

Table of Contents

What is MIE?

MIE 1.1 Format Specification (2007-01-21)

File Structure

A DataLength of zero is valid for any element except a compressed MIE group. A zero TagName should DataLength for an uncompressed MIE group indicates that the group length is unknown. For other elements, a zero length indicates there is no associated data. A terminator element must have a DataLength of 0, 6 or 10, and may not use an extended DataLength.

TagName

The TagName string is 0 to 255 bytes long, and is composed of the ASCII characters A-Z, a-z, 0-9 and underline ('_'). Also, a dash ('-') is used to separate the language/country code in the TagName of a localized text string, and a units string (possibly containing other ASCII characters) may follow. For example, "ET Q q 0.24 0 0 -0."

read in step 1, seek backward by this number of bytes to find the start of the MIE group element for this document.

Tags which may take on a discrete set of values should have meaningful values if possible. This improves the extensibility of the format. (This is generally applicable to integer (with or without "D" suffix), e.g. multi-integer multi-unrecognized values.

Numerical Representation

Integer and floating point numbers are represented in binary in the . In the ., n of

Large data lengths

Some software may limit the maximum size of a MIE group or element. Historically, a limit of 2GB may be imposed by some systems. However, 8-byte data lengths should be supported by all applications provided the value doesn't exceed the system limit. (ie. For systems with a 2GB limit, 8-byte data lengths should be supported if the upper 17 bits are all zero.) If a data length above the system limit is encountered, it may be necessary for the application to stop processing if it can not seek to the next element in the file.

Revisions

2012-08-21 - Added "Offset" column to Element Structure table

2010-04-05 - Fixed "Format Size" Note 7 to give the correct number of bits
in the example rational value 225 703 Tm /F1.01Pcs60.24 18 774 cm BT 41 00

Appendix A – Units of Measure

Description

The MIE format allows units of measurement to be specified in brackets at the end of a MIE tag name (ie. “Volume(m3)”). This appendix describes the standard MIE units abbreviations.

Syntax

The units string may contain any ASCII characters in the range 0x21 (!) to 0x7d (}), excepting the bracket characters (0x28 and 0x29). An empty string is allowed, and indicates a dimensionless value.

gon	gon (plane angle)
GPL-U	GPL unit (biologic activity of anticardiolipin IgG)
gr	grain (mass)
Gy	Gray (energy dose)

qt	quart, U.S. (fluid volume)
qt_br	quart, British (volume)
R	Roentgen (ion dose)
rad	radian (plane angle)
RAD	radiation absorbed dose (energy dose)

