processing of the visual data and its psychological impact on investigators. Faced with the increasing commercialization of the market for child exploitation police agencies are struggling with the volume of cases to investigate and prosecute. The battle can be won with efficient analysis and the international sharing of case results.***

**Global Security Mag: Can you tell us about BlueBear and your LACE solution?**

Antoine Normand: BlueBear is a privately held Canadian company that develops solutions to fight against the exploitation of children. With the assistance of police agencies specializing in Internet crimes involving the sexual exploitation of children, the BlueBear LACE software was developed. Dedicated to police and judicial services this software allows the classification of visual content from computers seized in the investigation of child exploitation. It enables investigators to classify large amounts of image and video data from online sources and seized computers in a most efficient way..

The idea of creating this software was born the following observations. First, in cases of child exploitation, the police agencies have an obligation to fully categorize the contents of confiscated computers to ensure that the evidence is admissible in court. Further, the capacity of hard disks has increased dramatically. The police are therefore left with hundreds of thousands of images to review.

**GS Mag: How does your technology help the police?**

Antoine Normand: LACE technology is based on visual recognition of images and videos. By using advanced biometric analysis, the faces that are in the images are automatically extracted and matched to compile lists of victims and suspects, or compare them to faces in existing databases. LACE recognizes the visual content of the image rather than just matching the computer file. Thus, regardless of format, resolution, watermarking, cropping or other minor modifications; image and video files will automatically be recognized and categorized if they are already in the accumulated database. This means that only "new" content needs to be manually reviewed. It is the investigator who configures the software and determines classification categories. The software will then produce a report for presentation in Court.

The classification of child exploitation content is psychologically an extremely stressful task. The LACE software will recognize the images or videos that are already in the database which protects the investigator from having to repeatedly review the same horrific content. On average, LACE reduces by 85% to 95% the number of images and videos to be reviewed manually by an investigator. Only previously unknown content needs to be manually reviewed.. The work of several months before it is reduced in a few days.

**GS Mag: What is the state of criminal child exploitation today?**

Antoine Normand: There is a growing phenomenon of gang crime and marketing. Before, pedophiles shared photos. Today, there are real organized groups with which it is possible to order and purchase child exploitation content. There is also the case development; particularly in countries of Eastern Europe is where parents exploit their children for payment. The pedophile groups are becoming better organized and use subterfuge, such as encryption, to attempt to evade detection.

**GS Mag: What about the evolution of means to fight against this crime?**

Antoine Normand: Since 2007, the French police are working on "cyberinfiltration". This is already happening in Quebec for 3 / 4 years. This technique is bearing fruit but is not yet practiced in all countries because it is a logic control computer attack. New methods of investigation increase the number of cases that are discovered, but unfortunately, human resources are limited: they remain the same.

**GS Mag: Do you ever come to Milipol?**

Antoine Normand: This is the first time. The General Delegation of Quebec has done important work early in order to schedule appointments with customers and distributors.

**GS Mag: What is the French market for you?**

Antoine Normand: The French market is very important because it is the only one that is really central (Police Nationale and Gendarmerie). The fact that we are from Quebec and the software is available in French is a key factor in our trade. Further, there is significant collaboration between the authorities in Quebec and France.

**GS Mag: How will this advance the fight against child exploitation?**

Antoine Normand: The key lies in the sharing of data internationally. 3500 organizations doing this work in the world and by sharing of data between these organizations the work is made much more efficient: when one investigator categorizes a file then all other police agencies can benefit. This will make a real difference in the fight against child exploitation. The larger the accumulated database is, the more fewer files need to be manually reviewed and the investigators will benefit with reduced effort and stress.