2018.04 Release notes

Hipster 2018.04 is here

We are glad to announce that Hipster 2018.04 snapshot is available.

Image	Checksum	GPG-signature
OI-hipster-gui-20180427.iso	[SHA256]	[SIG]
OI-hipster-gui-20180427.usb	[SHA256]	[SIG]
OI-hipster-text-20180427.iso	[SHA256]	[SIG]
OI-hipster-text-20180427.usb	[SHA256]	[SIG]
OI-hipster-minimal-20180427.iso	[SHA256]	[SIG]
OI-hipster-minimal-20180427.usb	[SHA256]	[SIG]

List of mirrors: https://wiki.openindiana.org/oi/Mirrors

Security

This release is signed and verifiable by GPG. The OpenIndiana Release Engineering key has key id 0x3a021afadbe31887.

The public key:

```
-----BEGIN PGP PUBLIC KEY BLOCK-----
mQINBFkHrmsBEADCHjW1mu/SgnV0nshQO6Ma+mQ6NNumGN6NdCTaWyfvjLGde17o
RBLLLVbt0+OpB3EW2Im+X6Zxnisq+V2LsFsamqGJXH84y0ubPxZH9y8O86CGBJPX
USsG9rldpLkBAkHtxDrDAt4GyD5090Z9otH2RgBmjWTzEHqVBwrKEUUJkiWP0QUY
5kZ60suX3DtqdC3uCEg4NNTMCPLOY3WJr6X2eDJ6DjZYFZ+SmjCD9X5rCzLQqmvW
bADO839815pUSZa+YJn6chgSGwqtWcg62al3EXB+TaqLyoiwO2Xw1qlWfUitMc6Q
rTYD+K4gh/8Fiz7Mn7MUYzPUT+vHBGui2/MzQycXGRH3kK3j7/a/lsN2AmxYJWag
wSMTDiOlm6f/eAk/E5mnquGzgSQkDcMAYijUDW98Zwy7y4zMLT2D2il6FalZkTYj
3ALdcewFSdZjsm7vJxG2uHRNh7vNcZyOZkYgvBoD4Ndb0vkj2LaOllIUvTyVPeS4
sbyTUw38asw3jPU2A6hd9YMZypfd5YsiyQCDrWGuVCCl3lfb4dfCra+3wwyExDz0
3YGzfVvxSgSexljvQQQ/xbATbDstBYj+JD16fH6mEJg0cEzp84rlTIOXCpksluFL
yJQ9xkHVmAUYQhBRHhRpm3H6B12hze/zp/RwIAIG53CSsbSY5c7hbJIMlwARAQAB
tB9PcGVuSW5kaWFuYSBSZWxlYXNlIEVuZ2luZWVyaW5niQI9BBMBCgAnBQJZB65r
AhsDBQkFo5qABQsJCAcDBRUKCQgLBRYCAwEAAh4BAheAAAoJEDoCGvrb4xiHfPkP
/A9MlvGKkuinRv7O+R//CBKCFmW6MgHWdcvA4FEAkvlHCJ/vYeBahKd0LIog642t
LmhLZ+wVUhsGZIq4ORRLCM4s/SLXohMuaWNdghGu1EhIYrTq8jhj2Ph1OChFXo9S
RhXn4Pnd7CtyNypECw291tO8d70RcEGM4kWiZLQE755luU7TrXM2X7YEcUeakzvv
mTbJ+SQhDpeAEIP4qtHru+EvwbHtyemdYKMBPHXE98ucrqfqCqFKDFdqxWpvbdUe
TeSgme+PSz25V3DxDcuSqHp4+WM6vSfiZ5T6Tk2u40vyu9kWePTeYWoFMvzXlbjq
mYwrIPmcQ6B1iifzOfI/cZHyFbcLxBLDf3uuQb7I8JNYkZB70IHHCTif1HIBKiUv
g/zZQq+0q4IelbSEXq+COZ0uFCjhDpZaPJ1DXFHXOKD5BJeOct9LnuDAg4Usenq1
yBmFuWut0U/Z9NY7U3TES6ZaG25i9/QZa59qFY6YW5n9WiSiuCP2vYhi9p33iLEy
uUHnmdk/XgRHA1if5tkRQqVsj5RkoDP5xAhADnJe2tW11cCZAe8yc0LA/VAiQLdA
9iz5NgNLgSDfDUAw0jGtH96xClGaMlv9ysnsnamH9SIkRs+HA4/eD4/kaQiXjKWc
pcX95GCFCTHMYW4iVPV/m7gjx4IMGUdJZWVHSGMcTAk0uQINBFkHrmsBEADPJ23B
EVN3kdM/zuvG8B41k9yk9MNQXLzI/FnTJ1hgTQH+HvRSix4bIsOo7U2t4+CB6wUy
5xRVcIO7DKdoHzMBqXfVFIkUti1k9CFZx37oLaYBsldE6rL7ZchQKileICYAWze3
bnTe/b6ZaWNVs1yMk79MJ/DF8z1RNeZsPFxBrXE5vh973+k0hkDZfi9bULdmQroL
gniBS5aSc2pGdl3UNqSx+CcyS+/Jrn4LDnPHj3mx7WGlJLc/Lw0uYZxSZM3FAj7/
zrsLgnP4/xdcCMTcbVbC6L7VBSIE+hE6ppdrKwoLp7C2cyA14DnHM+heqx8Dqtf6
acIc8txyUB7zShGC5Fhp37YnhrHGnUrDxxYi99OfNChXAbwtR5z8Leicijplc/NF
oibGSLLC8NvFkzuWIIuqZK8l2/UZmER7Nt7hhHszilsnAJenwvYCIVEqJsrdsTUf
iiYm5AifwhU018Ia5As9kvBqymMy2bYSbZZVic+WXb6StWHugjKSFJmCo2h66QsI
giHNJEvOxybANlSkxI6t38EipGvvW1dlRObuL/RZOQvSJL7SRlclOeQF4ZtPBMFy
yI5p3DBZbIHChdaH5OE0U7zk+qt1hvO+HSh8Yc1OVBd6pziAay5L6S8jsBKDPjJr
7OTUuHJL00teBe3SORS8BACkg6+/6Yk9a3lSiQARAQABiQIlBBgBCgAPBQJZB65r
AhsMBQkFo5qAAAoJEDoCGvrb4xiHUqcP/iOUf55a2rU5N/tlZsn2fd+O6U2V4Iym
YYysJ5OZJj0baDmL+SSmNarem+ogRcpBmKX3LFNgGnEoRVaeILQApri5JelCSEhC
Ex5Xwk1WOqXTRWV9flbVU/rTSiCNDUySaaJDCVOQ07TEQ/bDShkR0X+MyCzklgbZ
rZnj+spaPeDnpIkfwfG2aKiJ0hq9KATBwdREcP9f/R7LaAdmcbr89Ya4iPEmaDYO
gh/t83zH45XKiWxXwb9rn9U2szWLOfx8rMTTRhYWBPB+K7RX8mGoiphqtMOJYhNA
N7AVm+9LRVxRcnmWyf1cQKF8FGlj9FBlaeNUAFefpvvcBffTFvPnpqOaSZm7nu6l
NwWT2N0IHdr9daET0ewvL2poMkE9P3abPmEjQYFMobg3ZiPs7e5TeplvVFtC2y89
47Gow54KIVS2cbeSVCPlCj/B8GmEjkAsGmjDtGTk45LiJptv6h5lH95YGUafI97U
xLSEJJ+mab1iSRqDCn8lVlfjvAp6Hv/DW9sr6lutQuzZjxhFi5rsly1C40rkOni/
pByJDW47+VERp2wxvJdVVUZEge53IHTgrruHs/tWUsJNEswkHQ7OsY5u7bEcPUlW
Stua8WJo5U4cN0abgrRAXnXXBWi2bNbYe8xnH+OsOghb1gRg3N99G/TthoziPQlI
cuYxZQalebJS
=fC+/
-----END PGP PUBLIC KEY BLOCK-----
```

How to verify:

- Download <ISO>.sig file from mirror
- Run: `gpg2 --verify <ISO>.sig <ISO>`. You should see the following output:

```
gpg: Signature made 28 April 2018 at 05:07:53 UTC using RSA key ID DBE31887
gpg: Good signature from "OpenIndiana Release Engineering" [unknown]
Primary key fingerprint: F5E9 84E5 ADD2 9578 D45C  C1FE 3A02 1AFA DBE3 1887
```

- Even if the output includes:

```
gpg: WARNING: This key is not certified with a trusted signature!
gpg: There is no indication that the signature belongs to the owner.
```

The signature is still correct.

General system changes

Userland software is rebuilt with GCC 6. As old GCC 4 runtime libraries are still delivered to `/usr/lib`, automatic checks and cleanup is applied to remove harmful `RUNPATH`s (`/usr/lib`, `/usr/lib/amd64` and so on) from binaries. illumos-gate is still compiled with patched GCC 4.4.

Kernel Page-Table Isolation (KPTI) was enabled to mitigate recent security issues in Intel CPUs (thanks to Joyent's Alex Wilson, John Levon, and Robert Mustacchi for their hard work on this).

GNOME 2 desktop was removed. A lot of applications were fixed not to depend on GNOME 2 libraries (including OpenIndiana-specific software like *Network Auto-Magic* GUI (`nwam-manager`), *Time Slider* and GUI installer).

Linked images support was enhanced to include *zoneproxy* support, so that `ipkg` zones without connection to Internet can update their software via global zone's proxy. Administration documentation is available in zones section of OpenIndiana Handbook.

MATE desktop applications are now delivered as 64-bit-only.

UPower was integrated.

Internet/Intranet Input Method (IIIM) was removed (IBus is kept).

Work on delivering 64-bit-only applications continues.

Note, that although shipped ISO and USB images support booting in UEFI mode, it's still work in progress. VGA console is not supported when system is booted in UEFI mode and installer still misses some steps to create bootable UEFI images.

Desktop software and libraries

- GNOME 2 was removed. Corresponding GNOME 3 applications were added where necessary (`totem`, `gnome-keyring`, `seahorse`, `vino` among others).
- libunique, at-spi, libgnome-desktop and Python GNOME bindings were removed. Dependent applications were ported to pure GTK2/GTK3. Removal of GNOME 2 libraries is still in progress.
- Xorg server was updated to version 1.19.6, Xorg libraries and drivers were also updated as well.
- VirtualBox video driver compatible with Xorg 1.19 is available.
- UPower 0.99.7 and MATE Power Manager were added. ConsoleKit patches to support Suspend/Hibernate D-Bus API were backported. LightDM and MATE applications were updated to work with the new ConsoleKit functionality.
- MATE was recompiled as 64-bit and applications updated to latest versions of 1.18 branch.
- Firefox was updated to 52.7.3
- VLC was updated to 2.2.8
- Thunderbird was updated to 52.7.0
- NVIDIA driver was updated to 340.106
- Gnumeric was updated to 1.12.39

Note that PulseAudio is now delivered as 64-bit application and as a consequence its configuration files are now incompatible with the previous version. If `pulseaudio` fails to start after the update, just remove `~/.config/pulse` directory.

Common tools and libraries

- zsh was updated to 5.4.2
- *Midnight Commander* was updated to 4.8.20
- fish was updated to 2.7.0

Development tools and libraries

- GCC 6.4.0 is the default OpenIndiana userland compiler.
- GCC 7 was updated to 7.3.0
- Jenkins was updated to 2.89.4 (LTS) and 2.108
- OpenJDK 8 was updated to 1.8.162
- Erlang was updated to 19.3
- Mercurial was updated to 4.5.3
- git was updated to 2.16.2
- Memcached was updated to 1.4.37
- PHP versions were updated to 5.6.35 and 7.0.29

Server software

- PostgreSQL versions 9.4 thru 10 were updated to their latest minor versions. PostgreSQL 9.3 was removed (9.4 is the default now).
- MariaDB 10.1, Percona Server 5.6 and 5.7 were updated to latest minor versions.
- CouchDB 2.1 was added.
- ISC Bind was updated to 9.10.6-P1
- ISC DHCP server was updated to 4.3.6-P1

- Squid was updated to 3.5.27
- nginx was updated to 1.14.0
- Apache HTTP 2.4 was updated to 2.4.33
- Samba was updated to 4.5.16
- Node.js was updated to 6.14.0 and 8.11.1

A lot of other bug fixes and minor software updates are included.

Several significant OpenIndiana userland changes were introduced. In resolve step pkgdepend resolve searches for dependencies only in `REQUIRED_PAC KAGES` and packages, provided by current component. OpenIndiana userland automatic tooling now detects and removes standard library directories from `RUNPATH` (`/lib`, `/usr/lib`, `/lib/$(MACH64)`, `/usr/lib/$(MACH64)`). Component build bitness (i.e. whether to deliver 64-bit binaries in `/usr/bin`) now can be controlled by `PREFERRED_BITS` macros (64 or 32, defaults to 32).

It's worth noting that automated test tool/framework performs installation image generation and testing on a frequent basis.

As always, we are proud to ship the latest illumos-gate bits (47b8d4b884).