What's New?
ERDAS IMAGINE 9.3

Viewer

- **Dramatic Vector Performance Boost**: A performance boost in creation, load, zoom and pan speed, and smoothness when viewing or editing of vector datasets, in some cases a 10x performance boost, makes ERDAS IMAGINE 9.3 the fastest vector display engine in any IMAGINE product to date.
- **New Vector Roam capability**: Along with the performance boost in the vector, the ability to roam at high speeds through a vector or vector over raster dataset without flickering or blurring is now possible.
- **Dramatic Annotation Performance Boost**: A performance boost in creation, load, zoom and pan speed, and smoothness when viewing or editing of annotation datasets, makes ERDAS IMAGINE 9.3 the fastest annotation display engine in any IMAGINE product to date.
- **New Annotation Roam capability**: Along with the performance boost in the annotation, the ability to roam at high speeds through an annotation or annotated dataset without flickering or blurring is now possible.
- Raster Zoom, Pan and Roam **speed and smoothness have been improved**, especially when displaying data with transparency.
- **Improved raster performance** for all systems by optimizing data handling, blocking, and pyramiding. Further improvements for single CPU systems: changed the internal threading options to be more efficient in reading data to the viewer. This especially helps single CPU systems, but benefits are seen for all CPUs.
- **Improved image display quality** for images without a LUT: Adopted a Percentage LUT of 96.5% as the default display for all imagery without a LUT. The old default action of two-standard-deviation worked well for older satellite images, but hid details in the tails of the histogram (shadows and bright areas) from the user. The new display works far better, especially with newer aerial and satellite images above 8-bit.
- **Improved Relief Display** appearance and performance: The display quality of raster elevation data displayed as relief has a much higher display quality (smoother transition between elevation values and using new Percentage LUT default), and responds much faster using the Relief Tool's Sun-shading with Auto-Apply. Further, the user can now smoothly roam through raster elevation data displayed as relief.
- Much **improved performance of Geospatial Services Explorer**, in some places up to 10x: Speed and scalability of opening, browsing, and exploiting shared data from WMS, WCS, ERDAS Image Web Server, ERDAS Apollo suite, and ERDAS TITAN improved.
- **Improved Dynamic Range Adjustment** performance with the introduction of a New Dynamic Range Adjustment Slider on GLT. This is especially useful when using 16-bit data, bringing out the details on shadows and bright areas.
- **New Color Temperature and Photo Enhancement tools** allow the user to enhance imagery using color temperature, fill light (ambient light), highlights, and shadows, allowing the user to independent adjustment of bright and dark areas.
- **New Image Contrast Adjustment tools** allow the user to interactively compare various histograms modifications of the image with adjacent views, then apply the desired modification to a LUT or change the image by stretching through the pixels.
- **New Image Convolution tools** allow the user to interactively compare various convolution filter modifications of the image with adjacent views, then apply the desired modification to a LUT or change the image by stretching through the pixels.
- **Improved ECW(P) read capability** to support faster streaming of ECW data from ERDAS Image Web Server (IWS) into ERDAS IMAGINE 9.3.

- **Improved handling of MrSID MG2 and MG3 formats**, allowing simultaneous display and exploitation of a large amount of MrSID data.

General

- **A new resolution merge algorithm** has been added in the Image Interpreter. The Subtractive Resolution Merge is designed to deliver high quality resolution merges of Quickbird, Ikonos, and Formosat data.
- **New support in Terrain Prep Tool for non-linear surfacing**. Continued attention has been given to the Terrain Prep Tool in an effort to retire the older-technology Surface Tool. Tests have shown that >50 million points can be processed into surfaces, either as a linear surface or a non-linear surface.
- Added ability to **create images (GeoTIFF, etc.) of maps created in Map Composer, Map Reports, Map Series Tool with map coordinates**.
- **Added support for WorldView RPC** in both Warptool and AutoSync.
- **ECW Compression in ERDAS IMAGINE now supports 16-bit data** as an input into the compression process. The tools will rescale the data into an 8-bit format supported by the ECW compression tools.
- **Expanded Read and write projection support for MrSID MG2 & MG3 formats**. For MG2 writing the following projection definition methods are now supported: internal WKT strings, .aux, .sdw and prj files. For MG3 writing the following projection definition methods are now supported: internal WKT strings, internal GeoTIFF tags, .aux, .sdw and .prj files.
- **Expanded ECW projection support**: The ECW projection engine within ERDAS IMAGINE now supports essentially all US State Plane Coordinate Systems, and utilizes a new, faster implementation based on the ECW SDK.
- **Expanded support for ER Mapper ERS data format** has been provided to support greater cross-product line usage between ERDAS IMAGINE 9.3 and ER Mapper 7.2.
- **Improved management of MrSID MS2 and MS3 formats**, allowing much larger sets of data to be processed together.
- **JPEG2000 and ECW performance has been improved** by using ECW SDK 3.0. Connections have been added to easily upgrade ECW SDK 4.0 when available. Internal tests on the ECW SDK 3.0 indicate the fastest JPEG2000 encode and decode speeds available on the market today. Preliminary tests indicate ECW SDK 4.0 is greater than 2x faster than ECW SDK 3.0.
- **Improved Oracle GeoRaster projection and loading** support.
- **Improved image quality in Map Composer**: Now, the resampling techniques and LUTs are persisted more consistently into Map Compositions.
- Support for **RADARSAT-2 formats** added and support for **TerraSAR-X formats** expanded.
- **A capability to search Preferences has been added**. No more searching through preferences to find a single or multiple references to preferences. Now type in the word or phrase and see the Preference and its setting right-away.
- **Numerous customers reported issues have been resolved**: A special focus on customer reported issues has been underway during the 12 months leading up to ERDAS IMAGINE 9.3.

ERDAS-Net Licensing

In ERDAS IMAGINE 9.3 there is a completely new licensing system that works with FLEXnet Publisher (the next generation tool of FLEXlm from Acresso Software).

- Supports all ERDAS-supported OS platforms.

- Eliminates the need to merge or delete license files.
- Simplifies requesting and managing ERDAS software licenses.
- Generates a system ID and directly links to the ERDAS Support webpage to request a license.
- Allows users to “borrow” licenses so they can disconnect from the network and work offline.
- Provides built-in drivers for FLEXnet ID and SafeNet dongles.
- Can generate reports on license usage including user ID and host name.
- Supports floating and node-locked licenses.
- Runs stand-alone or installed with other ERDAS applications.

IMAGINE Coherence Change Detection

The IMAGINE Coherence Change Detection (CCD) module takes advantage of coherence change in radar imagery to **generate multiple change detection products for radar pairs**, with special focus on detecting small-scale and linear features. A streamlined, wizard-based interface can be quickly used to generate geocoded vector and raster maps containing detected features alongside associated RGB and IHS images for visual interpretation.

Map2PDF for ERDAS IMAGINE

The Map2PDF for IMAGINE module has been designed with TerraGo® Technologies to provide ERDAS IMAGINE users tools to **author GeoPDF® data for use in Adobe Acrobat Reader version 7 and higher**. GeoPDF data has geographic coordinates and projection information imbedded in the PDF, and may be created from an image or from a map composition.

IMAGINE Objective

IMAGINE Objective introduces an **innovative set of tools for feature extraction, update and change detection, enabling geospatial data layers to be created and maintained** through the use of remotely sensed imagery. IMAGINE Objective crosses the boundary between traditional image processing and computer vision through the **use of pixel level and true object processing, ultimately emulating the human visual system of image interpretation**. Catering to both experts and novices alike, IMAGINE Objective contains a wide variety of powerful tools. For remote sensing and domain experts, IMAGINE Objective includes a desktop authoring system for building and executing feature-specific (buildings, roads, etc) and/or landcover (e.g., vegetation type) processing methodologies. Other users may adjust, and apply existing examples of such methodologies to their own data.