

## What's New?

# ERDAS ECW JPEG2000 SDK v4.1

Solve the problems associated with storing and transferring large imagery datasets. The ERDAS ECW JPEG2000 SDK enables software developers to increase the value of desktop applications they create by including robust support for selected wavelet compression formats and protocols.

The ERDAS ECW JPEG2000 SDK provides read and write support for the visually-lossless ECW and numerically-lossless JPEG2000 imagery formats, and read support for the ECWP protocol. Enhanced Compression Wavelet (ECW) is a compressed format designed specifically for geospatial imagery, which can quickly compress and decompress huge images using minimal memory. Enhanced Compression Wavelet Protocol (ECWP) allows streaming of ECW images, enabling rapid delivery of terabyte-sized images over the internet using inexpensive server technology. JPEG2000 is an ISO-certified compressed image format that is commonly used for geospatial imagery.

Originally used in the ER Mapper products, this SDK has been implemented in all ERDAS software. ERDAS IMAGINE, LPS and ERDAS APOLLO use the SDK to provide support for these wavelet compression and transmission technologies. For over ten years, this industry-proven SDK has produced stable, high-quality commercial applications.

The latest version of the ERDAS ECW JPEG2000 SDK includes the following major enhancements:

### Selectable Level of Wavelet Compression Support: Read/Write or Read-Only

The ERDAS ECW JPEG2000 SDK is available as a complete read/write version that provides the ability to create ECW and JPEG2000 images and read ECW, JPEG2000 and ECWP. This version may be obtained from the ERDAS sales team.

ERDAS now also distributes a free version of this SDK that provides read-only support for ECW, JPEG2000 and ECWP. Developers may download the free SDK from [www.erdas.com](http://www.erdas.com).

### Support for OGC-standard GML in JPEG2000

The SDK supports OGC-standard GML embedded within JPEG files as an XML box, assisting with georeferencing.

### Opacity Channels for ECW & JPEG2000 format (local and ECWP)

Developers can use the newest SDK to read and write ECW and JPEG2000 images with opacity bands, allowing images to overlay other imagery cleanly without showing compression artifacts around the edges.

### Configurable Local Persistent Block Cache for Streaming ECWP Files

The SDK can now store compressed blocks delivered over an ECWP stream in the client cache, so images can be opened faster on subsequent viewing. This also lowers the bandwidth required by the server, since less data is transferred to the client. This feature is ideal for web sites that use a small number of very large files.

### Configurable Buffered Input/Output for JPEG2000 Decoder

Optional and configurable buffering improves JPEG2000 decode performance on high-latency networks.

### ECW Decoding Up to 4 Times Faster

Reading tiles from an ECW file can be two to four times faster than previous versions due to substantial decoder enhancements.

### **Faster JPEG2000 Decoding**

The JPEG2000 decoder is faster, especially for NPJE and EPJE profiles and several other JPEG2000 variants.

### **Configurable J2I Index Files for Improved JPEG2000 Decoding**

Developers can now specify that index files should be automatically created on disk, uncompressed and pre-calculated, instead of being held in memory. The SDK also provides a mechanism for configuring JPEG2000 index file generation, improving JPEG2000 decoding performance.

### **Configurable Decoding of JPEG2000 Files with Quality Layers**

Using the new SDK, the developer can fully leverage quality layers in the JPEG2000 file and improve decoding performance by specifying how many quality layers should be included in the decoding process.

### **More Robust ECW Decoding**

The ECW decoder can now be configured to use either fussy or resilient mode. Fussy mode halts decoding if issues such as file corruption are detected and reports the issue; resilient mode continues and attempts to decode as much data as possible.

### **API compatible with “C” interface of 3.x release**

### **Full native Microsoft x32 and x64 platform support (Windows)**

### **Microsoft Visual Studio 2005/2008 support (Windows)**

## **About ERDAS**

ERDAS – The Earth to Business Company – helps organizations harness the information of the changing earth for greater advantage.

ERDAS creates geospatial business systems that transform our earth’s data into business information, enabling individuals, businesses and public agencies to quickly access, manage, process and share that information from anywhere.

Using secure geospatial information, ERDAS solutions improve employee, customer and partner visibility to information, enabling them to respond faster and collaborate better. It also means better decision-making, increased productivity and new revenue streams.

ERDAS is a part of the Hexagon Group, Sweden. For more information about ERDAS or its products and services, please call +1 770 776 3400, toll free +1 866 534 2286, or visit [www.erdas.com](http://www.erdas.com).