DENG asset file format (.das) specifications

DAS format contains of three headers, INFO_HDR, VERT_HDR and INDX_HDR. If texture type is texture mapped then file also contains TPIX_HDR header.

INFO_HDR

The layout for the INFO_HDR is following:
- 8 bytes: Header name
- 8 bytes: Creation time (since epoch)
- 4 bytes: Header size (bytes)
- 1 byte: Name size (bytes)
- 1 – 24 bytes: Asset name
- 1 byte: Description size (bytes)
- 1 – 255 bytes: Asset description

VERT_HDR

The layout for the VERT_HDR is following:
- 8 bytes: Header name
- 4 bytes: Header size (bytes)
- 4 bytes: Vertices count n
- 1 byte: Vertices type (0 = unmapped, 1 = texture mapped)

Vertices data can be stored in texture mapped format and unmapped format.
- n * 20 bytes: Texture mapped data
  - 12 bytes: Vertices coordinates (x, y, z; type float)
  - 8 bytes: Texture coordinates (x, y; type float)
- n * 28 bytes: Unmapped vertices data
  - 12 bytes: Vertices coordinates (x, y, z; type float)
  - 16 bytes: Color data (r, g, b, a; type float)

INDX_HDR

The layout for the INDX_HDR is following:
- 8 bytes: Header name
- 4 bytes Header size (bytes)
- 4 bytes: Indices count n
- n * 4 bytes: Indices data (type uint32_t)

TPIX_HDR

The layout for the TPIX_HDR is following:

- 8 bytes: Header name
- 4 bytes: Header size (bytes)
- 2 bytes: Image width x
- 2 bytes: Image height y
- x * y * 4 bytes: Image pixel data (r, g, b, a)