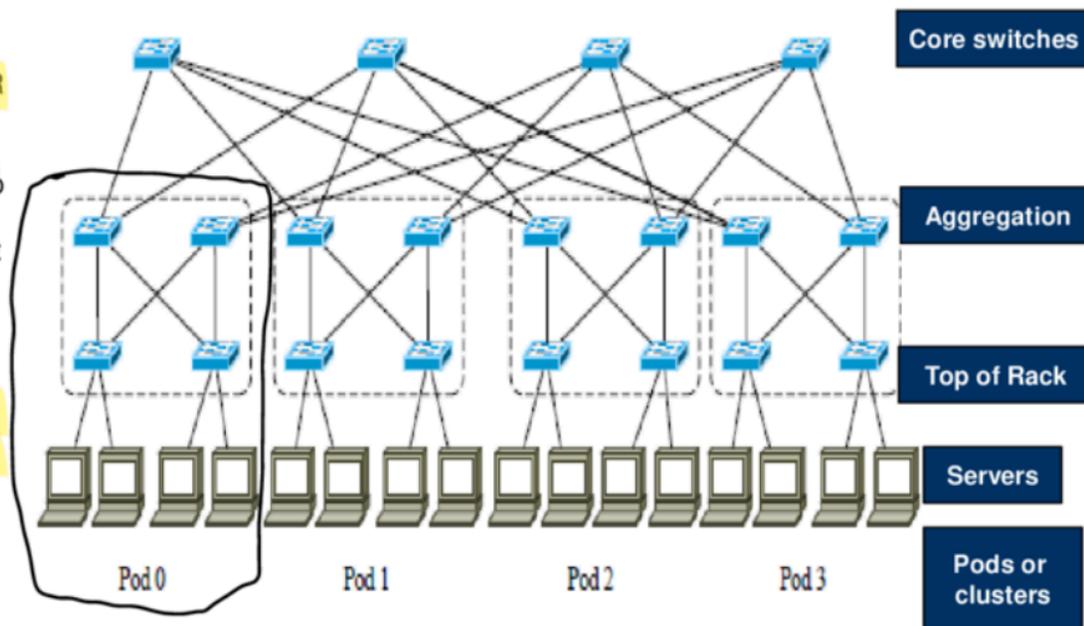


Intra-Data Centre Topologies (Fat Tree)

- The main advantages of this topology is its the redundancy and the possibility of using cheaper switches. This comes at the cost of wiring complexity and scalability problems.

Each n -port switch in ToR tier is connected to $n/2$ servers. The remaining $n/2$ ports are connected to $n/2$ switches in the aggregation level. The set of $n/2$ aggregation switches, $n/2$ ToR switches and the servers connected to the ToRs form a basic cell of the fat tree called pod or cluster. In the core level there are $(n/2)^2$ n -port switches, each one interconnected to each of the n pods



The maximum number of servers in a fat tree with n -port switches is $n^3/4$.