Alpine Linux Template #7323

Open

ayakael opened this issue on Mar 5, 2022 · 74 comments

Assignees



Labels C: Alpine Linux community dev P: default S: in progress T: enhancement

ayakael commented on Mar 5, 2022 • ▶ Details

description

QubeOS should have an Alpine Linux template. This has been requested in the past, and I've finally decided to tackle it, having packaging experience with this distro. This space is for tracking issues.

current state

- xorg works
- · memory ballooning works
- copy / paste works + qvm-copy
- OpenRC scripts generally working, but things lack finesse
- tempate builder not implemented yet (now fixed)
- automatic assignment of ip address broken (now fixed)
- apk does not work on templates without networking (now fixed)

steps

- Create qubes-vm packages (repo)
- Test packages within Alpine HVM with the goal of creating a functional TemplateVM
- Create builder-alpine (repo)
- Test within qubes-builder environment with the goal of creating a tar.gz file that matches TemplateVM on test system

hurdles

- Alpine uses OpenRC as its init system, while afaik every other template uses Systemd. A major part of the work will be updating existing initd scripts, and creating them where they don't exist.
- Alpine uses musl rather than libc, but this doesn't seem to be a major issue.
 - ayakael added P: default T: enhancement labels on Mar 5, 2022

ayakael commented on Mar 5, 2022 • ▶ Details

Author

So far, all of the packages have been implemented as an APKBUILD. I'm currently working on initd scripts, with the following, as far as I can tell, mostly working:

- xendriverdomain
- qubes-db
- aubos maminfo writer

- danez-meninio-mirei
- qubes-sysinit
- qubes-grexec-agent

My current roadblock is <code>qubes-gui-agent</code> . It is stuck at <code>waiting</code> on <code>/var/run/xf86-qubes-socket</code> socket . Anyone can give me any pointers on how I should debug this? The initd script is as is:

```
#!/sbin/openrc-run
name=$RC_SVCNAME
cfgfile="/etc/qubes/$RC_SVCNAME.conf"
command="/usr/bin/qubes-gui"
pidfile="/run/qubes/$RC_SVCNAME.pid"
command_background="yes"
error_log=/var/log/qubes/$RC_SVCNAME.log
depend() {
        need qubes-db
}
start_pre() {
        checkpath --directory --owner $command_user:$command_user --mode 0775 ∖
                /run/qubes /var/log/qubes /var/run/console/user
        # start console-kit-daemon
        /usr/bin/ck-list-sessions > /dev/null 2>&1
        # pretend tha user is at local console
        touch /var/run/console/user
        /bin/sh -c /usr/lib/qubes/qubes-gui-agent-pre.sh
        . /var/run/qubes-service-environment
        command_args="$command_args $GUI_OPTS"
        export DISPLAY=:0
}
```

moiselazarus commented on Mar 5, 2022

Thank you for working on this. I can't help you with this issue, but maybe this link, how Void Linux done this, can help you.

https://github.com/Nexolight/void-tainted-pkgs/blob/qubes/srcpkgs/qubes-gui-agent-linux/files/qubes-gui-agent/run

https://github.com/Nexolight/void-tainted-pkgs/tree/qubes/QubesOS

- andrewdavidwong added the C: Alpine Linux label on Mar 6, 2022
- andrewdavidwong added this to the Release TBD milestone on Mar 6, 2022

Thanks <u>@moiselazarus</u>! I threw an afternoon on it with no success, but that void has succeeded in packaging for Qubes before helps a lot! I havn't implemented the one-shot scripts adequately, so that's where I'm at.

ayakael commented on Jun 20, 2022 • ▶ Details

Author

Back on trying to figure this out. Despite implementing the one-shot scripts, I still am facing the Waiting on /var/run/xf86-qubes-socket socket issue. Anyone could fill me in to exactly what qubes-gui-agent is waiting on, or could give me pointers on where to go to debug this next. Of note, I am running off of the Alpine kernel, as the qubes kernels don't work

ayakael commented on Jun 20, 2022

Author

I've made more progress: hvm mode with qubes kernel works using additional kernelopts modules=ext4 rootfstype=ex4 after introducting udev in the initramfs and thus fixing /dev/mapper/dmroot generation. pvh mode is broken, hanging after boot. Still stuck on waiting qubes-socket error ...

ayakael commented on Jun 21, 2022

Author

<u>@Nexolight</u> Would you have encountered the issue of Waiting on /var/run/xf86-qubes-socket socket when creating the void template?

marmarek commented on Jun 21, 2022

Member

Sounds like either Xorg not starting (or crashing on start?) or not loading qubes driver (generic config file instead of the one from qubes-gui-agent?).

ayakael commented on Jun 21, 2022

Author

The /etc/X11/xorg-qubes.conf is the same as my Fedora template, so it can't be the generic config file. Driver are also available at /usr/lib/xorg/modules. At every start, the config file is updated, as well. It just seems like Xorg is never started, as there are no Xorg log (or error) files. In command line qubes-qui-runuser is in sleep (Z) mode.

ayakael commented on Jun 22, 2022

Author

Of note, /usr/bin/qubes-gui-runuser /usr/bin/xinit /etc/X11/xinit/xinitrc -- /usr/libexec/Xorg :0 -nolisten tcp vt07 -wr -config /etc/X11/xorg-qubes.conf fails with exit code 255 when executed from shell.

```
ayakael commented on Jun 28, 2022
```

Author

Good news! Tracked down the issue - it isn't a problem with Xorg, but rather with pam. There needs to be an Alpine version of /etc/pam.d/qubes-gui-agent. I've been trying for the last hour to throw spaguetti at the wall, see if it stick, but alas I do not know anything about pam. I see that they are copies of /etc/pam.d/su , so I went ahead and copied that, but now I get a execve cmd: Permission denied error.

ayakael commented on Jun 28, 2022 • ▶ Details

Author

Doesn't seem to have to do with pam anymore (edit: or maybe it does??)

strace:

```
execve("/usr/bin/qubes-qui-runuser", ["/usr/bin/qubes-qui-runuser", "yetc/
X11", "/bin/sh", "-1", "-c", "exec /usr/bin/xinit /etc/X11/xin"...], 0x7ffdc547b8d0
/* 23 vars */) = 0
arch_prctl(ARCH_SET_FS, 0x77e0c74a5b48) = 0
set_tid_address(0x77e0c74a5f90)
                                     = 2011
brk(NULL)
                                     = 0x64cf75ec6000
brk(0x64cf75ec8000)
                                      = 0x64cf75ec8000
mmap(0x64cf75ec6000, 4096, PROT_NONE, MAP_PRIVATE|MAP_FIXED|MAP_ANONYMOUS, -1, 0) =
0x64cf75ec6000
open("/etc/ld-musl-x86_64.path", O_RDONLY|O_LARGEFILE|O_CLOEXEC) = -1 ENOENT (No
such file or directory)
open("/lib/libpam.so.0", O_RDONLY|O_LARGEFILE|O_CLOEXEC) = 3
fcntl(3, F_SETFD, FD_CLOEXEC)
fstat(3, {st_mode=S_IFREG|0755, st_size=59288, ...}) = 0
960
mmap(NULL, 65536, PROT_READ, MAP_PRIVATE, 3, 0) = 0x77e0c73ff000
mmap(0x77e0c7402000, 28672, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED, 3, 0x3000) =
0x77e0c7402000
mmap(0x77e0c7409000, 12288, PROT_READ, MAP_PRIVATE|MAP_FIXED, 3, 0xa000) =
0x77e0c7409000
mmap(0x77e0c740d000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED, 3, 0xd000) =
0x77e0c740d000
close(3)
mprotect(0x77e0c740d000, 4096, PROT_READ) = 0
mprotect(0x77e0c74a2000, 4096, PROT_READ) = 0
mprotect(0x64cf7503c000, 4096, PROT_READ) = 0
rt_sigprocmask(SIG_UNBLOCK, [RT_1 RT_2], NULL, 8) = 0
\label{lem:condition} rt\_sigaction(SIGTERM, \{sa\_handler=0x64cf7503a506, sa\_mask=[], sa\_flags=SA\_RESTORER] \\
SA_RESTART, sa_restorer=0x77e0c7455c8a}, {sa_handler=SIG_DFL, sa_mask=[],
sa_flags=0, 8) = 0
rt_sigaction(SIGHUP, {sa_handler=0x64cf7503a506, sa_mask=[], sa_flags=SA_RESTORER|
SA_RESTART, sa_restorer=0x77e0c7455c8a}, {sa_handler=SIG_DFL, sa_mask=[],
sa_flags=0, 8) = 0
open("/etc/passwd", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = 3
fcntl(3, F_SETFD, FD_CLOEXEC)
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73fe000
fcntl(3, F_SETFD, FD_CLOEXEC)
```

```
read(3, "root:x:0:0:root:/root:/bin/ash\nb"..., 1024) = 1024
read(3, "gin\nsmmsp:x:209:209:smmsp:/var/s"..., 1024) = 579
lseek(3, -325, SEEK_CUR)
                                     = 1278
                                     = 0
close(3)
munmap(0x77e0c73fe000, 4096)
stat("/etc/pam.d", {st_mode=S_IFDIR|0755, st_size=4096, ...}) = 0
open("/etc/pam.d/qubes-gui-agent", O_RDONLY|O_LARGEFILE) = 3
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73fe000
read(3, "# basic PAM configuration for Al"..., 1024) = 203
open("/lib/security/pam_rootok.so", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = 4
fcntl(4, F_SETFD, FD_CLOEXEC)
fstat(4, {st_mode=S_IFREG|0755, st_size=14152, ...}) = 0
read(4, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\1\0\0\0p\20\0\0\0\0\0\0"..., 960) =
mmap(NULL, 20480, PROT_READ, MAP_PRIVATE, 4, 0) = 0x77e0c73f9000
mmap(0x77e0c73fa000, 4096, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED, 4, 0x1000) =
0x77e0c73fa000
mmap(0x77e0c73fb000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED, 4, 0x2000) =
0x77e0c73fb000
mmap(0x77e0c73fc000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED, 4, 0x2000) =
0x77e0c73fc000
close(4)
mprotect(0x77e0c73fc000, 4096, PROT_READ) = 0
open("/etc/pam.d/base-auth", 0_RDONLY|0_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 437
open("/lib/security/pam_env.so", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = 5
fcntl(5, F_SETFD, FD_CLOEXEC)
fstat(5, {st_mode=S_IFREG|0755, st_size=18248, ...}) = 0
read(5, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\0\1\0\0\0\340\21\0\0\0\0\0\0\0"..., 960)
mmap(NULL, 24576, PROT_READ, MAP_PRIVATE, 5, 0) = 0x77e0c73f3000
mmap(0x77e0c73f4000, 8192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED, 5, 0x1000) =
0x77e0c73f4000
mmap(0x77e0c73f6000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED, 5, 0x3000) =
0x77e0c73f6000
mmap(0x77e0c73f7000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED, 5, 0x3000) =
0x77e0c73f7000
mprotect(0x77e0c73f7000, 4096, PROT_READ) = 0
open("/lib/security/pam_unix.so", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = 5
fcntl(5, F_SETFD, FD_CLOEXEC)
                                     = 0
fstat(5, {st_mode=S_IFREG|0755, st_size=47000, ...}) = 0
960
mmap(NULL, 102400, PROT_READ, MAP_PRIVATE, 5, 0) = 0x77e0c73da000
mmap(0x77e0c73dc000, 24576, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED, 5, 0x2000) =
0x77e0c73dc000
mmap(0x77e0c73e2000, 8192, PROT_READ, MAP_PRIVATE|MAP_FIXED, 5, 0x8000) =
0x77e0c73e2000
mmap(0x77e0c73e5000, 57344, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED, 5, 0xa000)
= 0x77e0c73e5000
mmap(0x77e0c73e7000, 49152, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED|
MAP\_ANONYMOUS, -1, 0) = 0x77e0c73e7000
mprotect(0x77e0c73e5000, 4096, PROT_READ) = 0
open("/lib/security/pam_nologin.so", O_RDONLY|O_LARGEFILE|O_CLOEXEC) = 5
fcntl(5, F_SETFD, FD_CLOEXEC)
                                     = 0
fstat(5, {st_mode=S_IFREG|0755, st_size=14152, ...}) = 0
```

```
= 960
mmap(NULL, 20480, PROT\_READ, MAP\_PRIVATE, 5, 0) = 0x77e0c73d5000
mmap(0x77e0c73d6000, 4096, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED, 5, 0x1000) =
0x77e0c73d6000
mmap(0x77e0c73d7000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED, 5, 0x2000) =
0x77e0c73d7000
mmap(0x77e0c73d8000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED, 5, 0x2000) =
0x77e0c73d8000
close(5)
mprotect(0x77e0c73d8000, 4096, PROT_READ) = 0
read(4, "", 1024)
close(4)
open("/etc/pam.d/base-account", O_RDONLY|O_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 69
read(4, "", 1024)
close(4)
open("/etc/pam.d/base-password", 0_RDONLY|0_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 87
read(4, "", 1024)
close(4)
                                        = 0
open("/etc/pam.d/base-session-noninteractive", O_RDONLY|O_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 101
open("/lib/security/pam_limits.so", O_RDONLY|O_LARGEFILE|O_CLOEXEC) = 5
fcntl(5, F_SETFD, FD_CLOEXEC)
fstat(5, {st_mode=S_IFREG|0755, st_size=22424, ...}) = 0
read(5, "\177ELF\2\1\1\0\0\0\0\0\0\0\0\1\0\0\0\220\"\0\0\0\0\0"..., 960)
mmap(NULL, 28672, PROT_READ, MAP_PRIVATE, 5, 0) = 0x77e0c73ce000
mmap(0x77e0c73d0000, 8192, PROT_READ|PROT_EXEC, MAP_PRIVATE|MAP_FIXED, 5, 0x2000) =
0x77e0c73d0000
mmap(0x77e0c73d2000, 4096, PROT_READ, MAP_PRIVATE|MAP_FIXED, 5, 0x4000) =
mmap(0x77e0c73d3000, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_FIXED, 5, 0x4000) =
0x77e0c73d3000
close(5)
                                        = 0
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73cd000
mprotect(0x77e0c73d3000, 4096, PROT_READ) = 0
read(4, "", 1024)
close(4)
                                        = 0
read(3, "", 1024)
                                        = 0
close(3)
munmap(0x77e0c73fe000, 4096)
open("/etc/pam.d/other", O_RDONLY|O_LARGEFILE) = 3
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73fe000
read(3, "# basic PAM configuration for Al"..., 1024) = 173
open("/etc/pam.d/base-auth", 0_RDONLY|0_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 437
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73cc000
read(4, "", 1024)
close(4)
open("/etc/pam.d/base-account", O_RDONLY|O_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 69
read(4, "", 1024)
                                        = 0
close(4)
                                        = 0
open("/etc/pam.d/base-password", 0_RDONLY|0_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 87
```

```
read(4, "", 1024)
                                        = 0
                                        = 0
close(4)
open("/etc/pam.d/base-session-noninteractive", O_RDONLY|O_LARGEFILE) = 4
read(4, "# basic PAM configuration for Al"..., 1024) = 101
read(4, "", 1024)
close(4)
read(3, "", 1024)
                                        = 0
close(3)
                                        = 0
munmap(0x77e0c73fe000, 4096)
                                        = 0
ioctl(0, TIOCGWINSZ, {ws_row=25, ws_col=80, ws_xpixel=0, ws_ypixel=0}) = 0
ioctl(0, TIOCGWINSZ, {ws_row=25, ws_col=80, ws_xpixel=0, ws_ypixel=0}) = 0
readlink("/proc/self/fd/0", "/dev/tty1", 32) = 9
stat("/dev/tty1", {st_mode=S_IFCHR|0600, st_rdev=makedev(0x4, 0x1), ...}) = 0
fstat(0, \{st\_mode=S\_IFCHR | 0600, st\_rdev=makedev(0x4, 0x1), ...\}) = 0
clock_gettime(CLOCK_REALTIME, {tv_sec=1656427127, tv_nsec=903365906}) = 0
getuid()
socket(AF_UNIX, SOCK_STREAM|SOCK_CLOEXEC, 0) = 3
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73fe000
connect(3, {sa_family=AF_UNIX, sun_path="/var/run/nscd/socket"}, 24) = -1 ENOENT (No
such file or directory)
close(3)
                                        = 0
munmap(0x77e0c73fe000, 4096)
                                        = 0
open("/etc/group", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = 3
fcntl(3, F_SETFD, FD_CLOEXEC)
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73fe000
fcntl(3, F_SETFD, FD_CLOEXEC)
read(3, "root:x:0:root\nbin:x:1:root,bin,d"..., 1024) = 919
read(3, "", 1024)
                                        = 0
close(3)
                                        = 0
munmap(0x77e0c73fe000, 4096)
                                        = 0
rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1 RT_2], [], 8) = 0
rt\_sigprocmask(SIG\_BLOCK, \sim[], NULL, 8) = 0
setgroups(1, [1000])
rt_sigprocmask(SIG_SETMASK, [], NULL, 8) = 0
mmap(NULL, 4096, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73fe000
open("/etc/passwd", O_RDONLY|O_LARGEFILE|O_CLOEXEC) = 3
fcntl(3, F_SETFD, FD_CLOEXEC)
fcntl(3, F_SETFD, FD_CLOEXEC)
read(3, "root:x:0:0:root:/root:/bin/ash\nb"..., 1024) = 1024
read(3, "gin\nsmmsp:x:209:209:smmsp:/var/s"..., 1024) = 579
lseek(3, -325, SEEK_CUR)
                                        = 1278
close(3)
prlimit64(0, RLIMIT_CPU, NULL, {rlim_cur=RLIM64_INFINITY, rlim_max=RLIM64_INFINITY})
prlimit64(0, RLIMIT_FSIZE, NULL, {rlim_cur=RLIM64_INFINITY,
rlim_max=RLIM64_INFINITY}) = 0
prlimit64(0, RLIMIT_DATA, NULL, {rlim_cur=RLIM64_INFINITY,
rlim max=RLIM64 INFINITY}) = 0
prlimit64(0, RLIMIT_STACK, NULL, {rlim_cur=8192*1024, rlim_max=RLIM64_INFINITY}) = 0
prlimit64(0, RLIMIT_CORE, NULL, {rlim_cur=0, rlim_max=RLIM64_INFINITY}) = 0
prlimit64(0, RLIMIT_RSS, NULL, {rlim_cur=RLIM64_INFINITY, rlim_max=RLIM64_INFINITY})
prlimit64(0, RLIMIT_NPROC, NULL, {rlim_cur=3625, rlim_max=3625}) = 0
prlimit64(0, RLIMIT_NOFILE, NULL, {rlim_cur=1024, rlim_max=4*1024}) = 0
prlimit64(0, RLIMIT_MEMLOCK, NULL, {rlim_cur=8192*1024, rlim_max=8192*1024}) = 0
prlimit64(0, RLIMIT_AS, NULL, {rlim_cur=RLIM64_INFINITY, rlim_max=RLIM64_INFINITY})
= 0
```

```
prlimit64(0, RLIMIT_LOCKS, NULL, {rlim_cur=RLIM64_INFINITY,
rlim_max=RLIM64_INFINITY}) = 0
prlimit64(0, RLIMIT_SIGPENDING, NULL, {rlim_cur=3625, rlim_max=3625}) = 0
prlimit64(0, RLIMIT_MSGQUEUE, NULL, {rlim_cur=800*1024, rlim_max=800*1024}) = 0
prlimit64(0, RLIMIT_NICE, NULL, {rlim_cur=0, rlim_max=0}) = 0
prlimit64(0, RLIMIT_RTPRIO, NULL, {rlim_cur=0, rlim_max=0}) = 0
prlimit64(0, RLIMIT_RTTIME, NULL, {rlim_cur=RLIM64_INFINITY,
rlim_max=RLIM64_INFINITY}) = 0
getpriority(PRIO_PROCESS, 0)
                                        = 20
open("/etc/security/limits.conf", O_RDONLY|O_LARGEFILE) = 3
read(3, "# /etc/security/limits.conf n# n#T"..., 1024) = 1024
read(3, " the soft limits\n#
                               - \"har"..., 1024) = 1024
read(3, "ity\n\#\n#<domain> <type> <it"..., 1024) = 378
read(3, "", 1024)
                                        = 0
close(3)
                                        = 0
open("/etc/security/limits.d/", O_RDONLY|O_LARGEFILE|O_CLOEXEC|O_DIRECTORY) = 3
fcntl(3, F_SETFD, FD_CLOEXEC)
mmap(NULL, 8192, PROT_READ|PROT_WRITE, MAP_PRIVATE|MAP_ANONYMOUS, -1, 0) =
0x77e0c73ca000
getdents64(3, 0x77e0c73ca0b8 /* 3 entries */, 2048) = 88
getdents64(3, 0x77e0c73ca0b8 /* 0 entries */, 2048) = 0
close(3)
munmap(0x77e0c73ca000, 8192)
                                        = 0
open("/etc/security/limits.d/90-qubes-gui.conf", O_RDONLY|O_LARGEFILE) = 3
read(3, "# Qubes GUI agent needs to mlock"..., 1024) = 158
read(3, "", 1024)
                                        = 0
close(3)
prlimit64(0, RLIMIT_MEMLOCK, {rlim_cur=131072*1024, rlim_max=131072*1024}, NULL) = 0
setpriority(PRIO_PROCESS, 0, 0)
                                       = 0
open("/etc/login.defs", O_RDONLY|O_LARGEFILE) = 3
read(3, "USERGROUPS_ENAB yes\n", 1024) = 20
read(3, "", 1024)
close(3)
open("/etc/passwd", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = 3
fcntl(3, F_SETFD, FD_CLOEXEC)
fcntl(3, F_SETFD, FD_CLOEXEC)
                                        = 0
read(3, "root:x:0:0:root:/root:/bin/ash\nb"..., 1024) = 1024
read(3, "gin\nsmmsp:x:209:209:smmsp:/var/s"..., 1024) = 579
lseek(3, -325, SEEK_CUR)
                                        = 1278
close(3)
socket(AF_UNIX, SOCK_DGRAM|SOCK_CLOEXEC, 0) = 3
connect(3, {sa_family=AF_UNIX, sun_path="/dev/log"}, 12) = 0
clock\_gettime(CLOCK\_REALTIME, \{tv\_sec=1656427127, tv\_nsec=906160763\}) = 0
sendto(3, "<86>Jun 28 14:38:47 : pam_unix(q"..., 107, 0, NULL, 0) = 107
rt_sigprocmask(SIG_BLOCK, ~[RTMIN RT_1 RT_2], [], 8) = 0
rt_sigprocmask(SIG_BLOCK, ~[], ~[KILL STOP RTMIN RT_1 RT_2], 8) = 0
rt\_sigprocmask(SIG\_SETMASK, \sim[KILL STOP RTMIN RT\_1 RT\_2], NULL, 8) = 0
rt_sigprocmask(SIG_SETMASK, [], NULL, 8) = 0
wait4(2012, [{WIFEXITED(s) && WEXITSTATUS(s) == 127}], 0, NULL) = 2012
--- SIGCHLD {si_signo=SIGCHLD, si_code=CLD_EXITED, si_pid=2012, si_uid=1000,
si_status=127, si_utime=0, si_stime=0} ---
getuid()
open("/etc/login.defs", O_RDONLY|O_LARGEFILE) = 4
read(4, "USERGROUPS\_ENAB yes\n", 1024) = 20
read(4, "", 1024)
                                        = 0
close(4)
                                        = 0
```

```
Clock_gettlme(Clock_kealime, {tv_sec=165642/12/, tv_nsec=909603199}) = 0
sendto(3, "<86>Jun 28 14:38:47 : pam_unix(q"..., 86, 0, NULL, 0) = 86
munmap(0x77e0c73fe000, 4096) = 0
munmap(0x77e0c73cc000, 4096) = 0
exit_group(127) = ?
+++ exited with 127 +++
```

moiselazarus commented on Jun 30, 2022

Can you push the openrc files to your repo. I would like to test, maybe some hints or steps to build the template.

ayakael commented on Jul 6, 2022

Author

<u>@moiselazarus</u> Apologies for the delay, I was without my laptop for a little while. You will find the repo updated with latest openrc files. Following this guide to setting up an Alpine HVM proved useful: https://github.com/Nexolight/void-tainted-pkgs/tree/qubes/QubesOS. A few notes:

- kernelopts should be set via qvm-prefs -s \$vmname "kernelopts modules=ext4" rootfstype=ext4"
- There should be no need for linux-qubes, as qvm-vm-core now sets CONFIG_TRANSPARENT_HUGEPAGE_MADVISE as Y at startup
- qubes-mkinitfs is needed to allow inclusion of udev in initramfs. Without this, /dev/mapper/dm_mapper is never created in standalone VMs.
- Make sure created partition is GPT with following partition table: xvda1 200M EFI System xvda2 2048K BIOS boot partition xvda3 (whatever) Root filesystem (note the name for xvda3 as "Root filesystem")
- To create getty@hvc0 (xen tty), add to /etc/inittab: hvc0::respawn:/sbin/getty -L hvc0 115200 vt220
- make sure to rc-update add udev + udev-trigger
- make sure to add "eudev" to /etc/mkinitfs/mkinitfs.conf features line and regenerate initramfs with mkinitfs

By memory, that should get your VM to a similar state as mine. Don't desitate in case of questions

ayakael commented on Jul 11, 2022 • ▶ Details

Author

Current state of qubes-gui-runuser issue:

• fixed error connect(3, {sa_family=AF_UNIX, sun_path="/var/run/nscd/socket"}, 24) =

- -1 ENOENT (No such file or directory) by installing musl-nscd, executing echo 'hosts: files dns' > /etc/nsswitch.conf, and executing nscd
- fixed error open("/etc/ld-musl-x86_64.path", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) = -1
 ENOENT (No such file or directory) by executing echo '/lib:/usr/local/lib:/usr/lib'
 > /etc/ld-musl-x86_64.path

That the issue still persists suggests that these error were non-fatal.

<u>@marmarek</u> Having created qubes-gui-runuser binary, would you have any pointers as to the source of the wait4(1994, execve cmd: Permission denied error in the strace?

ayakael commented on Jul 14, 2022 • ▶ Details

Author

Debugged the issue: the qubes-gui-runuser issue had to do with two things: one was an error of mine in misunderstanding the command syntax, and the other was that qubes-run-xorg was trying to start xorg with ash (via /bin/sh link) rather than with bash. Of course, it'd be too easy for it to just work, as Xorg runs now but then crashes shortly after. See log below:

```
19.332]
X.Org X Server 1.21.1.3
X Protocol Version 11, Revision 0
    19.332] Current Operating System: Linux alpine 5.16.18-2.fc32.qubes.x86_64 #1
SMP PREEMPT Fri Apr 1 22:28:01 CEST 2022 x86_64
    19.332] Kernel command line: root=/dev/mapper/dmroot ro nomodeset console=hvc0
rd_NO_PLYMOUTH rd.plymouth.enable=0 plymouth.enable=0 xen_scrub_pages=0 modules=ext4
rootfstype=ext4
    19.332]
[
    19.332] Current version of pixman: 0.40.0
Γ
   19.332] Before reporting problems, check http://wiki.x.org
       to make sure that you have the latest version.
Γ
    19.332] Markers: (--) probed, (**) from config file, (==) default setting,
       (++) from command line, (!!) notice, (II) informational,
        (WW) warning, (EE) error, (NI) not implemented, (??) unknown.
    19.332] (==) Log file: "/home/user/.local/share/xorg/Xorg.0.log", Time: Thu Jul
14 16:15:09 2022
    19.332] (++) Using config file: "/etc/X11/xorg-qubes.conf"
    19.332] (==) Using system config directory "/usr/share/X11/xorg.conf.d"
    19.332] (==) ServerLayout "Default Layout"
   19.332] (**) |-->Screen "Screen0" (0)
    19.332] (**) | |-->Monitor "Monitor0"
    19.332] (**) |
                    |-->Device "Videocard0"
    19.332] (**) |-->Input Device "qubesdev"
    19.332] (==) Automatically adding devices
    19.332] (==) Automatically enabling devices
    19.332] (==) Automatically adding GPU devices
    19.332] (==) Automatically binding GPU devices
    19.332] (==) Max clients allowed: 256, resource mask: 0x1fffff
Γ
    19.333] (WW) The directory "/usr/share/fonts/TTF" does not exist.
   19.333] Entry deleted from font path.
    19.333] (==) FontPath set to:
       /usr/share/fonts/misc,
       /usr/share/fonts/100dpi:unscaled,
       /usr/share/fonts/75dpi:unscaled,
        /usr/share/fonts/Tvpe1
```

```
19.333] (==) ModulePath set to "/usr/lib/xorg/modules"
19.333] (II) The server relies on udev to provide the list of input devices.
        If no devices become available, reconfigure udev or disable AutoAddDevices.
    19.333] (II) Module ABI versions:
    19.333] X.Org ANSI C Emulation: 0.4
Γ
              X.Org Video Driver: 25.2
    19.333]
    19.333] X.Org XInput driver : 24.4
Γ
              X.Org Server Extension : 10.0
Γ
    19.334] (--) PCI:*(0@0:4:0) 1234:1111:1af4:1100 rev 2, Mem @
Γ
0xf1000000/16777216, 0xf2012000/4096, BIOS @ 0x????????/131072
     19.334] (WW) Open ACPI failed (/var/run/acpid.socket) (No such file or
directory)
19.334] (II) "glx" will be loaded by default.
    19.334] (II) LoadModule: "fb"
    19.334] (II) Module "fb" already built-in
Γ
     19.334] (II) LoadModule: "glx"
    19.335] (II) Loading /usr/lib/xorg/modules/extensions/libglx.so
    19.345] (II) Module glx: vendor="X.Org Foundation"
Γ
    19.345] compiled for 1.21.1.3, module version = 1.0.0
    19.345]
               ABI class: X.Org Server Extension, version 10.0
Γ
    19.345] (II) LoadModule: "dummyqbs"
    19.345] (II) Loading /usr/lib/xorg/modules/drivers/dummyqbs_drv.so
    19.345] (II) Module dummyqbs: vendor="X.Org Foundation"
    19.345] compiled for 1.21.1.2, module version = 0.3.6
    19.345] Module class: X.Org Video Driver
Γ
              ABI class: X.Org Video Driver, version 25.2
Γ
    19.345]
    19.345] (II) LoadModule: "qubes"
    19.345] (II) Loading /usr/lib/xorg/modules/drivers/qubes_drv.so
Γ
    19.345] (II) Module qubes: vendor="X.Org Foundation"
    19.345] compiled for 1.21.1.2, module version = 0.0.1
    19.345] Module class: X.Org XInput Driver
Γ
              ABI class: X.Org XInput driver, version 24.4
    19.345]
[
    19.345] (II) DUMMYQBS: Driver for Dummy chipsets: dummy
    19.345] (WW) Falling back to old probe method for dummyqbs
    19.345] (WW) VGA arbiter: cannot open kernel arbiter, no multi-card support
    19.345] (II) DUMMYQBS(0): Chipset is a DUMMY
Γ
    19.346] (**) DUMMYQBS(0): Depth 24, (--) framebuffer bpp 32
    19.346] (==) DUMMYQBS(0): RGB weight 888
     19.346] (==) DUMMYQBS(0): Default visual is TrueColor
Γ
    19.346] (==) DUMMYQBS(0): Using gamma correction (1.0, 1.0, 1.0)
19.346] (DB) xf86MergeOutputClassOptions unsupported bus type 0
    19.346] (**) DUMMYQBS(0): Option "GUIDomID" "0"
    19.346] (**) DUMMYQBS(0): VideoRAM: 28000 kByte
    19.346] (--) DUMMYQBS(0): Max Clock: 300000 kHz
    19.346] (II) DUMMYQBS(0): Monitor0: Using hsync range of 49.00-50.00 kHz
    19.346] (II) DUMMYQBS(0): Monitor0: Using vrefresh range of 46.00-47.00 Hz
    19.346] (II) DUMMYQBS(0): Clock range: 11.00 to 300.00 MHz
    19.346] (II) DUMMYQBS(0): Not using default mode "640x350" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "320x175" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x400" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "320x200" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "720x400" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "360x200" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x480" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "320x240" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x480" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "320x240" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x480" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "320x240" (hsync out of range)
```

```
19.346] (II) DUMMYQBS(0): Not using default mode "640x480" (hsync out of range)
Γ
     19.346] (II) DUMMYQBS(0): Not using default mode "320x240" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "400x300" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "400x300" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "400x300" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "400x300" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "400x300" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768i" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "512x384i" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "512x384" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "512x384" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "512x384" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
[
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "512x384" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1152x864" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "576x432" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x960" (hsync out of
[
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x480" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x960" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x480" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x1024" (hsync out of
[
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x512" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x1024" (hsync out of
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "640x512" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x1024" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x512" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "1600x1200" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1600x1200" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1600x1200" (hsync out of
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1600x1200" (hsync out of
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "1600x1200" (hsync out of
[
range)
```

```
19.346] (II) DUMMYQBS(0): Not using default mode "800x600" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1792x1344" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "896x672" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "1792x1344" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "896x672" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1856x1392" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "928x696" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1856x1392" (hsync out of
[
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "928x696" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1440" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "960x720" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1440" (hsync out of
19.346] (II) DUMMYQBS(0): Not using default mode "960x720" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "832x624" (vrefresh out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "416x312" (vrefresh out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1400x1050" (hsync out of
    19.346] (II) DUMMYQBS(0): Not using default mode "700x525" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1400x1050" (hsync out of
19.346] (II) DUMMYQBS(0): Not using default mode "700x525" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1440" (bad mode clock/
Γ
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "960x720" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2048x1536" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
[
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2048x1536" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2048x1536" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x768" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x360" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "320x180" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYOBS(0): Not using default mode "640x360" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "320x180" (bad mode clock/
interlace/doublescan)
     19.346] (II) DUMMYQBS(0): Not using default mode "720x405" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "360x202" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "720x405" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "360x202" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "864x486" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "432x243" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "864x486" (hsync out of range)
[
     19.346] (II) DUMMYQBS(0): Not using default mode "432x243" (hsync out of range)
```

```
19.346] (II) DUMMYQBS(0): Not using default mode "960x540" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "480x270" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "960x540" (hsync out of range)
     19.346] (II) DUMMYQBS(0): Not using default mode "480x270" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x576" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "512x288" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x576" (hsync out of
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "512x288" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "1280x720" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x360" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x720" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x360" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1368x768" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "684x384" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1368x768" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "684x384" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "1600x900" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "800x450" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "1600x900" (hsync out of
    19.346] (II) DUMMYQBS(0): Not using default mode "800x450" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1080" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "960x540" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1080" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "960x540" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "2048x1152" (hsync out of
range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x576" (hsync out of
range)
19.346] (II) DUMMYQBS(0): Not using default mode "2048x1152" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1024x576" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2560x1440" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x720" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2560x1440" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x720" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2880x1620" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1440x810" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2880x1620" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1440x810" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "3200x1800" (bad mode clock/
interlace/doublescan)
```

```
19.346] (II) DUMMYQBS(0): Not using default mode "1600x900" (hsync out of
Γ
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "3200x1800" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1600x900" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "3840x2160" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1080" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "3840x2160" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1080" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "4096x2304" (insufficient
memory for mode)
     19.346] (II) DUMMYQBS(0): Not using default mode "2048x1152" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "4096x2304" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "2048x1152" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "5120x2880" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "2560x1440" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "5120x2880" (insufficient
memory for mode)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "2560x1440" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "7680x4320" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "3840x2160" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "7680x4320" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "3840x2160" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "15360x8640" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "7680x4320" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "15360x8640" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "7680x4320" (insufficient
memory for mode)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x800" (vrefresh out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x400" (vrefresh out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x800" (vrefresh out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "640x400" (vrefresh out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1400x900" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "700x450" (hsync out of range)
19.346] (II) DUMMYQBS(0): Not using default mode "1400x900" (hsync out of
range)
```

```
19.346] (II) DUMMYQBS(0): Not using detault mode "700x450" (hsync out of range)
L
    19.346] (II) DUMMYQBS(0): Not using default mode "1680x1050" (hsync out of
range)
     19.346] (II) DUMMYQBS(0): Not using default mode "840x525" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1680x1050" (hsync out of
[
    19.346] (II) DUMMYQBS(0): Not using default mode "840x525" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1200" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "960x600" (hsync out of range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1920x1200" (hsync out of
range)
    19.346] (II) DUMMYOBS(0): Not using default mode "960x600" (hsync out of range)
Γ
    19.346] (II) DUMMYQBS(0): Not using default mode "2560x1600" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x800" (hsync out of
Γ
range)
    19.346] (II) DUMMYQBS(0): Not using default mode "2560x1600" (bad mode clock/
interlace/doublescan)
    19.346] (II) DUMMYQBS(0): Not using default mode "1280x800" (hsync out of
range)
    19.346] (II) DUMMYQBS(0): Virtual size is 1920x1080 (pitch 1920)
    19.346] (**) DUMMYQBS(0): *Mode "QB1920x1080": 96.0 MHz, 49.9 kHz, 46.1 Hz
    19.346] (II) DUMMYQBS(0): Modeline "QB1920x1080"x46.1 96.00 1920 1921 1922
1923 1080 1081 1082 1083 (49.9 kHz z)
   19.346] (==) DUMMYQBS(0): DPI set to (96, 96)
Γ
    19.346] (II) Loading sub module "fb"
    19.346] (II) LoadModule: "fb"
19.346] (II) Module "fb" already built-in
Γ
   19.346] (II) Loading sub module "ramdac"
    19.346] (II) LoadModule: "ramdac"
    19.346] (II) Module "ramdac" already built-in
Γ
    19.346] (EE) DUMMYQBS(0): Failed to open xengntshr: Permission denied!
    19.346] (EE)
Fatal server error:
    19.346] (EE) AddScreen/ScreenInit failed for driver 0
Γ
    19.346] (EE)
    19.346] (EE)
Please consult the The X.Org Foundation support
         at http://wiki.x.org
for help.
    19.346] (EE) Please also check the log file at "/home/user/.local/share/xorg/
Xorg.0.log" for additional information.
Γ
    19.347] (EE)
   19.347] (EE) Server terminated with error (1). Closing log file.
Γ
```

Failed to open xengntshr: Permission denied! relates to the following bit of code in **DUMMYQBS**:

```
dPtr->xgs = xengntshr_open(NULL, 0);
   if (dPtr->xgs == NULL) {
       xf86DrvMsg(pScrn->scrnIndex, X_ERROR, "Failed to open xengntshr: %s!\n",
strerror(errno));
       return FALSE:
   }
```

marmarek commented on Jul 14, 2022

Member

Failed to open xengntshr: Permission denied!

Missing udev rules from https://github.com/QubesOS/qubes-linux-utils/blob/master/udev/udev-qubes-misc.rules? Or maybe user isn't a member of qubes group?

marmarek commented on Jul 14, 2022

Member

- fixed error connect(3, {sa_family=AF_UNIX, sun_path="/var/run/nscd/socket"},
 24) = -1 ENOENT (No such file or directory) by installing musl-nscd, executing echo 'hosts: files dns' > /etc/nsswitch.conf, and executing nscd
- fixed error open("/etc/ld-musl-x86_64.path", 0_RDONLY|0_LARGEFILE|0_CLOEXEC) =
 -1 ENOENT (No such file or directory) by executing echo '/lib:/usr/local/lib:/usr/lib' > /etc/ld-musl-x86_64.path

I don't think any of those require "fixing" - both are optional features and everything should work just fine without them (and indeed the process continues to run past those attempts).

ayakael commented on Jul 14, 2022

Author

Failed to open xengntshr: Permission denied!

Missing udev rules from https://github.com/QubesOS/qubes-linux-utils/blob/master/udev/udev-qubes-misc.rules? Or maybe user isn't a member of qubes group?

Adding user to qubes group did the trick, Xorg now works, although qvm-run alpine urxvt does not work. I'm able to execute sudo -u user urxvt from within the VM via x1 console alpine, which opens it fortunately.

Another issue is that while qvm-copy to alpine works, it sends file to /root/QubesIncoming.

- fixed error connect(3, {sa_family=AF_UNIX, sun_path="/var/run/nscd/ socket"}, 24) = -1 ENOENT (No such file or directory) by installing muslnscd, executing echo 'hosts: files dns' > /etc/nsswitch.conf, and executing nscd
- fixed error open("/etc/ld-musl-x86_64.path", 0_RDONLY|0_LARGEFILE|
 0_CLOEXEC) = -1 ENOENT (No such file or directory) by executing echo '/lib:/usr/local/lib:/usr/lib' > /etc/ld-musl-x86_64.path

I don't think any of those require "fixing" - both are optional features and everything should work just fine without them (and indeed the process continues to run past those attempts).

Indeed this was desparation. I was barbing up the wrong tree

marmarek commented on Jul 14, 2022

Member

qubes-session process should run as user , and should have that user environment (including HOME=/home/user).

qvm-run alpine urxvt does not work

You can add -p option to get the command output, hopefully that will help. If it just hangs, it probably waits for <code>qubes.WaitForSession</code> service - that would be related to the <code>qubes-session</code> process above, and especially <code>qrexec-fork-server</code> started from there (it should also run as <code>user</code>).

ayakael commented on Jul 14, 2022

Author

 ${\it qubes-session process should run as user , and should have that user environment } \\ {\it (including HOME=/home/user).}$

qvm-run alpine urxvt does not work

You can add -p option to get the command output, hopefully that will help. If it just hangs, it probably waits for <code>qubes.WaitForSession</code> service - that would be related to the <code>qubes-session</code> process above, and especially <code>qrexec-fork-server</code> started from there (it should also run as <code>user</code>).

initrd starts qubes-session under user, but it stalls. htop shows xfsettingsd --replace subprocess under qubes-session. XFCE4 is installed. Log:

```
(gsd-xsettings:2617): Gdk-CRITICAL **: 17:31:26.664: gdk_atom_intern: assertion
'atom_name != NULL' failed
(gsd-xsettings:2617): Gdk-CRITICAL **: 17:31:26.664: gdk_atom_intern: assertion
'atom_name != NULL' failed
(gsd-xsettings:2617): xsettings-plugin-WARNING **: 17:31:26.672: You can only run
one xsettings manager at a time; exiting
Failed to start: Could not initialize xsettings manager.
2022-07-14 17:31:26,952 icon-sender: running: ['qrexec-client-vm', 'dom0',
'qubes.WindowIconUpdater']
(evolution-alarm-notify:2568): Gdk-CRITICAL **: 17:31:27.142: gdk_atom_intern:
assertion 'atom_name != NULL' failed
(evolution-alarm-notify:2568): Gdk-CRITICAL **: 17:31:27.142: gdk_atom_intern:
assertion 'atom_name != NULL' failed
(evolution-alarm-notify:2568): Gdk-WARNING **: 17:31:28.268: ../gdk/x11/gdkproperty-
x11.c:224 invalid X atom: 1701998435
(evolution-alarm-notify:2568): Gdk-WARNING **: 17:31:28.268: ../gdk/x11/gdkproperty-
```

x11.c:224 invalid X atom: 1852403568

(xfsettingsd:2526): Gdk-WARNING **: 17:31:28.268: ../gdk/x11/gdkproperty-x11.c:224

invalid X atom: 1701998435

(xfsettingsd:2526): Gdk-WARNING **: 17:31:28.268: ../gdk/x11/gdkproperty-x11.c:224

invalid X atom: 1852403568

xfsettingsd: No window manager registered on screen 0.

(xfsettingsd:2526): xfsettingsd-WARNING **: 17:31:31.629: Failed to get the

_NET_NUMBER_OF_DESKTOPS property.

marmarek commented on Jul 14, 2022

Member

starts gubes-session under user, but it stalls

It should remain running, with various children processes (mostly dependent on /etc/xdg/ autostart content). The question is whether <code>qrexec-fork-server</code> is started as one of them.

ayakael commented on Jul 14, 2022

Author

starts qubes-session under user, but it stalls

It should remain running, with various children processes (mostly dependent on /etc/xdg/ autostart content). The question is whether <code>qrexec-fork-server</code> is started as one of them.

Fixed it, it was a permission issue in /var/run/qubes (group owner root , not qubes) making the start of <code>qrexec-fork-server</code> fail

ayakael commented on Jul 16, 2022

Author

Memory ballooning doesn't work, any pointers that I could follow?

Note that no initcpio hooks have been adapted to Alpine. I suspect it may have something to do with that. Also note, AppVM does announce successful start, so connection to <code>qmemman</code> should be restarted.

marmarek commented on Jul 16, 2022

Member

Memory ballooning doesn't work, any pointers that I could follow?

That's about gubes-meminfo-writer service.

ayakael commented on Jul 17, 2022

Author

Memory ballooning doesn't work, any pointers that I could follow?

That's about qubes-meminfo-writer service.

Indeed, /sbin/meminfo-writer is started on boot, but it doesn't do anything when memory is maxed out via tail /dev/zero, A workaround I've found is executing kill -SIGUSR1 \$(cat / run/qubes/qubes-meminfo-writer.pid) as a start_post() command in the OpenRC init script, but that immediately allocates the maximum amount of memory, defeating the point of memory ballooning

ayakael commented on Jul 17, 2022

Author

After converting to template, qvm-run appvm-alpine-315 urxvt doesn't work in AppVM. qrexec-fork-server gives following error:

```
2022-07-17 22:33:04.813 qrexec-fork-server[12043]: qrexec-agent-data.c:244:handle_new_process_common: executed: QUBESRPC qubes.VMShell dom0 (pid 12045)
2022-07-17 22:33:04.816 qrexec-fork-server[12043]: qrexec-agent-data.c:272:handle_new_process_common: pid 12045 exited with 2
```

dom0 error after qvm-run:

```
Running 'urxvt' on appvm-alpine-315 appvm-alpine-315: command failed with code 2
```

I can execute urxvt without issue via sudo -u user urxvt through x1 console appvm-alpine-315.

andrewdavidwong commented on Dec 8, 2023 • ▶ Details

Member

I have time to work on this more. Any idea on how I might want to improve accessibility of this project? @marmarek @andrewdavidwong What steps can I take to improve visibility so that it's comparable to Arch Linux?

That's a good question. There are two separate aspects:

- 1. What is the proper procedure when a member of the community wants to contribute a community-supported template to the Qubes OS Project? I am not sure whether it falls under the <u>package contribution procedure</u>. If so, then simply follow that procedure. If not, then I don't think there's a documented procedure. (Maybe it's been infrequent enough just to be handled on a case-by-case basis.) All of this is up to @marmarek to decide.
- 2. What's the host way to spread the word about the new template and get others from the

community involved? This one is straightforward. You can simply post about it in an appropriate <u>Qubes venue</u>. I'd suggest the <u>forum</u> and maybe <u>qubes-users</u> or <u>qubes-devel</u> (depending on the nature of your post and your target audience).

lubellier commented on Dec 10, 2023

Today I installed the Antoine's 3.19 alpine template from the <u>rpm release</u> in Qubes-OS 4.1. And It works great, congratulation to Antoine (**@ayakael**)!

I tested:

- ▼ template installation
- *app qube* creation and usage (terminal, web browser)
- disposable template creation and disposable usage (terminal, web browser)

Presently, for my usage, the main limitation (already in the the-yet-to-be-implemented-list)) is:

• apk proxying from within template (thus you must allow internet access to template to install packages)

Lately I saw that I installed the wrong template (**4.2** rpm template in QubesOS **4.1**) but It works :-) I will fix my mistake later...

ayakael commented on Dec 10, 2023

Author

<u>@lubellier</u> Many thanks for checking that! If you find a way to get apk proxying working, please feel free to share. I can then integrate it in the template builder. It's low on my list of things to tackle, so outside help would be welcomed. I'd like to tackle systems VMs next.

As for your mistake, it should be as easy as changing the URL in /etc/apk/repositories from r4.2 to r4.1 and executing apk upgrade -a . If ever you want to go to edge, I also release the packages for edge, so requires just a change from v3.19 to edge like the rest of the repos. ^^

<u>@andrewdavidwong</u> Awesome, thank you! I'll wait for <u>@marmarek</u>'s perspective, and then get on that. My building infra (available <u>here</u>) has all of the APKBUILD files in the same repo. I assume getting it to match the archlinux infra would involve integrating those APKBUILD files in their relevant repos.

lubellier commented on Feb 4

If you find a way to get apk proxying working, please feel free to share.

<u>@ayakael</u> I found a solution, I don't own a gitlab account on <u>lab.ilot.io</u> and I never did an APKBUILD, so I share here.

• /etc/init.d/qubes-updates-proxy-torwarder creates a socket with netcal to the sys-net proxy controlled by the QubesOS RPC. @ayakael: in the qubes-vm-core-openro apk package, you should add this service (rc-update add?). For debugging, just add the -v to the no command and see the output_log and error_log files. You will see the created socket with netstat -apn --inet --listen.

```
#!/sbin/openrc-run
# Updates proxy forwarder
                             Startup script for the updates proxy forwarder
# description: forwards connection to updates proxy over Qubes RPC
# The clients should use the below shell variable exports:
# http_proxy="http://127.0.0.1:8082/"
# https_proxy="http://127.0.0.1:8082/"
# For apk, see the /etc/profile.d/apk-proxy.sh alias
name=$RC_SVCNAME
cfgfile="/etc/qubes/$RC_SVCNAME.conf"
command="/bin/busybox"
command_args="nc -lk -s 127.0.0.1 -p 8082 -e /usr/bin/qrexec-client-vm @default
qubes.UpdatesProxy"
command_user="root"
pidfile="/run/qubes/$RC_SVCNAME.pid"
command_background="yes"
output_log="/var/log/qubes/$RC_SVCNAME.log"
error_log="/var/log/qubes/$RC_SVCNAME.err"
depend() {
    need qubes-qrexec-agent
    need net
}
start_pre() {
    checkpath --directory --owner $command_user:qubes --mode 0775 \
              /run/qubes \
              /var/log/qubes \
              /var/run/qubes
    # TODO should fail if qubes-update-proxy is running
    # if qsvc qubes-updates-proxy ; then
          # updates proxy running here too, avoid looping traffic back to itself
          exit 0
    #
   # fi
}
```

/etc/profile.d/apk-proxy.sh creates an apk alias with the proxy usage

```
# Use the update proxy over the QubesOS RPC for apk
# /etc/init.d/qubes-updates-proxy-forwarder creates the socket to the proxy
# root uses the ash shell and the users use the bash or other shells,
# so use /etc/profile.d/ and not /etc/bashrc/ for the alias
alias apk='https_proxy="http://127.0.0.1:8082/" apk'
```

• /etc/bash/sudo-aliases.sh allows the above alias for sudo

```
# allow aliases with sudo
alias sudo='sudo '
```

Thanks to the 2 aliases, the usage is very basic:

• as a user: sudo apk upgrade

• as root: apk upgrade

ayakael commented on Feb 8

Author

<u>@lubellier</u> Many thanks for this! I've just pushed an update to <code>qubes-vm-core</code> with your proposed changes, with one adjustment. I've consolidated <code>sudo-aliases.sh</code> and <code>apk-proxy.sh</code> and have them mirrored via a symbolic link on both <code>/etc/bash</code> and <code>/etc/profile.d</code>. There are still issues with non-interactive shells on sourcing the alias, but this seems to cover most cases.

I've also pushed a new image r4.2 and r4.1 image with the changes, along with a fix for the repository issue related to r4.2 pointing to r4.1.

lubellier commented on Feb 8

@ayakael Thanks for the package and repository update!

Is it the package or the user to do the rc-update add qubes-updates-proxy-forwarder ? Because I need to do it manually after the apk upgrade (+reboot), to get the init service started by default.

ayakael commented on Feb 9 • ▶ Details

Author

<u>@lubellier</u> The new template RPM will have qubes-updates-proxy-forwarder added to boot. Old templates will have to apk upgrade + rc-update add qubes-updates-proxy-forwarder to enable the APK proxy.

jobforacowboy commented on Feb 12

<u>@ayakael</u> i have request refused in /var/log/qubes/qubes-updates-proxy-forwarder.err on alpine based AppVM or StandaloneVM. it seems like /etc/qubes/policy.d/90-default.policy need modifications.

marmarek commented on Feb 12

Member

do not modify the <code>90-default.policy</code> file, use earlier file instead. Is that R4.2? if so, there should be <code>50-config-updates.policy</code> that is managed by the GUI "qubes global config" tool-you can configure updates proxy there (but defaults should work...)

is this standalone qube instead of template by a chance? those should not use updates proxy by default (but it's still okay to enable it, if you configure policy for it too)

jobforacowboy commented on Feb 12

@marmarek, R4.2

Denied qubes. UpdatesProxy from test-alpine to @default

```
qvm-prefs test-alpine
audiovm
                   D dom0
autostart
                   D False
backup_timestamp
                   D False
debug
default_dispvm
                   D default-dvm
default_user
                  D user
dns
                   D 10.139.1.1 10.139.1.2
gateway
gateway6
                   D
guivm
                   D dom0
icon
                   D appvm-red
include_in_backups D True
installed_by_rpm D False
iр
                   D 10.137.0.27
ip6
                   D
kernel
                  D 6.6.14-1.fc37
kernelopts
                  D swiotlb=2048
keyboard_layout
                   D us++
klass
                   D AppVM
label
                   - red
mac
                   D 00:16:3e:5e:6c:00
management_dispvm D default-mgmt-dvm
                   D 4000
maxmem
memory
                   D 400
                   - test-alpine
name
                   D sys-firewall
netvm
provides_network
                  - False
qid
                   - 27
grexec_timeout
                  D 60
                  D 60
shutdown_timeout
                   D 1707744843.24
start_time
stubdom_mem
stubdom_xid
                   U
                   D -1
                   - alpine
template_for_dispvms D False
updateable
                   D False
uuid
                      03d4dc3d-e9b2-488d-b976-d13103c2475d
                   D 2
vcpus
virt_mode
                   D pvh
visible_gateway
                   D 10.138.38.213
visible_gateway6
visible_ip6
                  D 10.137.0.27
                   D
visible_netmask
                   D 255.255.255.255
                   D 17
xid
```

default settings in my policy

```
/etc/qubes/policy.d/50-config-updates.policy
```

- # THIS IS AN AUTOMATICALLY GENERATED POLICY FILE.
- # Any changes made manually may be overwritten by Qubes Configuration Tools.
- qubes.UpdatesProxy
 target=sys-whonix
- @tag:whonix-updatevm

@default

allow

marmarek commented on Feb 12

Member

ah, so it isn't even standalone, just normal app qube; proxy shouldn't be enabled in that case, see https://github.com/QubesOS/qubes-core-agent-linux/blob/main/vm-systemd/qubes-sysinit.sh#L9-L13)

ayakael commented on Feb 12

Author

ah, so it isn't even standalone, just normal app qube; proxy shouldn't be enabled in that case, see https://github.com/QubesOS/qubes-proxy-setup is enabled in templates only: https://github.com/QubesOS/qubes-core-agent-linux/blob/main/vm-systemd/qubes-sysinit.sh#L9-L13)

I see, we're missing if qsvc yum-proxy-setup || qsvc updates-proxy-setup; then logics for apk. I'll investigate this later this week. Anyways, the current alias approach for setting https_proxy env for apk is not excellent. We need a better approach.

lubellier commented on Feb 13

Anyways, the current alias approach for setting https_proxy env for apk is not excellent. We need a better approach.

I agree.

Apk doesn't provide a setting file for the proxy settings. So we should find a way to inject the https_proxy env for the apk command. Apk uses libfetch, libfetch get the proxy settings in http.c:780.

Ideas: a shell function, a shell script, sudo env https_proxy="http://127.0.0.1:8082/" apk ,...

This comment was marked as off-topic.

Sign in to view

ayakael commented on Apr 20 • ▶ Details

Author

Of note, I've rebuilt all r4.1 and r4.2 packages to support current edge that now uses python 3.12. With r4.1 EOL in mid-june, this is likely the last update for r4.1 packages. I will sunset the r4.1 building infra around that time, as well.

EDIT Alpine 3.20, due for release in the beginning of may, will thus be the last release that will support r4.1, and that only till mid-june.

TwinkleToes777 commented on Jul 7

When is v3.20 alpine template coming?

TwinkleToes777 commented on Jul 7

 $\underline{https://lab.ilot.io/ayakael/repo-apk/-/raw/v3.20/qubes/r4.2/x86_64/APKINDEX.tar.gz} \ is timing out on update$

ayakael commented on Jul 12

Author

<u>@TwinkleToes777</u> v3.20 template is up. As for the timing out issue, do you have it now? I can't reproduce on my side.

ayakael commented on Jul 24

Author

For the record, I am now tracking r4.3 packages here: https://lab.ilot.io/ayakael/repo-apk/-/tree/v3.20/qubes/r4.3/x86_64?ref_type=heads

I've yet to test them, so your mileage may vary.

ayakael commented on Jul 27 • ▶ Details

Author

Of note, I've fixed a bug with qubes-usb-proxy which broke attaching devices to the Alpine AppVM. Incidently, this seems to also fix using Alpine Linux as a base for sys-usb. I'm working on porting https://github.com/QubesOS/qubes-app-linux-input-proxy, but I'm not sure how to port the systemd services to openrc.

(edit: a package for the input proxy is already available via qubes-input-proxy, but it wont

automatically spawn the proxy process since it does that via udev and systemd. It's available via the repo though, for those who wish to figure out an openrc implementation)

ayakael commented on Jul 27 • ▶ Details

Author

I figured it out, qubes-input-proxy is now implemented in openrc and ready for testing. Y'all can get access to this simply by apk upgrading your template, and moving sys-usb to use the Alpine template.

ayakael commented on Aug 22

Author

Hello everyone, an important infrastructure update.

The repos now have a new home on my very own Forgejo instance. You can browse them here:

- qubes-builder-alpine: https://ayakael.net/forge/qubes-builder-alpine
- qports (formerly qubes-aports): https://ayakael.net/forge/qports

This will bring some much needed infrastructure upgrades:

- 1. We can now use proper Alpine Linux and RPM repositories
- 2. Alpine package signing is now handled seperately from the package building workflows
- 3. The Qubes template RPM is now available on a signed template. It is thus installable using qvm-template

These changes require manual intervention on already-existing templates to use the new Alpine Linux repo

Repo migration instructions

1. Update repo in /etc/apk/repositories to use this instead:

```
https://ayakael.net/api/packages/forge/alpine/v3.20/qubes-r4.2
```

2. Go to /etc/apk/keys and download new key:

```
cd /etc/apk/keys
curl -JO https://ayakael.net/api/packages/forge/alpine/key
```

New RPM installation:

If you wish to install an updated template, you can follow the instructions on the README in qubes-builder-alpine's new repo.

TwinkleToes777 commented 3 weeks ago

<u>@TwinkleToes777</u> v3.20 template is up. As for the timing out issue, do you have it now? I can't reproduce on my side.

It's gone now. I tested qubes-usb-proxy and the first sys-usb works, second sys-usb does not work (does not see any USB devices). (I have two USB controllers)

It works if first sys-usb is on alpine template and second sys-usb is on debian template.

TwinkleToes777 commented 3 weeks ago • ▶ Details

Any plans to make it work as sys-firewall/sys-net?

toothlesslizard commented last week

<u>@ayakael</u> can you please check alpine/edge/testing repo. something is broken after template update (qubes-packages or new release)

```
alpine-test:~$ cat /etc/apk/repositories
```

https://dl-cdn.alpinelinux.org/alpine/edge/main

https://dl-cdn.alpinelinux.org/alpine/edge/community

https://dl-cdn.alpinelinux.org/alpine/edge/testing

https://ayakael.net/api/packages/forge/alpine/v3.20/qubes-r4.2

alpine-test:~\$

ayakael commented last week

Author

<u>@toothlesslizard</u> Thank you for sharing this issue. I think a few packages are due for upgrade. By the way, if you are on edge, the repo should be https://ayakael.net/api/packages/forge/alpine/edge/qubes-r4.2

ayakael commented last week

Author

<u>@TwinkleToes777</u> I hope to eventually get to sys-{firewall,net}. That said, I don't see myself getting to that before the end of 2024. If you figure it out, feel free to share how you made it work and I'll integrate the changes in the template builder.

ayakael commented 5 days ago

Author

<u>@toothlesslizard</u> Was your issue related to gui agent failure? I've upgraded my edge template and indeed something broke on the GUI side of things. I lack time right now to debug this but

will make today or tomorrow to figure out a fix. It seems like this is due to something that changed on the Alpine side of things, as latest qubes-vm-gui (4.2.18) works on 3.20.

ayakael commented 4 days ago

Author

I fixed the issue causing edge templates to fail. It was introduced by https://gitlab.alpinelinux.org/alpine/aports/-/commit/7ce7590c3a49bb6ea5996296c51250178e1c4e2f, which is a change in-line with Alpine's new policy on merging /lib and /sbin into /usr . This caused an issue where a udev rule that gave access to xen devices to the qubes group wasn't picked up. Via https://ayakael.net/forge/qports/pulls/101 I've thus followed suite and merged everything qports related into /usr . This fixed the issue, and brings the template in line with where things should land for v3.21 .

For those on an edge template who lost access, you can fix your template by updating it through sudo x1 console template-name and apk update; apk upgrade and restarting your template.