

Photosphere 1.7 Specifications

Anywhere Software

Program type: Application

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Description: Photosphere is a digital image browsing and cataloging tool, with unique features to create high dynamic-range (HDR) images from bracketed exposure sequences, and support a number of standard HDR image formats.

System requirements: Mac OS X 10.3.9 or later
256 Mbytes of RAM

Browsing Features:

- Browse local file systems to find images in JPEG, TIFF, BMP, HDR, and EXR formats
- Folders conveniently accessible in a hierarchical list display
- Images are identified by their size and hash value rather than filename and location for more reliable identification
- Four thumbnail resolutions, including an extra-large (320x320) preview size

Catalog Features:

- Database contains fields that identify an image and hold display properties (crop, rotate, etc.) as well as comments, keywords, owner, and custom fields
- Quick searches for events, subjects, albums, keywords, and owners
- More sophisticated searches on additional fields, including title, comments, camera settings, and custom user fields
- Custom user fields may be added to the database at any time
- Original image files are tracked automatically rather than added to an internal database – this saves on disk space and allows the user to manage their own images with confidence
- Modifications such as cropping and red-eye removal do not alter the image data – they only affect the appearance for display, printing, and export
- Thumbnails are available when images are not

Import/Export:

- Catalog data may be exported to and imported from programs that understand tab-separated ASCII fields
- Copy and paste also supported as tab-separated text fields
- Export rendered image collections to a web page or folder

Image Viewing:

- Quick pan, zoom, rotation, cropping, and red-eye removal
- HDR images shown with linear or non-linear tone-mapping and optional “human” exposure to match appearance
- Full screen slide show with random & continuous options

Printing:

- Images may be printed with catalog info. if desired
- Albums printed with captions and multiple images per page
- Thumbnails printed as contact sheets (index print)

HDR Images:

- Support for LogLuv, 16-bit & floating point TIFF, Radiance RGBE (a.k.a. HDR), and ILM’s OpenEXR format, and BrightSide Technologies’ backwards-compatible JPEG-HDR format
- Metadata stored for capture date, owner, and comments, etc.
- HDR image may be built from up to 32 exposures
- Exposures are aligned (registered) automatically, permitting hand-held sequences
- Application deduces camera response function and converts to a linear (RGB) color space
- Flare removal option reduces effects of lens flare on results
- Ghost removal option selects a single exposure for moving objects in the scene
- Response function for a particular camera is stored for later reuse, making the process more robust
- Fallback to standard curve if camera response cannot be determined
- Panorama stitching feature for HDR and standard images

Memory & Storage:

- User-adjustable memory limit employing LRU caching
- Database uses approximately 512 bytes/image
- Thumbnail cache uses approximately 15 Kbytes per 320x320 thumbnail, with a user-settable total limit
- No limit to number of images in a catalog – key searches are accelerated with dynamic hash lookups