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3 / 2

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1997.12.16

POSTECH DPE Lab.

- 
- - Client/Server System                      2-tier      3-tier  
Architecture
  - 3-tier Architecture
  - POSCO Client/Server System
  - 3-tier Architecture Migration
  - POSCO
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- 2-tier Architecture Client/Server System

3-tier Architecture

Migration

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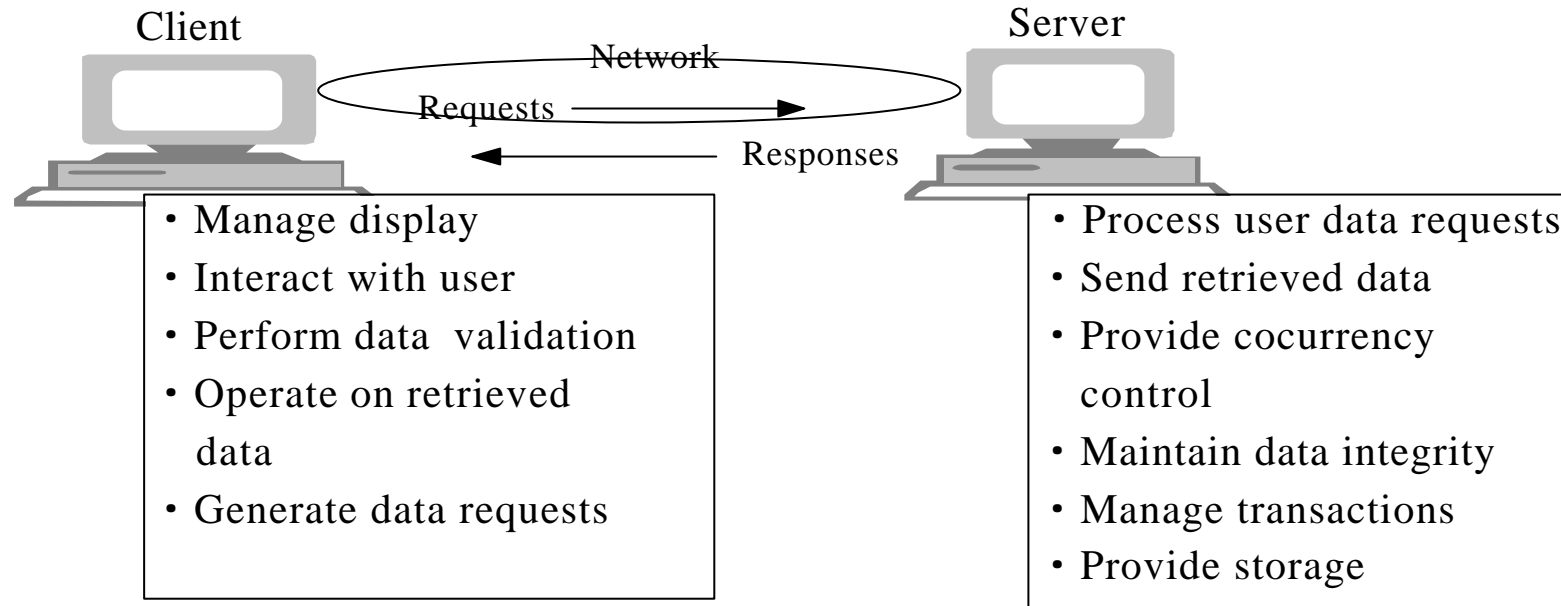
POSCO Client/Server

System

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# Client/Server System

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- : Presentation Logic (User Interface),  
Application Logic (Business process),  
Data management (Database)

가

# 2-tier Client/Server System

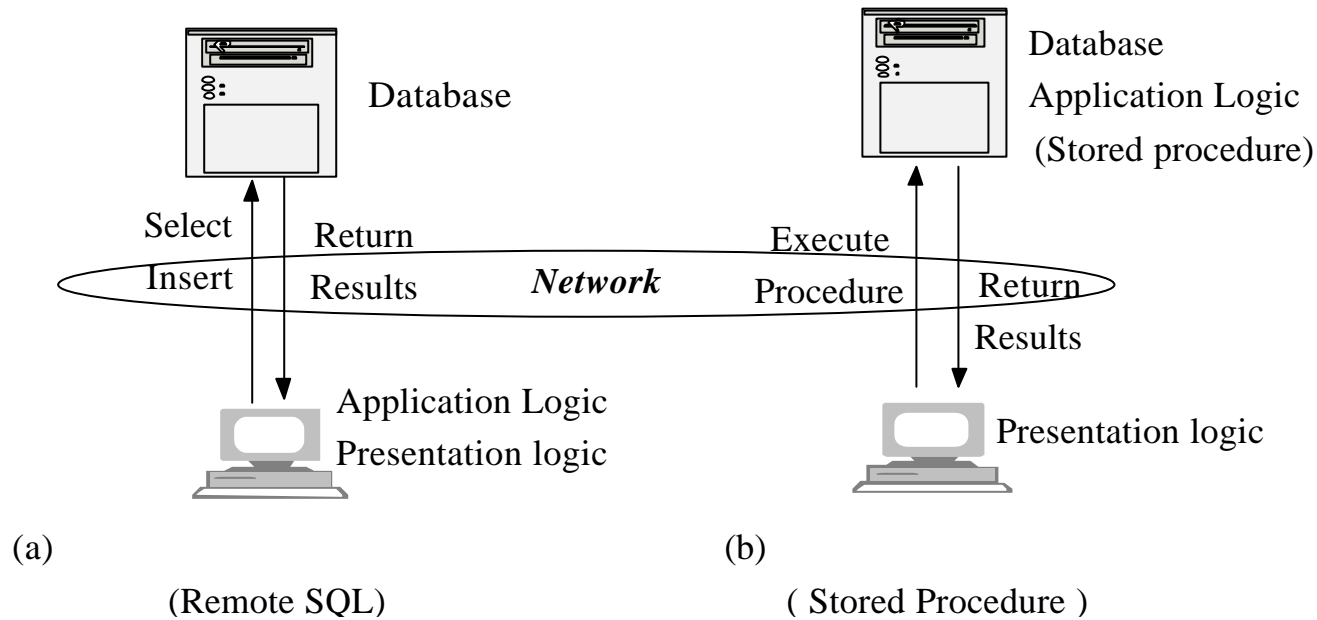
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- Presentation Logic, Application Logic, Database가 2

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# 2-tier Architecture

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- Embedded sql (ESQL)  
access

- fat client

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stored procedure (SP)가

-

SP call .

- thin client or fat server

# 2-tier Architecture

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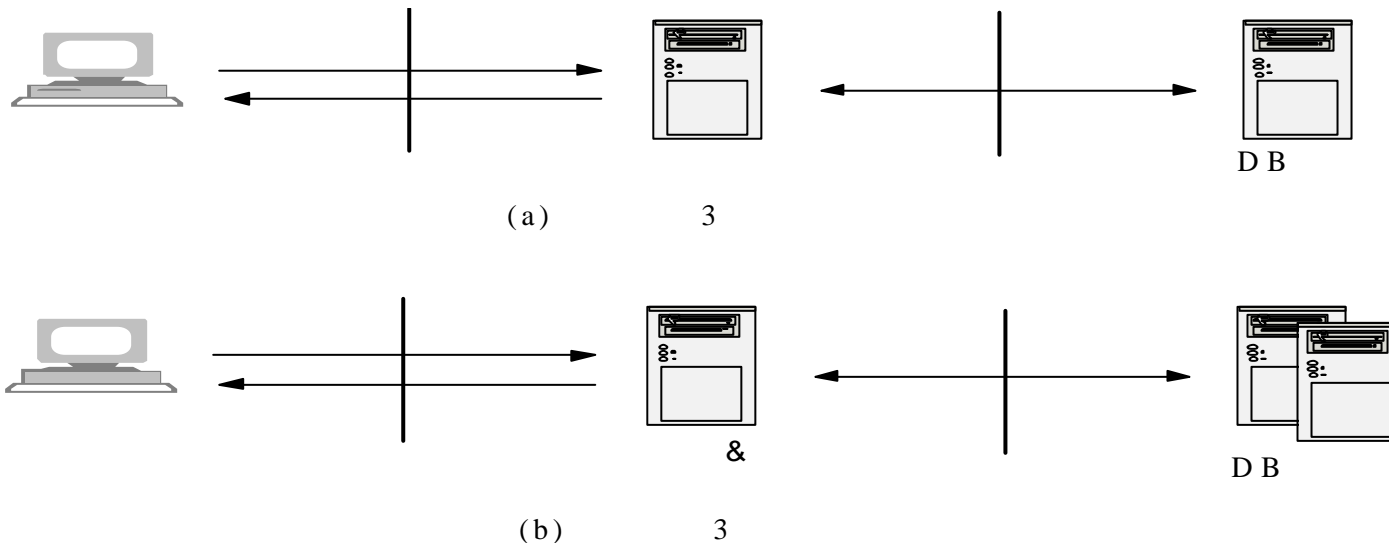
# 3-tier Architecture System

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# 3-tier Architecture

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□            **3**  
-                            3

□            **3**  
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OLTP

# 3-tier Architecture

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- performance

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- 2-phase commit 가

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- LAN WAN : , ,

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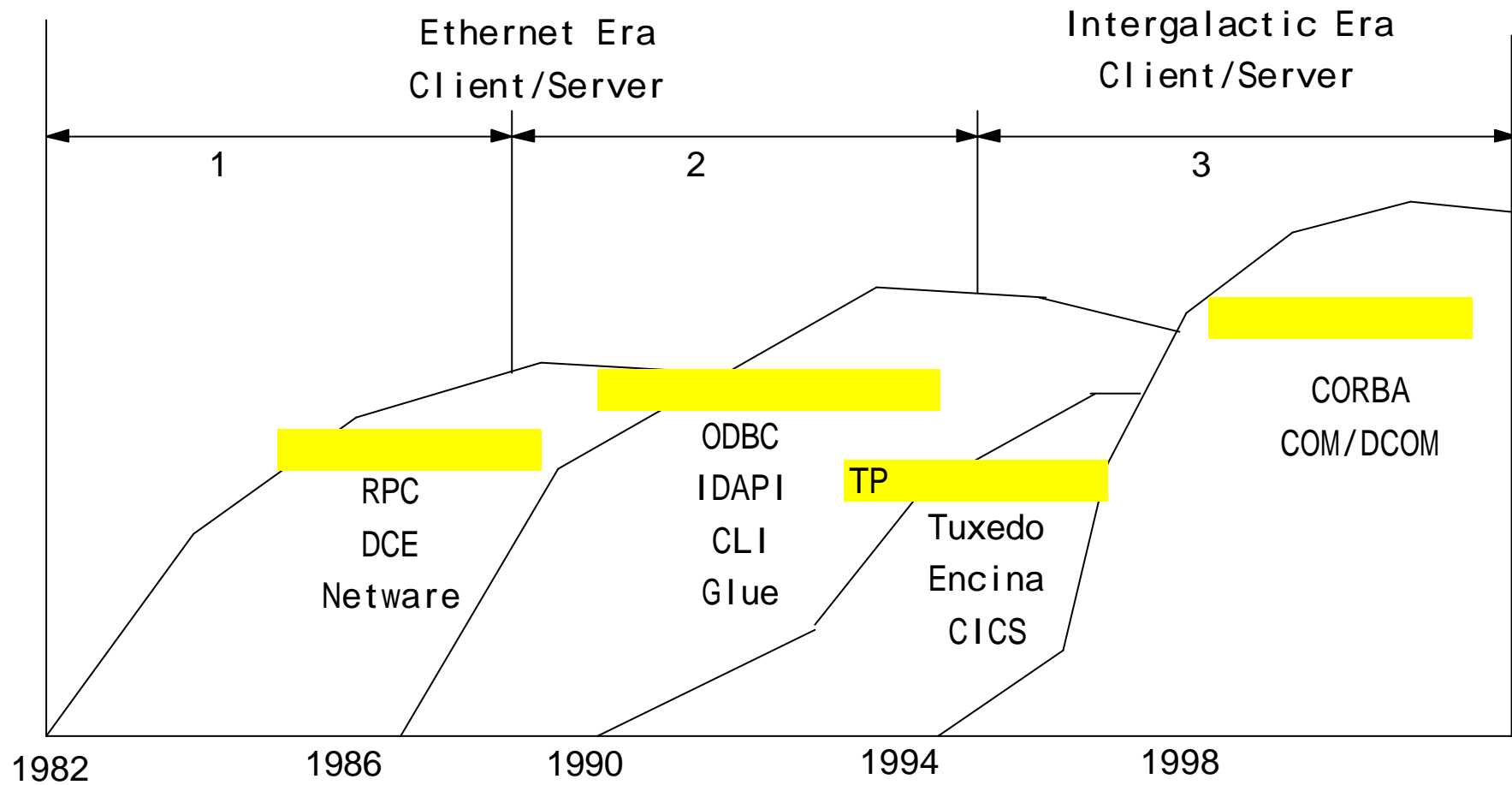
# 2-tier 3-tier Architecture

	2	3
	<ul style="list-style-type: none"> <li>□□</li> <li>□□</li> <li>□□</li> </ul>	<ul style="list-style-type: none"> <li>□□</li> <li>□□</li> <li>□□</li> <li>□□</li> </ul>
	<ul style="list-style-type: none"> <li>□□ 가</li> <li>□□</li> <li>□□ RDBMS</li> </ul>	<ul style="list-style-type: none"> <li>□□</li> <li>□□</li> </ul>
	<ul style="list-style-type: none"> <li>□□</li> <li>□□</li> <li>□□ LAN</li> </ul>	<ul style="list-style-type: none"> <li>□□</li> <li>□□ LAN WAN</li> <li>□□</li> <li>□□ 가</li> </ul>

# 3 - tier Client/Server

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- 3 /
  - 
  - Multi-vender, Multi-protocol
  - 
  - : Back-up machine
  - Transaction : Transaction Scheduling
- Response Time



# 3 - tier Architecture

(1)

- - 3
  - TP 100
  - 1700
  - ,
  - 
  - OLTP

# 3 - tier Architecture

(2)

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- IBM

3

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: SUN E5000

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3

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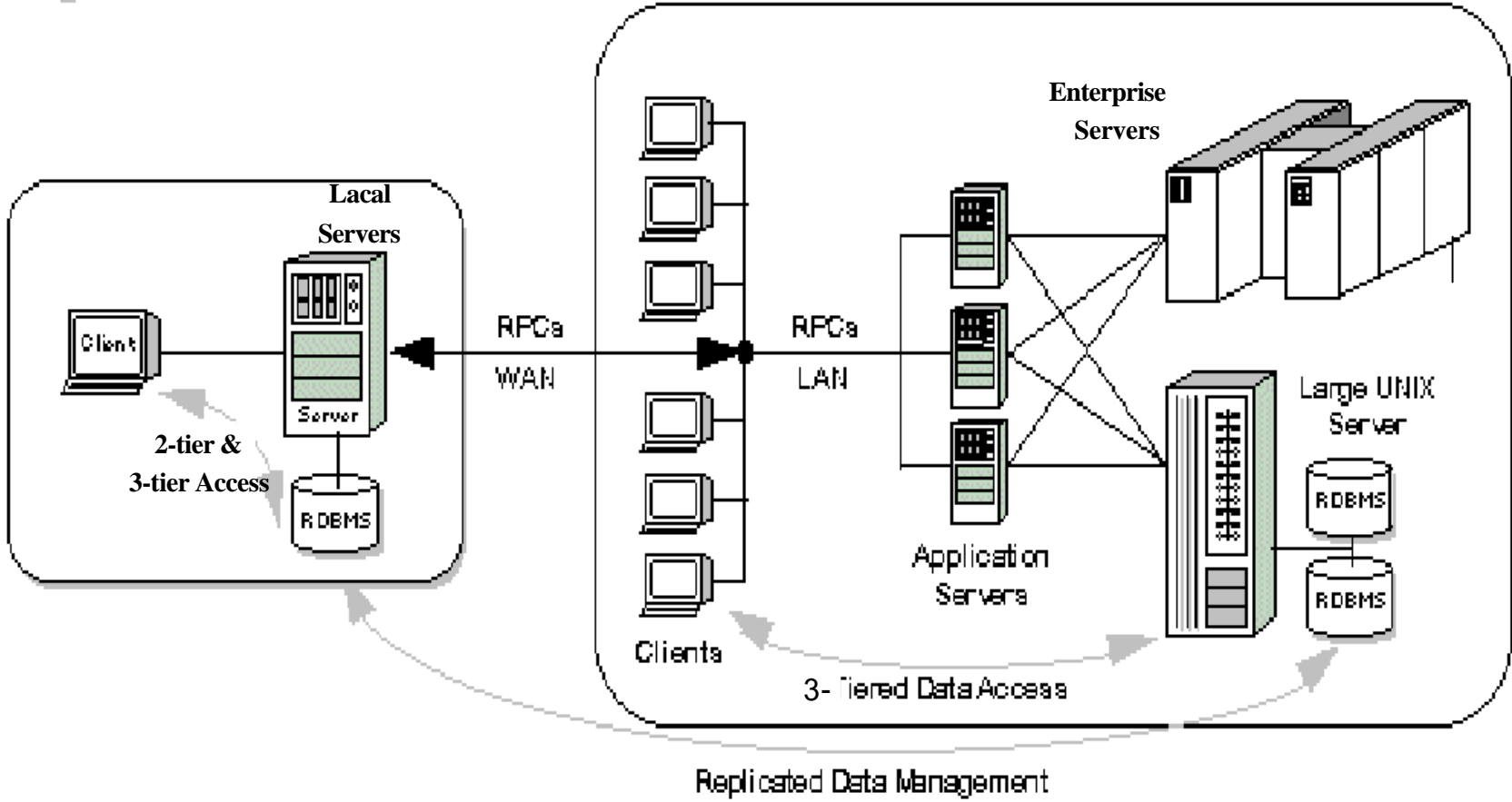
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# 3-tier Architecture Migration (1)



# 3-tier Architecture Migration (2)

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- : Load Balancing

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- :

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- :

# 3-tier Architecture Migration (3)

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- - - ?
      - ? 가 50GB  
? 10 response time 가 .
      - ? 가 100  
? 가  
? 가
      - ? 가
      - ? Batch ,

# 3-tier Architecture Migration

(4)

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?

? 가 50 ~ 20GB  
? response time 3 ~ 10

? 가 100 ~ 500  
?  
?

, , .

# 3-tier Architecture Migration

(5)

- 

-  
?  
? 100,000  
?  
?  
? 가 200GB  
? response time 3  
? 가 500  
?  
? 가 , ,  
? , , .

# 3-tier Architecture Migration (6)

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- 3

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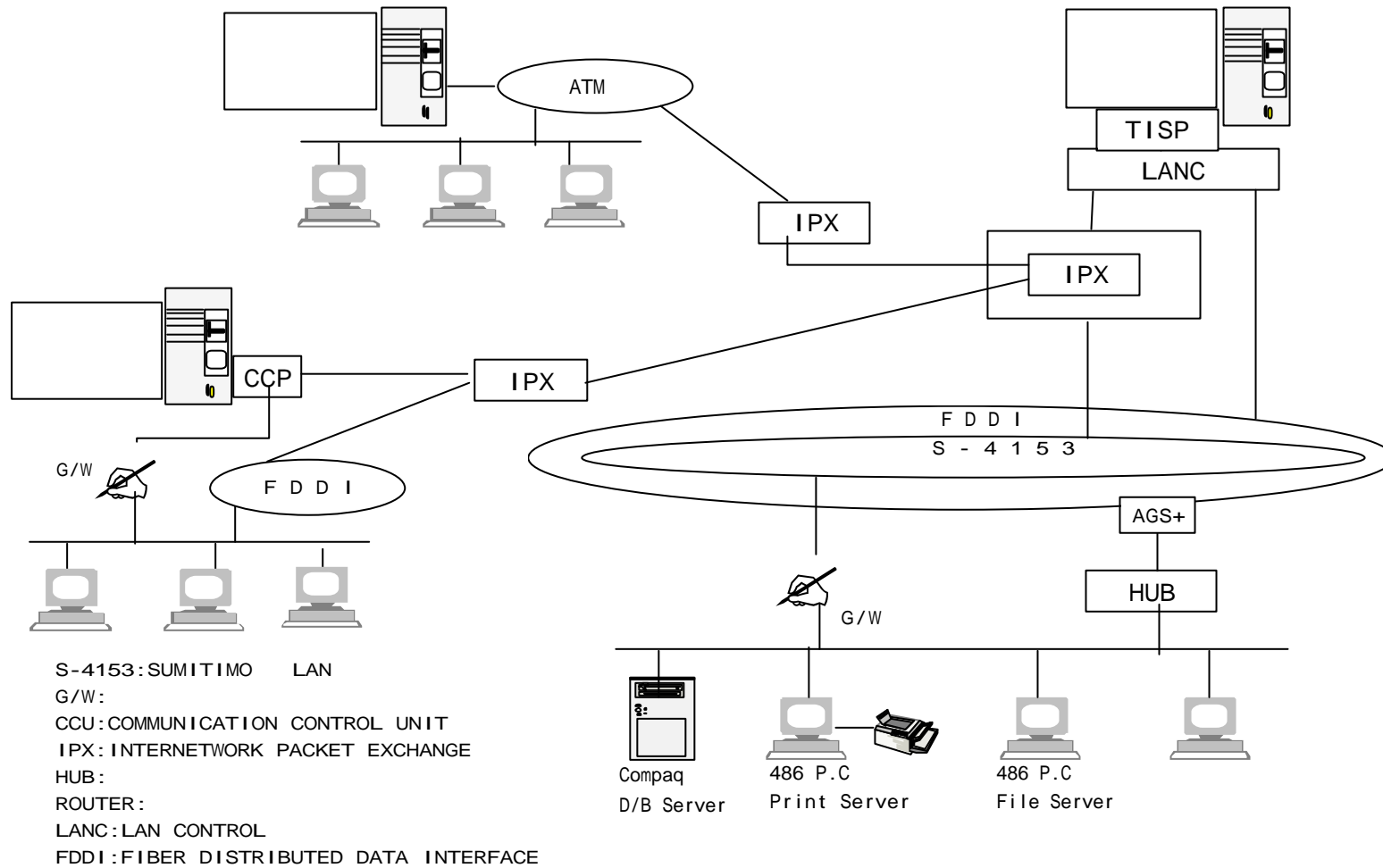
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# POSCO Client/Server System

(1)

- 



# POSCO Client/Server System

(2)

- + /
- : LAN + TCP/IP FDDI & ATM
- : IBM 4 , FACOM 4 , 100 , PC 8000
- - -
- - 가 .
  - 가 .
  - 가 .
  - 가 가 .



# POSCO Client/Server System

(3)

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- / 2 가 90%  
가  
- 가 : DBMS  
- :



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- 2 D/B  
DBMS DB

# POSCO Client/Server System

(4)

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- DBMS 가

가

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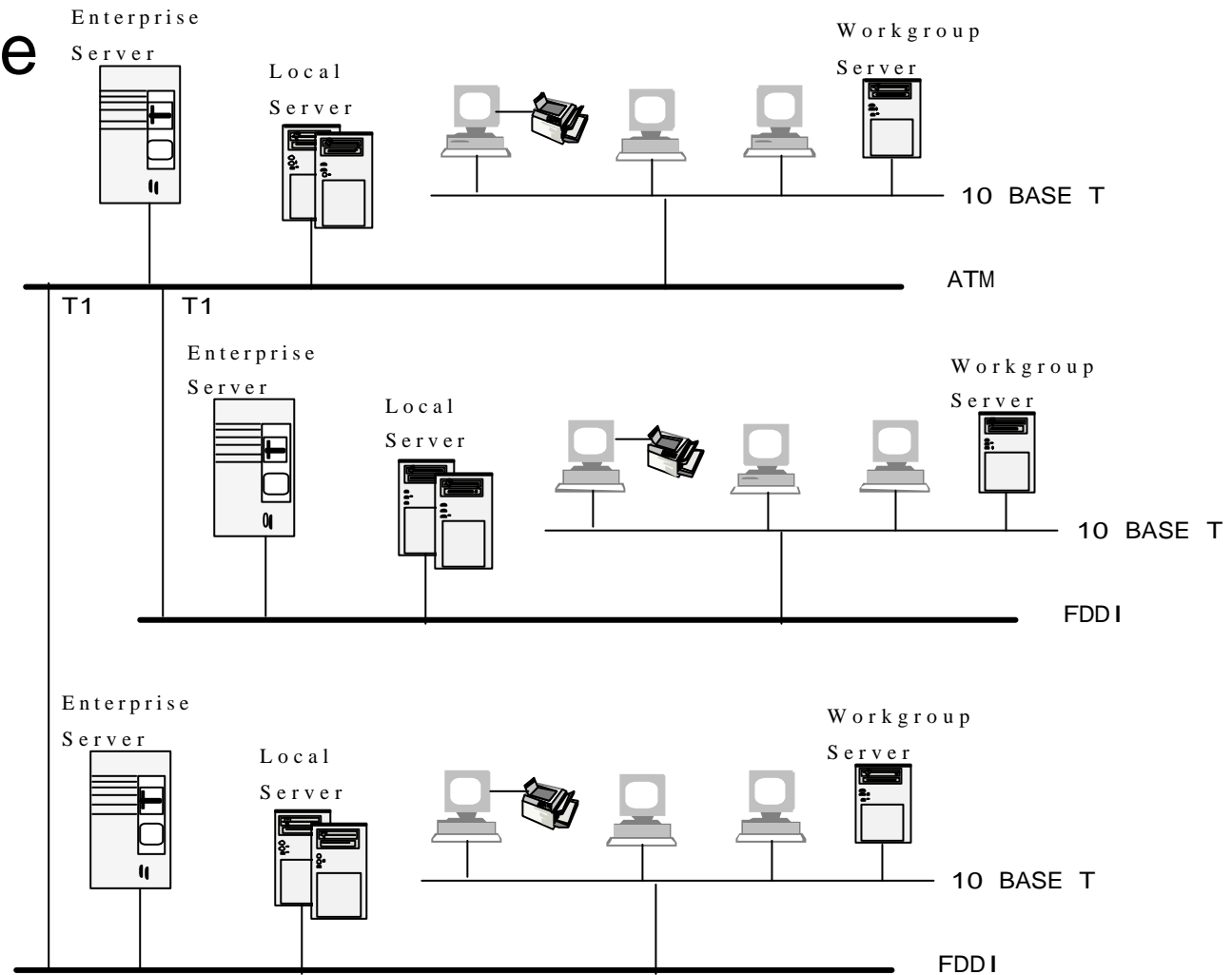
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# POSCO 3-tier Architecture (1)

- Architecture



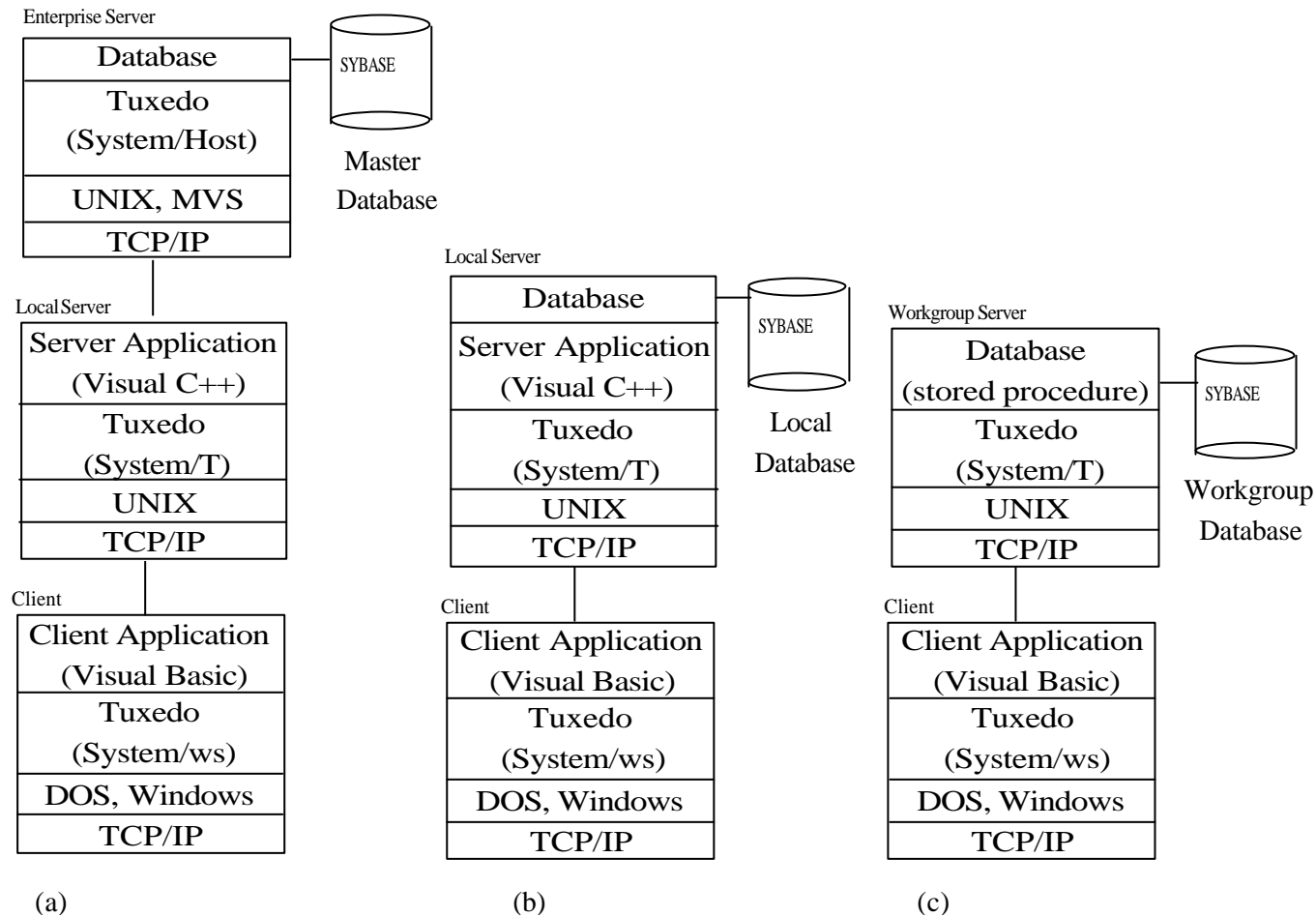
# POSCO 3-tier Architecture (2)

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- 
- : UNIX ,
- : OLTP
- 
- : C++, Visual Basic 4.0
- : +

# POSCO 3-tier Architecture (3)

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# POSCO 3-tier Architecture (4)

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- - 가
  - 
  - Performance & Security가 :
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  - 가
  - :
- - 2
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