Automating System Administration Recovering your life

A note on the group structure



Selling upwards

The 10000 foot view

Business wins

- Management is generally not too interested in the technical details
- Show the benefits to the business
 - People not burning out
 - People being more productive
 - More income per person (or reduced costs)

Selling to your peers

Show them the view

Everyone moves together

Be clear about what you want at the end



Baby steps

The first steps

- Choose your tools
 - Puppet, cfengine, BCFG2, LCFG, Config, ...
- We started out by managing only three identical mail exchangers
- We only managed some common files on all the three boxes

Getting people comfortable

- For a few days, files were still edited on the end boxes, only to be overwritten
- Then editing files on the puppetmaster became a given
- Once this happened, we moved NagIOS check definitions, event handlers and some more config files into the puppetmaster

Danger awaits the unwary

Especially if you don't have change control or QA

Disaster tales

- Any sysadmin can blow up a box, but to blow up an entire bunch of machines takes a sysadmin with a configuration management system
- We had a junior admin send out a hosts.deny file with sshd: ALL
- Recovering from that was ... fun, and instructive

Benefits of the disaster

- The entire team saw how the configuration management system could reduce their work
- There was a major wave of support for change control and a revision control system for configurations

Package management

- Package deployment via RPM or YUM
- YUM repository for RPMs
 - Easy task
- All packages standardised and converted into RPM format
 - This was a hard task, taking about three months of effort

Partial victories as milestones

Major improvements

- Reduced number of telephonic support calls
- Used Jabber conference rooms far more effectively
- Reduced effective work hours from 12+ to a far more manageable 8/day
- As we introduced package management, host deployment time per project went from three weeks to one.

Current status, and further goals

Currently missing

- An effective change control system
- An effective review process for changes
- ITIL?
- Internal Developer support
- Windows tooling and integration