

**NAME**

`djvumake` - Assemble DjVu image files.

**SYNOPSIS**

**djvumake** *djvufile* [*chkid=argument*]...

**DESCRIPTION**

Program **djvumake** assembles a single-page DjVu file *djvufile* by copying or creating chunks according to the provided arguments. Supported arguments are as follows:

**INFO**=*w,h,dpi*

Create the initial information chunk. Arguments *w*, *h*, and *dpi* describe the width, height and resolution of the image. All arguments may be omitted. The default resolution is 300 dpi. The default width and height will be retrieved from the first mask chunk specified in the command line options.

**Sjbz**=*jb2file*

Create a JB2 foreground mask chunk. File *jb2file* may contain raw JB2 data, or be a DjVu file containing JB2 data such as those produced by program **cjb2**.

**Smmr**=*mmrfile*

Create a MMR/G4 foreground mask chunk. File *mmrfile* may contain raw MMR data or be a DjVu file containing MMR data.

**BG44**=*iw44file[:n]*

Create one or more IW44 background chunks. File *iw44file* must contain IW44 data. Such files can be obtained by compressing the background image with program **c44** and extracting the raw IW44 data using program **djvextract**. The optional argument *n* indicates the number of chunks to copy from the IW44 file. Omitting the number of chunks copies all available chunks.

**BGjp**=*jpegfile*

Create a JPEG encoded background chunk. File *jpegfile* must contain JPEG encoded data.

**BG2k**=*jpegfile*

Create a JPEG-2000 background chunk. File *jpegfile* must contain JPEG-2000 encoded data. The DjVu decoder does not yet display files containing JPEG-2000 data.

**FGbz**=(*filename*{*#color[:x,y,w,h]*})

Create a foreground color chunk describing one solid color for each JB2 encoded mark. The argument can be the name *filename* of a file containing the raw data. Such files are best created using program **djvextract**(1). Alternatively the argument could describe a sequence of color zones. Each color zone specifies a color name *color*, and optionally the coordinates *x,y,w,h* of a rectangle. Each mark receives the color of the last color zone whose rectangle intersects the bounding box of the mark. The mark is painted black if its bounding box does not intersect one of the zones. The rectangle coordinates are expressed in pixels with the origin at the bottom left corner of the page. The full page is assumed when no rectangle coordinates are specified. Color names can be specified with exactly six hexadecimal digits, e.g. **FGbz=#FF8080**, or by one of the following sixteen HTML color names defined by the W3C, e.g. **FGbz=#red**.

```
+-----+
|aqua blackblue  fuchsia |
|gray greenlime  maroon  |
|navy olive purplered   |
|silverteal  white yellow |
+-----+
```

**FG44**=*iw44file*

Create a IW44 foreground color chunk. File *iw44file* must contain IW44 data. Such files can be obtained by compressing the background image with command **c44** and extracting the raw IW44 data using program **djvextract**. Only the first chunk is copied.

**FGjp**=*jpegfile*

Create a JPEG foreground color chunk.

**FG2k**=*jpegfile*

Create a JPEG-2000 foreground color chunk. The DjVu decoder does not yet display files containing JPEG-2000 data.

**INCL**=*fileid*

Create a DjVu3 include chunk pointing to the component file named *fileid*. The resulting file should then be included into a multipage document using command **djvm**.

**Djbz**=*jb2file*

Create a JB2 shape dictionary. File *jb2file* must contain raw JB2 data describing a JB2 dictionary.

**PPM**=*ppmfile*

Create a IW44 background chunk and a IW44 foreground color chunk by masking and subsampling the PPM file *ppmfile*.

Assume, for instance, that we have a PPM image **myimage.ppm** and an identically sized PBM bitonal image **mymask.pbm** whose black pixels indicate which pixels belong to the foreground. Such a bitonal file might have been obtained by thresholding or color-keying the PPM image. We can then produce a DjVuDocument image using the following two commands:

```
cjb2 mymask.pbm mymask.djvu  
djvumake my.djvu Sjbz=mymask.djvu PPM=myimage.ppm
```

The DjVu specification documents in the directory **doc** of the DjVuLibre distribution provide the authoritative information about the composition of a legal DjVu image file.

## CREDITS

This program was written by Léon Bottou <leonb@users.sourceforge.net> and was then improved by Andrei Erofeev <andrew\_erofeev@yahoo.com>, Bill Riemers <docbill@sourceforge.net> and many others.

## SEE ALSO

**djvu(1)**, **djvuextract(1)**, **cjb2(1)**, **c44(1)**