

NAME

xfs_metadump – copy XFS filesystem metadata to a file

SYNOPSIS

```
xfs_metadump [ -aefFgow ] [ -m max_extents ] [ -l logdev ] source target
xfs_metadump -V
```

DESCRIPTION

xfs_metadump is a debugging tool that copies the metadata from an XFS filesystem to a file. The *source* argument must be the pathname of the device or file containing the XFS filesystem and the *target* argument specifies the destination file name. If *target* is `-`, then the output is sent to stdout. This allows the output to be redirected to another program such as a compression application.

xfs_metadump may only be used to copy unmounted filesystems, or read-only mounted filesystems.

xfs_metadump does not alter the source filesystem in any way. The *target* image is a contiguous (non-sparse) file containing all the filesystem's metadata and indexes to where the blocks were copied from.

By default, **xfs_metadump** obfuscates most file (regular file, directory and symbolic link) names and extended attribute names to allow the dumps to be sent without revealing confidential information. Extended attribute values are zeroed and no data is copied. The only exceptions are file or attribute names that are 4 or less characters in length. Also file names that span extents (this can only occur with the **mkfs.xfs(8)** options where `-n size > -b size`) are not obfuscated. Names between 5 and 8 characters in length inclusively are partially obfuscated.

xfs_metadump cannot obfuscate metadata in the filesystem log. Log recovery of an obfuscated metadump image may expose clear-text metadata and/or cause filesystem corruption in the restored image. It is recommended that the source filesystem first be mounted and unmounted, if possible, to ensure that the log is clean. A subsequent invocation of **xfs_metadump** will capture a clean log and obfuscate all metadata correctly.

If a metadump must be produced from a filesystem with a dirty log, it is recommended that obfuscation be turned off with `-o` option, if metadata such as filenames is not considered sensitive. If obfuscation is required on a metadump with a dirty log, please inform the recipient of the metadump image about this situation.

xfs_metadump should not be used for any purposes other than for debugging and reporting filesystem problems. The most common usage scenario for this tool is when **xfs_repair(8)** fails to repair a filesystem and a metadump image can be sent for analysis.

The file generated by **xfs_metadump** can be restored to filesystem image (minus the data) using the **xfs_mdrestore(8)** tool.

OPTIONS

- a** Copies entire metadata blocks. Normally, **xfs_metadump** will zero any stale bytes interspersed with in-use metadata. Use this option to copy full metadata blocks, to provide more debugging information for a corrupted filesystem. Note that the extra data will be unobfuscated.
- e** Stops the dump on a read error. Normally, it will ignore read errors and copy all the metadata that is accessible.
- f** Specifies that the filesystem image to be processed is stored in a regular file (see the **mkfs.xfs -d** file option). This can also happen if an image copy of a filesystem has been made into an ordinary file with **xfs_copy(8)**.
- F** Specifies that we want to continue even if the superblock magic is not correct. If the source is truly not an XFS filesystem, the resulting image will be useless, and **xfs_metadump** may crash.
- g** Shows dump progress. This is sent to stdout if the *target* is a file or to stderr if the *target* is stdout.
- l logdev**
For filesystems which use an external log, this specifies the device where the external log resides. The external log is not copied, only internal logs are copied.

- m** Set the maximum size of an allowed metadata extent. Extremely large metadata extents are likely to be corrupt, and will be skipped if they exceed this value. The default size is 2097151 blocks.
- o** Disables obfuscation of file names and extended attributes.
- w** Prints warnings of inconsistent metadata encountered to stderr. Bad metadata is still copied.
- V** Prints the version number and exits.

DIAGNOSTICS

xfs_metadump returns an exit code of 0 if all readable metadata is successfully copied or 1 if a write error occurs or a read error occurs and the **-e** option used.

NOTES

As **xfs_metadump** copies metadata only, it does not matter if the *source* filesystem has a realtime section or not. If the filesystem has an external log, it is not copied. Internal logs are copied and any outstanding log transactions are not obfuscated if they contain names.

xfs_metadump is a shell wrapper around the **xfs_db(8) metadump** command.

SEE ALSO

xfs_repair(8), **xfs_mdrestore(8)**, **xfs_freeze(8)**, **xfs_db(8)**, **xfs_copy(8)**, **xfs(5)**

BUGS

Email bug reports to linux-xfs@vger.kernel.org.