

## **Notes on Spotlight**

Thursday, 17 June 2010

Depending on the file, spotlight returns differing attributes. We will use these attributes to catalogue the assets.

#### Points of interest

- ★ Orientation appears from time to time in the attributes. 0 = landscape 1 = portrait
- \* The values in the "Kind" attribute is quite in-consistent. Sometimes the acronym is expanded in the case of png but not with jpeg.
- ★ The meta data in fonts is a lot more consistent

### Attributes that are not preserved

- **★** Spotlight comments
- ★ Created at Modified at

#### Finding out classification

In order to decide on general classification of files, we will phase the kMDItemContentTypeTree
This will be a challenge for obscure files like *rack.ru* as there are only two nodes on the content type tree "public.data", "public.item"

# Attributes from a variety of file types

This list is not exhaustive. It aims to give us an idea of the types of attributes we can expect to pull back from spotlight.

| Kind (from Spotlight) | Notes   | Other attributes   | kMDItemContentTypeTree  |
|-----------------------|---|--|---|
| JPEG image            | "Save as jpeg"  Should be able to pull out additional info such as "date digitized" | Bits per sample (32) Pixel width/height Size Resolution width/height Colour profile Alpha channel Color space Content created                  | public.jpeg<br>public.image<br>public.data<br>public.item<br>public.content |
|                       | Attributes from cameras. On an iPhone 3GS you will have longitude and latitude      | Focal Device make Content creator Focal length Orientation Exposure time F number White balance ISO speed Flash (0 or 1) Exposure mode Red eye |   |

| Kind (from Spotlight)           | Notes   | Other attributes  | kMDItemContentTypeTree  |
|---------------------------------|---|---|---|
| Portable Network Graphics image |   | Pixel count Size Resolution w/h Orientation Alpha channel 1 Colour space  | public.png public.image public.data public.item public.content                |
| Portable Document Format (PDF)  | Measurements recorded in points. Which is 72 points per inch (postscript)  2.54 centimetres per inch            | Content creator (software) page width (in points) Pages (count) Security Version (pdf version) Encoding software  | com.adobe.pdf public.data public.item public.composite-content public.content |
|                                 | With a password protected pdf, only attributes pages (count) others aren't accessible                           | Security Password<br>Encrypted  |   |
| Adobe Photoshop file            | Lots of information. Also includes any camera information if the image was originally taken on a digital camera | Resolution width 300 Resolution height 300 Bits per sample Colour space Width/height in pixels Alpha channel (1) Orientation 1 layers (array of quoted strings) Content creator (software name and version) Colour profile (string) | com.adobe.photoshop-image public.image public.data public.item public.content |

|          | Kind (from Spotlight)      | Notes  | Other attributes  | kMDItemContentTypeTree   |
|----------|----------------------------|--|---|--|
|          | Adobe Illustrator Document | Unfortunately doesn't return dimensions or colour space  |   | com.adobe.illustrator.ai-image<br>public.image<br>public.data<br>public.item<br>public.content   |
|          | InDesign® CS4 Document     | No useful meta data.<br>Hopefully this can be changed<br>with a 3 <sup>rd</sup> party plugin               |   | public.data<br>public.item   |
| nDesign® | Document                   | Imported a CS document. mdimport did return kMDItemKind = InDesign \U00ae CS Document" when debug was on 2 |   | public.unix-executable<br>public.data<br>public.item<br>public.executable  |
|          | SVG Image                  | public.svg-image   |   | public.svg-image<br>public.image<br>public.data<br>public.item<br>public.content   |
|          | Encapsulated PostScript    | com.adobe.encapsulated-<br>postscript  | Content creator (name of software) Page width Page height Version (of postscript) | com.adobe.encapsulated-postscript<br>com.adobe.postscript<br>public.data<br>public.item<br>public.composite-content<br>public.content" |

| Kind (from Spotlight)  | Notes   | Other attributes   | kMDItemContentTypeTree   |
|------------------------|---|--|--|
| OpenType font          | public.opentype-font                          | Copyright Fonts (list of weights) Family name Style name Full name Postscript name Publishers Version Authors                            | public.opentype-font<br>public.font<br>public.data<br>public.item  |
| Datafork TrueType font | com.apple.truetype-datafork-<br>suitcase-font |  | com.apple.truetype-datafork-<br>suitcase-font<br>public.truetype-font<br>public.font<br>public.data<br>public.item   |
| Numbers Document       | com.apple.iwork.numbers.sffnu mbers           | Fonts (array of font names)<br>Keywords, Author, Title if<br>entered into the info panel.<br>(otherwise is an array of<br>empty comma's) | com.apple.iwork.numbers.sffnumbers com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.zip-archive public.zip-archive public.composite-content public.content |
| Pages Publication      | 08 pages doc                                  |  | com.apple.iwork.pages.pages<br>com.apple.package<br>public.directory<br>public.item<br>public.composite-content<br>public.content  |

| Kind (from Spotlight)                | Notes                  | Other attributes                              | kMDItemContentTypeTree  |
|--------------------------------------|------------------------|---|---|
| Pages Publication                    | 09 pages doc           |   | com.apple.iwork.pages.sffpages com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.zip-archive public.composite-content public.content                     |
| Keynote Document                     | 09 keynote             | Oddly no fonts used or other iWork attributes | com.apple.iwork.keynote.sffkey com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.zip-archive public.presentation public.composite-content public.content |
| Microsoft Word 97 - 2004<br>document | com.microsoft.word.doc |   | com.microsoft.word.doc public.data public.item public.composite-content public.content  |

| Kind (from Spotlight)                       | Notes                                  | Other attributes | kMDItemContentTypeTree  |
|---|--|------------------|---|
| Microsoft Word document                     | docx  No word count or number of pages | Authors<br>Title | org.openxmlformats.wordprocessing ml.document org.openxmlformats.openxml public.zip-archive com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.composite-content public.content |
| Microsoft Excel 97-2004<br>workbook         |  |                  | com.microsoft.excel.xls public.data public.item public.composite-content public.content   |
| Microsoft PowerPoint 97 - 2004 presentation |  |                  | com.microsoft.powerpoint.ppt public.data public.item public.presentation public.composite-content public.content  |
| Rich Text Format                            |  |                  | public.rtf public.text public.data public.item public.content   |

| Kind (from Spotlight)                                    | Notes   | Other attributes                            | kMDItemContentTypeTree   |
|--|---|---|--|
| Rich Text Format with<br>Attachments                     |   | Number of items. Has a count of attachement | com.apple.rtfd com.apple.package public.directory public.item public.composite-content public.content  |
| ZIP archive<br>(Actually an Open office<br>presentation) | On the open office website they say the new version comes with a quicklook plugin |   | org.oasis- open.opendocument.presentation org.oasis-open.opendocument public.zip-archive com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.composite-content public.content |
|  |   |   | org.oasis- open.opendocument.spreadsheet org.oasis-open.opendocument public.zip-archive com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.composite-content public.content  |

| Kind (from Spotlight) | Notes  | Other attributes   | kMDItemContentTypeTree  |
|-----------------------|--|--|---|
|                       |  |  | org.oasis-open.opendocument.text org.oasis-open.opendocument public.zip-archive com.pkware.zip-archive public.data public.item com.apple.bom-archive public.archive public.composite-content public.content |
| MPEG-4 movie          |  | Media types (Sound, Video)<br>Codecs (ACC, "H.264")<br>Pixel width<br>Pixel height<br>Duration | public.mpeg-4 public.movie public.audiovisual-content public.data public.item public.content  |
| Flash video           | Basically no additional meta data short of size. |  | com.adobe.flash.video public.movie public.audiovisual-content public.data public.item public.content  |
| MP3 Audio File        |  | Album genre etc<br>Bitrate<br>Duration appears to be<br>recorded in seconds                    | public.mp3 public.audio public.audiovisual-content public.data public.item public.content   |

| Kind (from Spotlight) | Notes                                       | Other attributes   | kMDItemContentTypeTree  |
|-----------------------|---|--|---|
| Style Sheet           | Note doesn't say "Cascading<br>Style Sheet" |  | com.apple.dashcode.css public.plain-text public.text public.data public.item public.content |
| HTML document         |   | Title is pulled from the <title> in the head Where from&lt;/td&gt;&lt;td&gt;public.html public.text public.data public.item public.content&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Web archive&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;Content creator (Cocoa&lt;br&gt;HTML writer)&lt;/td&gt;&lt;td&gt;com.apple.webarchive public.data public.item public.composite-content public.content&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Email Message&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;com.apple.mail.email public.data public.item public.email-message public.message&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Chat transcript&lt;/td&gt;&lt;td&gt;iChat transcript. Not sure what a MSN one would be like&lt;/td&gt;&lt;td&gt;Author address (handle) Instant message addresses (handles) Authors (names of those in chat) Delivery type. (AIM)&lt;/td&gt;&lt;td&gt;com.apple.ichat.transcript&lt;br&gt;public.message&lt;br&gt;public.data&lt;br&gt;public.item&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title> |   |

| Kind (from Spotlight) | Notes   | Other attributes                  | kMDItemContentTypeTree   |
|-----------------------|---|-----------------------------------|--|
| JavaScript source     | Says executable at base of content type tree  | Where from                        | com.apple.dashcode.javascript com.netscape.javascript-source public.source-code public.plain-text public.text public.data public.item public.content public.executable |
| Shockwave Flash Movie | Minimal attributes, regardless if<br>swf is heavily scripted or<br>timeline animation |                                   | public.data<br>public.item   |
| Ruby source           |   |                                   | public.ruby-script public.shell-script public.script public.source-code public.plain-text public.text public.data public.item public.content                           |
| vCard                 | If the card contains multiple people, title is pulled from the first person           | Title from the name of the person | public.vcard<br>public.data<br>public.item<br>public.contact   |
|                       |   |                                   |  |