NAME

reiserfsck − The checking tool for the ReiserFS filesystem.

SYNOPSIS

reiserfsck [**-aprVy**] [**--rebuild-sb** | **--check** | **--fix-fixable** | **--rebuild-tree** | **--clean-attributes**] [**-j** | **--journal** *device*] [**-z** | **--adjust-size**] [**-n** | **--nolog**] [**-B** | **--badblocks** *file*] [**-l** | **--logfile** *file*] [**-q** | **--quiet**] [**-y** | **--yes**] [**-f** | **--force**] [**-S** | **--scan-whole-partition**] [**--no-journal-available**] *device*

DESCRIPTION

Reiserfsck searches for a Reiserfs filesystem on a device, replays any necessary transactions, and either checks or repairs the file system.

device is the special file corresponding to a device or to a partition (e.g /dev/hdXX for an IDE disk partition or /dev/sdXX for a SCSI disk partition).

OPTIONS

--rebuild-sb

This option recovers the superblock on a Reiserfs partition. Normally you only need this option if mount reports "read_super_block: can't find a reiserfs file system" and you are sure that a Reiserfs file system is there. But remember that if you have used some partition editor program and now you cannot find a filesystem, probably something has gone wrong while repartitioning and the start of the partition has been changed. If so, instead of rebuilding the super block on a wrong place you should find the correct start of the partition first.

--check

This default action checks filesystem consistency and reports, but does not repair any corruption that it finds. This option may be used on a read-only file system mount.

--fix-fixable

This option recovers certain kinds of corruption that do not require rebuilding the entire file system tree (**--rebuild-tree**). Normally you only need this option if the **--check** option reports "corruption that can be fixed with **--fix-fixable**". This includes: zeroing invalid data-block pointers, correcting st_size and st_blocks for directories, and deleting invalid directory entries.

--rebuild-tree

This option rebuilds the entire filesystem tree using leaf nodes found on the device. Normally you only need this option if the **reiserfsck −−check** reports "Running with **−−rebuild-tree** is required". You are strongly encouraged to make a backup copy of the whole partition before attempting the **--rebuild-tree** option. Once **reiserfsck −−rebuild-tree** is started it must finish its work (and you should not interrupt it), otherwise the filesystem will be left in the unmountable state to avoid subsequent data corruptions.

--clean-attributes

This option cleans reserved fields of Stat-Data items. There were days when there were no extended attributes in reiserfs. When they were implemented old partitions needed to be cleaned first -- reiserfs code in the kernel did not care about not used fields in its strutures. Thus if you have used one of the old (pre-attrbutes) kernels with a ReiserFS filesystem and you want to use extented attribues there, you should clean the filesystem first.

--journal *device* , **-j** *device*

This option supplies the device name of the current file system journal. This option is required when the journal resides on a separate device from the main data device (although it can be avoided with the expert option **--no-journal-available**).

--adjust-size, -z

This option causes **reiserfsck** to correct file sizes that are larger than the offset of the last discovered byte. This implies that holes at the end of a file will be removed. File sizes that are smaller than the offset of the last discovered byte are corrected by **--fix-fixable**.

--badblocks *file*, **-B** *file*
This option sets the badblock list to be the list of blocks specified in the given 'file'. The filesystem badblock list is cleared before the new list is added. It can be used with **--fix-fixable** to fix the list of badblocks (see **debugreiserfs −B**). If the device has bad blocks, every time it must be given with the **--rebuild-tree** option.

--logfile *file*, **-l** *file*
This option causes **reiserfsck** to report any corruption it finds to the specified log file rather than to stderr.

--nolog, -n
This option prevents **reiserfsck** from reporting any kinds of corruption.

--quiet, -q
This option prevents **reiserfsck** from reporting its rate of progress.

--yes, -y
This option inhibits **reiserfsck** from asking you for confirmation after telling you what it is going to do. It will assuem you confirm. For safety, it does not work with the **--rebuild-tree** option.

-a, **-p** These options are usually passed by fsck −A during the automatic checking of those partitions listed in /etc/fstab. These options cause **reiserfsck** to print some information about the specified filesystem, to check if error flags in the superblock are set and to do some light-weight checks. If these checks reveal a corruption or the flag indicating a (possibly fixable) corruption is found set in the superblock, then **reiserfsck** switches to the fix-fixable mode. If the flag indicating a fatal corruption is found set in the superblock, then **reiserfsck** finishes with an error.

--force, -f
Force checking even if the file system seems clean.

-V This option prints the reiserfsprogs version and then exit.

-r This option does nothing at all; it is provided only for backwards compatibility.

EXPERT OPTIONS

DO NOT USE THESE OPTIONS UNLESS YOU KNOW WHAT YOU ARE DOING. WE ARE NOT RESPONSIBLE IF YOU LOSE DATA AS A RESULT OF THESE OPTIONS.

−-no-journal-available
This option allows **reiserfsck** to proceed when the journal device is not available. This option has no effect when the journal is located on the main data device. NOTE: after this operation you must use **reiserfstune** to specify a new journal device.

--scan-whole-partition, -S
This option causes **--rebuild-tree** to scan the whole partition but not only the used space on the partition.

AN EXAMPLE OF USING reiserfsck

1. You think something may be wrong with a reiserfs partition on /dev/hda1 or you would just like to perform a periodic disk check.

2. Run **reiserfsck −−check −−logfile check.log /dev/hda1**. If **reiserfsck −−check** exits with status 0 it means no errors were discovered.

3. If **reiserfsck −−check** exits with status 1 (and reports about fixable corruptions) it means that you should run **reiserfsck −−fix-fixable −−logfile fixable.log /dev/hda1**.

4. If **reiserfsck −−check** exits with status 2 (and reports about fatal corruptions) it means that you need to run **reiserfsck −−rebuild−tree**. If**r eiserfsck −−check** fails in some way you should also run **reiserfsck −−rebuild-tree**, but we also encourage you to submit this as a bug report.

5. Before running **reiserfsck −−rebuild-tree**, please make a backup of the whole partition before

proceeding. Then run **reiserfsck −−rebuild-tree −−logfile rebuild.log /dev/hda1**.

6. If the **reiserfsck −−rebuild-tree** step fails or does not recover what you expected, please submit this as a bug report. Try to provide as much information as possible including your platform and Linux kernel version. We will try to help solve the problem.

EXIT CODES

reiserfsck uses the following exit codes:

0 − No errors.
1 − File system errors corrected.
2 − Reboot is needed.
4 − File system fatal errors left uncorrected,
reiserfsck −−rebuild-tree needs to be launched.
6 − File system fixable errors left uncorrected,
reiserfsck −−fix-fixable needs to be launched.
8 − Operational error.
16 − Usage or syntax error.

AUTHOR

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BUGS

Please report bugs to the ReiserFS developers <reiserfs-devel@vger.kernel.org>, providing as much information as possible--your hardware, kernel, patches, settings, all printed messages, the logfile; check the syslog file for any related information.

TODO

Faster recovering, signal handling.

SEE ALSO

mkreiserfs(8), **reiserfstune**(8) **resize_reiserfs**(8), **debugreiserfs**(8),