

LISA10 San Jose, CA USA

Dong Yan
Oslo University College

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Arrival

In November 2010, I went to San Jose, USA to attend LISA10 conference. LISA is big conference, organized by USENIX every year. I am look forward to go there to know some crazy administrator guys and learn something new. I took the British Airways to London and changed flight to San Francisco and finally took the vans to San Jose. The food and service in the plane was very good. When I arrived at San Jose, it was night. So I had to go to bed. Next morning, we walked around the hotel and San Jose to find Subway for breakfast. It is a simple and plain hotel, connecting to the San Jose Convention Centre, where we had the LISA conference.



Photo: Hilton Hotel

And a San Jose Convention Centre main gate photo.



Photo: San Jose Convention Centre

We walked around San Jose a little bit. It is a nice city. A tram runs around the town. You can find many kinds of food, Mexican taco, Japanese sushi, Chinese dishes and American hamburger. Around San Jose, there are many enterprises. The tram connects many enterprises and some station has a funny name, like *Cisco Way* and *I-880*.

LISA

LISA is biggest conference about the system administrator. It has many parts. The tutorial part is good part and has many topics, like security, virtualization, scripting file system and IPv6. I chose several topics to join the courses. Another part is the Tech Sessions. And this part is divided into three parts. One is REFEREED PAPERS, one is INVITED TALKS, another is THE GURU IS IN.

This year's best student paper is from Michigan State University, a PhD student, Fei Chen and Alex X. Liu. Their topic is correcting firewall policy faults automatically. It is interesting and challenge. Although their model is naive, it is good to try. Here is their paper:

http://www.usenix.org/events/lisa10/tech/full_papers/Chen.pdf. This was the site where the award was held and invited people talked.



Photo: LISA site

Cfengine

I am a Cfengine fan. I attended the Cfengine course. The course is interesting. The CEO Mark Burgess gave the lecture. Cfengine is a configuration tool for system. Configuration is simple for one machine, but it is hard to configure hundreds of machines. So the Cfengine comes out to solve this problem. Cfengine can maintain each machine's state. When a disaster comes, Cfengine can help you to recover the machines back to normal state. Cfengine will run in each machine with its policy. If a master policy sever is running, other machines will check the policy version every 5 minutes. Installing Cfengine is not hard. You can download a package from Cfengine's website cfengine.com. Or you can install it from source code. The source code is available from cfengine.org. I think the hard part is the Cfengine language. Cfengine accepts its own language. If you are the SAGE member, you can find the Cfengine guide from here: http://www.sage.org/pubs/16_cfengine/.

VMWare

Nowadays VMWare is hot. In LISA10 on Monday, Tuesday and Thursday were all three full days for VMWare. On Monday it was the Fundamentals with VMWare vSphere 4. On Tuesday it was the VMWare Clouding and on Thursday it was the VMWare Performance for Gurus. I attended the Monday and Tuesday's courses. They were good.

In 2007, VMWare ESXi came to the world. It removed the service console away from the hypervisor. Installing ESXi is like installing an operation system, and it can eat up a whole disk. Virtualization technology has many benefits, like security isolation and advanced resource control. These virtual machines are hardware independent, which is easy to migrate to another server. Since VMWare ESXi doesn't have a console, we have to install one, like VMWare vSphere Client. It gives you a nice user interface and some beautiful graphs about resource usage. It is convenient to start and stop virtual machine. One virtual machine in VMWare ESXi is just some files, which is easy to copy and delete. You can go to the Inventory and do this.

VMWare has its own API functions to start/stop virtual machines. You can find all API functions from here:

<http://communities.vmware.com/community/developer/>.

Perl6

I like to use Perl. Perl is a very powerful scripting tool. It helps me a lot. In LISA10, there was a course, *Perl6 for Perl Users and Sysadmins*. I didn't attend this course. But I had a glimpse at the tutorial. It changes a lot. For example, they changed some keywords, like loop instead of for, for instead of foreach. And they brought object into Perl6. I like the object in Java. But I don't like the object concept in Perl. At least I don't like it now. Here is a little outline about Perl6 in LISA10, <http://www.usenix.org/events/lisa10/training/tutonefile.html#m6>

Interview One

Since I am Cfengine fan, the first candidate is Mark Burgess who is the founder of Cfengine. He wore jeans and yellow shoes during his Cfengine lecture. He is a gentleman and knows mathematics quite well. Based on the promise theory, he created Cfengine and it is growing. He published many papers and books. One book is called *Analytical Network and System Administration*. There are many models in this book. For example, when shall a system administrator do backup while the risk is the lowest. You may find the answer from the book.

Interview Two

Another candidate is Aeleen Frisch, who has rich experience in system administration. And she wrote many good books about how to do system administration. The *Essential System Administration* is one of the most

famous book. During the LISA10, Aeleen Frisch gave a two-day lecture, *Administrating Linux in Product Environments*. It was a huge lecture covering almost every part of the computer system. It covers:

- Recent kernel developments
- High performance I/O
- Enterprise-wide security features
- Linux performance tuning
- CPU performance optimization
- Automation technologies and facilities

If you want to know more, you can visit her website, [Personal Page](#).

Final words

In total, it was a very useful trip. I like the meeting city San Jose who combines both the American and Mexican style. I learned something about VMWare ESXi, VMWare Clouding and Cfengine. Finally I would like to say thank you to NUUG Foundation for the travel support.