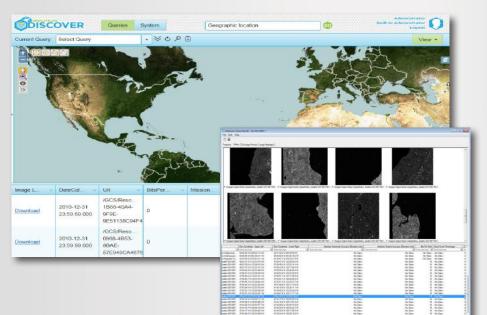
## **ELT/3500 EXTENSIONS**

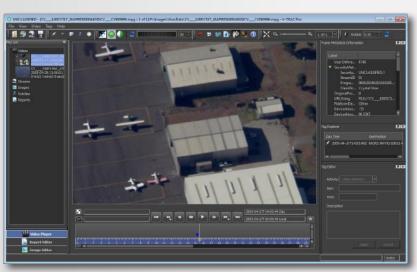






**GEOCATALOG™** is a complimentary data discovery and management extension for ELT/3500, which enables analysts to easily create searchable database libraries on their computer. GeoCatalog provides powerful content management tools for querying and retrieving imagery, motion video, maps, and other geospatial data.

Upgrade to GeoCatalog Enterprise web solution to achieve greater productivity. Search for data using the GeoCatalog Discovery Web Client, GeoCatalog Desktop, or other 3rd party discovery tools. The Discovery Client includes a management portal and administrative tools.



V-TRAC™ is a complimentary extension, which enables analysts to receive and analyze full motion video collections. Designed for the Intelligence Surveillance & Reconnaissance (ISR) community, V-TRAC Basic provides improved geospatial accuracy and workflow to operational users of motion imagery by leveraging Geospatial Solution's core competencies in photogrammetry, large data file management, and performance.

Upgrade to V-TRAC Pro to utilize the Report Editor and Image Editor tools to automate and speed report creation.

### **EXPORT WARNING**

This document does not contain export-controlled technical data and is approved for international release. However, the products depicted are controlled under the U.S. International Traffic in Arms Regulations, and require approval of the U.S. Department of State prior to export.

## **Textron Systems**

Geospatial Solutions

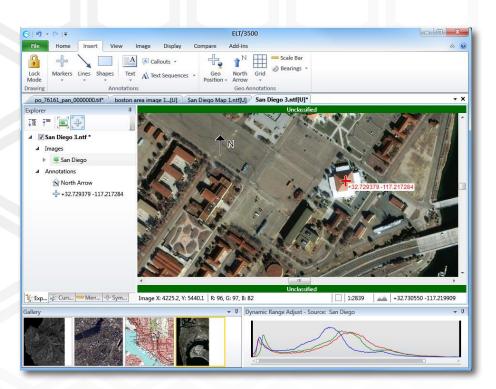
21660 Ridgetop Circle Suite 110 Sterling, VA 20166 Phone: +1 703 437 7651

E-mail: eltsales@overwatch.textron.com Toll Free: (800) 937-6881



## **ESSENTIAL IMAGE PROCESSING TOOLS FOR THE TACTICAL USER**

ELT/3500® software is ideal for users who need a broad range of image exploitation capabilities, but who don't require the advanced exploitation functionality of a high-end product like ELT/5500®. ELT/3500 offers a broad range of image exploitation tools along with a high-speed processing engine. ELT/3500 runs on standard laptop or PC hardware, providing robust performance during even the most memory intensive processes. NITF-certified up to CLEVEL 07, ELT/3500 is a proven performer and sets a new standard for ease-of-use, performance, and affordability.



## **INTUITIVE INTERFACE**

- Ribbon Toolbar Interface
- Tab-based Multiple Document Support
- Multiple Window/Monitor Support
- User Interface Theming
- High Resolution Icons/Graphics
- Rich Tooltips
- Contextual Awareness
- Enhanced Mouse Control Options
- Gallery of Open Documents
- International Language Support
- Dynamic Range Adjust Window
- Extendable through Add-Ins Interface

#### **ROBUST PERFORMANCE**

Trusted by analysts for maintaining the highest image quality standards and insuring that pixels are in the right place, ELT/3500 is specifically designed to handle large imagery with ease. In addition, the Geospatial Solutions software development teams have worked extensively with monitor and graphics card manufacturers to optimize hardware and software performance levels. These enhancements are most evident in the ultrasmooth and jitter-free roaming performance. The Multi-Window support allows users to open multiple ELT windows maximizing a computer's resources by executing from a single instance of the application.

## **KEY FUNCTIONALITY**

#### **CHANGE DETECTION**

Change detection tools are ideal for identifying natural and man-made differences between images collected time. Powerful compare tools such as colorized difference, blend, wipe, and color queue help quickly reveal changes and similarities between two images. Common applications include tracking urban and rural development, detecting environmental changes, and monitoring facilities.

#### **IMAGE ENHANCEMENT**

Powerful Image Processing Operations (IPOs) are available for visualizing and adjusting image display, which can be applied to the entire image or just a portion using a defined Region of Interest (ROI). The convenient Image Sampler streamlines users' workflow by displaying previews of multiple IPOs simultaneously in a single window. For example, Brightness and Contrast, Sharpen, Blur, Dynamic Range Adjust (DRA), Binary Threshold, and Laplacian Edge Detection previews can be viewed side-byside to compare and identify the best option prior to applying an IPO to the entire image or an ROI. The Image Sampler is customizable, and also includes zoom tools and a level adjustment slider to make it easy to fine tune user specified preview settings.

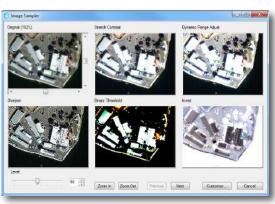
#### **GEO-BASED DATA DISCOVERY**

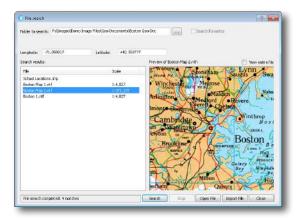
open files specific can containing geo coordinates right from their favorite's directory. Geo Search enables users to quickly find relevant data resulting in a streamlined workflow. By simply selecting a point in an document, Geo Search opens and provides the user with a list of files containing the cursor coordinate position.

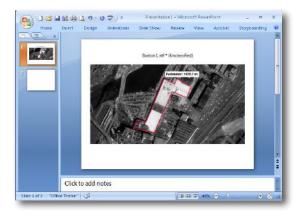
### **PRODUCT CREATION**

ELT/3500 offers advanced product creation support, which is valuable when generating documents for dissemination. Templates are helpful in communicating information contained in an image file in a clear and concise format, including annotations, graphics, logos, scale bars, north arrows, pixel and measured grid, text labels and text strings derived from document/image metadata. The export to PowerPoint option enables ELT/3500 users to quickly export products or the Main Window display to PowerPoint with just a single point-and-click. Users have the option to create a new presentation or add slides to an active presentation.









## **KEY FFATURES**

#### **IMAGE DISPLAY TOOLS**

- Crop, Scale, Rotate, and Flip
- Display Level Processing
  - Brightness Adjustment
  - Contrast Adjustment

  - Dynamic Range Adjustment
  - Gamma Correction
  - Haze Reduction
  - Pseudo Color
  - Sharpness
  - Tonal Transfer Curves (TTC)
- Reduced Resolution Data Set Generation
- Multi-Level RRDS Support
- On-Demand RRDS Generation
- Thumbnail Generation
- Manually Enable/Disable Elevation

#### **IMAGE MANIPULATION FEATURES**

- Ultra Smooth Pan and Roam
  - Dynamic Quality Roam (DQR)
- Dynamic Reduction Roam (DRR)
- Pan Window
- Auto Pan
- Auto/Custom Path Support
- Smooth Zoom
- Smooth Rotation
- Zoom Window and Chipping
- Floating Zoom Window and Chipping
- Zoom to Mouse Point
- Mouse Region Zoom

### **MULTISPECTRAL SUPPORT**

- Band Mapping
- Sensor-Specific Band Profiles
- Automatic Sensor Type Recognition
- Configurable Sensor and Band Profiles

#### **IMAGE COMPARISON**

- Blend
- Colorized Difference and Color Queue
- Flicker
- Vertical/Horizontal Wipe
- Two-Way, Left/Right, Top/Bottom
- Reposition Layer

#### **IMAGE EXPLOITATION FEATURES**

- Image Processing Sampler
  - Enhance: Stretch Contrast, Piecewise, Contrast, Binary Threshold, Adjust, Brightness Contrast, Color Invert, Density, Slice, Gamma Correction, Linear, Smoothing, Mean, Median, Dynamic, Range Adjust, Sharpen, Blur, Mean, Median, and Pseudomedian.
  - Edge Detections: Cross, Diamond, Gradient, Horizontal, Vertical, Laplacian, Left/Right Diagonal, Prewitt, Roberts, and Sobel
  - Equalize: CLAHE, Exponential, Gaussian, Hyperbolic, Log Hyperbolic, Rayleigh, and Uniform.
  - Convert: Grayscale, Indexed Color, and RGB Color.
- Histogram Generation
- Region of Interest (ROI) Generation
- ROI Image Processing
- ROI Chipping
- Transparency for Multiple Images

## **DRA/HISTOGRAM WINDOW SUPPORT**

- Adjust DRA Histogram Posts
- ROI, View, and Full Image Histograms
- Zoom to Increase Clarity and Granularity
- Auto Zoom in to View Active DRA Range
- Band-Independent DRA adjustment

#### PRODUCT & PUBLISHING SUPPORT

- Template creation for report generation
- Add lookup label/locator map/logo
- Define and add a grid
- Add text/graphic objects
- Publish template/image to PowerPoint®

#### SESSIONS FEATURE

- Save Main Window configuration:
  - Open Documents
- Rotation
- Zoom Level
- Display Settings

#### **ANNOTATION FEATURES**

- Advanced Text and Graphic Support
  - Text, Markers, Polylines, Polygons, Callouts
  - Relocatable Geo Position/Text Marker
  - Label
  - Grids
  - Text Sequencing
  - Metadata Lookup Labels
  - Burn-In/Flatten Options
- Floating Annotations Grid
- Magnifier
- Symbol Library SupportScalable
- Counter/Report Features
- Locator and Indicator Display Capability

### **GEO CAPABILITIES**

- Georegistration
- Lat/Long, MGRS, and UTM Coordinates
- Image to Image
- Geo Jump and Geo Position Marker
- Geo Projections (Ellipsoid and Datums)
- Ground Control Point Editing (GCP's)
- Image Rectification
- Orthorectification
- Mensuration Support
- Location, Distance, Area, Elevation
- Shadow-based Object Height
- Relative Calibration and Mensuration
- Cursor Tracking and Geo-Location Search
- North Arrow and Bearing Indicator
- Scale Bars
- North is Up, Up is Up, Image is Up

#### **GOOGLE EARTH™ COLLABORATION**

- Synchronized viewing with ELT/3500
- Fly to locations based on ELT/3500 view
- Import Google Earth results into ELT/3500

# **SUPPORTED** FORMATS

- ADF ADF 2.0\* ADRG\* BMP CADRG\*
- CIB\*
- CSV\* DEM\*
- DOQ\* DTED\* ECW\*
- \* Read Only

- ENVI\* ERDAS\*
- GeoSPOT\* GIF
- **JPEG**
- JPEG 2000 KMRG\*
- LandSat7\*
- NITF 2.0 & 2.7 NSIF1.0 & 1.1

- PNG\* QuickBird Til\*
- RAW\* Shapefile SDTS\*
- SKT/VO\*
- Sun Raster
- Symbol Library (ELT/3500) Template (ELT/3500) Template (RemoteView)\*
- TIFF/GeoTiff/BigTIFF