

ApacheCon

Apache Sanselan



Leading the Wave
of Open Source

Apache Sanselan

- A pure-Java image library
- Reading and writing of images
- Support for various image formats
- Extracting image meta information



History of Sanselan

- Initiated by Charles M. Chen in 2004
- Open source since 2004
 - Apache Licence
- Stable code base
- Used by several projects
- Entered incubator in September



Features of Sanselan

- Portable toolkit (pure Java)
- Correctness over performance
- Not tied to files
 - Byte arrays, input streams
- Simple but powerful API



Features of Sanselan

- File format identification
- Fast extraction (without reading the image data) of
 - image info
 - icc profile
 - image metadata
- Reading and writing



Supported Formats

- PNG
- GIF
- TIFF (EXIF support)
- BMP
- PNM/PGM/PBM/PPM
- ICO, PSD/Photoshop (read only)
- JPEG (read only) – EXIF support



Code Samples

```
// how to read an image:  
byte imageBytes[] = someBytes;  
BufferedImage image_1 =  
    Sanselan.getBufferedImage(imageBytes);  
  
// Write an image.  
BufferedImage image = someImage;  
File dst = someFile;  
ImageFormat format =  
    ImageFormat.IMAGE_FORMAT_PNG;  
Map optional_params = new Hashtable();  
Sanselan.write(image, dst, format, optional_params);
```

Code Samples

```
// get the image's width and height.
Dimension d = Sanselan.getImageSize(imageBytes);

// get all of the image's info (ie. bits per pixel, size,
// transparency, etc.)
ImageInfo image_info =
    Sanselan.getImageInfo(imageBytes);

if (image_info.getColorType() ==
    ImageInfo.COLOR_TYPE_GRAYSCALE)
    System.out.println("Grayscale image.");
if (image_info.getHeight() > 1000)
    System.out.println("Large image.");
```

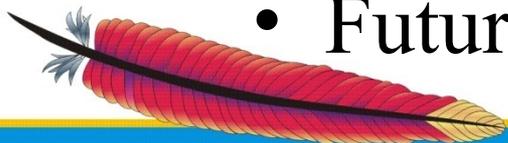
Code Samples

```
// try to guess the image's format.
ImageFormat image_format =
    Sanselan.guessFormat(imageBytes);
image_format.equals(
    ImageFormat.IMAGE_FORMAT_PNG);

// get all metadata stored in EXIF format
// (ie. from JPEG or TIFF).
ImageMetadata metadata =
    Sanselan.getMetadata(imageBytes);
```

Sanselan Today – Check It Out

- Code base is in SVN
 - Buildable with Maven 2
- Paper work is finished
- Website is set up
 - Documentation will follow soon :)
- Incubator release (stable code base) soon
- Future: growth – features **and** community



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Q&A

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