



ASGC tape report

Felix Lee

Academia Sinica Grid Computing Centre (ASGC),
Taiwan

Castor workshop 2012



ASGC tape lib historical event

- First delivery in 2007.
- Upgraded to LTO4 drives in 2008.
- Surveyed after DC fire accident in 2009
 - But some tapes became pretty unreliable.
 - Repacked all of potential bad tapes
- Configured tape robot HA and load balancing in 2010.
 - We were the first customer to implement IBM TS3500 tape HA solution in Taiwan.
 - Not a good sign actually...
 - It look almost three months to entirely close this case.
- Lived in peace in 2011
 - Replaced almost all LTO3 tapes by LTO4, still a few remainings.
- Tape single robot failure in 2012
 - We have been charging very high maintenance fee
 - Not yet fixed the robot, so, we lost HA at this moment..



IBM TS3500 configuraion

- 8 frames, two service bays
- L52*1, D52*1, D53*4, S54 *2
- Total cartridges: 5025.
- 30 LTO4 drives
- Two robots
 - One failure. :(



ASGC tape issues

- Mysterious empty tapes.
 - In Castor, it showed that they should have data.
 - But there was no data in such tapes.(raw level "dd" got nothing...)
 - We had two tapes in this trouble.
 - Root cause is still unknown...
- Stuck mounting.
 - Sometimes, tape can't be mounted properly.
 - Mountape command stuck in tape server.
 - We have to kill process and restart taped.

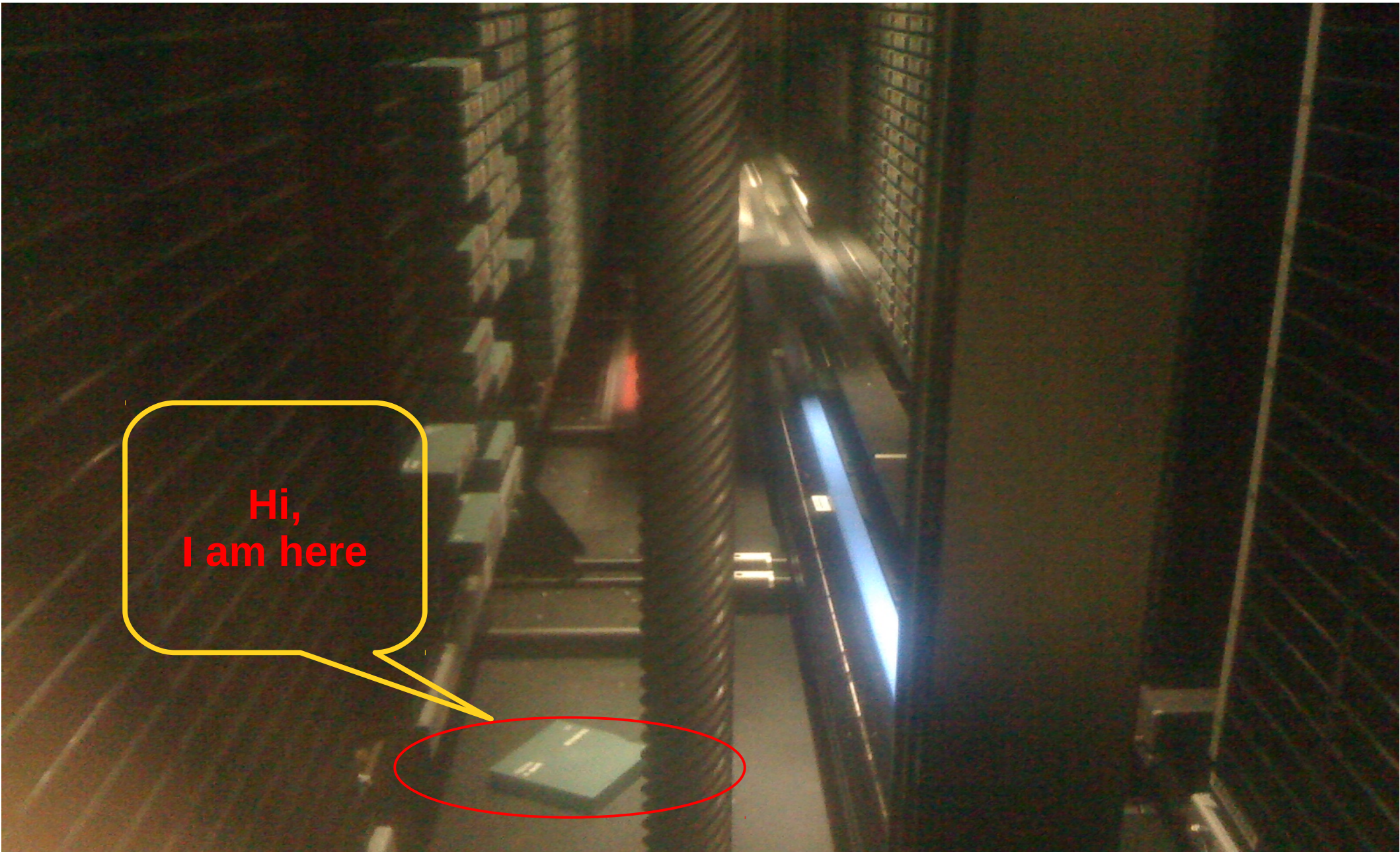


ASGC tape issues

- Struck tape
 - One day, we noticed one tape wasn't accessible..
 - Requests had been pending to it for days.
 - Tape could not be mounted, failed with smc, mtx...,



ASGC tape issues



Hi,
I am here



ASGC tape issues

- IBM mentioned that could happen because there is rubber band in gripper to make gripper to hold tape steadily.
 - And that is expendable parts for sure, it could break after time passes.



Tape maintenance

- Almost everything is cheap in Taiwan, excepting the tape library....
- Always struggle with vendor and \$\$...