To analysts, images and video footage are considered “heavy.” It takes hours to watch, annotate and extract value from them. Once extracted, that data is often not searchable or discoverable—and frequently isn’t relevant to the mission. Video Reconnaissance Exploitation (VRX) from Radiant Solutions extracts value from images and video faster, more efficiently and more effectively than humans—enabling users to locate and exploit the information that matters most in support of mission planning and operations.

Features & Benefits

- Automated extraction of dozens of common objects—including vehicles, people and license plates
- Can process videos or images from a wide range of owned and open source data types
- Allows for quick characterization and extraction of where and when objects were identified
- Scalable—can process video at 3x speed on a single computer (over 7.5 million photos per day)
- Identifies and stores multiple objects per image/video frame for search and discovery
- Easily incorporates RF survey data (if available)
- Can be tailored to fit customer needs and works in conjunction with a variety of common analysis tools—including Google Earth, ArcGIS, QGIS and more

VRX can identify and extract maximum value based on customer input—including cars, people, license plates and more—and store the detections so they are searchable and discoverable in other tools.

VRX provides the capability to process images, photos and videos to enable search & discovery, anomaly detection, and analysis. Through its uniquely designed workflow of image labeling/validation, model training and data processing, VRX extracts information based on customer-driven requirements to enable the automated discovery of time-sensitive information. Further integration and correlation of classified and commercial data sources enriches VRX data in support of mission planning and operations.

Search & Discovery
- Find when and where “red trucks” have been observed
- Is there a common car at my locations of interest?

Anomaly Detection
- High-congestion areas (vehicular traffic and people)
- Detect “out of place” cars—a single Mercedes in a city of Honda Civics

Analysis
- Route planning based on intersection type
- Classify areas as public or private based on numbers of cars and people

Quickly identify intersections with traffic lights for route planning

Filter by specific object - in this case, by traffic lights

For more information about Video Reconnaissance Exploitation (VRX), contact: capabilities@radiantsolutions.com