CENTOS CBS AND CI

INFRASTRUCTURE RESOURCES FOR BUILDING, TESTING, AND RELEASING

Created by Brian Stinson / @bstinsonmhk
AGENDA:

- The CentOS Ecosystem
- CBS
- CI
Dev  Source  Build

Export  Track Metadata

Import Externally  Inherit

{Source Prep'd elsewhere, or inherited from another SIG}
CentOS Curator Engine

Dev | Source | Build | Test | Rel

- Export
- Track Metadata
- User Metadata
- Dev Metadata

User Engagement
IRC | Forums | Lists | Bug Tracker | Dojo | Stories

Import Externally
- Source Prep'd elsewhere, or inherited from another SIG

Inherit
- Primary Content
- Dep Content

Built Elsewhere, eg:
- Upstream build roots
- Integrating with Distro / Dep

CentOS
CBS: KOJI TARGETS

storage7-gluster-36-candidate
storage7-gluster-36-testing
storage7-gluster-36-release
[bstinson@mazer ~]$ cbs build --scratch \ 
storage7-gluster36-el7 python-dateutil-1.5-7.el7.src.rpm
CBS: THE BUILD/TEST PROCESS

storage7-gluster-36-candidate

↓

Automated smoke testing

storage7-gluster-36-testing

↓

User/integration testing

storage7-gluster-36-release

↓

Sign+promote to mirror.centos.org
CBS: WHAT WE'RE WORKING ON

- /usr/bin/centpkg
- Inter-SIG Dependencies
- Better Alternative Architecture support
CI.CENTOS.ORG: TARGET AUDIENCE

- CentOS SIGs
- Infrastructure projects that want to verify on CentOS
CI.CENTOS.ORG: HOW WE DO IT

- Bare-Metal machines provisioned on-demand with CentOS 5, 6, or 7
- Jenkins orchestrates the jobs
- Bulk storage available for artifacts
Each project is assigned an API key
The API Key is used to request CentOS Nodes
Duffy contextualizes the root account with an ssh key
CI.CENTOS.ORG: DUFFY

The Internet

jump.ci.centos.org

slave01.ci.centos.org

Jenkins Master

HTTP

Duffy

256 Baremetal Nodes

admin.ci.centos.org

HTTP

The Job Lifecycle

Setup
Provision
Replace
Test
CI.CENTOS.ORG: WHAT'S NEXT

- Multi-machine deploys with private networks
- Jenkins Job Builder
- Openstack instance
REQUIRED READING

https://wiki.centos.org/HowTos/CommunityBuildsystem
https://wiki.centos.org/SpecialInterestGroup
https://wiki.centos.org/QaWiki/CI/

CONTACT

centos-devel@centos.org
#centos-devel on Freenode
@bstinsonmhk