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Version 5.0.0

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P3KD-1842-01EN

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Name	Version
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9. Semaphore implementation in blockingconcurrentqueue.h This file uses a semaphore implementation under the terms of its separate zlib license. For details, see, 3rdparty/dmlc-core/include/dmlc/blockingconcurrentqueue.h Copyright Jeff Preshing

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10. ONNX Export module

For details, see, python/mxnet/contrib/onnx/mx2onnx/LICENSE

This module is based on https://github.com/NVIDIA/mxnet\_to\_onnx/blob/master/ mx2onnx\_converter/#

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11. ONNX python bindings

#

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12. Clang

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13. FindJeMalloc.cmake For details, see cmake/Modules/FindJeMalloc.cmake

This file is based on https://github.com/STEllAR-GROUP/hpx/blob/master/cmake/ FindJemalloc.cmake

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14. FindPythonLibsNew.cmake

# Copyright 2001-2009 Kitware, Inc.

For details, see 3rdparty/onnx-tensorrt/third\_party/onnx/third\_party/pybind11/ tools/FindPythonLibsNew.cmake

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15. erfinv-inl.h
For details, see /src/operator/contrib/erfinv-inl.h
```

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```
16. mersenne.h
```

For details, see /3rdparty/nvidia\_cub/test/mersenne.h

A C-program for MT19937, with initialization improved 2002/1/26. Coded by Takuji Nishimura and Makoto Matsumoto.

\_\_\_\_\_

Before using, initialize the state by using init\_genrand(seed) or init\_by\_array(init\_key, key\_length).

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17. FindEigen3.cmake

For details, see /3rdparty/onnx-tensorrt/third party/onnx/third party/pybind11/ tools/FindEigen3.cmake

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18. protoc-gen-mypy.py

For details, see /3rdparty/onnx-tensorrt/third party/onnx/tools/protoc-gen-mypy.py

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# Taken from https://github.com/dropbox/mypy-protobuf/blob/

d984389124eae6dbbb517f766b9266bb32171510/python/protoc-gen-mypy

# (Apache 2.0 License)

- # with own fixes to
- # appease flake8
- # exit without error when protobuf isn't installed
- # fix recognition of whether an identifier is defined locally (unfortunately, we use a python package name ONNX NAMESPACE FOO BAR FOR CI on CI, which by the original protoc-gen-mypy script was recognized to be camel case and therefore handled as an entry in the local package)

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19. rang

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#### Appendix

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OSS Name	Version
accountsservice	0.6.45-1ubuntu1
acl	2.2.52-3build1
acpid	1:2.0.28-1ubuntu1
adduser	3.116ubuntu1
amd64-microcode	3.20191021.1+really3.20181128.1~ubuntu0.18.04.1
apparmor	2.12-4ubuntu5.1
apport	2.20.9-0ubuntu7.9
apport-symptoms	0.20
apt	1.6.12
apt-utils	1.6.12
at	3.1.20-3.1ubuntu2
aufs-tools	1:4.9+20170918-1ubuntu1
base-files	10.1ubuntu2.8
base-passwd	3.5.44
bash	4.4.18-2ubuntu1.2
bash-completion	1:2.8-1ubuntu1
bc	1.07.1-2
bcache-tools	1.0.8-2build1
bind9-host	1:9.11.3+dfsg-1ubuntu1.11
binutils	2.30-21ubuntu1~18.04.3
binutils-common:amd64	2.30-21ubuntu1~18.04.3
binutils-x86-64-linux-gnu	2.30-21ubuntu1~18.04.3
bridge-utils	1.5-15ubuntu1
bsdmainutils	11.1.2ubuntu1
bsdutils	1:2.31.1-0.4ubuntu3.5
btrfs-progs	4.15.1-1build1
btrfs-tools	4.15.1-1build1
build-essential	12.4ubuntu1
busybox-initramfs	1:1.27.2-2ubuntu3.2
busybox-static	1:1.27.2-2ubuntu3.2
byobu	5.125-0ubuntu1
bzip2	1.0.6-8.1ubuntu0.2
ca-certificates	20180409
cachefilesd	0.10.10-0.1ubuntu0.18.04.1
cgroupfs-mount	1.4

OSS Name	Version
cloud-guest-utils	0.30-0ubuntu5
cloud-init	19.4-33-gbb4131a2-0ubuntu1~18.04.1
cloud-initramfs-copymods	0.40ubuntu1.1
cloud-initramfs-dyn-netconf	0.40ubuntu1.1
command-not-found	18.04.5
command-not-found-data	18.04.5
console-setup	1.178ubuntu2.9
console-setup-linux	1.178ubuntu2.9
containerd.io	1.2.13-2
coreutils	8.28-1ubuntu1
сріо	2.12+dfsg-6ubuntu0.18.04.1
срр	4:7.4.0-1ubuntu2.3
срр-7	7.5.0-3ubuntu1~18.04
crash	7.2.8-1ubuntu0.18.04.1
crda	3.18-1build1
cron	3.0pl1-128.1ubuntu1
cryptsetup	2:2.0.2-1ubuntu1.1
cryptsetup-bin	2:2.0.2-1ubuntu1.1
curl	7.58.0-2ubuntu3.8
dash	0.5.8-2.10
datacenter-gpu-manager	1:1.7.2
dbus	1.12.2-1ubuntu1.1
debconf	1.5.66ubuntu1
debconf-i18n	1.5.66ubuntu1
debianutils	4.8.4
diffutils	1:3.6-1
dirmngr	2.2.4-1ubuntu1.2
distro-info-data	0.37ubuntu0.6
dmeventd	2:1.02.145-4.1ubuntu3.18.04.2
dmidecode	3.1-1
dmsetup	2:1.02.145-4.1ubuntu3.18.04.2
dns-root-data	2018013001
dnsmasq-base	2.79-1
dnsutils	1:9.11.3+dfsg-1ubuntu1.11
docker-ce	5:19.03.11~3-0~ubuntu-bionic
docker-ce-cli	5:19.03.11~3-0~ubuntu-bionic
dosfstools	4.1-1

OSS Name	Version
dpkg	1.19.0.5ubuntu2.3
dpkg-dev	1.19.0.5ubuntu2.3
dump	0.4b46-3
e2fsprogs	1.44.1-1ubuntu1.3
eatmydata	105-6
ebtables	2.0.10.4-3.5ubuntu2.18.04.3
ed	1.10-2.1
efibootmgr	15-1
eject	2.1.5+deb1+cvs20081104-13.2
ethtool	1:4.15-0ubuntu1
fakeroot	1.22-2ubuntu1
fdisk	2.31.1-0.4ubuntu3.5
file	1:5.32-2ubuntu0.3
findutils	4.6.0+git+20170828-2
fontconfig-config	2.12.6-0ubuntu2
fonts-dejavu-core	2.37-1
fonts-ubuntu-console	0.83-2
freeipmi	1.4.11-1.1ubuntu4.1
freeipmi-bmc-watchdog	1.4.11-1.1ubuntu4.1
freeipmi-common	1.4.11-1.1ubuntu4.1
freeipmi-ipmidetect	1.4.11-1.1ubuntu4.1
freeipmi-tools	1.4.11-1.1ubuntu4.1
friendly-recovery	0.2.38ubuntu1.1
ftp	0.17-34
fuse	2.9.7-1ubuntu1
g++	4:7.4.0-1ubuntu2.3
g++-7	7.5.0-3ubuntu1~18.04
gawk	1:4.1.4+dfsg-1build1
gcc	4:7.4.0-1ubuntu2.3
gcc-7	7.5.0-3ubuntu1~18.04
gcc-7-base:amd64	7.5.0-3ubuntu1~18.04
gcc-8-base:amd64	8.4.0-1ubuntu1~18.04
gdisk	1.0.3-1
geoip-database	20180315-1
gettext-base	0.19.8.1-6ubuntu0.3
gir1.2-glib-2.0:amd64	1.56.1-1
git	1:2.17.1-1ubuntu0.5

OSS Name	Version
git-man	1:2.17.1-1ubuntu0.5
gnupg	2.2.4-1ubuntu1.2
gnupg-l10n	2.2.4-1ubuntu1.2
gnupg-utils	2.2.4-1ubuntu1.2
gpg	2.2.4-1ubuntu1.2
gpg-agent	2.2.4-1ubuntu1.2
gpg-wks-client	2.2.4-1ubuntu1.2
gpg-wks-server	2.2.4-1ubuntu1.2
gpgconf	2.2.4-1ubuntu1.2
gpgsm	2.2.4-1ubuntu1.2
gpgv	2.2.4-1ubuntu1.2
grafana	7.0.3
grep	3.1-2build1
groff-base	1.22.3-10
grub-common	2.02-2ubuntu8.14
grub-efi-amd64	2.02-2ubuntu8.14
grub-efi-amd64-bin	2.02-2ubuntu8.14
grub-efi-amd64-signed	1.93.15+2.02-2ubuntu8.14
grub-legacy-ec2	1:1
grub2-common	2.02-2ubuntu8.14
gzip	1.6-5ubuntu1
hdparm	9.54+ds-1
hostname	3.20
htop	2.1.0-3
info	6.5.0.dfsg.1-2
init	1.51
init-system-helpers	1.51
initramfs-tools	0.130ubuntu3.9
initramfs-tools-bin	0.130ubuntu3.9
initramfs-tools-core	0.130ubuntu3.9
install-info	6.5.0.dfsg.1-2
intel-microcode	3.20191115.1ubuntu0.18.04.2
iproute2	4.15.0-2ubuntu1
iptables	1.6.1-2ubuntu2
iptables-persistent	1.0.4+nmu2ubuntu1
iputils-ping	3:20161105-1ubuntu3
iputils-tracepath	3:20161105-1ubuntu3

OSS Name	Version
irqbalance	1.3.0-0.1ubuntu0.18.04.1
isc-dhcp-client	4.3.5-3ubuntu7.1
isc-dhcp-common	4.3.5-3ubuntu7.1
iso-codes	3.79-1
iucode-tool	2.3.1-1
iw	4.14-0.1
kbd	2.0.4-2ubuntu1
kdump-tools	1:1.6.5-1ubuntu1~18.04.4
kexec-tools	1:2.0.16-1ubuntu1.1
keyboard-configuration	1.178ubuntu2.9
keyutils	1.5.9-9.2ubuntu2
klibc-utils	2.0.4-9ubuntu2
kmod	24-1ubuntu3.2
krb5-locales	1.16-2ubuntu0.1
landscape-common	18.01-0ubuntu3.4
language-selector-common	0.188.3
ledmon	0.90-0ubuntu1~18.04.1
less	487-0.1
libaccountsservice0:amd64	0.6.45-1ubuntu1
libacl1:amd64	2.2.52-3build1
libalgorithm-diff-perl	1.19.03-1
libalgorithm-diff-xs-perl	0.04-5
libalgorithm-merge-perl	0.08-3
libapparmor1:amd64	2.12-4ubuntu5.1
libapt-inst2.0:amd64	1.6.12
libapt-pkg5.0:amd64	1.6.12
libargon2-0:amd64	0~20161029-1.1
libasan4:amd64	7.5.0-3ubuntu1~18.04
libasn1-8-heimdal:amd64	7.5.0+dfsg-1
libassuan0:amd64	2.5.1-2
libatm1:amd64	1:2.5.1-2build1
libatomic1:amd64	8.4.0-1ubuntu1~18.04
libattr1:amd64	1:2.4.47-2build1
libaudit-common	1:2.8.2-1ubuntu1
libaudit1:amd64	1:2.8.2-1ubuntu1
libbind9-160:amd64	1:9.11.3+dfsg-1ubuntu1.11
libbinutils:amd64	2.30-21ubuntu1~18.04.3

OSS Name	Version
libblkid1:amd64	2.31.1-0.4ubuntu3.5
libbsd0:amd64	0.8.7-1ubuntu0.1
libbz2-1.0:amd64	1.0.6-8.1ubuntu0.2
libc-bin	2.27-3ubuntu1
libc-dev-bin	2.27-3ubuntu1
libc6:amd64	2.27-3ubuntu1
libc6-dev:amd64	2.27-3ubuntu1
libcap-ng0:amd64	0.7.7-3.1
libcap2:amd64	1:2.25-1.2
libcap2-bin	1:2.25-1.2
libcc1-0:amd64	8.4.0-1ubuntu1~18.04
libcilkrts5:amd64	7.5.0-3ubuntu1~18.04
libcom-err2:amd64	1.44.1-1ubuntu1.3
libcryptsetup12:amd64	2:2.0.2-1ubuntu1.1
libcurl3-gnutls:amd64	7.58.0-2ubuntu3.8
libcurl4:amd64	7.58.0-2ubuntu3.8
libdb5.3:amd64	5.3.28-13.1ubuntu1.1
libdbus-1-3:amd64	1.12.2-1ubuntu1.1
libdbus-glib-1-2:amd64	0.110-2
libdebconfclient0:amd64	0.213ubuntu1
libdevmapper-event1.02.1:amd64	2:1.02.145-4.1ubuntu3.18.04.2
libdevmapper1.02.1:amd64	2:1.02.145-4.1ubuntu3.18.04.2
libdns-export1100	1:9.11.3+dfsg-1ubuntu1.11
libdns1100:amd64	1:9.11.3+dfsg-1ubuntu1.11
libdpkg-perl	1.19.0.5ubuntu2.3
libdrm-common	2.4.99-1ubuntu1~18.04.1
libdrm2:amd64	2.4.99-1ubuntu1~18.04.1
libdumbnet1:amd64	1.12-7build1
libdw1:amd64	0.170-0.4ubuntu0.1
libeatmydata1:amd64	105-6
libedit2:amd64	3.1-20170329-1
libefiboot1:amd64	34-1
libefivar1:amd64	34-1
libelf1:amd64	0.170-0.4ubuntu0.1
liberror-perl	0.17025-1
libestr0:amd64	0.1.10-2.1
libevent-2.1-6:amd64	2.1.8-stable-4build1

OSS Name	Version
libexpat1:amd64	2.2.5-3ubuntu0.2
libext2fs2:amd64	1.44.1-1ubuntu1.3
libfakeroot:amd64	1.22-2ubuntu1
libfastjson4:amd64	0.99.8-2
libfdisk1:amd64	2.31.1-0.4ubuntu3.5
libffi6:amd64	3.2.1-8
libfile-fcntllock-perl	0.22-3build2
libfontconfig1:amd64	2.12.6-0ubuntu2
libfreeipmi16	1.4.11-1.1ubuntu4.1
libfreetype6:amd64	2.8.1-2ubuntu2
libfribidi0:amd64	0.19.7-2
libfuse2:amd64	2.9.7-1ubuntu1
libgcc-7-dev:amd64	7.5.0-3ubuntu1~18.04
libgcc1:amd64	1:8.4.0-1ubuntu1~18.04
libgcrypt20:amd64	1.8.1-4ubuntu1.2
libgdbm-compat4:amd64	1.14.1-6
libgdbm5:amd64	1.14.1-6
libgeoip1:amd64	1.6.12-1
libgirepository-1.0-1:amd64	1.56.1-1
libglib2.0-0:amd64	2.56.4-0ubuntu0.18.04.4
libglib2.0-data	2.56.4-0ubuntu0.18.04.4
libgmp10:amd64	2:6.1.2+dfsg-2
libgnutls30:amd64	3.5.18-1ubuntu1.3
libgomp1:amd64	8.4.0-1ubuntu1~18.04
libgpg-error0:amd64	1.27-6
libgpm2:amd64	1.20.7-5
libgssapi-krb5-2:amd64	1.16-2ubuntu0.1
libgssapi3-heimdal:amd64	7.5.0+dfsg-1
libhcrypto4-heimdal:amd64	7.5.0+dfsg-1
libheimbase1-heimdal:amd64	7.5.0+dfsg-1
libheimntlm0-heimdal:amd64	7.5.0+dfsg-1
libhogweed4:amd64	3.4-1
libhx509-5-heimdal:amd64	7.5.0+dfsg-1
libicu60:amd64	60.2-3ubuntu3
libidn11:amd64	1.33-2.1ubuntu1.2
libidn2-0:amd64	2.0.4-1.1ubuntu0.2

OSS Name	Version
libip6tc0:amd64	1.6.1-2ubuntu2
libipmiconsole2	1.4.11-1.1ubuntu4.1
libipmidetect0	1.4.11-1.1ubuntu4.1
libiptc0:amd64	1.6.1-2ubuntu2
libirs160:amd64	1:9.11.3+dfsg-1ubuntu1.11
libisc-export169:amd64	1:9.11.3+dfsg-1ubuntu1.11
libisc169:amd64	1:9.11.3+dfsg-1ubuntu1.11
libisccc160:amd64	1:9.11.3+dfsg-1ubuntu1.11
libisccfg160:amd64	1:9.11.3+dfsg-1ubuntu1.11
libisl19:amd64	0.19-1
libisns0:amd64	0.97-2build1
libitm1:amd64	8.4.0-1ubuntu1~18.04
libjson-c3:amd64	0.12.1-1.3
libk5crypto3:amd64	1.16-2ubuntu0.1
libkeyutils1:amd64	1.5.9-9.2ubuntu2
libklibc	2.0.4-9ubuntu2
libkmod2:amd64	24-1ubuntu3.2
libkrb5-26-heimdal:amd64	7.5.0+dfsg-1
libkrb5-3:amd64	1.16-2ubuntu0.1
libkrb5support0:amd64	1.16-2ubuntu0.1
libksba8:amd64	1.3.5-2
libldap-2.4-2:amd64	2.4.45+dfsg-1ubuntu1.4
libldap-common	2.4.45+dfsg-1ubuntu1.4
liblocale-gettext-perl	1.07-3build2
liblsan0:amd64	8.4.0-1ubuntu1~18.04
libltdl7:amd64	2.4.6-2
liblvm2app2.2:amd64	2.02.176-4.1ubuntu3.18.04.2
liblvm2cmd2.02:amd64	2.02.176-4.1ubuntu3.18.04.2
liblwres160:amd64	1:9.11.3+dfsg-1ubuntu1.11
liblxc-common	3.0.3-0ubuntu1~18.04.1
liblxc1	3.0.3-0ubuntu1~18.04.1
liblz4-1:amd64	0.0~r131-2ubuntu3
liblzma5:amd64	5.2.2-1.3
liblzo2-2:amd64	2.08-1.2
libmagic-mgc	1:5.32-2ubuntu0.3
libmagic1:amd64	1:5.32-2ubuntu0.3
libmnl0:amd64	1.0.4-2

OSS Name	Version
libmount1:amd64	2.31.1-0.4ubuntu3.5
libmpc3:amd64	1.1.0-1
libmpdec2:amd64	2.4.2-1ubuntu1
libmpfr6:amd64	4.0.1-1
libmpx2:amd64	8.4.0-1ubuntu1~18.04
libmspack0:amd64	0.6-3ubuntu0.3
libncurses5:amd64	6.1-1ubuntu1.18.04
libncursesw5:amd64	6.1-1ubuntu1.18.04
libnetfilter-conntrack3:amd64	1.0.6-2
libnettle6:amd64	3.4-1
libnewt0.52:amd64	0.52.20-1ubuntu1
libnfnetlink0:amd64	1.0.1-3
libnfsidmap2:amd64	0.25-5.1
libnghttp2-14:amd64	1.30.0-1ubuntu1
libnih1:amd64	1.0.3-6ubuntu2
libnl-3-200:amd64	3.2.29-0ubuntu3
libnl-genl-3-200:amd64	3.2.29-0ubuntu3
libnpth0:amd64	1.5-3
libnss-systemd:amd64	237-3ubuntu10.33
libntfs-3g88	1:2017.3.23-2ubuntu0.18.04.2
libnuma1:amd64	2.0.11-2.1ubuntu0.1
libnvidia-container-tools	1.1.1-1
libnvidia-container1:amd64	1.1.1-1
libopenipmi0	2.0.22-1.1ubuntu2.1
libp11-kit0:amd64	0.23.9-2
libpam-cap:amd64	1:2.25-1.2
libpam-modules:amd64	1.1.8-3.6ubuntu2.18.04.1
libpam-modules-bin	1.1.8-3.6ubuntu2.18.04.1
libpam-runtime	1.1.8-3.6ubuntu2.18.04.1
libpam-systemd:amd64	237-3ubuntu10.33
libpam0g:amd64	1.1.8-3.6ubuntu2.18.04.1
libparted2:amd64	3.2-20ubuntu0.2
libpcap0.8:amd64	1.8.1-6ubuntu1.18.04.1
libpci-dev	1:3.5.2-1ubuntu1.1
libpci3:amd64	1:3.5.2-1ubuntu1.1
libpcre3:amd64	2:8.39-9
libperI5.26:amd64	5.26.1-6ubuntu0.3

OSS Name	Version
libpipeline1:amd64	1.5.0-1
libplymouth4:amd64	0.9.3-1ubuntu7.18.04.2
libpng16-16:amd64	1.6.34-1ubuntu0.18.04.2
libpolkit-agent-1-0:amd64	0.105-20ubuntu0.18.04.5
libpolkit-backend-1-0:amd64	0.105-20ubuntu0.18.04.5
libpolkit-gobject-1-0:amd64	0.105-20ubuntu0.18.04.5
libpopt0:amd64	1.16-11
libprocps6:amd64	2:3.3.12-3ubuntu1.2
libpsI5:amd64	0.19.1-5build1
libpython3-stdlib:amd64	3.6.7-1~18.04
libpython3.6:amd64	3.6.9-1~18.04
libpython3.6-minimal:amd64	3.6.9-1~18.04
libpython3.6-stdlib:amd64	3.6.9-1~18.04
libquadmath0:amd64	8.4.0-1ubuntu1~18.04
libreadline5:amd64	5.2+dfsg-3build1
libreadline7:amd64	7.0-3
libroken18-heimdal:amd64	7.5.0+dfsg-1
librtmp1:amd64	2.4+20151223.gitfa8646d.1-1
libsasl2-2:amd64	2.1.27~101-g0780600+dfsg-3ubuntu2.1
libsasl2-modules:amd64	2.1.27~101-g0780600+dfsg-3ubuntu2.1
libsasl2-modules-db:amd64	2.1.27~101-g0780600+dfsg-3ubuntu2.1
libseccomp2:amd64	2.4.1-0ubuntu0.18.04.2
libselinux1:amd64	2.7-2build2
libsemanage1:amd64	2.7-2build2
libsemanage-common	2.7-2build2
libsensors4:amd64	1:3.4.0-4
libsensors4-dev	1:3.4.0-4
libsepol1:amd64	2.7-1
libsgutils2-2	1.42-2ubuntu1.18.04.2
libsigsegv2:amd64	2.12-1
libslang2:amd64	2.3.1a-3ubuntu1
libsmartcols1:amd64	2.31.1-0.4ubuntu3.5
libsnappy1v5:amd64	1.1.7-1
libsnmp-base	5.7.3+dfsg-1.8ubuntu3.3
libsnmp-dev	5.7.3+dfsg-1.8ubuntu3.3
libsnmp30:amd64	5.7.3+dfsg-1.8ubuntu3.3
libsqlite3-0:amd64	3.22.0-1ubuntu0.2

OSS Name	Version
libss2:amd64	1.44.1-1ubuntu1.3
libssl-dev:amd64	1.1.1-1ubuntu2.1~18.04.6
libssl1.0.0:amd64	1.0.2n-1ubuntu5.3
libssl1.1:amd64	1.1.1-1ubuntu2.1~18.04.6
libstdc++-7-dev:amd64	7.5.0-3ubuntu1~18.04
libstdc++6:amd64	8.4.0-1ubuntu1~18.04
libsystemd0:amd64	237-3ubuntu10.33
libtasn1-6:amd64	4.13-2
libtext-charwidth-perl	0.04-7.1
libtext-iconv-perl	1.7-5build6
libtext-wrapi18n-perl	0.06-7.1
libtinfo5:amd64	6.1-1ubuntu1.18.04
libtirpc1:amd64	0.2.5-1.2ubuntu0.1
libtsan0:amd64	8.4.0-1ubuntu1~18.04
libubsan0:amd64	7.5.0-3ubuntu1~18.04
libudev-dev:amd64	237-3ubuntu10.41
libudev1:amd64	237-3ubuntu10.41
libunistring2:amd64	0.9.9-0ubuntu2
libunwind8:amd64	1.2.1-8
libusb-1.0-0:amd64	2:1.0.21-2
libutempter0:amd64	1.1.6-3
libuuid1:amd64	2.31.1-0.4ubuntu3.5
libuv1:amd64	1.18.0-3
libwind0-heimdal:amd64	7.5.0+dfsg-1
libwrap0:amd64	7.6.q-27
libwrap0-dev:amd64	7.6.q-27
libx11-6:amd64	2:1.6.4-3ubuntu0.2
libx11-data	2:1.6.4-3ubuntu0.2
libxau6:amd64	1:1.0.8-1
libxcb1:amd64	1.13-2~ubuntu18.04
libxdmcp6:amd64	1:1.1.2-3
libxext6:amd64	2:1.3.3-1
libxml2:amd64	2.9.4+dfsg1-6.1ubuntu1.2
libxmlsec1:amd64	1.2.25-1build1
libxmlsec1-openssl:amd64	1.2.25-1build1
libxmuu1:amd64	2:1.1.2-2
libxslt1.1:amd64	1.1.29-5ubuntu0.2

libxtables12:amd64 1	
	1.6.1-2ubuntu2
libyaml-0-2:amd64 0	0.1.7-2ubuntu3
libzstd1:amd64 1	1.3.3+dfsg-2ubuntu1.1
linux-base 4	4.5ubuntu1
linux-crashdump 4	4.15.0.106.94
linux-firmware 1	1.173.14
linux-generic 4	4.15.0.76.78
linux-headers-4.15.0-76 4	4.15.0-76.86
linux-headers-4.15.0-76-generic 4	4.15.0-76.86
linux-headers-generic 4	4.15.0.76.78
linux-image-4.15.0-76-generic 4	4.15.0-76.86
linux-image-generic 4	4.15.0.76.78
linux-libc-dev:amd64 4	4.15.0-106.107
linux-modules-4.15.0-76-generic 4	4.15.0-76.86
linux-modules-extra-4.15.0-76-generic 4	4.15.0-76.86
locales 2	2.27-3ubuntu1
login 1	1:4.5-1ubuntu2
logrotate 3	3.11.0-0.1ubuntu1
lsb-base 9	9.20170808ubuntu1
lsb-release 9	9.20170808ubuntu1
lshw 0	02.18-0.1ubuntu6.18.04.1
lsof 4	4.89+dfsg-0.1
ltrace 0	0.7.3-6ubuntu1
lvm2 2	2.02.176-4.1ubuntu3.18.04.2
lxcfs 3	3.0.3-0ubuntu1~18.04.1
lxd 3	3.0.3-0ubuntu1~18.04.1
lxd-client 3	3.0.3-0ubuntu1~18.04.1
make 4	4.1-9.1ubuntu1
makedumpfile 1	1:1.6.5-1ubuntu1~18.04.4
man-db 2	2.8.3-2ubuntu0.1
manpages 4	4.15-1
manpages-dev 4	4.15-1
mawk 1	1.3.3-17ubuntu3
mdadm 4	4.1~rc1-3~ubuntu18.04.4
mime-support 3	3.60ubuntu1
mlocate 0	0.26-2ubuntu3.1
mokutil 0	0.3.0+1538710437.fb6250f-0ubuntu2~18.04.1

mount231.10.4ubuntu3.5mt-tiny0.92.1multarch-support2.27.3ubuntu1nano2.9.3-2ncurses-base6.1-1ubuntu1.8.04ncurses-base6.1-1ubuntu1.8.04ncurses-bin6.1-1ubuntu1.18.04ncurses-bin1.60+git20161116.90da8a0-1ubuntu1neth-tools1.60+git20161116.90da8a0-1ubuntu1neth-tools1.60+git20161116.90da8a0-1ubuntu1neth-tools1.60+git20161116.90da8a0-1ubuntu1neth-tools1.87-1ubuntu0.1neth-tools0.98-0ubuntu1-18.04.1neth-tools1.3.4-2.1ubuntu0.1neth-tools1.3.4-2.1ubuntu5.2neth-dispatcher1.3.4-2.1ubuntu0.18.04.2nfs-common1.3.4-2.1ubuntu0.18.04.2ndia-containe-toolkit1.2-1open-wr-tools2.024-1.1ubuntu0.18.04.2open-wr-tools2.024-1.1ubuntu0.18.04.2opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.7.6p1-4ubuntu0.3opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2opensh-dient1.5-2	OSS Name	Version
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rhfs-3g         1:2017.3.23-2ubuntu0.18.04.2           nvidia-container-toolkit         1.1.2-1           open-iscsi         2.0.874-5ubuntu2.7           open-vm-tools         2:11.0.1-2ubuntu0.18.04.2           openiprimi         2.0.22-1.1ubuntu2.1           openssh-client         1:7.6p1-4ubuntu0.3           openssh-server         1:7.6p1-4ubuntu0.3           openssh-stpp-server         1:7.6p1-4ubuntu0.3           openssh         1:7.6p1-4ubuntu0.3           openssh-stpp-server         1:7.6p1-4ubuntu0.3           openssh         1:7.6p1-4ubuntu0.3           openssh         1:7.6p1-4ubuntu0.3           openssh         1:7.6p1-4ubuntu0.3           openssh         1:4.1-1ubuntu2.1~18.04.5           os-prober         1:4.1-1ubuntu2.1~18.04.5           overlayroot         0.40ubuntu1.1           overlayroot         0.40ubuntu1.1           pated         3.2-20ubuntu0.2           passwd         1.5-2           patch         1.5-2           patch         1.5.2-1ubuntu1.1           perl-base         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           pipar         5.26.1-6ubuntu0.3 </td <td>nfs-common</td> <td>1:1.3.4-2.1ubuntu5.2</td>	nfs-common	1:1.3.4-2.1ubuntu5.2
nvidia-container-toolkit         1.1.2-1           open-iscsi         2.0.874-5ubuntu2.7           open-vm-tools         2:11.0.1-2ubuntu0.18.04.2           openipmi         2.0.22-1.1ubuntu2.1           openssh-client         1:7.6p1-4ubuntu0.3           openssh-server         1:7.6p1-4ubuntu0.3           openssh-server         1:7.6p1-4ubuntu0.3           openssh-server         1:7.6p1-4ubuntu0.3           openssh         1.1.1-1ubuntu2.1×18.04.5           ose-prober         1.74ubuntu1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1:5-2           patch         2:7.6-2ubuntu1.1           perl-base         5.26.1-6ubuntu0.3           perl-hase         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2:4-1           pinentry-curses         1:1.0-1	nplan	0.98-0ubuntu1~18.04.1
open-iscsi         2.0.874-5ubuntu2.7           open-vm-tools         2.11.0.1-2ubuntu0.18.04.2           openipmi         2.0.22-1.1ubuntu2.1           openssh-client         17.6p1-4ubuntu0.3           openssh-server         17.6p1-4ubuntu0.3           openssh-server         17.6p1-4ubuntu0.3           openssh-server         17.6p1-4ubuntu0.3           openssh-server         17.6p1-4ubuntu0.3           openssh-server         1.7.6p1-4ubuntu0.3           openssh-server         1.7.6p1-4ubuntu0.3           openssh-server         1.7.6p1-4ubuntu0.3           openssh-server         1.7.6p1-4ubuntu0.3           openssh-server         1.7.6p1-4ubuntu0.3           openssh-server         1.7.4ubuntu1.1           overlayroot         0.40ubuntu1.1           overlayroot         0.40ubuntu1.1           pated         3.2-20ubuntu0.2           passwd         1.5-2           patch         1.5-2           patch         1.5.2           perl-base         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pijz         2.4.1           pinentry-curses         1.0-1	ntfs-3g	1:2017.3.23-2ubuntu0.18.04.2
open-vm-tools         2:11.0.1-2ubuntu0.18.04.2           openipmi         2.0.22-1.1ubuntu2.1           openssh-client         1:7.6p1-4ubuntu0.3           openssh-server         1:7.6p1-4ubuntu0.3           openssh-sftp-server         1:7.6p1-4ubuntu0.3           openssh-sftp-server         1:7.6p1-4ubuntu0.3           openssh-sftp-server         1:7.6p1-4ubuntu0.3           openssh         1:1.1ubuntu2.1~18.04.5           os-prober         1.74ubuntu1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           patebinit         1.5-2           patch         2.7.6-2ubuntu1.1           peiluils         1:3.5.2-1ubuntu1.1           peiluils         1:3.5.2-1ubuntu1.1           peiluils         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           pigz         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.10-1	nvidia-container-toolkit	1.1.2-1
openipmi         2.0.22-1.1ubuntu2.1           openssh-client         1:7.6p1-4ubuntu0.3           openssh-server         1:7.6p1-4ubuntu0.3           openssh-sftp-server         1:7.6p1-4ubuntu0.3           openssl         1:7.6p1-4ubuntu0.3           openssl         1:1.1-1ubuntu2.1~18.04.5           os-prober         0.40ubuntu1.1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           patebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	open-iscsi	2.0.874-5ubuntu2.7
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openssh-server         1:7.6p1-4ubuntu0.3           openssh-sftp-server         1:7.6p1-4ubuntu0.3           openssl         1.1.1-1ubuntu2.1~18.04.5           os-prober         1.74ubuntu1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	openipmi	2.0.22-1.1ubuntu2.1
openssh-sftp-server         1:7.6p1-4ubuntu0.3           openssl         1.1.1-1ubuntu2.1~18.04.5           os-prober         1.74ubuntu1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	openssh-client	1:7.6p1-4ubuntu0.3
openssl         1.1.1-1ubuntu2.1~18.04.5           os-prober         1.74ubuntu1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	openssh-server	1:7.6p1-4ubuntu0.3
os-prober         1.74ubuntu1           overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.10-1	openssh-sftp-server	1:7.6p1-4ubuntu0.3
overlayroot         0.40ubuntu1.1           parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	openssl	1.1.1-1ubuntu2.1~18.04.5
parted         3.2-20ubuntu0.2           passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	os-prober	1.74ubuntu1
passwd         1:4.5-1ubuntu2           pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	overlayroot	0.40ubuntu1.1
pastebinit         1.5-2           patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	parted	3.2-20ubuntu0.2
patch         2.7.6-2ubuntu1.1           pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	passwd	1:4.5-1ubuntu2
pciutils         1:3.5.2-1ubuntu1.1           perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	pastebinit	1.5-2
perl         5.26.1-6ubuntu0.3           perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	patch	2.7.6-2ubuntu1.1
perl-base         5.26.1-6ubuntu0.3           perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	pciutils	1:3.5.2-1ubuntu1.1
perl-modules-5.26         5.26.1-6ubuntu0.3           pigz         2.4-1           pinentry-curses         1.1.0-1	perl	5.26.1-6ubuntu0.3
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pinentry-curses 1.1.0-1	perl-modules-5.26	5.26.1-6ubuntu0.3
	pigz	2.4-1
plymouth 0.9.3-1ubuntu7.18.04.2	pinentry-curses	1.1.0-1
	plymouth	0.9.3-1ubuntu7.18.04.2

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plymouth-theme-ubuntu-text	0.9.3-1ubuntu7.18.04.2
policykit-1	0.105-20ubuntu0.18.04.5
pollinate	4.33-0ubuntu1~18.04.1
popularity-contest	1.66ubuntu1
powermgmt-base	1.33
procps	2:3.3.12-3ubuntu1.2
psmisc	23.1-1ubuntu0.1
publicsuffix	20180223.1310-1
python-apt-common	1.6.5ubuntu0.2
python3	3.6.7-1~18.04
python3-apport	2.20.9-0ubuntu7.9
python3-apt	1.6.5ubuntu0.2
python3-asn1crypto	0.24.0-1
python3-attr	17.4.0-2
python3-automat	0.6.0-1
python3-blinker	1.4+dfsg1-0.1
python3-certifi	2018.1.18-2
python3-cffi-backend	1.11.5-1
python3-chardet	3.0.4-1
python3-click	6.7-3
python3-colorama	0.3.7-1
python3-commandnotfound	18.04.5
python3-configobj	5.0.6-2
python3-constantly	15.1.0-1
python3-cryptography	2.1.4-1ubuntu1.3
python3-dbus	1.2.6-1
python3-debconf	1.5.66ubuntu1
python3-debian	0.1.32
python3-distro-info	0.18ubuntu0.18.04.1
python3-distupgrade	1:18.04.37
python3-gdbm:amd64	3.6.9-1~18.04
python3-gi	3.26.1-2ubuntu1
python3-httplib2	0.9.2+dfsg-1ubuntu0.1
python3-hyperlink	17.3.1-2
python3-idna	2.6-1
python3-incremental	16.10.1-3
python3-jinja2	2.10-1ubuntu0.18.04.1

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python3-json-pointer	1.10-1
python3-jsonpatch	1.19+really1.16-1fakesync1
python3-jsonschema	2.6.0-2
python3-jwt	1.5.3+ds1-1
python3-markupsafe	1.0-1build1
python3-minimal	3.6.7-1~18.04
python3-netifaces	0.10.4-0.1build4
python3-newt:amd64	0.52.20-1ubuntu1
python3-oauthlib	2.0.6-1
python3-openssl	17.5.0-1ubuntu1
python3-pam	0.4.2-13.2ubuntu4
python3-pkg-resources	39.0.1-2
python3-problem-report	2.20.9-0ubuntu7.9
python3-pyasn1	0.4.2-3
python3-pyasn1-modules	0.2.1-0.2
python3-requests	2.18.4-2ubuntu0.1
python3-requests-unixsocket	0.1.5-3
python3-serial	3.4-2
python3-service-identity	16.0.0-2
python3-six	1.11.0-2
python3-software-properties	0.96.24.32.12
python3-systemd	234-1build1
python3-twisted	17.9.0-2
python3-twisted-bin:amd64	17.9.0-2
python3-update-manager	1:18.04.11.10
python3-urllib3	1.22-1ubuntu0.18.04.1
python3-yaml	3.12-1build2
python3-zope.interface	4.3.2-1build2
python3.6	3.6.9-1~18.04
python3.6-minimal	3.6.9-1~18.04
readline-common	7.0-3
rpcbind	0.2.3-0.6
rsync	3.1.2-2.1ubuntu1
rsyslog	8.32.0-1ubuntu4
run-one	1.17-0ubuntu1
sbsigntool	0.6-3.2ubuntu2
screen	4.6.2-1ubuntu1

secureboot.db1.4-ubuntu0.18.04.1sed4.42sensible-utils0.0.12shared-mine-info1.9-2shim-signed1.5-1533136590.3beb971-0ubuntu1shim-signed1.5-1533136590.3beb971-0ubuntu1smartmontols6.5+svr4324-1snapd2.42.1+18.04sorkpare-properties-common0.96.24.32.12sosteport3.6-1ubuntu0.18.04.4squashf-tools1.4.3-6ubuntu0.18.04.4squashf-tools3.7-0ubuntu1.1stare2.7-0ubuntu1.1systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.70ubuntu1.2systemd-sporties-common2.70ubuntu1.1systemd-sporties-common2.88ds/59.10ubuntu1systemd-sporties-common2.88ds/59.10ubuntu1systemd-sporties-common2.88ds/59.10ubuntu1tare1.20-5ubuntu5tare1.72.5ubilf1turus2.6-3ubuntu0.2time1.72.5ubilf1turus2.6-3ubuntu0.18.04.1ubuntu-reling1.417.4ubuntu-sporter1.818.04.37ubuntu-sporter1.818.04.37ubuntu-sporter1.818.04.37ubuntu-sporter3.73ubuntu0.18.04.1ubuntu-sporter1.417.4ubuntu-sporter1.417.4ubuntu-sporter3.7	OSS Name	Version
sensible-utils0.0.12shared-mime-info1.9-2shim15×1533136590.3beb971-0ubuntu1shim-signed1.37~18.04.3×15×1533136590.3beb971-0ubuntu1smartmontools6.5×sm4324-1snapd2.42.1×18.04sortware-properties-common0.62.4.32.12sortware-properties-common3.6-1ubuntu.18.04.4squashfs-tools3.6-1ubuntu.18.04.1squashfs-tools1.4.3-6ubuntu.18.04.1squashfs-tools2.12-1ubuntu1sudo1.8.21p2-3ubuntu.12systend2.37-3ubuntu1.0.33systend-sysv237-3ubuntu1.0.33systend-sysv237-3ubuntu1.0.3systend-sysv2.848f-59.10ubuntu1tar1.29b-2ubuntu0.1topdump4.9.3-0ubuntu1.8.04.1teinet0.17-41thrmadid1.70-subuntu0.18.04.1time2.6-3ubuntu0.2tuntu-advantage-tools17ubuntu-seyring2.18.04.37ubuntu-server1.417.4ubuntu-server1.417.4ubuntu-server3.038udw3.038udw3.0308udw3.0308udw3.0308udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw3.03008udw <td>secureboot-db</td> <td>1.4~ubuntu0.18.04.1</td>	secureboot-db	1.4~ubuntu0.18.04.1
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unzip 6.0-21ubuntu1	uidmap	1:4.5-1ubuntu2
	unattended-upgrades	1.1ubuntu1.18.04.13
update-manager-core 1:18.04.11.10	unzip	6.0-21ubuntu1
	update-manager-core	1:18.04.11.10

OSS Name	Version
update-notifier-common	3.192.1.7
ureadahead	0.100.0-21
usbutils	1:007-4build1
util-linux	2.31.1-0.4ubuntu3.5
uuid-runtime	2.31.1-0.4ubuntu3.5
vim	2:8.0.1453-1ubuntu1.1
vim-common	2:8.0.1453-1ubuntu1.1
vim-runtime	2:8.0.1453-1ubuntu1.1
vim-tiny	2:8.0.1453-1ubuntu1.1
wget	1.19.4-1ubuntu2.2
whiptail	0.52.20-1ubuntu1
wireless-regdb	2018.05.09-0ubuntu1~18.04.1
xauth	1:1.0.10-1
xdelta3	3.0.11-dfsg-1ubuntu1
xdg-user-dirs	0.17-1ubuntu1
xfsprogs	4.9.0+nmu1ubuntu2
xkb-data	2.23.1-1ubuntu1.18.04.1
xxd	2:8.0.1453-1ubuntu1.1
xz-utils	5.2.2-1.3
zerofree	1.0.4-1
zlib1g:amd64	1:1.2.11.dfsg-0ubuntu2
zlib1g-dev:amd64	1:1.2.11.dfsg-0ubuntu2
# Appendix

The terms and conditions of the licenses for the following NVIDIA products are described here.

- Tesla Driver for Linux x64 440.64.00 END USER LICENSE AGREEMENTS (EULA)
- cudnn 8.0.1
   NVIDIA SOFTWARE LICENSE AGREEMENT



# END USER LICENSE AGREEMENTS (EULA)

DR-06739-001\_v01\_v11.0 | June 2020



# PREFACE

The Software License Agreement in Chapter 1 and the Supplement in Chapter 2 contain license terms and conditions that govern the use of NVIDIA software. By accepting this agreement, you agree to comply with all the terms and conditions applicable to the product(s) included herein.

#### **NVIDIA Driver**

#### Description

This package contains the operating system driver and fundamental system software components for NVIDIA GPUs.

#### NVIDIA CUDA Toolkit

#### Description

The NVIDIA CUDA Toolkit provides command-line and graphical tools for building, debugging and optimizing the performance of applications accelerated by NVIDIA GPUs, runtime and math libraries, and documentation including programming guides, user manuals, and API references.

#### Default Install Location of CUDA Toolkit

Windows platform: %ProgramFiles%\NVIDIA GPU Computing Toolkit\CUDA\v#.# Linux platform:

/usr/local/cuda-#.#

#### Mac platform: /Developer/NVIDIA/CUDA-#.#

### NVIDIA CUDA Samples

#### Description

This package includes over 100+ CUDA examples that demonstrate various CUDA programming principles, and efficient CUDA implementation of algorithms in specific application domains.

#### Default Install Location of CUDA Samples

Windows platform: %ProgramData%\NVIDIA Corporation\CUDA Samples\v#.# Linux platform: /usr/local/cuda-#.#/samples and \$HOME/NVIDIA\_CUDA-#.#\_Samples Mac platform: /Developer/NVIDIA/CUDA-#.#/samples

### NVIDIA Nsight Visual Studio Edition (Windows only)

#### Description

NVIDIA Nsight Development Platform, Visual Studio Edition is a development environment integrated into Microsoft Visual Studio that provides tools for debugging, profiling, analyzing and optimizing your GPU computing and graphics applications.

#### Default Install Location of Nsight Visual Studio Edition

#### Windows platform:

%ProgramFiles(x86)%\NVIDIA Corporation\Nsight Visual Studio Edition #.#

Preface

# Chapter 1. LICENSE AGREEMENT FOR NVIDIA SOFTWARE DEVELOPMENT KITS

Release date: January 28, 2020

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Each SDK has its own set of software and materials, but here is a description of the types of items that may be included in a SDK: source code, header files, APIs, data sets and assets (examples include images, textures, models, scenes, videos, native API input/ output files), binary software, sample code, libraries, utility programs, programming code and documentation.

This Agreement can be accepted only by an adult of legal age of majority in the country in which the SDK is used.

If you are entering into this Agreement on behalf of a company or other legal entity, you represent that you have the legal authority to bind the entity to this Agreement, in which case "you" will mean the entity you represent.

If you don't have the required age or authority to accept this Agreement, or if you don't accept all the terms and conditions of this Agreement, do not download, install or use the SDK.

You agree to use the SDK only for purposes that are permitted by (a) this Agreement, and (b) any applicable law, regulation or generally accepted practices or guidelines in the relevant jurisdictions.

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- 2. Modify and create derivative works of sample source code delivered in the SDK, and
- 3. Distribute those portions of the SDK that are identified in this Agreement as distributable, as incorporated in object code format into a software application that meets the distribution requirements indicated in this Agreement.

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These are the distribution requirements for you to exercise the distribution grant:

- 1. Your application must have material additional functionality, beyond the included portions of the SDK.
- 2. The distributable portions of the SDK shall only be accessed by your application.
- 3. The following notice shall be included in modifications and derivative works of sample source code distributed: "This software contains source code provided by NVIDIA Corporation."
- 4. Unless a developer tool is identified in this Agreement as distributable, it is delivered for your internal use only.
- 5. The terms under which you distribute your application must be consistent with the terms of this Agreement, including (without limitation) terms relating to the license grant and license restrictions and protection of NVIDIA's intellectual property rights. Additionally, you agree that you will protect the privacy, security and legal rights of your application users.
- 6. You agree to notify NVIDIA in writing of any known or suspected distribution or use of the SDK not in compliance with the requirements of this Agreement, and to enforce the terms of your agreements with respect to distributed SDK.

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- 2. If you want to terminate this Agreement, you may do so by stopping to use the SDK.
- 3. NVIDIA may, at any time, terminate this Agreement if:
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  - c. (iii) NVIDIA decides to no longer provide the SDK in a country or, in NVIDIA's sole discretion, the continued use of it is no longer commercially viable.
- 4. Upon any termination of this Agreement, you agree to promptly discontinue use of the SDK and destroy all copies in your possession or control. Your prior distributions in accordance with this Agreement are not affected by the termination of this Agreement. Upon written request, you will certify in writing that you have complied with your commitments under this section. Upon any termination of this Agreement all provisions survive except for the license grant provisions.

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If any court of competent jurisdiction determines that any provision of this Agreement is illegal, invalid or unenforceable, such provision will be construed as limited to the extent necessary to be consistent with and fully enforceable under the law and the remaining provisions will remain in full force and effect. Unless otherwise specified, remedies are cumulative.

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# Chapter 2. CUDA TOOLKIT SUPPLEMENT TO SOFTWARE LICENSE AGREEMENT FOR NVIDIA SOFTWARE DEVELOPMENT KITS

#### Release date: January 28, 2020

The terms in this supplement govern your use of the NVIDIA CUDA Toolkit SDK under the terms of your license agreement ("Agreement") as modified by this supplement. Capitalized terms used but not defined below have the meaning assigned to them in the Agreement.

This supplement is an exhibit to the Agreement and is incorporated as an integral part of the Agreement. In the event of conflict between the terms in this supplement and the terms in the Agreement, the terms in this supplement govern.

#### 2.1. License Scope

The SDK is licensed for you to develop applications only for use in systems with NVIDIA GPUs.

#### 2.2. Distribution

The portions of the SDK that are distributable under the Agreement are listed in Attachment A.

#### 2.3. Operating Systems

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Agreement, provided that the object code files are not modified in any way (except for unzipping of compressed files).

### 2.4. Audio and Video Encoders and Decoders

You acknowledge and agree that it is your sole responsibility to obtain any additional third-party licenses required to make, have made, use, have used, sell, import, and offer for sale your products or services that include or incorporate any third-party software and content relating to audio and/or video encoders and decoders from, including but not limited to, Microsoft, Thomson, Fraunhofer IIS, Sisvel S.p.A., MPEG-LA, and Coding Technologies. NVIDIA does not grant to you under this Agreement any necessary patent or other rights with respect to any audio and/or video encoders and decoders.

### 2.5. Licensing

If the distribution terms in this Agreement are not suitable for your organization, or for any questions regarding this Agreement, please contact NVIDIA at nvidia-compute-license-questions@nvidia.com.

### 2.6. Attachment A

The following portions of the SDK are distributable under the Agreement:

Component	CUDA Runtime
Windows	cudart.dll, cudart_static.lib, cudadevrt.lib
Mac OSX	libcudart.dylib, libcudart_static.a, libcudadevrt.a
Linux	libcudart.so, libcudart_static.a, libcudadevrt.a
Android	libcudart.so, libcudart_static.a, libcudadevrt.a
Component	CUDA FFT Library
Windows	cufft.dll, cufftw.dll, cufft.lib, cufftw.lib
Mac OSX	libcufft.dylib, libcufft_static.a, libcufftw.dylib, libcufftw_static.a
Linux	libcufft.so, libcufft_static.a, libcufftw.so, libcufftw_static.a
Android	libcufft.so, libcufft_static.a, libcufftw.so, libcufftw_static.a
Component	CUDA BLAS Library

Windows	cublas.dll, cublasLt.dll
Nac OSX	libcublas.dylib, libcublasLt.dylib,
	libcublas_static.a, libcublasLt_static.a
Linux	libcublas.so, libcublasLt.so, libcublas_static.a,
	libcublasLt_static.a
Android	libcublas.so, libcublasLt.so, libcublas_static.a, libcublasLt static.a
Component	NVIDIA "Drop-in" BLAS Library
Windows	nvblas.dll
Mac OSX	libnvblas.dylib
Linux	libnvblas.so
Component	CUDA Sparse Matrix Library
Windows	cusparse.dll, cusparse.lib
Mac OSX	libcusparse.dylib, libcusparse_static.a
Linux	libcusparse.so, libcusparse_static.a
Android	libcusparse.so, libcusparse_static.a
Component	CUDA Linear Solver Library
Windows	cusolver.dll, cusolver.lib
Mac OSX	libcusolver.dylib, libcusolver_static.a
Linux	libcusolver.so, libcusolver_static.a
Android	libcusolver.so, libcusolver_static.a
Component	CUDA Random Number Generation Library
Windows	curand.dll, curand.lib
Mac OSX	libcurand.dylib, libcurand_static.a
Linux	libcurand.so, libcurand_static.a
Android	libcurand.so, libcurand_static.a
Component	NVIDIA Performance Primitives Library
Windows	nppc.dll, nppc.lib, nppial.dll, nppial.lib, nppicc.dll, nppicc.lib, nppicom.dll, nppicom.lib, nppidei.dll, nppidei.lib, nppif.dll, nppif.lib, nppig.dll, nppig.lib, nppim.dll, nppim.lib,

#### CUDA Toolkit Supplement to Software License Agreement for NVIDIA Software Development Kits

	nppist.dll, nppist.lib, nppisu.dll, nppisu.lib, nppitc.dll, nppitc.lib, npps.dll, npps.lib
Mac OSX	libnppc.dylib, libnppc_static.a, libnppial.dylib, libnppial_static.a, libnppicc.dylib, libnppicc_static.a, libnppicom.dylib, libnppicom_static.a, libnppidei.dylib, libnppidei_static.a, libnppif.dylib, libnppif_static.a, libnppig.dylib, libnppig_static.a, libnppim.dylib, libnppisu_static.a, libnppitc.dylib, libnppitc_static.a, libnpps.dylib, libnpps_static.a
Linux	<pre>libnppc.so, libnppc_static.a, libnppial.so, libnppial_static.a, libnppicc.so, libnppicc_static.a, libnppicom.so, libnppicom_static.a, libnppidei.so, libnppidei_static.a, libnppif.so, libnppif_static.a libnppig.so, libnppig_static.a, libnppim.so, libnppim_static.a, libnppist.so, libnppist_static.a, libnppisu.so, libnppisu_static.a, libnppitc.so libnppitc_static.a, libnpps.so, libnpps_static.a</pre>
Android	libnppc.so, libnppc_static.a, libnppial.so, libnppial_static.a, libnppicc.so, libnppicc_static.a, libnppicom.so, libnppicom_static.a, libnppidei.so, libnppidei_static.a, libnppif.so, libnppif_static.a libnppig.so, libnppig_static.a, libnppim.so, libnppim_static.a, libnppist.so, libnppist_static.a, libnppisu.so, libnppisu_static.a, libnppitc.so libnppitc_static.a, libnpps.so, libnpps_static.a
Component	NVIDIA JPEG Library
Linux	libnvjpeg.so, libnvjpeg_static.a
Component	Internal common library required for statically linking to cuBLAS, cuSPARSE, cuFFT, cuRAND, nvJPEG and NPP
Mac OSX	libculibos.a
Linux	libculibos.a
Component	NVIDIA Runtime Compilation Library and Header
All	nvrtc.h
Windows	nvrtc.dll, nvrtc-builtins.dll
Mac OSX	libnvrtc.dylib, libnvrtc-builtins.dylib

Linux	libnvrtc.so, libnvrtc-builtins.so
Component	NVIDIA Optimizing Compiler Library
Windows	nvvm.dll
Mac OSX	libnvvm.dylib
Linux	libnvvm.so
Component	NVIDIA Common Device Math Functions Library
Windows	libdevice.10.bc
Mac OSX	libdevice.10.bc
Linux	libdevice.10.bc
Component	CUDA Occupancy Calculation Header Library
All	cuda_occupancy.h
Component	CUDA Half Precision Headers
All	cuda_fp16.h, cuda_fp16.hpp
Component	CUDA Profiling Tools Interface (CUPTI) Library
Windows	cupti.dll
Mac OSX	libcupti.dylib
Linux	libcupti.so
Component	NVIDIA Tools Extension Library
Windows	nvToolsExt.dll, nvToolsExt.lib
Mac OSX	libnvToolsExt.dylib
Linux	libnvToolsExt.so
Component	NVIDIA CUDA Driver Libraries
Linux	libcuda.so, libnvidia-ptxjitcompiler.so

The NVIDIA CUDA Driver Libraries are only distributable in applications that meet this criteria:

- 1. The application was developed starting from a NVIDIA CUDA container obtained from Docker Hub or the NVIDIA GPU Cloud, and
- 2. The resulting application is packaged as a Docker container and distributed to users on Docker Hub or the NVIDIA GPU Cloud only.

### 2.7. Attachment B

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Developed by:

LLVM Team

University of Illinois at Urbana-Champaign

http://llvm.org

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# CUDNN

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6.3 NVIDIA may, at any time, terminate this Agreement if: (i) you fail to comply with any term of this Agreement and the non-compliance is not fixed within thirty (30) days following notice from NVIDIA (or immediately if you violate NVIDIA's intellectual property rights); (ii) you commence or participate in any legal proceeding against NVIDIA with respect to the SDK; or (iii) NVIDIA decides to no longer provide the SDK in a country or, in NVIDIA's sole discretion, the continued use of it is no longer commercially viable.

6.4 Upon any termination of this Agreement, you agree to promptly discontinue use of the SDK and destroy all copies in your possession or control. Your prior distributions in accordance with this Agreement are not affected by the termination of this Agreement. Upon written request, you will certify in writing that you have complied with your commitments under this section. Upon any termination of this Agreement all provisions survive except for the licenses granted to you.

# Chapter 7. GENERAL.

If you wish to assign this Agreement or your rights and obligations, including by merger, consolidation, dissolution or operation of law, contact NVIDIA to ask for permission. Any attempted assignment not approved by NVIDIA in writing shall be void and of no effect. NVIDIA may assign, delegate or transfer this Agreement and its rights and obligations, and if to a non-affiliate you will be notified.

You agree to cooperate with NVIDIA and provide reasonably requested information to verify your compliance with this Agreement.

This Agreement will be governed in all respects by the laws of the United States and of the State of Delaware as those laws are applied to contracts entered into and performed entirely within Delaware by Delaware residents, without regard to the conflicts of laws principles. The United Nations Convention on Contracts for the International Sale of Goods is specifically disclaimed. You agree to all terms of this Agreement in the English language.

The state or federal courts residing in Santa Clara County, California shall have exclusive jurisdiction over any dispute or claim arising out of this Agreement. Notwithstanding this, you agree that NVIDIA shall still be allowed to apply for injunctive remedies or an equivalent type of urgent legal relief in any jurisdiction.

If any court of competent jurisdiction determines that any provision of this Agreement is illegal, invalid or unenforceable, such provision will be construed as limited to the extent necessary to be consistent with and fully enforceable under the law and the remaining provisions will remain in full force and effect. Unless otherwise specified, remedies are cumulative.

Each party acknowledges and agrees that the other is an independent contractor in the performance of this Agreement.

The SDK has been developed entirely at private expense and is "commercial items" consisting of "commercial computer software" and "commercial computer software documentation" provided with RESTRICTED RIGHTS. Use, duplication or disclosure by the U.S. Government or a U.S. Government subcontractor is subject to the restrictions in this Agreement pursuant to DFARS 227.7202-3(a) or as set forth in subparagraphs (b)(1) and (2) of the Commercial Computer Software - Restricted Rights clause at

FAR 52.227-19, as applicable. Contractor/manufacturer is NVIDIA, 2788 San Tomas Expressway, Santa Clara, CA 95051.

The SDK is subject to United States export laws and regulations. You agree that you will not ship, transfer or export the SDK into any country, or use the SDK in any manner, prohibited by the United States Bureau of Industry and Security or economic sanctions regulations administered by the U.S. Department of Treasury's Office of Foreign Assets Control (OFAC), or any applicable export laws, restrictions or regulations. These laws include restrictions on destinations, end users and end use. By accepting this Agreement, you confirm that you are not a resident or citizen of any country currently embargoed by the U.S. and that you are not otherwise prohibited from receiving the SDK.

Any notice delivered by NVIDIA to you under this Agreement will be delivered via mail, email or fax. You agree that any notices that NVIDIA sends you electronically will satisfy any legal communication requirements. Please direct your legal notices or other correspondence to NVIDIA Corporation, 2788 San Tomas Expressway, Santa Clara, California 95051, United States of America, Attention: Legal Department.

This Agreement and any exhibits incorporated into this Agreement constitute the entire agreement of the parties with respect to the subject matter of this Agreement and supersede all prior negotiations or documentation exchanged between the parties relating to this SDK license. Any additional and/or conflicting terms on documents issued by you are null, void, and invalid. Any amendment or waiver under this Agreement shall be in writing and signed by representatives of both parties.

### CUDNN SUPPLEMENT TO SOFTWARE LICENSE AGREEMENT FOR NVIDIA SOFTWARE DEVELOPMENT KITS

The terms in this supplement govern your use of the NVIDIA cuDNN SDK under the terms of your license agreement ("Agreement") as modified by this supplement. Capitalized terms used but not defined below have the meaning assigned to them in the Agreement.

This supplement is an exhibit to the Agreement and is incorporated as an integral part of the Agreement. In the event of conflict between the terms in this supplement and the terms in the Agreement, the terms in this supplement govern.

**4.1 License Scope.** The SDK is licensed for you to develop applications only for use in systems with NVIDIA GPUs.

**2. Distribution.** The following portions of the SDK are distributable under the Agreement: the runtime files .so and .h.

In addition to the rights above, for parties that are developing software intended solely for use on Jetson development kits or Jetson modules and running Linux for Tegra software the following shall apply: the SDK may be distributed in its entirety, as provided by NVIDIA and without separation of its components, for you and/or your licensees to create software development kits for use only on the Jetson platform and running Linux for Tegra software.

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Addendum for Version 5.0.0

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List of softwares related to prometheus

Name	Version
Prometheus	2.19.0
alertmanager	0.20.0
node exporter	1.0.0
snmpexporter	0.18.0
ipmi exporter	1.2.0
mtail	v3.0.0-гс35

List of drivers not including ubuntu

Name	Version
CUDA driver	440.64.00
MLNX_OFED_LINUX (*)	5.0-1.0.0.0-ubuntu18.04-x86_64

\*: OFED is only for 200H

#### List of pre-installed container images

Name	Version
PyTorch	20.03-ру3
TensorFlow	20.03-tf2-py3
MxNet	20.03-руЗ