

What's New?

ERDAS ECW/JP2 SDK Version 4.2

Solve the problems associated with handling large imagery datasets. The ERDAS ECW/JP2 SDK allows software developers to enable rapid and efficient file handling in their applications by including robust support for selected wavelet compression formats and protocols.

The ERDAS ECW/JP2 SDK provides support for the visually-lossless ECW imagery format and the ECWP protocol. ERDAS' Enhanced Compression Wavelet (ECW) technology compresses bulky imagery files into manageable sizes, enabling faster processing and transfer of imagery and reducing the hardware investment required for the geospatial workflow. The SDK also provides support for the numerically-lossless JPEG2000, an ISO-certified compressed image format commonly used for geospatial imagery.

Using minimal memory, ECW can rapidly compress massive files to smaller sizes than other formats while still preserving the quality of the images. ECW files can then be reopened quickly, in many cases faster than uncompressed imagery. Additionally, multi-resolution level of detail is built into the file, eliminating the need to generate, store or distribute separate pyramids or overviews. Enhanced Compression Wavelet Protocol (ECWP) allows streaming of ECW images, enabling rapid delivery of large quantities of imagery over the internet to thousands of users with standard server hardware of just eight cores or less.

Originally used in ER Mapper products, the ERDAS ECW/JP2 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.

ERDAS ECW/JP2 SDK saves development time. Accessible via the widely-used Geospatial Data Abstraction Library (GDAL), developers can simply add the SDK to their systems and easily provide ECW and JPEG2000 read support without having to learn an additional toolkit.

Version 4.2 of the ERDAS ECW/JP2 SDK includes the following major enhancements:

Selectable Level of Wavelet Compression Support on Desktop and Server

The ERDAS ECW/JP2 SDK Desktop Read-Only is a free product that provides developers with tools to add read support for ECW, ECWP and JPEG2000 in their desktop and mobile applications. Developers may download the free SDK from www.erdas.com.

The ERDAS ECW/JP2 SDK Desktop Read-Write provides software developers with tools to add read support for ECW, ECWP and JPEG2000 in their desktop software applications. It also provides tools to compress images into both ECW and JPEG2000 data formats. Developers may obtain this SDK from the [ERDAS sales team](#).

The ERDAS ECW/JP2 SDK Server Read-Write provides software developers with tools to enable server applications to read and serve ECW and JPEG2000 data, consume ECWP streams, and compress images into both ECW and JPEG2000 data formats. Developers may obtain this SDK from the [ERDAS sales team](#).

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 viewings. 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, and 2010 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.