

# LISA 2005



Paul Anderson, December 2005

## The 2005 Large Installation System Administration Conference

This report was created as an experiment using “Pages” on the Macintosh, and the title photographs from the Configuration Workshop are by David Snyder.



LISA 2005 was back at the Town and Country hotel in San Diego which now seems to be the preferred venue for the west coast (alternate years). Thankfully

we didn't see any of the serious fire problems which caused so much trouble in 2003, and the weather was cool enough to need a sweater in the evenings.

### General Impressions

Conference attendance seems to be growing again after the 9/11 slump, and there were far too many events for me to cover. I was rather committed to configuration-related activities and it would definitely have been worthwhile to have had someone else from Informatics to take in in some of the other aspects. Security and network issues seemed to be a big topic as usual, and there were a lot of interesting tutorials, lead by well-known experts - see <http://www.usenix.org/events/lisa05/> for the full programme. I have copy of the printed proceedings, and a password to download electronic copies of individual papers. Of course, the offline discussions were at least as valuable as the formal sessions, and I had a very full week.

### Apple

One of the things I was interested in this year was Apple and Mac OsX. Apple is now becoming very popular. These were probably the most common laptops in use by the system administrators themselves, and mine certainly performed wonderfully. The combination of a real Unix, high reliability, and a good user interface seems to be attracting everyone from techies to their grandmothers. Someone recommended the Circus Ponies “Notebook” application, and I used an evaluation copy throughout the week to take notes - I'm still considering whether to adopt this full-time or not.

There were at least two interesting technical papers on managing OsX in large environments, and an interesting BOF. However, the most useful session for me was the Guru session lead by Jordan Hubbard who is director of UNIX Technology for the CoreOS group at Apple. He was very knowledgeable, and seemed to be genuinely looking for feedback from the community. He talked about the tension in creating a product to satisfy both home and professional use, and he encouraged people to report “wishes” to [bugreporter.apple.com](http://bugreporter.apple.com) as well as bugs - apparently, the volume of requests here does affect priorities, even if it does not produce immediately useful replies.



I brought up the lack of an adequate package management system as *the* critical barrier to effective management of large numbers of Apple machines. This was

echoed by almost everyone else, and it was clear the Apple are aware of this. We got very strong hints that Apple are considering implementing an RPM-based package management solution. This information alone could potentially save us a huge amount of wasted effort. Of course, Jordan was obviously unwilling to admit anything officially at this stage, and it is clear that they face some difficulties in integrating this smoothly.

AFS was also mentioned, and Apple didn't seem so positive about this ("old technology"?) although they are talking to the OpenAFS group, and they are open to being convinced of the demand (via bugreporter feedback). Other topics discussed included virtual desktops, openvpn, ssh and the keychain. There was also a strong demand for new hardware to support slightly older versions of the OS so as not to force premature upgrades. This point seemed to be taken onboard.

Finally, I personally used iChat AV via a .Mac account for video-conferencing to home throughout the week. This was the first time that I have found a general-purpose application like this to work well enough to be worthwhile, and I would definitely consider using it for work-related conferencing next time (possibly for workshop participation?).

## Configuration

I was involved in three formal configuration activities - I organised the one-day configuration workshop, I presented a technical paper, and I gave an introductory talk on system configuration. The workshop report is available at <http://homepages.informatics.ed.ac.uk/group/lssconf/config2005/index.html>, the technical paper is in the proceedings, and the slides from the introductory talk are available at [\[ications/lisa05jumpstart.pdf\]\(http://homepages.informatics.ed.ac.uk/group/lssconf/config2005/jumpstart.pdf\). There is also a full audio recording of the workshop available. I went to BOFs on the new version of `cfengine`, and on the new configuration tools `BCFG` and `Puppet`. Informal discussions on configuration-related issues took up most of my remaining time at the conference. There has been Usenix approval for a more formal, independent configuration workshop at the general conference in June \(Boston\), and I will probably be on the committee for this.](http://homepages.informatics.ed.ac.uk/dcspaul/publ</a></p></div><div data-bbox=)

In general, there is a rapidly growing interest in configuration, but the state-of-the-art is still primitive. The technical talks on the subject were mostly disappointing (Sanjai Narain's talk being a notable exception). The tools (commercial or not) appear considerably less-effective than `LCFG`, despite their very active promotion. I have avoided promoting `LCFG` in the past because of our inability to provide effective external support. However, we do still seem to have a genuine lead in this area, and the promotion of inferior tools is frustrating.

Further configuration details are available in the workshop report, slides, and published papers.

## Advanced Topics Workshop

The ATW is an annual opportunity for senior people to discuss the state-of-the-art and important issues in system administration (for a full day). There is no fixed agenda and the discussions usually ramble across a range of topics. This year, the chaos was moderated by some very interesting web-based software (see the screen dump on the following page). This was developed in response to the (dubious) practice that had evolved in previous years of using IRC during the workshop for "out-of-band" communications.

Topics discussed were chosen from those suggested by the participants. Some of the suggestions are shown on the following page, and I have a full list if anyone is interested. I was particularly interested in the discussions on Macintosh and the use of new web-based technologies such as Wikis (very popular) and RSS. There was also quite a long discussion on physical plant issues which could have been interesting to us, but I wasn't really able to participate (I don't know anything about it).

<b>Now speaking:</b> Geoff	<b>Topic:</b> Professionalism, "seniority," where are we going, where should we be going, LOPSA, and training	<b>1:56 p.m.</b> <b>Cookies at 2:55 p.m.</b>
<b>Waiting to speak: 8</b> 1. Chris 2. Tom 3. Mark R 4. Bill 5. Alva  <input type="button" value="I want to speak"/>	<b>Time on topic: 0:15</b> <b>Interest: 100% (32 of 32)</b>	<b>Are you a consultant?</b> <hr/> <b>I said: No</b>  <input type="button" value="Yes"/> <input type="button" value="Abstain"/>
<input type="button" value="I want to speak"/>  <u>Total: 0:04:54</u>	<b>I want to: Keep going</b>  <input type="button" value="Move on"/>	<b>User: dcspaul</b>  <input type="button" value="Refresh"/>
	<input type="button" value="Suggest a topic"/>	<input type="button" value="Change colors"/>  <input type="button" value="Log out"/>

## Users:

Adam, Alva, Andrew, Bill, Brent, Bryan, Cat, Chris, DJ, David P, David S, David W, Doug, Geoff, Graydon, Greg, H. Paul, Jon, Josh, Ken, Lois, Luke, Marc S, Mario, Mark R, Markus, Paul A, Remy, Richard, Skaar, Steve, Tom

## Suggested Topics:

new paradigms in storage mangement - from the user perspective - e.g. beyond HSM, ILM [Tom]

Generalist vs. Specialization [Mario]

Caffeine and Housekeeping [Trey]

"Trap email address" in lists provided to vendors - good/bad? Issues? [Jon]

Favorite/wanted personal productivity tools (i.e., I want recommendations for a Bluetooth headset) [Brent]

Managing juniors -- creating structures so they can do more good and less harm [Trey]

What technology are you going to care about next year? [Adam]

Unix authc/authz via Active Directory/generic Kerberised LDAP [Richard]

Bill wants you to submit a paper for LISA 2006 [Adam]

The ATW software moderates the queue of people waiting to speak by allowing them to join an online queue, rather than waving a physical hand. This is lot fairer, but it does need some free interpretation by the human moderator to prevent it becoming too restrictive. More interesting was the ability to vote on whether or not to continue a topic. This allowed the moderator to force a change of topic when sufficient people were bored, rather than continuing and having most people go off to read their mail! The software also supported online “quick polls” to get votes on opinions, and it tracked the time spent talking by each individual (happily mine was somewhere about average).

### **Some Other Topics**

- There was a large vendor exhibition. I collected piles of information and sample software for console solutions which I thought we might be interested in (not that I know much about it).
- Having recently attempted to write a short booklet, I went to a BOF organised by someone from Prentice Hall on technical writing, and book publishing.