

# Fast OS deployment on baremetal

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Flock 2014, Prague

August 8, 2014



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# Why deploy the OS Fast?

- Yahoo wants to be efficient and fast in scaling infrastructure



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- Yahoo wants to be efficient and fast in scaling infrastructure
- Unserved traffic affects revenue and user experience



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# Existing installer

- Powerful home grown tool



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- Powerful home grown tool
- Has the ability to handle multiple OS deployments



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# Existing installer

- Powerful home grown tool
- Has the ability to handle multiple OS deployments
- But needs work to support new technologies (Read: UEFI, Grub2)



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# Why anaconda?



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- Kickstart files are highly customizable



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- Kickstart files are highly customizable
- Build-in support for LVM, RAID, BTRFS, iscsi and Multipath devices



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# Why anaconda?

- Kickstart files are highly customizable
- Build-in support for LVM, RAID, BTRFS, iscsi and Multipath devices
- Built-in support for UEFI/Secure boot



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## 1 Anaconda improvements

## 2 Other tweaks



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# Status of TarPayload

- Provided by `pyanaconda/packaging/tarpayload.py`



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# Status of TarPayload

- Provided by `pyanaconda/packaging/tarpayload.py`
- Not hooked up into main anaconda code base



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# liveimg and tarfiles

- Provided by `pyanaconda/packaging/livepayload.py`



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# liveimg and tarfiles

- Provided by `pyanaconda/packaging/livepayload.py`
- Used by anaconda to install "live" squashfs images



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# liveimg and tarfiles

- Provided by pyanaconda/packaging/livepayload.py
- Used by anaconda to install "live" squashfs images
- Support for tarfiles to liveimgpayload was added in March 2014



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# liveimg and tarfiles

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- Coming soon to RHEL 7



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# liveimg and tarfiles

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- Coming soon to RHEL 7
- Coming soon to Fedora 21



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# Enabling tarpayload in kickstart

- `liveimg --url=http://192.168.122.1/root-x86_64.tar.gz`



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# Considerations generating the root tarball

- Include authconfig in the root tarball



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- Include authconfig in the root tarball
- lvm/raid tools?



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# Effect on installation time

- Payload size of 250 MB took 1 minute and 55 seconds to install



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# Tweaks to the installation process

- TUI based installation - Do not probe display hardware



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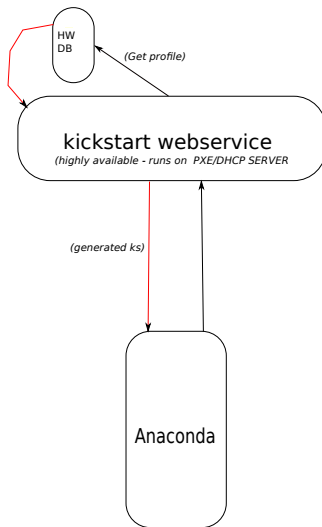
# Tweaks to the installation process

- TUI based installation - Do not probe display hardware
- Reduce the payload size



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# Architecture

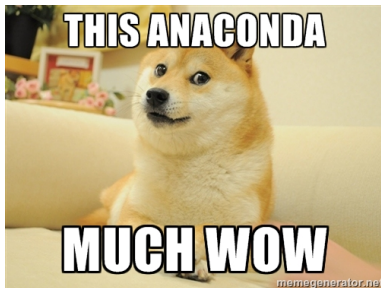


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# Demo



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# Questions?



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