

Bonding Benchmarking

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February 28, 2006

1 Overview

I set out to experiment with the bonding in linux.

2 Kit

- 2 x P4 3.0Ghz connected via gigabit capable cisco switch
- 2 x 3c900's nics, set to 10BaseT in one box
- 1 x Broadcom gigabit nic in other box

3 Setup and Method

Straight "modprobe bonding", ie no link failure detection. Ran twice swapping to measure in and out. On one host: `sudo dd if=/dev/zero bs=1M count=512 — sudo pv -s 512M — sudo nc host 9999` and on the other host: `sudo nc -l -p 9999 — sudo pv -S 512M /dev/null`

4 Results

5 Analysis

Average throughput for single 10M nic 858kB/s, range 6kB/s Theoretical max 1220kB/s, ie 30pc less

Interface	In	Out
eth0	859	856
eth1	862	856
bond0	1382	1607

Table 1: Cross connector for Chalsig

Average throuput for 2 bonded 10M nics 1495kB/s, range 225kB/s Theoretical max 2440kB/s, ie 38pc less