

# 2019.04 Release notes

## Hipster 2019.04 is here

We are glad to announce that Hipster 2019.04 snapshot is available.

Image	Checksum	GPG-signature
<a href="#">OI-hipster-gui-20190511.iso</a>	[SHA256]	[SIG]
<a href="#">OI-hipster-gui-20190511.usb</a>	[SHA256]	[SIG]
<a href="#">OI-hipster-text-20190511.iso</a>	[SHA256]	[SIG]
<a href="#">OI-hipster-text-20190511.usb</a>	[SHA256]	[SIG]
<a href="#">OI-hipster-minimal-20190511.iso</a>	[SHA256]	[SIG]
<a href="#">OI-hipster-minimal-20190511.usb</a>	[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-----
mQINBFkHrmsBEADCHjWlmu/SgnV0nshQO6Ma+mQ6NNumGN6NdCTaWyfvjLgde17o
RBLLLVbt0+OpB3Ew2Im+X6Zxnisq+V2LsFsamqGJXH84y0ubPxZH9y8O86CGBJPX
USsG9rldpLkBAKHtXdrDat4GyD5090Z9otH2RgBmjWTzEHqVbwrKEUUJkiWP0QUY
5kZ60suX3Dtqdc3uCEg4NNTMCPLOY3WJr6X2eDJ6DjZYFz+SmjCD9X5rCzLQqmvW
bAD0839815pUSZa+YJn6chgSGwqtWcg62al3EXB+TaqLyoiwO2Xw1qlWfUitMc6Q
rTYD+K4gh/8Fiz7Mn7MUy+PUT+vHBGui2/MzQycXGRH3kK3j7/a/lS2AmxYJWag
wSMTDiOlM6f/eAk/E5mnuGzGzSQkDcMAYiJUDW98Zwy7y4zMLT2D2il6FalZkTYj
3ALdcewFSdzjSm7vJxG2uHRNh7vNcZyOZkYgvBoD4Ndb0vkj2LaO1lIUvTyVPeS4
sbyTUw38asw3jPU2A6hd9YMZypfd5YsIyQCDrWGuVCCl3lfb4dfCra+3wwyExDz0
3YGzfVvXsGSex1jvQQQ/xbATbDStBYj+JD16fH6mEJg0cEzp84r1TIOXCpksluFL
yJQ9xkHvMAUYQhBRHhRpm3H6B12hze/zp/RwIAIG53CSsbSY5c7hbJIMlWARAQAB
tB9PcGVuSW5kaWfUySBSZwXlYXNlIEVuz2luZWVyaW5niQI9BMBMCgAnBQJZB65r
AhsDBQkFo5qABQsJCAcDDBRUKCQgLBRYCAwEAAh4BAheAAoJEDoCGvrb4xiHfPkP
/A9MlvGKkuinRv70+R//CBKCFmW6MgHwDcvA4FEAkvlHCJ/vYeBahKd0LlOg642t
LmhLz+wVUhsGZlq4ORRLCM4s/SLXohMuaWNdghGulEhIYrTq8jhj2Ph10ChFXo9S
RhXn4Pnd7CtyNypECw291t08d70RcEGM4kWiZLQE755luU7TrXM2X7YecUeakzvv
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TeSgme+PSz25V3DxDcuSqHp4+WM6vSfIZ5T6Tk2u40vvy9kWePteYwFmVzXlBjg
mYwrIPmcQ6BliffzOfI/cZHyFbcLxBLDF3uuQb7I8JNYkZB70IHCTiflHIBKiUv
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uUHMndk/XgRHA1if5tkRQqVsj5RkoDP5xAhADnJe2tW1lCZAE8yc0LA/VAiQLdA
9iz5NgNLgSDfDUAw0jGtH96xC1GaMlv9ysnsnamH9SiKRs+HA4/eD4/kaQixjKwC
pcX95GCFCTHMYW4iVPV/m7gJx4IMGUdJZVHSGMCTak0uQINBFkHrmsBEADPJ23B
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5xRvCI07DKdoHzMBQXfVfIkUtilk9CFZx37oLaYBsldE6rL7ZchQKileICYAWze3
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gniB55aSc2pGdl3UNqSx+CcyS+/Jrn4LDnPHj3mx7WGLJLc/Lw0uYzXsZM3FAj7/
zrsLgnP4/xdcCMTcbVbC6L7VBSIE+hE6ppdrKwoLp7C2cyA14DnHM+heqx8DqtF6
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oibGSLLC8NvFkzuWIIuqZK8l2/UzMER7Nt7hhHszilsnAJenwvYCIvEqsJrdsTUF
iiYm5AifwhU018Ia5A9kvBqymMy2bYSbZZVic+WXb6StWHugjKSFJmCo2h66QsI
giHNJEvOxybANlSkxI6t38EipGvvWldlROBuL/RZOQvSjL7SRlc10eQF4ZtPBMFy
yI5p3DBZbIHChdaH5OE0U7zk+qt1hv0+HSh8Yc1OVbd6pziAay5L6S8jsBKDPjJr
70TUuHJL00teBe3SORS8BACkg6+/6Yk9a3lSiQARAQABIQILBBGcGAPBQJZB65r
AhsDBQkFo5qAAAOJEDoCGvrb4xiHUqCP/iOUf55a2rU5N/tlZsn2fd+06U2V4Iym
YYysJ5OZJj0baDmL+SSmNarem+ogRcpBmKX3LFNgGnEorVaeILQApri5JelCSEhC
Ex5Xwk1WOqXTRWV9flbVU/rTSiCNDUySaaJDCVOQ07TEQ/bDShkr0X+MyCzklgbZ
rZnj+spaPeDnpIkfwfG2aKiJ0hq9KATBwdRECP9f/R7LaAdmcbR89Ya4iPEmaDYO
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N7AVm+9LRVxRcnmWYflcQKF8Fglj9FBlaeNUAFefpvcBffTFvPnpqOaSzm7nu6l
NwWT2N0IHdr9daET0ewL2pOmKE9P3abPmEjQYFMobg3ZiPs7e5Tep1vVfTC2y89
47Gow54KIVS2cbeSVCP1Cj/B8GmEjkAsGmjDtGTk45LiJptv6h5lH95YGUafI97U
xLSEJJ+mablISRqDcn81VlfjvAp6Hv/DW9sr6lutQuzZjxhFi5rslylC40rkOni/
pByJDW47+VERp2wxvJdVVUZEGe53IHTgrruHs/tWUSJNEswkHQ70sY5u7bEcPULW
Stua8WJo5U4cN0abgrRAXnXXBWi2bNbyE8xnH+OsOghblgRg3N99G/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 October 23, 2018 at 03:15:31 PM 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

During this development cycle we've worked on fixing VirtualBox, updating Firefox and Mate.

Other noticeable changes include moving of some OI-specific applications from Python 2.7/GTK 2 to Python 3.5/GTK 3, merging updates from OmniOS CE IPS (including automatically named boot environments), rebuilding and fixing issues in libiconv conversion modules.

## Late news (known issues)

Firefox can fail to spawn child processes on the first launch. After being restarted it runs fine.

In some scenarios Firefox hangs or crashes. In many cases enlarging the swap helps. In the example below we enlarge swap from 4 to 8 GB:

```
$ zfs get volsize rpool/swap
NAME          PROPERTY  VALUE  SOURCE
rpool/swap    volsize   4G     local
$ pfexec zfs set volsize=8g rpool/swap
$ pfexec reboot
```

Desktop software and libraries

- MATE 1.22 was integrated.
- Firefox was updated to 60 ESR
- VirtualBox 6.0 was integrated (including guest additions).
- Xorg fonts, tools and libraries were updated. xbacklight tool was added.
- Freetype was updated to 2.9.1, fontconfig was updated to 2.13.1.
- GTK+3 was updated to 3.24.8
- glib2 was updated to 2.58.3.
- LightDM was updated to 1.28

## Common tools and libraries

- Updates for IPS were merged from OmniOS CE IPS, including automatically named boot environments (see [documentation](#) for details).
- Many utilities are now 64-bit-only.
- zsh, bash and pdsh shells were updated. zsh and bash syntax highlighting support was enhanced.
- GNU awk was updated to 5.0, GNU sed was updated to 4.7, GNU coreutils were updated to 8.31.
- vim was updated to 8.1.1002, nano was updated to 4.2.
- Ghostscript was updated to 9.26.
- rename tool was added.

## Development tools and libraries

- GCC compilers were updated to 6.5, 7.4 and 8.3.0, binutils were updated to 2.32
- git was updated to 2.21.0.
- cmake was updated to 3.12.4.
- Python 3.5, 3.4 and 2.7 were updated to latest minor versions.
- rust was updated to 1.32.0.
- Python modules were updated.
- Bison was updated to 3.3.2
- Golang 1.11 was added
- PHP 7.3 was added. PHP 5.6 was removed.
- Several illumos-specific commands like `zfs`, `zpool`, `pkg`, `beadm`, `svcs`, and `svcadm` now have bash completions. To leverage them install the bash-completion package.
- gSOAP 2.8.83 was added
- zstd 1.3.8 was added.

## Server software

- Apache 2.4 is 64-bit-only now
- OpenSSH was updated to 7.9p1.
- PostgreSQL 11 was added. PostgreSQL versions 9.4 thru 10 were updated to their latest minor versions. Citus extensions was added. Other PostgreSQL extensions were updated.
- MariaDB 10.1 was updated, MariaDB 10.3 was added. Percona Server 5.6 and 5.7 were updated. Berkeley DB was updated as well.
- MongoDB 3.4 and 4.0 were updated. MongoDB 3.3 was removed.
- Nginx was updated to 1.16.0.
- Samba was updated to 4.9.5.
- Node.js was updated to 12.2.0, 10.15.3, 8.16.0, 6.17.1.
- Ansible 2.7.5 was added.

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

# illumos

As always, we are proud to ship the latest illumos-gate bits ([a547acf91a](#)).

## Contributors

Following developers contributed to the 2019.04 snapshot with close to 500 commits. We very much appreciate their contributions:

- Alexander Pyhalov
- Andreas Grueninger
- Andreas Wacknitz
- Aurélien Larcher
- Gary Mills
- Ivan Maidanski
- Jason Martin
- Jean-Pierre André
- Jim Klimov
- Joshua M. Clulow
- Michal Nowak
- Nona Hansel
- Rouven Weiler
- Sebastian Wiedenroth
- Stephan Althaus
- Till Wegmüller
- Tim Mooney
- benf33