



Linux @ CERN

17.01.2017
CERN Linux Support
Jarosław (Jarek) Polok

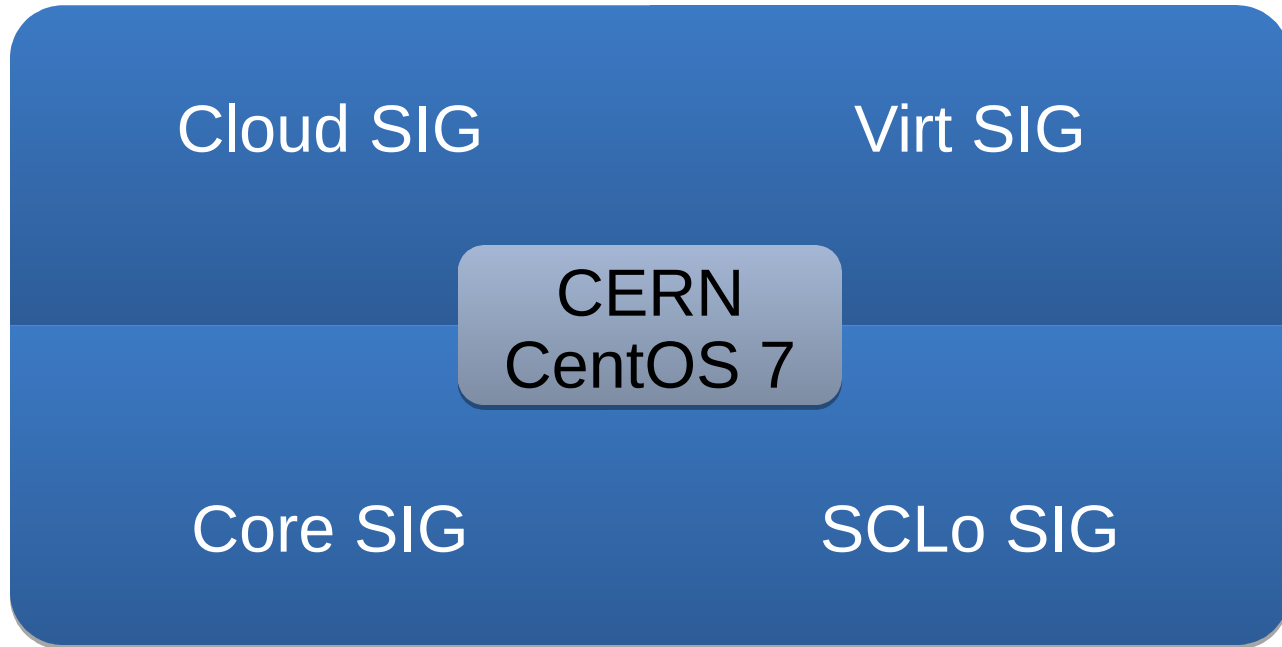
Linux @ CERN

- (A little bit of) history
 - CERN Linux 6.X (Red Hat Linux 6) – (2000-2003)
 - CERN Linux 7.X (Red Hat Linux 7) – (2002-2005)
 - Then ... Red Hat Enterprise Linux happened
 - Tried Fedora (by the time we got ready .. it was 3 versions ahead ..)
- Scientific Linux CERN (Red Hat Enterprise Linux)
 - Past: 3 (2004-2007) , 4 (2006-2010)
 - Present: 5 (2010-...), 6 (2012-...)
- CERN CentOS 7 (2015-...)

Linux @ CERN

- Scientific Linux CERN 5
 - 5.11 latest release
 - EOL 2017 (Support for experiments until 2019)
- Scientific Linux CERN 6
 - Version 6.8 released May 2016
- CERN CentOS 7
 - Version 7.3 released January 2017
- RHEL 5 / RHEL 6 / RHEL 7 / RHEV 3.X / 4
 - Licences =~ 800
 - Extended Update Support
 - Extended Lifetime Support

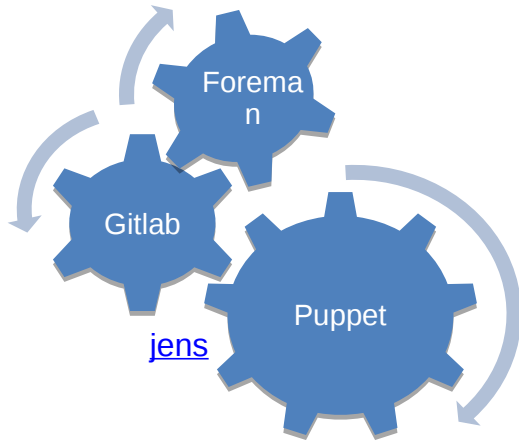
CentOS 7 @ CERN



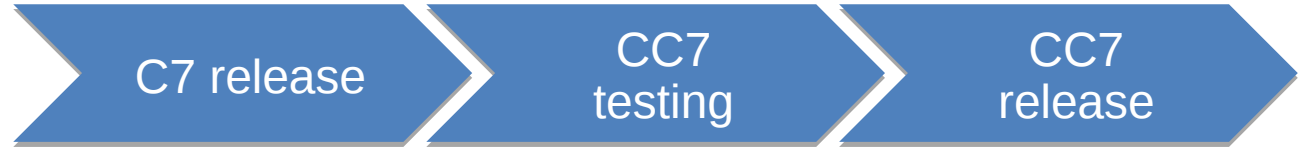
CERN CentOS 7 (CC7)

- CentOS 7 upstream rpms (no CERN specific customization),
- Additional software (cern and cernonly repositories),
- Updates are staged,
- Daily repository snapshots,
- <http://linux.web.cern.ch/linux/centos7/>
- Masterless puppet tool to configure, out of the datacentre machines (locmap). Based on same (reworked) puppet module as the datacentre.

CC7 Updates Lifecycle



Once a week



- IT Linux support tests & integration
- Rebuild if needed (nss) with Koji

- Disabled by default
- Enabled on datacentre QA environment

- Pushed to all clients
- Enabled on datacentre PROD environment

In numbers

Systems contacting repository server within 24 hours.
(most of rhel6/rhel7 systems - running Oracle – do not appear in these numbers, those are updated infrequently)

```
-----
linuxsoft.cern.ch updaters statistics for: 2016-12-20
-----
slc5/i386:    193 [int:   82 + ext:  109 + pup:   2] snap:   0 pushn:   0
slc5/x86_64:  603 [int:  318 + ext:  221 + pup:  64] snap:   0 pushn:  51
slc5/all:    782 [int:  396 + ext:  320 + pup:  66] snap:   0 pushn:  51

slc6/i386:    237 [int:  158 + ext:   77 + pup:   2] snap:   0 pushn:   0
slc6/x86_64: 15316 [int: 3893 + ext: 1630 + pup: 9793] snap: 1145 pushn: 9338
slc6/all:   15534 [int: 4046 + ext: 1694 + pup: 9794] snap: 1145 pushn: 9338

cc7/x86_64:  10722 [int: 1346 + ext:  262 + pup: 9114] snap:   46 pushn:  314
cc7/all:   10722 [int: 1346 + ext:  262 + pup: 9114] snap:   46 pushn:  314

rhel5/i386:    1 [int:   1 + ext:   0 + pup:   0] snap:   0 pushn:   0
rhel5/x86_64:  16 [int:   1 + ext:   0 + pup:  15] snap:   0 pushn:  15
rhel5/all:    17 [int:   2 + ext:   0 + pup:  15] snap:   0 pushn:  15

rhel6/i386:    0 [int:   0 + ext:   0 + pup:   0] snap:   0 pushn:   0
rhel6/x86_64:  289 [int:  41 + ext:   0 + pup: 248] snap:   41 pushn: 223
rhel6/all:    289 [int:  41 + ext:   0 + pup: 248] snap:   41 pushn: 223

rhel7/x86_64:  53 [int:   1 + ext:   0 + pup:  52] snap:   0 pushn:   0
rhel7/all:    53 [int:   1 + ext:   0 + pup:  52] snap:   0 pushn:   0

-----
All:  26979 [int: 5772 + ext: 2231 + pup:18976] snap: 1191 pushn: 9703
-----

int:  CERN network, using yum-autoupdate
ext:  external network, using yum-autoupdate
pup:  CERN network, using puppet
snap: CERN network, using repository daily snapshots
pushn: CERN network, using repository daily snapshots with puppet
```


Centos 7 @ CERN Future

