NAME

guestfs–release–notes – libguestfs Release Notes

RELEASE NOTES FOR LIBGUESTFS 1.18

These release notes only cover the differences from the previous stable/dev branch split (1.16.0). For detailed changelogs, please see the git repository, or the ChangeLog file distributed in the tarball.

New features

virt tools

- virt-sysprep has been rewritten and expanded (thanks Wanlong Gao)
  http://libguestfs.org/virt-sysprep.1.html

- virt-sparsify --zero is a new option that zeroes the named
  partition or filesystem

- virt-sparsify can now safely sparsify Linux swap partitions

- virt-sparsify fixed so it cleans up after ^C
  http://libguestfs.org/virt-sparsify.1.html

- a new tool 'libguestfs-make-fixed-appliance' is provided to build
  fixed appliances that can be copied to other machines that don't
  have febootstrap support
  http://libguestfs.org/libguestfs-make-fixed-appliance.1.html

- virt-filesystems now displays the parents (containers) of MD
  devices and volume groups

- virt-alignment-scan, run with no args, displays alignment information
  for all libvirt domains

- virt-df and virt-alignment-scan will display information from all
  guests even when a disk is inaccessible

- virt-rescue new --scratch option to make scratch disks
  https://rwmj.wordpress.com/2012/04/26/virt-rescue-scratch/#content

- virt-make-fs can now be used to create btrfs

- virt-edit preserves permissions, UID, GID and SELinux context
  when editing files

- guestfish passes the close event over stdout and remote correctly

- guestfish new '--pipe-error' option lets you detect errors in pipe
  commands

- guestfish globs now expand device names

- comma and colon characters in filenames now handled correctly by
  all virt tools

inspection

- added support for Fedora 17+

      – added support for FreeDOS

      – added support for Buildroot and Cirros

      – inspection is now compatible with Windows guests that have been
        sysprepped (thanks Grant Williamson).

API

      – broad support for btrfs added, including adding multiple devices,
        fsck, snapshots (thanks Wanlong Gao)

      – the new 'mount-local' API brings FUSE support directly into the
        core libguestfs API
        https://rwmj.wordpress.com/2012/05/14/tip-using-mount-local-api-from-c/#cont

      – new man page: guestfs-performance(1), which contains performance
        tuning tips
        http://libguestfs.org/guestfs-performance.1.html

      – new man page: guestfs-faq(1), Frequently Asked Questions
        http://libguestfs.org/guestfs-faq.1.html

      – ENOTSUP (from guestfs_last_errno) is now returned for APIs that
        are not supported

examples

      – 'copy_over' example showing how to copy between two handles

      – 'display_icon' program displays the icon associated with a guest

      – 'mount_local.c' example shows how to use the mount-local API

Security

      (no security problems were found or fixed in this release)

New APIs

```
btrfs-device-add: Add devices to a btrfs filesystem.
btrfs-device-delete: Remove devices from a btrfs filesystem.
btrfs-filesystem-sync: Sync a btrfs filesystem.
btrfs-filesystem-balance: Balance a btrfs filesystem.
btrfs-fsck: Check btrfs filesystem.
btrfs-set-seeding: Enable or disable seeding.
btrfs-subvolume-create: Create a btrfs snapshot.
btrfs-subvolume-delete: Delete a btrfs snapshot.
btrfs-subvolume-list: List btrfs snapshots and subvolumes.
btrfs-subvolume-set-default: Set default btrfs subvolume.
btrfs-subvolume-snapshot: Create a writable btrfs snapshot.
get-e2attrs: List ext2 file attributes of a file.
get-e2generation: Get ext2 file generation of a file.
isoinfo, isoinfo-device: Get information from the header of ISO files.
llz: List files with SELinux information.
lvcreate-free: Create an LVM logical volume in % remaining free space.
md-stat: Return underlying devices from an MD device.
mkfs-brtfs: Make btrfs filesystem, with all tunables.
mount-local, mount-local-run, umount-local: FUSE support in the API.
ntfsclone-in, ntfsclone-out: Save, restore NTFS from backup.
```

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ntfsfix: Fix common errors and force Windows to check NTFS.
set-e2attrs: Set or clear ext2 file attributes of a file.
set-e2generation: Set ext2 file generation of a file.
set-label: Unified interface for setting filesystem label.
vgmeta: Get volume group metadata.
wipefs: Wipe filesystem signatures from a device.
zero-free-space: Zero free space in a filesystem.
```

Internals

- The debian/ subdirectory has been removed. We recommend you use
  the official Debian packages made by Hilko Bengen.
  http://people.debian.org/~bengen/libguestfs/
  http://packages.debian.org/search?keywords=libguestfs

- O_CLOEXEC / SOCK_CLOEXEC is now used for almost all file
  descriptors that the library opens.

- posix_fadvise is called when sequentially reading or writing large
  files.

- close all file descriptors and remove all signal handlers in the
  recovery process

- multiple gcc warnings and Coverity bugs have been fixed; many
  strict-overflow bugs have also been fixed

- use ./configure --enable-valgrind-daemon to use valgrind on the
  daemon; many errors have been fixed

- use ./configure --with-qemu-options to pass extra options to qemu

- the daemon now has a growable strings buffer type (DECLARE_STRINGSBUF)

- the <guestfs.h> header file works with C++ and we have a regression
  test for this

- multiple APIs which should only be called in the CONFIG state now
  give an error if they are not

- .gitignore fixed to use absolute paths

- gobject bindings have been expanded, including mapping libguestfs
  events to gobject signals (thanks Matt Booth)

- gobject documentation is generated properly (thanks Matt Booth)

- gobject header files now live in a subdirectory

- CompareWithString test in the generator now works

- FUInt32, FUInt64 struct field types now use the correct XDR type

- OCaml tests are now run on bytecode and native code.

- java -Xlint:all is used, and all warnings have been fixed

- bmptopng, wrestool (etc) missing or failure no longer prints
  warning messages

- ruby: Use RbConfig instead of Config.

- PYTHONPATH is set by the ./run script.

- appliance building is now thread-safe.

- appliance now uses 'ip' instead of 'ifconfig' and 'netstat'
  commands

- several fixes to make parallel builds work properly

- guestfish --listen now cleans up properly

- the BUSY state has been removed

- gettextize has been removed, replaced by a simple Makefile.am

- gettext support now covers virt-resize, virt-sparsify and virt-sysprep

- better support for the arm architecture

Bugs fixed
- 822490 virt-ls error: "libguestfs: error: checksum: path: parameter cannot be r
- 816839 data overflow error when debug progress -1
- 816098 virt-make-fs fails to make a btrfs filesystem because it doesn't alloca
- 811872 inspection fails on ubuntu 10.04 guest with encrypted swap
- 811650 guestfs_last_error not set when qemu fails early during launch
- 811649 libguestfs cannot open disk images which are symlinks to files that con
- 811117 [RFE][virt-sysprep] net-hwaddr not removed from "ifcfg-*" files on rhel
- 811112 [RFE][virt-sysprep] hostname can not be changed on rhel system
- 809361 inspection doesn't recognize Fedora 18 (grub2 + GPT)
- 807905 mkfs blocksize option breaks when creating btrfs
- 805070 virt-filesystems should show 'parents' of LV and RAID devices
- 804464 libguestfs cannot be built when LINGUAS is different then ja or uk
- 803664 libguestfs inspection fails on Windows XP: libguestfs: error: hivex: co
- 803533 guestfish: write error
- 802389 event handlers for 'close' event doesn't work in remote mode
- 802109 libguestfs uses putc on stderr, results in many individual 1 byte write
- 801640 [RFE] the error reported by resize2fs-M need to be more clear
- 801298 Possible null dereference and resource leaks
- 801273 Document for set-pgroup need to be updated
- 798196 virt-resize confuses format and output_format variables; using --output-
- 797986 virt-resize on Windows XP in sysprep state causes "UNMOUNTABLE_BOOT_VOLU
- 796520 [RFE] Prevent user from running some appliance configure commands after
- 790721 multiprovider build error: RuntimeError: link: /tmp/.guestfs-0/kernel /t
- 789960 guestfsd crash when try to mount non-exist disk
- 789504 virt-df (other tools?) should not give up if a guest disk is missing
- 788641 virt-edit doesn't preserve file permissions
- 786215 libguestfs inspection does not recognize FreeDOS operating system
- 786188 libguestfs inspection does not recognize FreeDOS install CD
- 785668 aug-defnode: daemon crash

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        – 784647 Libguestfs uses deprecated net-tools
        – 769304 virt-resize on RHEL 6 kernel fails to re-read the partition table
        – 755729 Error message for resize2fs-M needs tweaking
        – 701814 virt-win-reg fails on a libvirt guest that has no defined disk format:
        – 679737 libguestfs: improve error message when zerofree is not available in the
        – 635971 glob mkfs ext2 /dev/vd[b-t]1 does not expand
```

SEE ALSO

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

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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.