

Alice T1/T2 Tutorial

BitTorrent Usage

Questions & Concerns from the IN2P3 federation

- Disclaimer : this is a summary from exchanges in the LCG-FR discussion list for technical issues. I did my best to accurately report the questions. Answers are what I understood from Pablo and Costin's replies. JM.

Questions & Concerns (1)

1

“Why is the SW not a good method ? Is it only security concerns but also performance ?”

=> The vobox is a public access machine and has write access to the SM area. Tempering the vobox enables to have all Wns run malicious software. Also NFS problems are sometimes preventing good access to the software.

2

“There would be a kind of soft area per worker, so what about management of versions, etc.”

=> No, each jobs installs what it needs in its sandbox (where actually ?)

Questions & Concerns (2)

3

“Compiling the software 8 times on a 8 cores machine is inefficient and the size is not neglectable”

=> The software is not compiled and yes it is installed 8 time if 8 jobs are running on the same 8 cores machine

4

“It seems stupid to install the software 8 times if the machine runs 8 Alice jobs. Will the cleaning be done if a job crashes ?”

5

“Would pilot jobs install the software even if they cannot run a real job and die ?”

=> They would only install the AliEn client (30Mbytes)

Questions & Concerns (3)

6

“The central tracker at CERN will be a single point of failure”

=>

7

“If the central machine is hacked, all worker nodes in all sites are exposed”

=>

7bis

“If a file is corrupted, it will be very difficult to find where it came from”

8

“We will have to open more ports in the firewalls”

Questions & Concerns (4)

9

“In theory, all machines can potentially become a seeder for the others and serving only clients from your site would mean a specially adapter tracker. How is this done ? How will local clients prefer using local seeder instead of all going to the CERN seeder ?

10

“The network traffic between worker nodes will increase and in an uncontrolled manner. It can impact other network transfers on the worker nodes and especially access to the data”

11

“BitTorrent will try to optimize the downloading of the software for the client but at the price of a controlled way of using the network”

Questions & Concerns (4)

12

“It is a nice idea but it would be better if it was something carefully planned and used for all Vos and not only Alice”