



SOLUTIONS

## GMLJP2

# Use GML Metadata in Your JPEG 2000 Imagery with LizardTech Geospatial Products

Give your JPEG 2000 imagery “spatial awareness” with the most advanced method available today for including geographic metadata in your JPEG 2000 (JP2) files. LizardTech’s support for the open GMLJP2 standard in GeoExpress and Express Server means you can increase the value of your geospatial imagery using familiar workflows. Now when you mosaic, color balance, reproject, and specify areas of interest in your JPEG 2000 imagery, you can also include GML metadata and the GML schemas that downstream applications will use to integrate your imagery. Express Server enables you to preserve GML metadata while efficiently delivering GMLJP2 imagery online.

### The GMLJP2 Advantage

#### What are GML and GMLJP2?

GML (Geography Markup Language) is an open, XML-based specification for representing geographic information including geographic features, coverages, observations, topology, geometry, coordinate reference systems, units of measure, time and other values. Because it is an XML grammar, it is both extensible and adaptable to any application within the broad geospatial field.

As a wavelet-based image compression format, JPEG 2000 (JP2) is capable of handling images into the gigabyte range and beyond. But until recently, JP2 was not particularly suited to the needs of the geospatial community because it didn’t have a designated geospatial

metadata standard. However, the JPEG 2000 format allows for the inclusion of XML data, so GML has emerged as the ideal partner for JPEG 2000 imagery, bridging the gap between JP2 and GIS. GMLJP2 is the specification that standardizes that partnership and opens the door for greater interoperability between your imagery and the thousands of current and future geospatial applications that might use it. Containing its own geographic metadata, your JP2 imagery becomes “spatially aware” and is thus of increased value in geospatial applications.

#### What Kind of Standard is GMLJP2?

The GMLJP2 specification was officially adopted in February 2006 by the Open Geospatial Consortium (OGC) as an open standard for representing

geographic information in JPEG 2000 imagery. LizardTech supports open standards and is committed to the success of the GMLJP2 specification. Jointly proposed and developed by LizardTech, Galdos Systems and a consortium of forward-looking aerospace and technology companies, GMLJP2 represents the most advanced means of including geographic metadata within compressed geospatial imagery and making that information useful in downstream applications now and in the future.

## The GMLJP2 Advantage Continued

### Rest Easy with the Security of Open Standards

LizardTech's GeoExpress already offers the most complete and easy-to-use implementation of the open JPEG 2000 standard. Now, your JP2 imagery encoded with GMLJP2 metadata is secure for the future because, like JPEG 2000, the GMLJP2 specification is an open, non-proprietary standard.

### Increase the Value of Your Imagery

GMLJP2 is the most efficient means for storing and transmitting GML metadata in JPEG 2000 imagery, promising greater interoperability among GIS applications. The easy "checkbox" GMLJP2 functionality in GeoExpress enables you to encode improved usefulness directly into

your geospatial imagery while expanding the market for your product. And with support for GMLJP2 in LizardTech Express Server, you can now distribute your JPEG 2000 imagery at high speed, with all of its geographic metadata, to any device over any connection. Express Server supports Web Map Services (WMS) for maximum interoperability with geospatial applications

GMLJP2 support in GeoExpress and Express Server enables you to take advantage of two open standards and your favorite image processing and server applications to create and distribute high-value imagery to your end-users.

For more information and pricing contact GIS Services at  
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Learn more about the GML and GMLJP2 specifications at :  
[www.opengeospatial.org/specs/?page=specs](http://www.opengeospatial.org/specs/?page=specs)