RPM and Red Hat Build System

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Abstract

- Description of RPMs and Red Hat Build system

RPMs

- Method of packaging executables for distributions
- All things sent to RH customers as RPM
- Internally use Source RPMs to build packages

SRPM Structure

- Pristine tarball
- Set of patches
- Spec file:
  - Information about package
  - Dependencies
  - Provides
  - Applies patches
  - Configures
  - Builds
  - Install
  - File manifests

Beehive Build System

- Collection of machines
- Have chroot for various distro
- Generates RPM (and debuginfo) files from SRPMs
- Some package testing, e.g. gcc and gdb

Management of RPMs

- Fedora making things more visible
  - before only visible after built in beehive before
  - now getting externally visible CVS repository
- Have common make file to handle operations:
  - Import tarball
  - Tag uniquely for build
  - Create SRPM
  - Submit job to beehive (check out from CVS and start build)

RPM Philosophy

- Tarball is nearly what wanted
- A few patches to fix problems or to add enhancements
- Backports of patches rather than branches and maintain separate source
- With RHEL stay with same ABI for life (avoid wholesale switch to newer/different version)