A (very) brief introduction to cfengine.

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What is cfengine?

- Cfengine is an open source fabric management and "automatic maintenance" tool.

- It has been around for a while, first released in 1993.

- Class based system.

- Handles configs, packages, environments and events.

- Works using a "final state" paradigm.

Cfengine Workflow.

- Define the desired machine final state within the cfengine configs- easier said then done!

- Store these on your cfengine nameserver.

- Install cfengine on your node. (we do it from dag).

- Copy over the update.conf.

- Run the cfagent.

- Profit. Hopefully.

Gubbins.

- We use an svn "backend" to manage config versions and changes.

- Connections between the nameserver and client machines are authenticated using public/private keys.

- Main configs to worry about are update.conf, cfagent.conf and class-specific *.cf files.

- Invokes 3 daemons: cfservd (server daemon), cfexecd (oversees periodic running of cfagent) and cfenvd (which performs anomaly detection).

The Good.

- Combined with PXE/Kickstart really takes the sting out of re-installing nodes.

    – A great help during Step'09 when a pool node blew a system disk.

- Takes work away from yaim.

- Makes rolling out small changes a breeze.

- A major asset in keeping your workers homogeneous.

The Bad.

- It ain't intuitive. At all.
    - Setting up a new server type can be a pain.
- The chances of rolling out a bodge-up across your whole cluster is increased.
    - Luckily rolling back is also easier.
- Has some odd nuances that can lead to peril (- is translated to _, IPADDR range group definitions are dodgey, possible to break your nameserver).