Local Ubuntu repositories with apt-mirror

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Agenda

• What is it? Why use it?
• Installing
• Configuring
• Usage
• Using plugins

• Lab & Exercises: Create a local repository and make your other machines use that!
apt-mirror

What? Why?

• Running Ubuntu on many machines on your (and you users) network, you will have frequent need for updates - this creates a significant amount of network traffic. And it can be very slow!

• Creating a local mirror once, and then making it available to other people (e.g. over the network, on USB drive or DVDs) near you can be a great way to help building networks and user satisfaction!

• Cascading mirrors in a meaningful way multiplies the benefits!
Installing apt-mirror

- apt-mirror is part of the Ubuntu repositories, so it may be installed via apt-get:

  > apt-get install apt-mirror
Configuring apt-mirror

- Running a default install, apt-mirror will create its repository in
  
  /var/spool/mirror

  and the files will be in, e.g.

  /var/spool/apt-mirror/archive.ubuntu.com/ubuntu

- It can be a good idea to point this to an external disk instead, e.g.
  
  /var/spool/apt-mirror# ln -s /media/<your_disk>/apt-mirror/mirror/
Configuring apt-mirror

• If you want that repository to be reachable from the outside as

http://<yourIP>/ubuntu

you need to create a symlink in /var/www, like so:
ubuntu -> /var/spool/apt-mirror/mirror/archive.ubuntu.com/ubuntu

• Apt-mirror has its config file here:

/etc/apt/mirror.list

in a default install, it copies its settings from your existing
/etc/apt/sources.list (your machines' Ubuntu repo settings)
- take a look at both to verify they use reasonable repos.
Using

apt-mirror

• Do an initial

  >apt-mirror

  This will take a looooooong time - once! (~50GB!)
  • If you can, do this against another repository nearby, or - even better - fill the initial repo from a DVD or disk
  • Also make sure that you do not cause trouble for the line owner, by running over the cap, or causing a huge bill!
  • If this is all fine, go ahead.
  • Later updates will be a lot smaller and faster!
Using

Your new repository

• Now you can do the following on all other machines on your network:
• Find the apt configuration files in /etc/apt
• Make backup copy of sources.list and then:

  Change all occurrences of the old (external) repositories to your new (internal) repository!

• Then try a test install of some package you need, or a full upgrade - you will notice a speed difference! :)


Finetuning

apt-mirror

• Once you have the basics running, get familiar with the single entries in your mirror.list, make decisions on where to get what, what to exclude and so forth.
• Make sure apt-mirror appears in your cron jobs!