

Tracing File Format (final)

EoDb::kHeaderSection sentinel	EoUInt16 0x0101
{0 or more key-value pairs}	
EoDb::kEndOfSection sentinel	EoUInt16 0x01ff
EoDb::kGroupsSection sentinel	EoUInt16 0x0104
Number of groups definitions	EoUInt16
{0 or more groups definitions}	
EoDb::kEndOfSection sentinel	EoUInt16 0x01ff

Notes:

When a tracing (tra) file is loaded the required Linetype Table can no longer be assumed to contain the required definitions. More than likely the only linetype preloaded will be the default “Continuous” linetype (index = 1). The primitives must be reviewed before the first display to determine which (if any) linetype should be loaded from the external linetype file. The Legacy linetype file will always be maintained in the original indexed order. So, a lookup of the linetype by the linetype index value in the tracing file primitive definition is straight forward.

Peg File Formats (final)

EoDb::kHeaderSection sentinel	EoUInt16 0x0101
{0 or more key-value pairs}	
EoDb::kEndOfSection sentinel	EoUInt16 0x01ff
EoDb::kTablesSection sentinel	EoUInt16 0x0102
EoDb::kViewportTable sentinel	EoUInt16 0x0201
{0 or more viewport definitions}	EoUInt16
EoDb::kEndOfTable sentinel	EoUInt16 0x02ff
EoDb::kLinetypeTable sentinel	EoUInt16 0x0202
Number of linetypes	EoUInt16
{0 or more linetype definitions}	
EoDb::kEndOfTable sentinel	EoUInt16 0x02ff
EoDb::kLayerTable sentinel	EoUInt16 0x0203
Number of layers (resident only)	EoUInt16
{0 or more layer definitions}	
EoDb::kEndOfTable sentinel	EoUInt16 0x02ff
EoDb::kEndOfSection sentinel	EoUInt16 0x01ff
EoDb::kBlocksSection sentinel	EoUInt16 0x0103
Number of block definitions	EoUInt16
{0 or more block definitions}	
EoDb::kEndOfSection sentinel	EoUInt16 0x01ff
EoDb::kGroupsSection sentinel	EoUInt16 0x0104
Number of groups definitions	EoUInt16
{0 or more groups definitions}	
EoDb::kEndOfSection sentinel	EoUInt16 0x01ff

Layer definition

Layers	
Name	string
Tracing flags	EoUInt16

State	EoUInt16
Layer pen color	EoUInt16
Layer line type	string
Tracings	
?? nothing	

Line style definition

Name	string
Flags (always 0)	EoUInt16
Description	string
Definition length	EoUInt16
Pattern length	double
if (definition length > 0)	
1 or more dash length	double...

Block definition

Number of primitives	EoUInt16
Name	string
Flags	EoUInt16
Base point	EoGePoint3d
{0 or more primitive definitions}	

Groups definition

Number of Group definition	EoUInt16
{0 or more group definitions}	

Group definition

Number of primitive definitions	EoUInt16
{0 or more primitive definitions}	

Primitive definition

Point primitive		
Type code <0x0100>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Point style	EoUInt16	[4-5]
Point	EoGePoint3d	[6-13][14-21][22-29]
Number of data values	EoUInt16	[18-19]
{0 or more data values}	double	[20-]

Insert primitive		
Type code <0x0101>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Block name	string	
Insertion point	EoGePoint3d	
Local reference x-axis	EoGeVector3d	
Local reference y-axis	EoGeVector3d	
Local reference z-axis	EoGeVector3d	
Number of columns	EoUInt16	
Number of rows	EoUInt16	
Column spacing	double	
Row spacing	double	

SegRef primitive		
Type code <0x0102>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Group name	string	
Insertion point	EoGePoint3d	

Local normal vector	EoGeVector3d
Scale factors(x, y, z)	EoGeVector3d
Rotation	double
Number of columns	EoUInt16
Number of rows	EoUInt16
Column spacing	double
Row spacing	double

Line primitive

Type code <0x0200>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Line begin	EoGePoint3d	[6-13][14-21][22-29]
Line end	EoGePoint3d	[30-37][38-45][46-53]

Polygon primitive

Type code <0x0400>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Polygon style	EoUInt16	[4-5]
Polygon Style Index	EoUInt16	[6-7]
Number of vertices	EoUInt16	[8-9]
Hatch origin	EoGePoint3d	[10-17][18-25][26-33]
Hatch/pattern reference x-axis	EoGeVector3d	[34-41][42-49][50-57]
Hatch/pattern reference y-axis	EoGeVector3d	[58-65][66-73][74-81]
{0 or more points}	EoGePoint3d	[82-...]

Ellipse primitive

Type code <0x1003>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Center point	EoGePoint3d	[6-13][14-21][22-29]
Major axis	EoGeVector3d	[30-37][38-45][46-53]
Minor axis	EoGeVector3d	[54-61][62-69][70-77]
Sweep angle	double	[78-85]

Spline primitive

Type code <0x2000>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Number of control points	EoUInt16	[6-7]
{0 or more control points}	EoGePoint3d	[8-]

CSpline primitive

(This primitive may still exist in some files and is readable but is converted on the read to a Polyline primitive and is never written to file.)

Type code <0x2001>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
m_wPtsS	EoUInt16	[6-7]
Number of control points	EoUInt16	[8-9]
End condition Type	EoUInt16	[10-11]
Begin point tangent vector	EoGeVector3d	[12-19][20-][20-27]
End point tangent vector	EoGeVector3d	[28-35][36-43][44-51]
{0 or more control points}	EoGePoint3d	[52-]

Polyline primitive

(never made it release: if already written flags not streamed)

Type code <0x2002>	EoUInt16	[0-1]
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Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Flags	EoUInt16	[6-7]
Number of points	EoUInt16	[8-9]
{0 or more points}	EoGePoint3d	[10-]

Text primitive

Type code <0x4000>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Font definition		
Text precision	EoUInt16	[6-7]
Text font name	string	[8
Text path	EoUInt16	
Horizontal alignment	EoUInt16	
Vertical alignment	EoUInt16	
Character spacing	double	
Insertion point	EoGePoint3d	
Local reference x-axis	EoGeVector3d	
Local reference y-axis	EoGeVector3d	
Text ('\t' terminated)	string	

Tag primitive

(This primitive may still exist in some files and is readable but is converted on the read to a Point primitive and is never written to file.)

Type code <0x4100>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Point style	EoUInt16	[4-5]
Point	EoGePoint3d	[6-13][14-21][22-29]

Dim primitive

Type code <0x4200>	EoUInt16	[0-1]
Pen color	EoUInt16	[2-3]
Line type	EoUInt16	[4-5]
Line begin	EoGePoint3d	[6-13][14-21][22-29]
Line end	EoGePoint3d	[30-37][38-45][46-53]
Text pen color	EoUInt16	[30-31]
Font definition		
Text precision	EoUInt16	[32-33]
Text font name	string	[34
Text path	EoUInt16	
Horizontal alignment	EoUInt16	
Vertical alignment	EoUInt16	
Character spacing	double	
Insertion point	EoGePoint3d	
Local reference x-axis	EoGeVector3d	
Local reference y-axis	EoGeVector3d	
Text ('\t' terminated)	string	