Managing OS release transitions at Netflix scale

Edward Hunter - Netflix

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Painless transition
April 2016
Well over 4,000 deployments per day
Netflix CS @Netflixhelps  Oct 1, 2016
Hi all - we are aware of streaming issues and we are working quickly to solve them. We will update you when they are resolved.

Jonanak @Jonanak
Is this the Apocalypse, and do I need to start hoarding Blu-Rays?
12:39 PM - Oct 1, 2016

Jake Counselbaum @jakecbaum
Netflix is down. I'm running to Costco now, the apocalypse is near.
5:14 PM - Feb 3, 2015

Mrs M @MrsJIMorgan
@netflix quick my snacks are getting cold & reality is too scary
1:04 PM - Oct 1, 2016

michelle @mishkauf
Netflix is down so maybe I'll go and talk to my family for the first time...they seem like nice ppl idk
5:08 PM - Feb 3, 2015
Strategy and planning (in three easy steps)
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2. Get it working internally first
Planning and prep (in three easy steps)

1. Only change the stuff you really need to change.
2. Get it working internally first
3. Have a set of friends to work with
Java

Optional Apache front end, memcached, non-java apps

Atlas Monitoring

GC and thread dump logging

Tomcat

Application servlet, base server, platform, interface jars for dependent services

Healthcheck, status servlets, JMX interface
Configuration

- Ezconfig - helps configure Apache, Tomcat, Java etc.
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    - sysvinit? daemontools? upstart? systemd?
    - Factor these away - devs hate it
Configuration

○ Ezconfig - helps configure Apache, Tomcat, Java etc.
  ● No init scripts
    ○ sysvinit? daemontools? upstart? systemd?
    ○ Factor these away - devs hate it
  ● Generate configuration files
    ○ Apache, Tomcat, etc
    ○ Java GC settings
Automate

- Automated image builds
- Automated image tests
- Automated changelog generation
- Automated performance testing
Account structure

- Master NFLX account
- Streaming
  - Production
  - Test
- Billing
  - Accounts
Account structure

Master NFLX account

Billing

Streaming

Production

Test

Accounts
Org Structure
Org Structure
PLAN
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