Massively parallel processors

* A large parallel processing system with a shared-nothing architecture
* Consist of several hundred nodes with a high-speed interconnection network/switch
* Each node consists of a main memory & one or more processors
* Runs a separate copy of the OS
* advantages: scalability, price
* MPP processors can have up to 200 or more processors working on application and most commonly communicate using a messaging interface.
* This allows MPP databases to handle massive amounts of data and provide much faster analytics based on large datasets.
* There are several types of MPP database architectures.
* **Grid computing**– uses multiple computers in distributed networks. This type of architecture uses use resources opportunistically based on their availability. This architecture reduces costs for server space, but also limits bandwidth and capacity at peak times or when there are too many requests.