

NAME

guestfs-release-notes – libguestfs Release Notes

RELEASE NOTES FOR LIBGUESTFS 1.24

These release notes only cover the differences from the previous stable/dev branch split (1.22.0). For detailed changelogs, please see the git repository, or the ChangeLog file distributed in the tarball.

New features

User-Mode Linux (UML) can be used as an alternative backend (ie. instead of KVM). This improves performance especially when using libguestfs inside a VM (eg. in the cloud). UML is supported as a first-class backend. See “USER-MODE LINUX BACKEND” in **guestfs** (3) for how to use this.

ARM (32 bit) and PPC64 are now fully supported.

Tools

virt-builder (1) is a new tool for building virtual machine images. It lets you rapidly and securely create guests and customize them.

New **virt-sysprep** (1) operations: Remove files in */tmp* and */var/tmp*. Remove RPM database files. Change root and user passwords. More log files are removed. New operations which are not enabled by default: Create random UUIDs for filesystems. Reset firewall rules. (Wanlong Gao)

virt-resize (1) and **virt-sysprep** can now use URIs to specify a remote disk.

Use `guestfish -N filename=type` to create a named disk image (instead of the default *test1.img* etc).

virt-sparsify (1) now tests if there is enough disk space to complete the operation, instead of possibly running out of space half way through.

virt-format (1) and **virt-make-fs** (1): new *--label* option for setting filesystem label.

virt-resize *--no-sparse* flag can be used to resize on to partitions and other targets that are not zeroed.

Language bindings

New bindings for the Go programming language.

API

Support for the systemd journal.

`guestfs_add_drive_opts` can now control the qemu caching mode through a new `cachemode` parameter. You can select improved performance for temporary drives, or safety.

`guestfs_set_label` now works for XFS and btrfs.

New GUESTFS_EVENT_WARNING event for warning messages.

Inspection

Better inspection of SUSE guests (Olaf Hering).

Better support for non-standard Windows `%systemroot%` (Matthew Booth).

Enhanced error reporting for Augeas errors.

Security

CVE-2013-2124

https://bugzilla.redhat.com/show_bug.cgi?id=968306

A denial of service was possible when inspecting certain guests. The fix has been backported to 1.20 and 1.22 branches.

CVE-2013-4419

<https://www.redhat.com/archives/libguestfs/2013-October/msg00031.html>

Fix insecure temporary directory handling for remote guestfish. The fix has been backported to 1.20 and 1.22 branches.

New APIs

`add-drive-scratch`: Add a temporary scratch drive

`aug-label`

`aug-setm`

`journal-open`: Systemd journal support

`journal-close`

`journal-next`

`journal-skip`

`journal-get`

`journal-get-data-threshold`

`journal-set-data-threshold`

`remount`: Allow `rw` flag to be adjusted on mounted filesystems

`set-uuid`: Set UUID of filesystem

`is-file`, `is-dir`, `is-blockdev`, `is-chardev`, `is-fifo`, `is-socket` APIs now have an extra `followsymlinks` flag.

`add-drive` has a new `cachemode` parameter.

Build changes

The following packages are required to build libguestfs 1.24:

Augeas $\geq 1.0.0$

The following optional packages may be added to enhance functionality but are not required:

`sd-journal`

To read journal files from guests which use that.

`url_mkcw`

For UML backend.

`curl`

`gpg`

`xz` For `virt-builder`.

`golang` $\geq 1.1.1$

For Go language bindings.

Internals

New `make check-*` rules replace `make extra-tests`. See `make help` and `guestfs(3)` for details.

Perl code can now be valgrinded.

Inspection code is now fuzz-tested.

`make` no longer recurses into the generator directory in every other directory. This reduces the overhead of builds considerably.

Additional tests for Augeas, hivex.

Add a launch timeout of 20 minutes waiting for the appliance to start up.

Add a timeout (4 hours) to all tests so we can catch the case where `qemu` or other components hang.

Use `kvmclock` and `-cpu host`. This improves clock stability and overall performance.

`./configure --enable-packet-dumpmode` is fixed.

`./configure --enable-valgrind-daemonmode` has been rewritten. It is now feasible for developers to keep this flag enabled at all times.

Backends have been refactored to be modular (although they are not actually loadable modules).

When enabled, the network now uses resolver configuration (ie. `/etc/resolv.conf`) from the host.

Bugs fixed

- <https://bugzilla.redhat.com/1019889>
libguestfs-tools.conf should have a man page
- <https://bugzilla.redhat.com/1018149>
valgrind errors in btrfs_subvolume_list
- <https://bugzilla.redhat.com/1002032>
mke2fs can't return the correct filesystem type when blockcount is less than 2048 for ext3
- <https://bugzilla.redhat.com/1001876>
Update "rsync-out" helpout for using wildcard
- <https://bugzilla.redhat.com/1001875>
Argument 'excludes' of tar-out does not work
- <https://bugzilla.redhat.com/1000428>
virt-format uses wrong partition type for vfat filesystems
- <https://bugzilla.redhat.com/1000121>
'sh' command before mount causes daemon to segfault
- <https://bugzilla.redhat.com/998513>
guestfish does not work when you mix --remote and --add options
- <https://bugzilla.redhat.com/998482>
guestfish remote prints "libguestfs: error: waitpid (qemu): No child processes"
- <https://bugzilla.redhat.com/995711>
list-fileystems command fails if there are no block devices
- <https://bugzilla.redhat.com/994517>
cache=none/O_DIRECT workaround doesn't work for images with backing files
- <https://bugzilla.redhat.com/989356>
cap-get-file will return error if the file has not be set capabilities
- <https://bugzilla.redhat.com/986877>
RFE: Implement set-uuid command
- <https://bugzilla.redhat.com/986875>
RFE: Implement set-label for xfs
- <https://bugzilla.redhat.com/985269>
Can't set acl value for a specified user with 'acl-set-file'
- <https://bugzilla.redhat.com/983218>
libguestfs double free when kernel link fails during launch
- <https://bugzilla.redhat.com/981715>
Make xfs filesystem failed with specified blocksize, gives "unknown option -b" error
- <https://bugzilla.redhat.com/981683>
"hivex-commit" should fail with a relative path
- <https://bugzilla.redhat.com/981663>
disk-format "qemu-img info: JSON parse error" when target file does not exist
- <https://bugzilla.redhat.com/978302>
mke2fs-J should give a meaningful error when specified type is anything except 'ext{2,3,4}'
- <https://bugzilla.redhat.com/975797>
Specifying virtio interface ('iface' parameter) breaks the direct backend - libguestfs hangs
- <https://bugzilla.redhat.com/975753>
"virt-resize --expand" and "virt-resize --resize" outputs error message for Win2008 32bit OS

<https://bugzilla.redhat.com/975412>

inspection: Augeas expressions are broken with augeas >= 0.10

<https://bugzilla.redhat.com/974904>

virt-resize —expand fails on Ubuntu Cloud Image

<https://bugzilla.redhat.com/974489>

Regression: Fedora inspection broken by change from guestfs_exists to guestfs_is_file

<https://bugzilla.redhat.com/972775>

txz-out command produces a bzip2-compressed file (should be xz-compressed)

<https://bugzilla.redhat.com/969845>

upload to a directory occasionally hangs instead of failing

<https://bugzilla.redhat.com/968875>

virt-sysprep should support URL-type arguments

<https://bugzilla.redhat.com/624334>

blockdev-setbsz succeeds, but does not affect blockdev-getbsz

SEE ALSO

guestfs-examples (1), **guestfs-faq** (1), **guestfs-performance** (1), **guestfs-recipes** (1), **guestfs-testing** (1), **guestfs** (3), **guestfish** (1), <http://libguestfs.org/>

AUTHOR

Richard W.M. Jones

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BUGS

To get a list of bugs against libguestfs, use this link:
<https://bugzilla.redhat.com/buglist.cgi?component=libguestfs&product=Virtualization+Tools>

To report a new bug against libguestfs, use this link:
https://bugzilla.redhat.com/enter_bug.cgi?component=libguestfs&product=Virtualization+Tools

When reporting a bug, please supply:

- The version of libguestfs.
- Where you got libguestfs (eg. which Linux distro, compiled from source, etc)
- Describe the bug accurately and give a way to reproduce it.
- Run **libguestfs-test-tool** (1) and paste the **complete, unedited** output into the bug report.