2017.04 Release notes

Hipster 2017.04 is here

We are glad to announce that Hipster 2017.04 snapshot is available.

Image	Checksum	Checksum GPG-signed
OI-hipster-gui-20170502.iso	9bea73fa64b985e6e789875a2e316d8c00bb30910870f3b59a1a4948782e92f8 [SHA256]	[SHA256.asc]
OI-hipster-gui-20170502.usb	377a31057a1287ccc0d21a7e7de11f328ff320aa8a6afbbe51c2f04a71c0937e [SHA256]	[SHA256.asc]
OI-hipster-text-20170502.iso	0b3f27331220b27afdf85f0b3cd851f87581a209a2e67093298da88995e26976 [SHA256]	[SHA256.asc]
OI-hipster-text-20170502.usb	48dbd49e718a0d37a88c5d809f19c21dad2a948d92c404d4896a730bfe5c4d4f [SHA256]	[SHA256.asc]
OI-hipster-minimal-20170502.iso	e8de83a6080c0c48590042bc4a4e19481154d75f8ce1fcf72ad4e7c81028bb63 [SHA256]	[SHA256.asc]
OI-hipster-minimal-20170502.usb	464fe3e6cff883fbe05494e882b9d62ccfbce99c23290516f9bec9777ad921c8 [SHA256]	[SHA256.asc]

Mirror list: https://wiki.openindiana.org/oi/Mirrors

Security changes

This release is the first one to be 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+9LRVxRcnmWyf1cQKF8FG1j9FBlaeNUAFefpvvcBffTFvPnpqOaSZm7nu6l
NwWT2N0IHdr9daET0ewvL2poMkE9P3abPmEjQYFMobg3ZiPs7e5TeplvVFtC2y89
47Gow54KIVS2cbeSVCPlCj/B8GmEjkAsGmjDtGTk45LiJptv6h5lH95YGUafI97U
xLSEJJ+mab1iSRqDCn8lVlfjvAp6Hv/DW9sr6lutQuzZjxhFi5rsly1C40rkOni/
pByJDW47+VERp2wxvJdVVUZEge53IHTgrruHs/tWUsJNEswkHQ7OsY5u7bEcPUlW
Stua8WJo5U4cN0abgrRAXnXXBWi2bNbYe8xnH+OsOghb1gRg3N99G/TthoziPQlI
cuYxZQalebJS
=fC+/
-----END PGP PUBLIC KEY BLOCK-----
```

How to verify:

- Download <ISO>.sha256sum.asc file from mirror
- Run: gpg2 --verify <ISO>.sha256sum.asc. You should see the following output:

```
gpg: Signature made Tue May  2 14:29:55 2017 CEST
gpg:                using RSA key 0x3A021AFADBE31887
gpg: Good signature from "OpenIndiana Release Engineering" [unknown]
gpg: WARNING: This key is not certified with a trusted signature!
gpg:          There is no indication that the signature belongs to the owner.
Primary key fingerprint: F5E9 84E5 ADD2 9578 D45C  C1FE 3A02 1AFA DBE3 1887
```

> ⓘ 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.
> ```

- Run: digest -a sha256 <ISO> and check the ISO checksum as previously.

General system changes

The most notable change for this snapshot is related to hardware support. OI now fully supports USB 3.0 devices. Intel Video drivers were significantly improved by Gordon Ross. The list of supported hardware has significantly extended (see https://wiki.openindiana.org/oi/Intel+KMS+driver)

Xorg was updated to 1.18.4 version, so if you use any third-party modules – they might need recompilation or update (notably, the VirtualBox Guest Additions).

Mate was updated to 1.16 version. We started shipping GTK3 applications. Several Gnome 2 applications, which don't have Mate analogs, were updated to Gnome 3 versions. A lot of end user applications are delivered now as 64-bit only.

Installer no longer creates the classic `auto_home` layout, as it was a source of confusion to the users. Default home filesystem is created under `rpool /export/home` now. Old-school users or those with more complicated setups are free to set up the legacy configuration in their systems, the functionality is still there.

We thoroughly tested IPS and imported several upstream fixes. Now IPS uses Apache 2.4 as its internal web server.

GNU TLS 3.4 is the default TLS implementation now. We also introduced `ca-certificates` service to regenerate the CA bundle.

Notice: on some resource-constrained systems `ca-certificates` service can fail to start immediately after system install. Later SMF takes care and restarts it, but you can see error messages on first boot. The issue is being investigated.

Notice: if you upgrade from earlier versions, you can see errors about failing `metainit` service. It was removed from the system, but SMF fails to notice it. Just remove the service manually for now in this case:

```
:; svcadm disable -s svc:/system/metainit ; svccfg delete svc:/system/metainit
```

Desktop software and libraries

- Xorg was updated to 1.18.4, xorg libraries and drivers were updated.
- Mate was updated to 1.16
- Intel video driver was updated, the list of supported hardware has significantly extended (see https://wiki.openindiana.org/oi/Intel+KMS+driver)
- libsmb was updated to 4.4.6
- gvfs was updated to 1.26.0
- gtk3 was updated to 3.18.9
- Nimbus theme was updated to look better with GTK3, so we started shipping GTK3 applications
- Rhythmbox was updated to 3.4.1
- Major text editors were updated (we ship vim 8.0.104, joe 4.4, emacs 25.2, nano 2.7.5
- pulseaudio was updated to 10.0
- firefox was updated to 45.9.0
- thunderbird was updated to 45.8.0
- critical issue in enlightenment was fixed, now it's operational again
- privoxy was updated to 3.0.26
- cdrtools were updated to 3.02a7
- gthumb was updated to 3.2.9.1
- brasero was updated to 3.12.1
- critical issue in sound-juicer was fixed, now it's operational again
- Gstreamer 1.10.3 and gstreamer 1.0 plugins were integrated
- WebkitGTK2 was updated to 2.14.5
- Mesa was updated to 13.0.6
- Nvidia driver was updated to 340.102

Development tools and libraries

- GCC 6 was added. Patches necessary to compile illumos-gate with GCC 6 were added (note, compiling illumos-gate with version other than illumos-gcc-4.4.4 is not supported)
- Bison was updated to 3.0.4
- Groovy 2.4 was added
- Ruby 1.9 was removed, Ruby 2.3 is the default Ruby now
- Perl 5.16 was removed. 64-bit Perl 5.24 is shipped.

- 64-bit OpenJDK 8 is the default OpenJDK version now.
- Mercurial was updated to 4.1.3
- Git was updated to 2.12.2
- ccache was updated to 3.3.3
- QT 5.8.0 was added
- Valgrind was updated to 3.12.0

Server software

- PostgreSQL 9.6 was added, PostgreSQL 9.3-9.5 were updated to latest minor versions
- MongoDB 3.4 was added
- MariaDB 10.1 was added
- NodeJS 7 was added
- Percona Server 5.5/5.6/5.7 and MariaDB 5.5 were updated to latest minor versions
- OpenVPN was updated to 2.4.1
- ISC Bind was updated to 9.10.4-P8
- Squid was updated to 3.5.25
- Nginx was updated to 1.12.0
- Apache 2.4 was updated to 2.4.25. Apache 2.4 is the default Apache server now. Apache 2.2 will be removed before the next snapshot.
- ISC ntpd was updated to 4.2.8p10
- OpenSSH was updated to 7.4p1
- Samba was updated to 4.4.12
- Tcpdump was updated to 4.9.0
- Snort was updated to 2.9.9.0
- Puppet was updated to 3.8.6

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

As always, we are proud to deliver to you latest illumos-gate bits (i.e. illumos-48d8443e35).