

# How to Effectively Manage and Release Your Drupal Contributions

Derek Wright (dww), DrupalCon Boston, March 2008

## Why care about release management?

- Drupal 6 core contains update status notifications so sites know when to upgrade.
- Proposal for a killer feature in Drupal 7: "Automatic"(!?!) upgrades.
- If you manage your releases correctly, it will save you time and hassle.
- It allows people to actually use your code.
- It allows you to handle security problems quickly and safely.
- It makes it easy for you to keep moving your code forward and improving it without making life hell for your users.

## Underlying assumptions

- No one is forcing you to do any extra work or to do anything -- you always scratch your own itch (or the itches of people paying you).
- No one requires that you put your code on drupal.org and share it with the world.
- The Drupal project thrives because so many people contribute their code.

## Once you upload your code, then you have some responsibilities

*Putting code on drupal.org implies that you think people should use it.* Therefore:

- You have to be conscious of security vulnerabilities and be willing to fix them.
- You should clearly state your intentions and plans as a maintainer so users can prepare.
- You should be aware of your user-base.
- Poorly maintained code contributed to drupal.org gives Drupal itself a bad name.

## Tools for maintainers

There are three primary tools that help you:

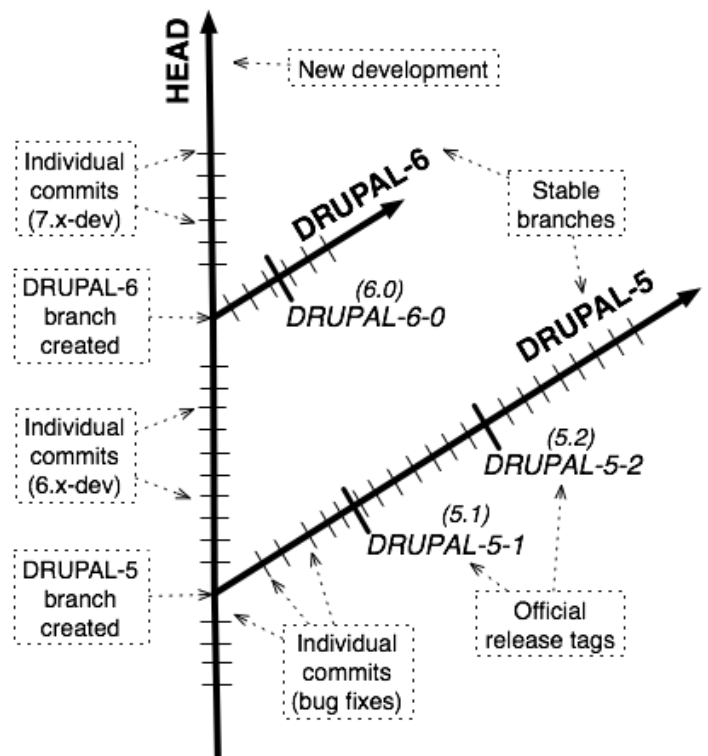
- A revision control system (currently CVS) lets you keep track of changes and is required to host your code on drupal.org.
- Creating releases (both official releases of a specific set of code that never changes, or development snapshots that are rebuilt automatically). Official releases are best.
- Project nodes on drupal.org allow you to describe your contribution, show what versions are recommended to use, and state your intentions as a maintainer.

## Basics of revision control

There are three key concepts to grasp:

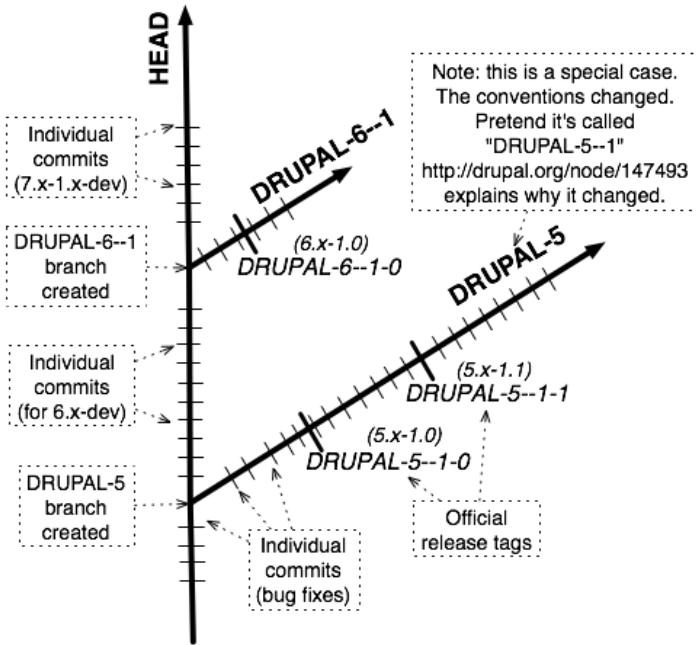
- Revision: a specific copy of something. For example, a particular file in a given state. Every time you commit a change, you get a new revision.
- Branch: an isolated set of revisions that are independent of other branches. Imagine this is a new directory with its own copy of each file. You can modify files in one directory without changing the copies in others.
- Tag: a label or name you give to a given set of revisions of the files on a certain branch.

CVS Branches and Tags for Drupal Core



## Why using branches matters

- Branches allow you to isolate changes and develop for different versions of core.
- Having stable (bug-fix-only) branches let you keep part of your code stable so people using it can run their sites, while you work on cool new features without fear or hesitation.
- Development snapshot release nodes for your branches allow testers without CVS to access your code.
- Release notes can explain your intentions.



### How to commit a patch

Before you commit a patch, you should:

1. Ask yourself what branch(es) this patch should go in (new feature vs. bug fix).
2. Make sure you're working on the branch you think you are [`cvcs status`].
3. Make sure your copy only has the changes you think it does [`cvcs diff`].
4. Decide who deserves credit.
5. Write a short but clear commit message that refers to the issue number, gives credit, and summarizes/justifies the change. (See <http://drupal.org/node/52287> for more.)

### Why official releases are better

- An official release is based on a specific tag which never changes, so everyone knows exactly what the code is.
- If/when someone reports a bug, you can use the same code to reproduce and fix it.
- Release notes summarize the user-visible changes without the full commit history.

### How and when to make a release

- Make a release when you think it's worth it for your users to upgrade.
- Do *not* make a new release after every commit to your code -- don't cry wolf.
- Security fixes (after you've worked with the security team) get an immediate release. <http://drupal.org/security-team> for more.
- Have to use some judgement and sense.
- Beta/RC releases can be very useful.

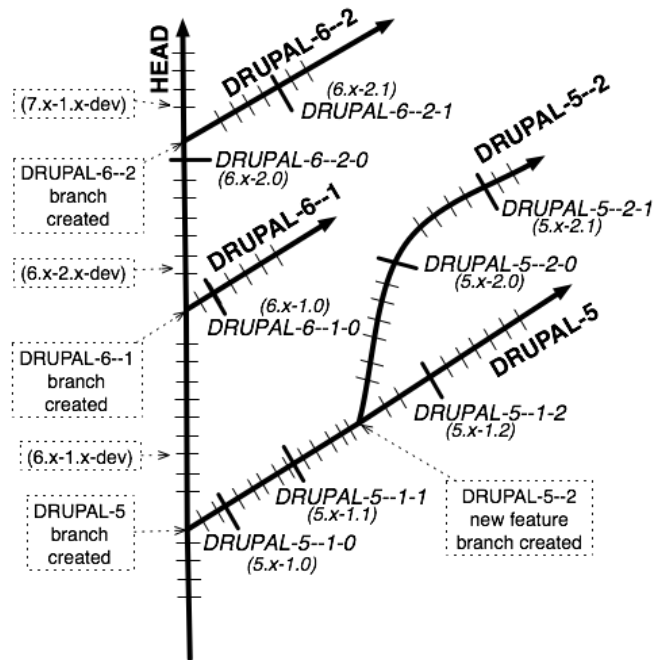
## Releases and Update status notifications

- Update status compares what's installed on a site vs. what releases are available on drupal.org to recommend upgrades and alert administrators if there's a security update.
- Beta or RC releases are marked as "Also available", as are releases from newer branches (such as new feature branches).
- If a branch is no longer supported, Update status will warn users to upgrade.
- You can't "fix" a release and change it -- once it's out, the only fix is a newer release.

## Strategies for using CVS HEAD

There are two primary approaches:

- 1) Keep changing HEAD to follow changes to the in-development version of Drupal core. This helps flesh out potential problems with changes to the core API, and you're ported as soon as the new core is out.
- 2) Use HEAD to write new features for an older, stable version of core. For example, a 6.x-2.\* release series while your stable 6.x code is in the DRUPAL-6--1 branch



## Other resources

- <http://drupal.org/handbook/cvs>
- <http://drupal.org/handbook/cvs/releases>
- <http://drupal.org/handbook/cvs/quickstart>
- <http://drupal.org/patch>
- CVS: [/contributions/tricks/cvs-release-notes](http://drupal.org/contributions/tricks/cvs-release-notes)