

Chapter 4

Hardware Details

4.1 Switch

Currently the cluster employs three switches to interconnect the machines:

- one IBM Fast Ethernet Desktop Switch 8275 Model 324 (as shown in Fig. 4.1), which offers 24 ports helping drive 10/100 switching. Port trunking capabilities provide aggregate bandwidth (up to 800Mbps) between the switches.
- one Intel Express 510T switch, with 24 Ethernet 10Base-T/100Base-TX ports, supporting 8K MAC addresses, and 100Mbps data transfer rate.
- one linksys SRW2024 switch, with 24 Ethernet 10Base-T/100Base-TX/1000Base-T ports, supporting 10/100/1000Mbps data transfer rate and 48Gbps backplane bandwidth.



Figure 4.1: IBM Fast Ethernet Desktop Switch.

4.2 Cluster-Reserved Nodes

Table 4.1: Configurations of the Cluster-Reserved Nodes

Hostname	Configuration
n200	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n201	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n202	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n203	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.40GHz cache size : 512 KB MemTotal: 1 GB
n204	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n205	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n206	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n207	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n208	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n209	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB

Hostname	Configuration
n210	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n211	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n212	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n213	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n214	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n215	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n216	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n217	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n218	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n219	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n220	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB

Hostname	Configuration
n221	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n222	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB
n223	processor : 0 model name : Intel(R) Pentium(R) 4 CPU 2.26GHz cache size : 512 KB MemTotal: 1 GB