Continuous Delivery through the Open Build Service

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Who am I?

- Professional technologist
- Contributor and package maintainer in the Fedora Project
- Contributor and package maintainer in Mageia Linux
- Contributor to RPM, DNF, and various related projects
- Diligent follower of the telecommunications industry
- Systems Engineer at Datto, Inc.

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“Continuous Delivery…?”

“Continuous delivery (CD) is a software engineering approach in which teams produce software in short cycles, ensuring that the software can be reliably released at any time.”

-- Wikipedia

Why is continuous delivery important?

- Continuous delivery makes it possible to ship software incrementally and regularly.
- It encourages “bite-sized” changes which are easily dissected.
- For critical systems, a continuous delivery model enables managing code churn much more easily.
- ***NOT THE SAME AS CONTINUOUS DEPLOYMENT!***

Continuous delivery and Linux

- Continually developing software to target Linux can be very hard!
- Linux as a platform can have a high degree of variance depending on the Linux distributions being targeted for the software.
  - In many cases, not everyone can even agree on what should be *in* a Linux distribution!
- So how do you solve that problem?!

The Open Build Service

The Open Build Service

- The Open Build Service (OBS) is a software solution developed by SUSE to build and manage the openSUSE and SUSE Linux Enterprise distributions.
- However, it was designed from the beginning to support a wide variety of Linux distributions.
- It can build packages, repositories, and images.
  - It can build packages and repositories for even Arch and Debian based systems!
- And yes, you can host your own!
  - The appliance install image is available at openbuildservice.org

How does the OBS enable CD?

- The Open Build Service has several capabilities to be integrated with VCSes (such as Mercurial, Git, Subversion, etc.) that allow it to either pull code or receive code regularly to build.
- From there, it can be used to build the software for the target platforms. After builds, it can fire off events to trigger tests and/or reviews.
- Build failures can automatically trigger notifications to the appropriate people.

Demonstration

Links to resources

- Open Build Service website: http://openbuildservice.org/
- openSUSE's OBS instance: https://build.opensuse.org/
- Open Build Service Reference Guide: http://openbuildservice.org/help/manuals/obs-reference-guide/

The End

Any Questions?