NAME

mkisofs − create a ISO9660 filesystem with optional Rock Ridge attributes and Joliet hybrid data.

SYNOPSIS

mkisofs [−**abstract** *FILE*] [−**allow-lowercase**] [−**allow-multidot**] [−**biblio** *FILE*] [−**b** *eltorito_boot_image*] [−**B** *sparc_boot_image_list*] [−**G** *generic_boot_image*] [−**gui**] [−**C** #,#] [−**hard-disk-boot**] [−**no-emul-boot**] [−**no-boot**] [−**boot-load-seg**] [−**boot-load-size**] [−**boot-info-table**] [−**c** *boot_catalog*] [−**check-oldnames**] [−**copyright** *FILE*] [−**A** *application_id*] [−**f**] [−**d**] [−**D**] [−**hide** *glob*] [−**hide-list** *file*] [−**hidden** *glob*] [−**hidden-list** *file*] [−**hide-joliet** *glob*] [−**hide-joliet-list** *file*] [−**hide-joliet-trans-tbl**] [−**hide-rr-moved**] [−**iso-level** *level*] [−**J**] [−**jcharset** *charset*] [−**l**] [−**L**] [−**log-file** *log_file*] [−**max-iso9660-filenames**] [−**M** *path* | *device*] [−**nobak**] [−**no-bak**] [−**no-split-symlink-components**] [−**no-split-symlink-fields**] [−**pad**] [−**path-list** *file*] [−**p** *preparer*] [−**print-size**] [−**P** *publisher*] [−**quiet**] [−**r**] [−**R**] [−**relaxed-filenames**] [−**sort** *sort file*] [−**sysid** *ID*] [−**T** | −**table-name** *TABLE_NAME*] [−**ucs-level** *level*] [−**use-fileversion**] [−**U**] [−**no-iso-translate**] [−**v**] [−**V** *volid*] [−**volset** *ID*] [−**volset-size** #] [−**volset-seqno** #] [−**x** *path*] [−**exclude-list** *file*] [−**z**] [−**m** *glob*] −**o** *filename pathspec [pathspec]*

DESCRIPTION

mkisofs is effectively a pre-mastering program to generate the iso9660 filesystem - it takes a snapshot of a given directory tree, and generates a binary image which will correspond to an iso9660 filesystem when written to a block device.

mkisofs is also capable of generating the System Use Sharing Protocol records specified by the Rock Ridge Interchange Protocol. This is used to further describe the files in the iso9660 filesystem to a unix host, and provides information such as longer filenames, uid/gid, posix permissions, and block and character devices.

Each file written to the iso9660 filesystem must have a filename in the 8.3 format (8 characters, period, 3 characters, all upper case), even if Rock Ridge is in use. This filename is used on systems that are not able to make use of the Rock Ridge extensions (such as MS-DOS), and each filename in each directory must be different from the other filenames in the same directory. **mkisofs** generally tries to form correct names by forcing the unix filename to upper case and truncating as required, but often times this yields unsatisfactory results when there are cases where the truncated names are not all unique. **mkisofs** assigns weightings to each filename, and if two names that are otherwise the same are found the name with the lower priority is renamed to have a 3 digit number as an extension (where the number is guaranteed to be unique). An example of this would be the files foo.bar and foo.bar.˜1˜ - the file foo.bar.˜1˜ would be written as FOO.000;1 and the file foo.bar would be written as FOO.BAR;1

Note that **mkisofs** is not designed to communicate with the writer directly. Most writers have proprietary command sets which vary from one manufacturer to another, and you need a specialized tool to actually burn the disk. The **cdwrite** utility is one such tool that runs under Linux and performs this task. The latest version of **cdwrite** is capable of communicating with the Phillips/IMS/Kodak, HP and Yamaha drives that have been manufactured before 1997. Most writers come with some version of DOS software that allows a direct image copy of an iso9660 image to the writer. The current version of **cdwrite** is available from ftp://sunsite.unc.edu/utils/disk-management/cdwrite-2.0.tar.gz Note that cdwrite has not been actively maintained since 1995.

The **cdrecord** utility is another utility capable of burning an actual disc. The latest version of **cdrecord** is available from ftp://ftp.fokus.gmd.de/pub/unix/cdrecord Cdrecord is under constant development.

Also you should know that most cd writers are very particular about timing. Once you start to burn a disc, you cannot let their buffer empty before you are done, or you will end up with a corrupt disc. Thus it is critical that you be able to maintain an uninterrupted data stream to the writer for the entire time that the disc is being written.

pathspec is the path of the directory tree to be copied into the iso9660 filesystem. Multiple paths can be specified, and **mkisofs** will merge the files found in all of the specified path components to form the cdrom image.

It is possible to graft the paths at points other than the root directory, and it is possible to graft files or directories onto the cdrom image with names different than what they have in the source filesystem. This is easiest to illustrate with a couple of examples. Let's start by assuming that a local file ../old.lis exists, and you wish to include it in the cdrom image.

foo/bar/=../old.lis

will include the file old.lis in the cdrom image at /foo/bar/old.lis, while

foo/bar/xxx=../old.lis

will include the file old.lis in the cdrom image at /foo/bar/xxx. The same sort of syntax can be used with directories as well. **mkisofs** will create any directories required such that the graft points exist on the cdrom image - the directories do not need to appear in one of the paths. Any directories that are created on the fly like this will have permissions 0555 and appear to be owned by the person running mkisofs. If you wish other permissions or owners of the intermediate directories, the easiest solution is to create real directories in the path such that mkisofs doesn't have to invent them.

mkisofs will also run on Win9X/NT4 machines when compiled with Cygnus' cygwin (available from http://sourceware.cygnus.com/cygwin/). Therefore most references in this man page to *Unix* can be replaced with *Win32*.

OPTIONS

−**abstract** *FILE*
Specifies the abstract file name. This parameter can also be set in the file **.mkisofsrc** with ABST=filename. If specified in both places, the command line version is used.

−**A** *application_id*
Specifies a text string that will be written into the volume header. This should describe the application that will be on the disc. There is space on the disc for 128 characters of information. This parameter can also be set in the file **.mkisofsrc** with APPI=id. If specified in both places, the command line version is used.

−**allow-lowercase**
This options allows lower case characters to appear in iso9660 filenames.
This violates the ISO9660 standard, but it happens to work on some systems. Use with caution.

−**allow-multidot**
This options allows more than one dot to appear in iso9660 filenames. A leading dot is not affected by this option, it may be allowed separately using the −**L** option.
This violates the ISO9660 standard, but it happens to work on many systems. Use with caution.

−**biblio** *FILE*
Specifies the bibliographic file name. This parameter can also be set in the file **.mkisofsrc** with BIBLO=filename. If specified in both places, the command line version is used.

−**b** *eltorito_boot_image*
Specifies the path and filename of the boot image to be used when making an "El Torito" bootable CD. The pathname must be relative to the source path specified to **mkisofs.** This option is required to make an "El Torito" bootable CD. The boot image must be exactly the size of either a 1.2, 1.44, or a 2.88 meg floppy, and **mkisofs** will use this size when creating the output iso9660 filesystem. It is assumed that the first 512 byte sector should be read from the boot image (it is essentially emulating a normal floppy drive). This will work, for example, if the boot image is a LILO based boot floppy.

−**B** *img_sun4,img_sun4c,img_sun4m,img_sun4d,img_sun4e*
Specifies a comma separated list of boot images that are needed to make a bootable CD for sparc systems. There may be empty fields in the comma separated list. This option is required to make a bootable CD for Sun sparc systems. If the −**B** or −**sparc-boot** option has been specified, the first sector of the resulting image will contain a Sun disk label. This disk label specifies slice 0 for the iso9660 image and slice 1 ... slice 7 for the boot images that have been specified with this option. Byte offset 512 ... 8191 within each of the additional boot images must contain a primary boot that works for the appropriate sparc architecture. The rest of each of the images usually contains an ufs filesystem that is used primary kernel boot stage.

The implemented boot method is the boot method found with SunOS 4.x and SunOS 5.x. However, it does not depend on SunOS internals but only on properties of the Open Boot prom. For this reason, it should be usable for any OS that boots off a sparc system.

If the special filename **...** is used, the actual and all following boot partitions are mapped to the previous partition. If **mkisofs** is called with −**G** *image* −**B** ... all boot partitions are mapped to the partition that contains the iso9660 filesystem image and the generic boot image that is located in the first 16 sectors of the disk is used for all architectures.

−**G** *generic_boot_image*
Specifies the path and filename of the generic boot image to be used when making a generic bootable CD. The **generic_boot_image** will be placed on the first 16 sectors of the CD. The first 16 sectors are the sectors that are located before the iso9660 primary volume descriptor. If this option is used together with the −**sparc-boot** option, the Sun disk label will overlay the first 512 bytes of the generic boot image.

−**hard-disk-boot**
Specifies that the boot image used to create "El Torito" bootable CDs is a hard disk image. The hard disk image must begin with a master boot record that contains a single partition.

−**no-emul-boot**
Specifies that the boot image used to create "El Torito" bootable CDs is a 'no emulation' image. The system will load and execute this image without performing any disk emulation.

−**no-boot**
Specifies that the created "El Torito" CD should be marked as not bootable. The system will provide an emulated drive for the image, but will boot off a standard boot device.

−**boot-load-seg** *segment_address*
Specifies the load segment address of the boot image for no-emulation "El Torito" CDs.

−**boot-load-size** *load_sectors*
Specifies the number of "virtual" (512-byte) sectors to load in no-emulation mode. The default is to load the entire boot file. Some BIOSes may have problems if this is not a multiple of 4.

−**boot-info-table**
Specifies that a 56-byte table with information of the CD-ROM layout will be patched in at offset 8 in the boot file. If this option is given, the boot file is modified in the source filesystem, so make sure to make a copy if this file cannot be easily regenerated! See the **BOOT INFO TABLE** section for a description of this table.

−**C** *last_sess_start,next_sess_start*
This option is needed when **mkisofs** is used to create the image of a second session or a higher level session for a multi session disk. The option −**C** takes a pair of two numbers separated by a comma. The first number is the sector number of the first sector in the last session of the disk that should be appended to. The second number is the starting sector number of the new session. The expected pair of numbers may be retrieved by calling **cdrecord** −**msinfo ...** the −**C** option may only be uses in conjunction with the −**M** option.

−**c** *boot_catalog*
Specifies the path and filename of the boot catalog to be used when making an "El Torito" bootable CD. The pathname must be relative to the source path specified to **mkisofs.** This option is required to make a bootable CD. This file will be inserted into the output tree and not created in the source filesystem, so be sure the specified filename does not conflict with an existing file, as it will be excluded. Usually a name like "boot.catalog" is chosen.

−**check-oldnames**
Check all filenames imported from old session for compliance with actual **mkisofs** iso9660 file naming rules. It his option is not present, only names with a length > 31 are checked as these files are a hard violation of the iso9660 standard.

−**copyright** *FILE*
Specifies the Copyright file name. This parameter can also be set in the file **.mkisofsrc** with COPY=filename. If specified in both places, the command line version is used.

−**d** Omit trailing period from files that do not have a period.
This violates the ISO9660 standard, but it happens to work on many systems. Use with caution.

−**D** Do not use deep directory relocation, and instead just pack them in the way we see them.
This violates the ISO9660 standard, but it happens to work on many systems. Use with caution.

−**f** Follow symbolic links when generating the filesystem. When this option is not in use, symbolic links will be entered using Rock Ridge if enabled, otherwise the file will be ignored.

−**gui** Switch the behaviour for a GUI. This currently makes the output more verbose but may have other effects in future.

−**hide** *glob*
Hide *glob* from being seen on the ISO9660 or Rock Ridge directory. *glob* is a shell wild-card-style pattern that must match any part of the filename or path. Multiple globs may be hidden. If *glob* matches a directory, then the contents of that directory will be hidden. All the hidden files will still be written to the output CD image file. Should be used with the −**hide-joliet** option.

−**hide-list** *file*
A file containing a list of *globs* to be hidden as above.

−**hidden** *glob*
Add the hidden (existence) ISO9660 directory attribute for *glob*. This attribute will prevent *glob* from being listed on DOS based systems if the /A flag is not used for the listing. *glob* is a shell wild-card-style pattern that must match any part of the filename or path. Multiple globs may be hidden.

−**hidden-list** *file*
A file containing a list of *globs* to get the hidden attribute as above.

−**hide-joliet** *glob*
Hide *glob* from being seen on the Joliet directory. *glob* is a shell wild-card-style pattern that must match any part of the filename or path. Multiple globs may be hidden. If *glob* matches a directory, then the contents of that directory will be hidden. All the hidden files will still be written to the output CD image file. Should be used with the −**hide** option.

−**hide-joliet-list** *file*
A file containing a list of *globs* to be hidden as above.

−**hide-joliet-trans-tbl**
Hide the **TRANS.TBL** files from the Joliet tree. These files usually don't make sense in the Joliet World as they list the real name and the ISO9660 name which may both be different

from the Joliet name.

−**hide-rr-moved**
Rename the directory **RR_MOVED** to **.rr_moved** in the Rock Ridge tree. It seems to be impossible to completely hide the **RR_MOVED** directory from the Rock Ridge tree. This option only makes the visible tree better to understand for people who don't know what this directory is for. If you need to have no **RR_MOVED** directory at all, you should use the −**D** option. Note that in case that the −**D** option has been specified, the resulting filesystem is not ISO9660 level-1 compliant and will not be readable on MS-DOS.

−**l** Allow full 31 character filenames. Normally the ISO9660 filename will be in an 8.3 format which is compatible with MS-DOS, even though the ISO9660 standard allows filenames of up to 31 characters. If you use this option, the disc may be difficult to use on a MS-DOS system, but this comes in handy on some other systems (such as the Amiga). Use with caution.

−**iso-level** *level*
Set the iso9660 conformance level. Valid numbers are 1..3.

With level 1, no associated files are allowed and filenames are restricted to 8.3 characters.

With level 2, no associated files are allowed.

With level 3, no restrictions apply.

With all iso9660 levels all filenames are restricted to upper case letters, numbers and the underscore (_). The maximum filename length is restricted to 31 characters, the directory nesting level is restricted to 8 and the maximum path length is limited to 255 characters.

−**J** Generate Joliet directory records in addition to regular iso9660 file names. This is primarily useful when the discs are to be used on Windows-NT or Windows-95 machines. The Joliet filenames are specified in Unicode and each path component can be up to 64 Unicode characters long.

−**jcharset** *charset*
Local charset that should be used for translating local file names into Joliet Unicode directory records. To get a list of valid charset names, call **mkisofs −jcharset help.** To get a 1:1 mapping, you may use **default** as charset name. The default initial values are *cp437* on DOS based systems and *iso8859-1* on all other systems. If the −**jcharset** option is specified, the −**J** option is implied.

−**L** Allow ISO9660 filenames to begin with a period. Usually, a leading dot is replaced with an underscore in order to maintain MS-DOS compatibility.
This violates the ISO9660 standard, but it happens to work on many systems. Use with caution.

−**log-file** *log_file*
Redirect all error, warning and informational messages to *log_file* instead of the standard error.

−**m** *glob*
Exclude *glob* from being written to CDROM. *glob* is a shell wild-card-style pattern that must match part of the filename (not the path as with option −**x**). Technically *glob* is matched against the *d->d_name* part of the directory entry. Multiple globs may be excluded. Example:

mkisofs −o rom −m '*.o' −m core −m foobar

would exclude all files ending in ".o", called "core" or "foobar" to be copied to CDROM. Note that if you had a directory called "foobar" it too (and of course all its descendants) would be excluded.

NOTE: The −m and −x option description should both be updated, they are wrong. Both now work identical and use filename globbing. A file is excluded if either the last component matches or the whole path matches.

−**exclude-list** *file*
A file containing a list of *globs* to be exclude as above.

−**max-iso9660-filenames**
Allow 37 chars in iso9660 filenames. This option forces the −**N** option as the extra name space is taken from the space reserved for ISO-9660 version numbers.
This violates the ISO9660 standard, but it happens to work on many systems. Although a conforming application needs to provide a buffer space of at least 37 characters, disks created with this option may cause a buffer overflow in the reading operating system. Use with extreme care.

−**M** *path*
or

−**M** *device*
Specifies path to existing iso9660 image to be merged. The alternate form takes a SCSI device specifier that uses the same syntax as the **dev=** parameter of **cdrecord.** The output of **mkisofs** will be a new session which should get written to the end of the image specified in −M. Typically this requires multi-session capability for the recorder and cdrom drive that you are attempting to write this image to. This option may only be used in conjunction with the −**C** option.

−**N** Omit version numbers from ISO9660 file names.
This violates the ISO9660 standard, but no one really uses the version numbers anyway. Use with caution.

−**nobak**

−**no-bak**
Do not include backup files files on the iso9660 filesystem. If the −**no-bak** option is specified, files that contain the characters '~' or '#' or end in '.bak' will not be included (these are typically backup files for editors under unix).

−**no-rr** Do not use the Rock Ridge attributes from previous sessions. This may help to avoid getting into trouble when **mkisofs** finds illegal Rock Ridge signatures on an old session.

−**no-split-symlink-components**
Don't split the SL components, but begin a new Continuation Area (CE) instead. This may waste some space, but the SunOS 4.1.4 cdrom driver has a bug in reading split SL components (link_size = component_size instead of link_size += component_size).

−**no-split-symlink-fields**
Don't split the SL fields, but begin a new Continuation Area (CE) instead. This may waste some space, but the SunOS 4.1.4 and Solaris 2.5.1 cdrom driver have a bug in reading split SL fields (a '/' can be dropped).

−**o** *filename*
is the name of the file to which the iso9660 filesystem image should be written. This can be a disk file, a tape drive, or it can correspond directly to the device name of the optical disc writer. If not specified, stdout is used. Note that the output can also be a block special device for a regular disk drive, in which case the disk partition can be mounted and examined to ensure that the premastering was done correctly.

−**pad** Pad the end of the ISO9660 by 16 sectors (32kB). If the total size then is not a multiple of 16 sectors, the needed number of sectors is added. If the option −**B** is used, then there is a second padding at the end of the boot partitions.

The padding is neded as many operating systems (e.g. Linux) implement read ahead bugs in

their filesystem I/O. These bugs result in read errors on one or more files that are located at the end of a track. They are usually present when the CD is written in Track at Once mode or when the disk is written as mixed mode CD where an audio track follows the data track.

−**path-list** *file*
A file containing a list of *pathspec* directories and filenames to be added to the ISO9660 filesystem. This list of pathspecs are processed after any that appear on the command line. If the argument is −, then the list is read from the standard input. There must be at least one *pathspec* given on the command line as well.

−**P** *publisher_id*
Specifies a text string that will be written into the volume header. This should describe the publisher of the CDROM, usually with a mailing address and phone number. There is space on the disc for 128 characters of information. This parameter can also be set in the file **.mkisofsrc** with PUBL=. If specified in both places, the command line version is used.

−**p** *preparer_id*
Specifies a text string that will be written into the volume header. This should describe the preparer of the CDROM, usually with a mailing address and phone number. There is space on the disc for 128 characters of information. This parameter can also be set in the file **.mkisofsrc** with PREP=. If specified in both places, the command line version is used.

−**print-size**
Print estimated filesystem size and exit. This option is needed for Disk At Once mode and with some CD-R drives when piping directly into **cdrecord.** In this case it is needed to know the size of the filesystem before the actual CD-creation is done. The option −print-size allows to get this size from a "dry-run" before the CD is actually written.

−**quiet** This makes **mkisofs** even less verbose. No progress output will be provided.

−**R** Generate SUSP and RR records using the Rock Ridge protocol to further describe the files on the iso9660 filesystem.

−**r** This is like the −R option, but file ownership and modes are set to more useful values. The uid and gid are set to zero, because they are usually only useful on the author's system, and not useful to the client. All the file read bits are set true, so that files and directories are globally readable on the client. If any execute bit is set for a file, set all of the execute bits, so that executables are globally executable on the client. If any search bit is set for a directory, set all of the search bits, so that directories are globally searchable on the client. All write bits are cleared, because the CD-Rom will be mounted read-only in any case. If any of the special mode bits are set, clear them, because file locks are not useful on a read-only file system, and set-id bits are not desirable for uid 0 or gid 0. When used on Win32, the execute bit is set on *all* files. This is a result of the lack of file permissions on Win32 and the Cygwin POSIX emulation layer.

−**relaxed-filenames**
The option −**relaxed-filenames** allows ISO9660 filenames to include digits, uppercase characters and all other 7 bit ASCII characters (resp. anything except lowercase characters).
This violates the ISO9660 standard, but it happens to work on many systems. Use with caution.

−**sort** *sort file*
Sort file locations on the media. Sorting is controlled by a file that contains pairs of filenames and sorting offset weighting. If the weighting is higher, the file will be located closer to the beginning of the media, if the weighting is lower, the file will be located closer to the end of the media.

−**sysid** *ID*
Specifies the system ID. This parameter can also be set in the file **.mkisofsrc** with

SYSI=system_id. If specified in both places, the command line version is used.

−**T** Generate a file TRANS.TBL in each directory on the CDROM, which can be used on non-Rock Ridge capable systems to help establish the correct file names. There is also information present in the file that indicates the major and minor numbers for block and character devices, and each symlink has the name of the link file given.

−**table-name** *TABLE_NAME*
Alternative translation table file name (see above). Implies the −**T** option. If you are creating a multi-session image you must use the same name as in the previous session.

−**ucs-level** *level*
Set Unicode conformance level in the Joliet SVD. The default level is 3. It may be set to 1..3 using this option.

−**use-fileversion**
The option −**use-fileversion** allows mkisofs to use file version numbers from the filesystem. If the option is not specified, *mkisofs* creates a version if 1 for all files. File versions are strings in the range *;1* to *;32767* This option is the default on VMS.

−**U** Allows "Untranslated" filenames, completely violating the iso9660 standards described above. Forces on the −d, −l, −L, −N and −no-iso-translate flags, and also allows more than one '.' character in the filename, as well as mixed case filenames. This is useful on HP-UX system, where the built-in CDFS filesystem does not recognize ANY extensions. Use with extreme caution.

−**no-iso-translate**
Do not translate the characters '#' and '~' which are invalid for iso9660 filenames. These characters are though invalid often used by Microsoft systems.
This violates the ISO9660 standard, but it happens to work on many systems. Use with caution.

−**V** *volid*
Specifies the volume ID (volume name or label) to be written into the master block. This parameter can also be set in the file **.mkisofsrc** with VOLI=id. If specified in both places, the command line version is used. Note that if you assign a volume ID, this is the name that will be used as the mount point used by the Solaris volume management system and the name that is assigned to the disc on a Windows or Mac platform.

−**volset** *ID*
Specifies the volset ID. This parameter can also be set in the file **.mkisofsrc** with VOLS=volset_id. If specified in both places, the command line version is used.

−**volset-size** #
Sets the volume set size to #. The volume set size is the number of CD's that are in a CD set. The −**volset-size** option may be used to create CD's that are part of e.g. a Operation System installation set of CD's. The option −**volset-size** must be specified before −**volset-seqno** on each command line.

−**volset-seqno** #
Sets the volume set sequence number to #. The volume set sequence number is the index number of the current CD in a CD set. The option −**volset-size** must be specified before −**volset-seqno** on each command line.

−**v** Verbose execution. If given twice on the command line, extra debug information will be printed.

−**x** *path* Exclude *path* from being written to CDROM. *path* must be the complete pathname that results from concatenating the pathname given as command line argument and the path relative to this directory. Multiple paths may be excluded. Example:

mkisofs −o cd −x /local/dir1 −x /local/dir2 /local

NOTE: The −m and −x option description should both be updated, they are wrong. Both now work identical and use filename globbing. A file is excluded if either the last component matches or the whole path matches.

−z Generate special SUSP records for transparently compressed files. This is only of use and interest for hosts that support transparent decompression. This is an experimental feature, and no hosts yet support this, but there are ALPHA patches for Linux that can make use of this feature.

BOOT INFORMATION TABLE

When the −**boot-info-table** option is given, **mkisofs** will modify the boot file specified by the −**b** option by inserting a 56-byte "boot information table" at offset 8 in the file. This modification is done in the source filesystem, so make sure you use a copy if this file is not easily recreated! This file contains pointers which may not be easily or reliably obtained at boot time.

The format of this table is as follows; all integers are in section 7.3.1 ("little endian") format.

Offset	Name	Size	Meaning
8	bi_pvd	4 bytes	LBA of primary volume descriptor
12	bi_file	4 bytes	LBA of boot file
16	bi_length	4 bytes	Boot file length in bytes
20	bi_csum	4 bytes	32-bit checksum
24	bi_reserved	40 bytes	Reserved

The 32-bit checksum is the sum of all the 32-bit words in the boot file starting at byte offset 64. All linear block addresses (LBAs) are given in CD sectors (normally 2048 bytes).

CONFIGURATION

mkisofs looks for the **.mkisofsrc** file, first in the current working directory, then in the user's home directory, and then in the directory in which the **mkisofs** binary is stored. This file is assumed to contain a series of lines of the form **TAG=***value*, and in this way you can specify certain options. The case of the tag is not significant. Some fields in the volume header are not settable on the command line, but can be altered through this facility. Comments may be placed in this file, using lines which start with a hash (#) character.

APPI The application identifier should describe the application that will be on the disc. There is space on the disc for 128 characters of information. May be overridden using the −**A** command line option.

COPY The copyright information, often the name of a file on the disc containing the copyright notice. There is space in the disc for 37 characters of information. May be overridden using the −**copyright** command line option.

ABST The abstract information, often the name of a file on the disc containing an abstract. There is space in the disc for 37 characters of information. May be overridden using the −**abstract** command line option.

BIBL The bibliographic information, often the name of a file on the disc containing a bibliography. There is space in the disc for 37 characters of information. May be overridden using the −**bilio** command line option.

PREP This should describe the preparer of the CDROM, usually with a mailing address and phone number. There is space on the disc for 128 characters of information. May be overridden using the −**p** command line option.

PUBL This should describe the publisher of the CDROM, usually with a mailing address and phone number. There is space on the disc for 128 characters of information. May be overridden

using the −**P** command line option.

SYSI The System Identifier. There is space on the disc for 32 characters of information. May be overridden using the −**sysid** command line option.

VOLI The Volume Identifier. There is space on the disc for 32 characters of information. May be overridden using the −**V** command line option.

VOLS The Volume Set Name. There is space on the disc for 128 characters of information. May be overridden using the −**volset** command line option.

mkisofs can also be configured at compile time with defaults for many of these fields. See the file defaults.h.

AUTHOR

mkisofs is not based on the standard mk∗fs tools for unix, because we must generate a complete copy of an existing filesystem on a disk in the iso9660 filesystem. The name mkisofs is probably a bit of a misnomer, since it not only creates the filesystem, but it also populates it as well.

Eric Youngdale <ericy@gnu.ai.mit.edu> or <eric@andante.org> wrote both the Linux isofs9660 filesystem and the mkisofs utility. The copyright for the mkisofs utility is held by Yggdrasil Computing, Incorporated.

NOTES

Mkisofs may safely be installed suid root. This may be needed to allow **mkisofs** to read the previous session when creating a multi session image.

BUGS

- Any files that have hard links to files not in the tree being copied to the iso9660 filesystem will have an incorrect file reference count.
- Does not check for SUSP record(s) in "." entry of the root directory to verify the existence of Rock Ridge enhancements.

  This problem is present when reading old sessions while adding data in multi-session mode.
- Does not properly read relocated directories in multi-session mode when adding data.

  Any relocated deep directory is lost if the new session does not include the deep directory.

  Repeat by: create first session with deep directory relocation then add new session with a single dir that differs from the old deep path.
- Does not re-use RR_MOVED when doing multi-session from TRANS.TBL
- Does not create whole_name entry for RR_MOVED in multi-session mode.

There may be some other ones. Please, report them to the author.

FUTURE IMPROVEMENTS

Some sort of gui interface.

AVAILABILITY

mkisofs is available as part of the cdrecord package from ftp://ftp.fokus.gmd.de/pub/unix/cdrecord/

MAILING LISTS

If you want to actively take part on the development of mkisofs, you may join the cdwriting mailing list by sending mail to:

other-cdwrite-request@lists.debian.org

and include the word *subscribe* in the body. The mail address of the list is:

cdwrite@lists.debian.org

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