Revisiting Unix principles for modern system automation

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Just because the Cloud is all hip and stuff doesn't mean that you need to reinvent the wheel all the time thank you very much.

reclass inventory management

- Parametrise knowledge about your hosts
- Parameter merging up hierarchies (i.e. how LDAP/X.500 got it wrong)
- Supports Puppet, Ansible, Salt; adapters easy to write
- Currently working, but development stalled
- http://reclass.pantsfullofunix.net

SSH "botnet"

- Persistent connections between nodes (spoke, bouncers, mesh?)
- Run sysadmin stuff on the "botnet"
- Focus on transport.
 Do that well.
 Provide interfaces.
 Be Unix-y.

"OSI Stack" of system automation



Transport feature comparisons

	cfengine	Puppet	Chef	Salt	Ansible
Authentication	NIH	NIH	NIH	NIH	SSH
Encryption	NIH (TLS)	NIH (TLS)	NIH (TLS)	NIH (crap)	SSH
Topology	Pull	Pull	Pull	Pull or hope	Push
Resilience	Good	Fair	Fair	Hope-based	n/a

Transport Unix style

- Do one thing and do it well
- Topology independent: push *and* pull
- Plain interfaces, so usable by other tools that do e.g.
 - Monitoring
 - Data collection, asset management
 - Remote execution, policy enforcement

Live demo

ssh://git@github.com/madduck/retrans

Thanks!

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