SNA Lab - Link Aggregation

Choose one task

Linux Bonding

- Create two virtual machines with two network interfaces each
- Study the various mode= driver options there are, for enabling Linux Bonding[1]. Which mode do you think is best?
- Aggregate the two NICs to obtain both, fault-tolerance and higher bandwidth between the nodes
- Validate your results on both aspects, redundancy and performance[2]

Linux Bonding & old Cisco Catalyst switches

teams of two

Do the same but with physical machines instead, and through an old Cisco Catalyst switch. Which Linux Bonding mode(s) are compatible with the network device? Validate 100Mbit/s link aggregations. Available hardware:

- 6 to 9 dual-NIC workstations
- 2 Catalyst 2950 series (WD-C2950-24)
- 2 Catalyst 2950 series (WD-C2950T-24) incl. 2xGbit

Old Cisco routers

Pick one or more old Cisco devices and play with it

- Cisco 1700 series (1760) – untested
- Cisco 2550 series (2511) – untested
- Cisco 2600 series (2610XM) – untested

Are those in working condition? What systems and firmware versions are currently running? Eventually find and update their firmware and document it. No Proof of Concept required – simply explore the available features and report on the device capabilities, in particular its dynamic routing protocols.

[1] Linux Ethernet Bonding Driver HOWTO https://www.kernel.org/doc/Documentation/networking/bonding.txt
[2] iPerf https://iperf.fr/iperf-download.php