

1 Chap0

8Fallacies

1.Network Reliable. [PowerSupply, Hard-Disk, NodeFailures, Configurations, Bugs] **Effect:**applicationHangs, crashes |**Countermeasures:** Redundancy HW&SW systems,middleware &application; CatchExceptions, CheckCodes, React;Retry ConnectingUponTimeouts
2.LatencyZero.[Latency:timeForData Transfer(speedOfLight)& Bandwidth:howMuchData transferred 3.Bandwidth is infinite. 4.The network is secure. 5.Topology doesn't change. 6.There is one administrator. 7.Transport cost is zero. 8.The network is homogeneous

2 Chap1-CommunicationBasics

SOCKET

3 Chap2 EXTERNAL DATA REPRESENTATION

in OSI Presentation Layer

Heterogeneity

HW: Diff. HW architectures store bytes:Big Small Endian ProgrammingLanguage:Diff. PL store data types differently:AB, 0AB

Transformation between representations: Transformation between local and remote representations|Information may be lost

Two realizations: **1.Pairwise transformation between n local representations**(vollständigGraph, $\#n^2 - n$, Either sender or receiver has to transform)
2.Transformation to and from canonical representation(a single canonical C as intermediate representation|No local information about communication partner needed| $\#2 * (n - 2)$, -2 if canonical is one of n)