

Snappy Ubuntu Core

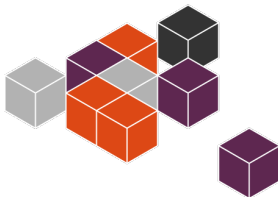
Sujeevan Vijayakumaran

zudʒi:væŋ vidʒæjekumaræn

oder auch: Er, dessen Name nicht genannt wird.

OpenRheinRuhr

8. November 2015



Content

1 Classification

2 Ubuntu Core

3 Demo

4 End

Sujeevan Vijayakumaran

- aka svij
- from Castrop-Rauxel
- Software-Developer and Masters Student
- ubuntuusers.de team member
- not a Canonical Employee
- Ubucon Deutschland & Ubucon Europe Organisator
- Twitter: @svijee
- Google+: +Sujeevan Vijayakumaran
- Blog: svij.org

Traditional Ubuntu



- apt/dpkg with deb-Paketen
- Release-Cycle: 6 months (STS) – 24 months(LTS)
- Fixed package versions per release
- Usage in desktops & servers

Ubuntu Phone



- System-Image
- Release-Cycle: 6 weeks
- click-Packages
- Frameworks & SDK

Snappy

Snappy Ubuntu Core



Ubuntu Core with
snappy transactional updates



Applications confined by Canonical's
AppArmor kernel security system



Safe, reliable, worry free
updates with tests and rollback



Amazing developer experience
with **snapcraft** to build from source



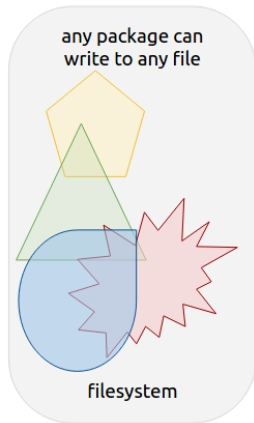
Easily extensible with **frameworks**



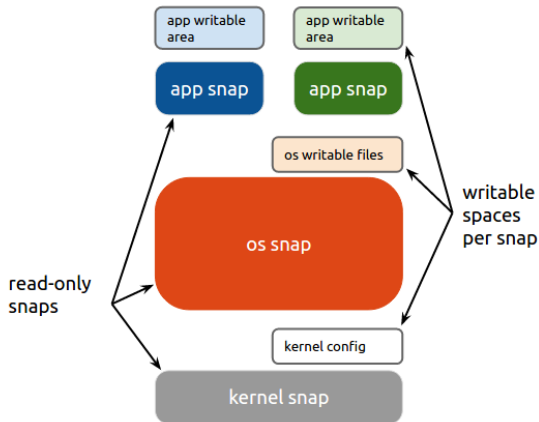
Perfect for the smartest **IoT**

Traditional Ubuntu vs Snappy Ubuntu

traditional ubuntu



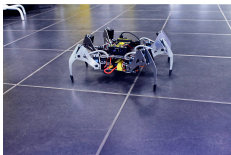
snappy ubuntu



Section 2

Ubuntu Core

Devices

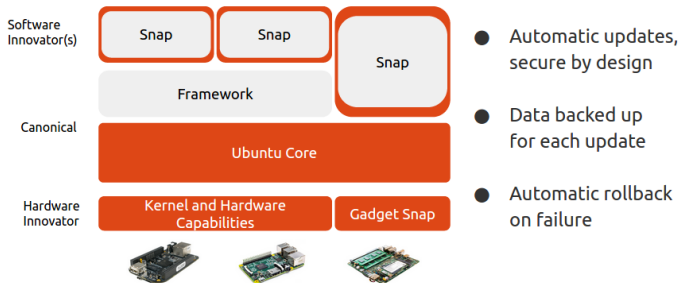


- IoT (Drones, Fridges,...)
- Beaglebone Black, Raspberry Pi
- Switches, Router
- Wearables
- Cloud-Instances

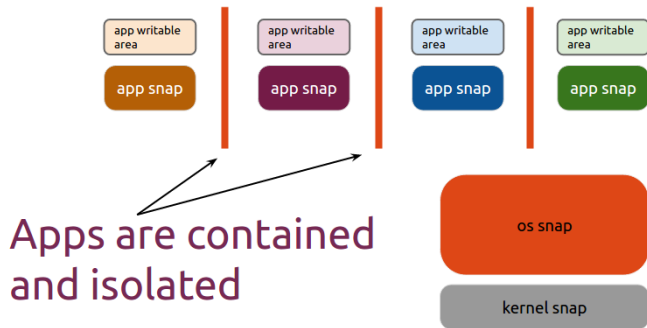
Architecture

Transactional updates with snappy packages

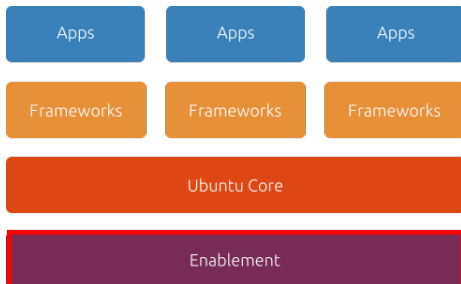
Reliable, atomic, with guaranteed rollback



Architecture

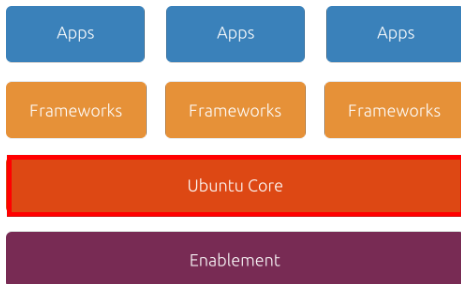


Enablement



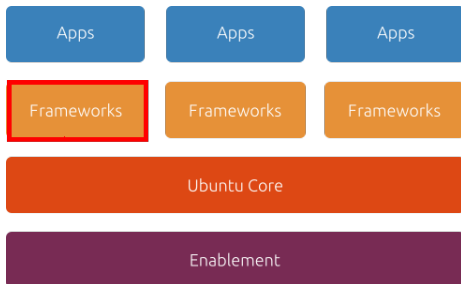
- Kernel
- Hardware-Support
- Drivers
- Read-Only!

Ubuntu Core



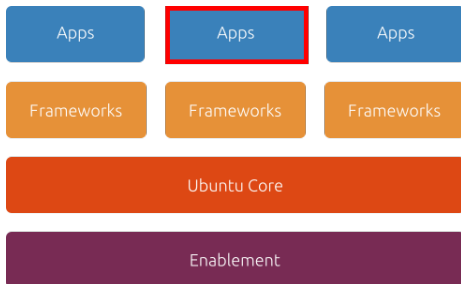
- Slim/Small Base-System
- Read-Only!
- Image-based Updates
- Transaktionale Updates

Frameworks



- shared resources (sensors, cameras, etc.)
- delivered via snaps
- provide a significant benefit for many users

Apps



- Snap-Packages
- „All in One“
- Can depend on Frameworks
- Includes all Libraries

Partitions

Partition Label	Default Size (MB)	Filesystem type	Writable?	Description
system-boot	64	vfat	Yes	Boot-related files
system-a	1024	ext4	No	Primary root filesystem
system-b	1024	ext4	No	Secondary root filesystem
writable	<i>(all remaining space)</i>	ext4	Yes	All persistent user data

WebDM



Snappy store

Sat, October 17th 2015, 11:23:23 am

Installed snaps

A-Z

kB

Grid

Row



chatroom
18.99 MB



docker
27.54 MB



generic-amd64
59.55 kB



pastebinit
287.77 kB



ubuntu-core
-1 B



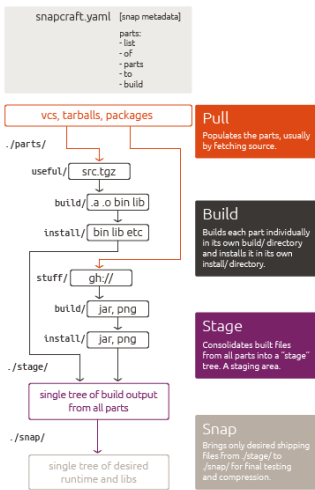
webdm
36.67 MB

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Ubuntu Personal

- Snappy + Ubuntu = Ubuntu Personal
- Snappy with GUI (e.g. Unity)
- For devices with displays: Phones, Wearables, TVs ...

Snapcraft



- easiest ever way to deliver software to Ubuntu
- one file to care about: `snapcraft.yaml`
- many plugins available (autotools, cmake, python, go, catkin, maven, etc.)

Section 3

Demo

Questions

Any questions?

Thank you for the attention!

Slides are available at GitHub:

<https://github.com/svijee/snappy-ubuntu-froscon>

