

Server drops network due to load

Introduction

We observed for the FGST xrootd servers that it might loose it's network connections (afs, nis,...) if the load on the server is to high. After the load drops the connections are established again.

This problem could be reproduced by having tens of clients reading data from a xrootd server.

Test Setup

- sysdev4540: xrootd server
- 50 clients machines (two cpu's, 1.8GHz Opterons)
- There are ten 1GiB testfiles on the xrootd server that the clients read.
- The xrootd servers the file from memory no access to the disk.
- The client uses dd (with xrootd preload lib) and a blocksize of 1MiB to read files.
- 1-4 clients are run per machine.
- Clients are starting up staggered. Clients on the same machine start at the same time but there is a delay between running clients on different machines.
- Stats on the xrootd server are collected: mpstat, intrstat, net work I/O, iostat

Tests

Test 20100210_1632

Setup

Four clients per machine, one minute after submitting clients to two machines (every eight clients).

