NAME

guestfs−release−notes − libguestfs Release Notes

RELEASE NOTES FOR LIBGUESTFS 1.40

These release notes only cover the differences from the previous stable/dev branch split (1.38.0). For detailed changelogs, please see the git repository, or the ChangeLog file distributed in the tarball.

New features

New features in existing tools

Virt-inspector now displays the libosinfo short ID for guests (Pino Toscano).

Guestfish −*N* will now generate 1G disks instead of 100M disks by default.

Virt-resize supports f2fs filesystems (Pino Toscano).

libguestfs-test-tool now supports bash tab completion (Pino Toscano).

The −−*machine−readable* option now supports sending output to files or stdout/stderr. This works uniformly across most OCaml-based virt tools, specifically: virt-builder, virt-builder-repository, virt-dib, virt-get-kernel, virt-resize, virt-sparsify, and virt−v2v (Pino Toscano).

Virt-builder −−*uninstall* option now works on SUSE (Sebastian Meyer).

Virt-builder now supports Windows. We are not able to ship Windows templates in the public repository for obvious licensing reasons, but if you are an MSDN subscriber you may build your own. See https://rwmj.wordpress.com/2018/09/13/creating−windows−templates−for−virt−builder/

Many tools now support a −−*key* option allowing you to pass in decryption keys for filesystems stored in local files on the host rather than having to feed them in over stdin (Pino Toscano).

virt−v2v and virt−p2v

New −*o rhv-upload* mode for directly uploading images to RHV, bypassing the Export Storage Domain (Tomáš Golembiovský, Nir Soffer, Daniel Erez, Pino Toscano).

New −*o openstack* mode for directly uploading images to OpenStack and Cinder using OpenStack APIs.

Virt−v2v now has a general mechanism for input and output options: −*io* and −*oo*.

Virt−v2v can now install the RHV tools or QEMU GA in guests (Tomáš Golembiovský).

The huge manual has now been split into several smaller documents and is more focused on helping users to accomplish specific v2v tasks.

Multiple improvements to the OVF metadata when converting to RHV (Tomáš Golembiovský, Pino Toscano, Arik Hadas).

Virt−v2v can now convert Linux guests with split kernel packages, especially Ubuntu 18.04 (Pino Toscano).

Virt−v2v old −−*password−file* option has been replaced by −*ip* (the old option remains for backwards compatibility).

Virt−v2v now preserves the VM Generation ID.

Virt−v2v has a new −−*mac* option allowing specific NICs to be mapped precisely to networks or bridges on the target.

New virt−v2v −−*print−estimate* option to estimate the size of data that virt−v2v will copy.

Virt−v2v is now usually able to remove open-vm-tools and VMware Tools from the Linux guest during conversion (Pino Toscano).

Virt−v2v can now support UEFI conversions to RHV (Tomáš Golembiovský).

Virt−p2v now prefers you to shut down instead of rebooting the machine after conversion has finished (Pino Toscano).

Virt−v2v now writes the libosinfo short ID to the libvirt metadata when using −*o local* and −*o libvirt* output

modes (Martin Kletzander).

Language bindings

OpenJDK 10+ is supported (Pino Toscano).

Java bindings fixed for Gentoo host (Martin Kletzander).

Inspection

Support Kali Linux (Pino Toscano).

When inspecting mountpoints, look for */etc/mdadm/mdadm.conf* as well as */etc/mdadm.conf* (Nikolay Ivanets).

Improved support for OpenSUSE Tumbleweed (Pino Toscano).

Architectures and platforms

Miscellaneous macOS build fixes (Adam Robinson).

Other

Multiple documentation typos fixed (Yuri Chornoivan).

Security

See also **guestfs–security** (1).

CVE–2018–11806

Qemu's slirp (userspace networking) had several buffer overflows which could be triggered from the guest or network side.

API

New APIs

`f2fs_expand`
    Expand an f2fs filesystem (Pino Toscano).

`inspect_get_osinfo`
    Get the libosinfo short ID for the inspected guest (Pino Toscano).

`lvm_scan`
    This rescans all PVs, VGs and LVs, optionally activating them.

Other API changes

`part_get_mbr_part_type` was reimplemented in OCaml (Nikolay Ivanets).

`list_filesystems` now filters out MBR extended partitions (Nikolay Ivanets).

`vgscan` has been deprecated. Use the new `lvm_scan` API in preference.

Build changes

The JSON library switched from yajl to Jansson ≥ 2.7 (Pino Toscano).

Support for The Sleuth Kit 4.5 (Pino Toscano).

Multiple improvements in the `./configure` script (Lin Ma).

More out-of-tree build fixes (Hilko Bengen).

Some work on reproducible builds (Bernhard M. Wiedemann).

Internals

lvmetad is now used unconditionally, and is started much earlier in the appliance boot process. This fixes support for certain PV types.

On Debian, dash is installed inside the appliance and in virt-rescue (Pino Toscano).

The amount of RAM assigned to the appliance has been increased from 500M to 768M (on x86_64, other architectures have different limits). This enables use of up to 255 disks when using recent Linux kernels.

Virt−v2v now models the source machine type (eg. i440FX, Q35 or virt).

Virt−p2v now generates configuration code automatically, also code for parsing the kernel command line.

Use `LT_INIT` instead of `AC_PROG_LIBTOOL`.

The OCaml `JSON` code for parsing and serializing has been unified into a single abstract data type.

Most OCaml tools are now built using the PIC runtime. This has a performance penalty on i686, but is relatively free on other architectures and has security benefits.

The direct backend now queries the qemu binary for availability of KVM, instead of using a heuristic based on *
/dev/kvm* (Andrea Bolognani).

Our "clever" libxml2 writer macros are now used consistently across all parts of the code base.

Qemu dropped *−nodefconfig* without telling us. The equivalent *−no−user−config* option is now used instead. Qemu also moved the `serial` option from *−drive* to *−device*, again without any notice, and this is also fixed.

Bugs fixed

https://bugzilla.redhat.com/1664310
> [RHEL 7.6 LP] openstack output leaks passwords

https://bugzilla.redhat.com/1661038
> virt-inspector fails with "error: int_of_string" on a Linux image when /etc/fstab contains a partionless device

https://bugzilla.redhat.com/1651432
> v2v − support for −insecure option to support OSP SSL connection for VM migrations

https://bugzilla.redhat.com/1642044
> [RFE] virt−p2v UI should give the option to shutdown after conversion is finished

https://bugzilla.redhat.com/1634248
> virt−v2v cannot convert opensuse15 guest

https://bugzilla.redhat.com/1624902
> Fix rhev-apt command that virt−v2v runs in Windows guests on first boot

https://bugzilla.redhat.com/1624878
> Update v2v docs to describe support for SHA 2 certs required for converting Windows 7 and 2008 R2 guests

https://bugzilla.redhat.com/1615885
> Minor log issue of virt−v2v

https://bugzilla.redhat.com/1614276
> VixDiskLib: VixDiskLib_Read: Read 4096 sectors at 57516160 failed. Error 2 (Memory allocation failed. Out of memory.) (DiskLib error 802: `NBD_ERR_INSUFFICIENT_RESOURCES`) at 5240.

https://bugzilla.redhat.com/1612785
> "warning: <target dev='sr0'> was ignored because the device name could not be recognized" should be hidden since convert cdrom is supported by virt−v2v

https://bugzilla.redhat.com/1611690
> part_to_dev "/dev/sdp1" returns "/dev/sd" instead of "/dev/sdp"

https://bugzilla.redhat.com/1608131
> inspection fails when swap partition in /etc/fstab has incorrect UUID compared to actual swap partition

https://bugzilla.redhat.com/1605071
> On machines where /dev/kvm exists but KVM doesn't work, libguestfs will not fall back to TCG

https://bugzilla.redhat.com/1602353
> virt-inspector can't inspect LUKS-encrypted RHEL7 guest image

https://bugzilla.redhat.com/1601943
       Improve error ''No module named ovirtsdk4'' in v2v rhv-upload conversion

https://bugzilla.redhat.com/1598715
       Adding QXL device in OVF causes Cirrus Logic device to be added to guest

https://bugzilla.redhat.com/1598350
       RFE: virt−v2v should preserve <genid>

https://bugzilla.redhat.com/1596851
       Transfer fails if local host is in maintenance mode

https://bugzilla.redhat.com/1596810
       Transfer fails if local host belongs to another DC

https://bugzilla.redhat.com/1592468
       v2v to RHV transfer fails with: error: [empty name]: cannot read '//*/disksection' with value: null

https://bugzilla.redhat.com/1592061
       virt−v2v convert rhel5.3 failure when executing rpm −ql kernel−2.6.18−128.el5 command

https://bugzilla.redhat.com/1591789
       p2v: error: XML error: CPU vendor specified without CPU model

https://bugzilla.redhat.com/1590220
       Hide rhv-upload option in virt−p2v client

https://bugzilla.redhat.com/1588451
       Don't use relative socket paths for NBD

https://bugzilla.redhat.com/1588088
       RFE: Support for −o rhv-upload via Unix domain socket

https://bugzilla.redhat.com/1586198
       ovirt-imageio-daemon times out during migration

https://bugzilla.redhat.com/1580309
       virt−v2v rhel7.6 build can't convert guest to null with qemu-kvm rhel7.5.z build

https://bugzilla.redhat.com/1580292
       Virt−v2v rhel7.6 build can't convert guest with qemu-kvm rhel7.5.z build

https://bugzilla.redhat.com/1579047
       virt-builder: ubuntu−18.04 template has stray HTTP proxy configured for apt

https://bugzilla.redhat.com/1575640
       virt-builder: error: host cpu (x86_64) and guest arch (unknown) are not compatible

https://bugzilla.redhat.com/1570407
       virt−v2v −i ova gives checksum error when missing files are mentioned in .mf

https://bugzilla.redhat.com/1567763
       guestfsd: error: /Windows/Drivers/VirtIO: Read-only file system

https://bugzilla.redhat.com/1564983
       The mount-vfs failed to mount the logical volume

https://bugzilla.redhat.com/1561828
       RHV tools not properly installed in migrated Windows VM's causing boot failure

https://bugzilla.redhat.com/1559027
       virt−v2v does not honor −−network with −o rhv-upload

https://bugzilla.redhat.com/1557273
       [RFE] Upload images directly to oVirt (virt−v2v −o rhv-upload)

https://bugzilla.redhat.com/1544842
　　　[RFE] Add libosinfo short-id to virt-inspector output

https://bugzilla.redhat.com/1544674
　　　virt-inspector −−help differs from manpage

https://bugzilla.redhat.com/1544227
　　　RFE: recognize the Kali Linux distribution

https://bugzilla.redhat.com/1532224
　　　Resume=/dev/sdaX can't be updated to resume=/dev/vdaX in rhel7 guest's grub file after v2v
　　　conversion

https://bugzilla.redhat.com/1530967
　　　Change categories of "Guest Operating system management by VIX API" in v2v man page

https://bugzilla.redhat.com/1527334
　　　Various −it vddk −io vddk* options should be documented, removed or fixed

https://bugzilla.redhat.com/1148012
　　　Reverted: RFE: Allow qemu-bridge-helper to be used to implement guestfs_set_network

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

COPYRIGHT
　　　Copyright (C) 2009−2020 Red Hat Inc.

LICENSE
　　　This program is free software; you can redistribute it and/or modify it under the terms of the GNU General
　　　Public License as published by the Free Software Foundation; either version 2 of the License, or (at your
　　　option) any later version.

　　　This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even
　　　the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU
　　　General Public License for more details.

　　　You should have received a copy of the GNU General Public License along with this program; if not, write
　　　to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110−1301 USA.

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.