Matlab file version 5

Module:	matfile5
Module Maintainer:	Daniele Romagnoli
Status:	⭐⭐⭐⭐
Email Help:	Geotools-gt2-users@lists.sourceforge.net
Volunteer:	geotools-devel@lists.sourceforge.net
IP Review:	review.apt

Coverage plugin to decode Matlab files which adhere to version 5 of the format specification.

- Module Status
  - Gold Star Quality Assurance Check
- Aim
  - Future plans
- The Image I/O-Ext project
- Outstanding Issues

Module Status

Gold Star Quality Assurance Check

⭐ IP Check: review.apt added, all headers are in place
⭐ Quality Assurance: test coverage is poor, we need to work on that and find suitable test data
⭐ Stability: No planned API changes
⭐ Supported: Documents available. Module maintainer does watches user list, answers email.

Aim

The aim of this plugin is to allow users to decode Matlab data file when encoded in version 5 of the format (the only one that is known to be open as far as it specification is concerned). We also look for a sibling world file (wld) and projection file (prj) to get access to the associated CRS and grid to world transformation.

Notice that the Matlab data format version 5 support many different types of datatypes, like Int32 and Double. For more information, please check the file format specification here .

Future plans

We plan to do what follows as time and funding permits:

- improve decoding on uncompressed data by NOT loading everything in memory
- add support for Complex (as in x+ j y) numbers
- add support for more custom metadata formats for decoding georeferencing information
- add support for writing to Matlab format 5

The Image I/O-Ext project

The Image I/O-Ext project leverages existing native APIs to extend the set of formats that the JAI ImageIO API can read.
Actual version of Image I/O-Ext is 1.0.5, but this plugin is leveragin on version 1.1 unstable.

Outstanding Issues

> The JIRA server does not support trust requests. Issues have been retrieved anonymously.You can set the macro to always use an anonymous request by setting the `anonymous` parameter to `true`

JIRA Issues (4 issues)

Type	Key	Summary	Assignee	Reporter	Priority	Status	Resolution	Created	Updated	Due
	GEOT-3423	Datum mapping values are trashed if gt-jp2k is on the classpath	Unassigned	Joe Boese		Open	Unresolved	Feb 10, 2011	Feb 23, 2011	
	GEOT-3135	JP2KReader should not depend on Kakadu to get the UUIDBox	Daniele Romagnoli	David Smiley		Open	Unresolved	Jun 04, 2010	Jun 01, 2012	
	GEOT-2885	Add support for masking a specific color to all the raster plugins	Simone Giannecchini	Simone Giannecchini		In Progress	Unresolved	Dec 10, 2009	Sep 29, 2011	
	GEOT-1644	Add support for external	Simone Giannecchini	Andrea Aime		In Progress	Unresolved	Dec 27, 2007	Sep 29, 2011	

		overviews raster format								