

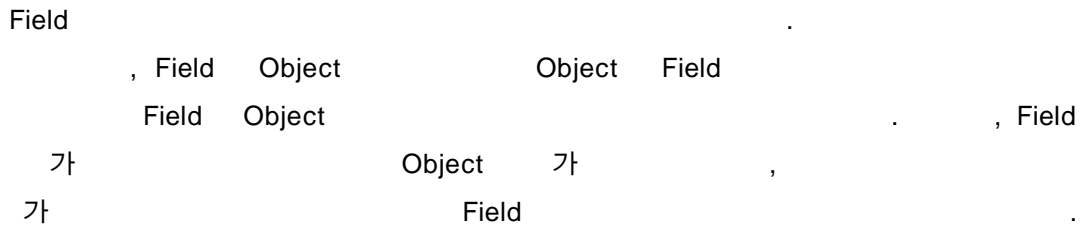
KGDC 2002

Wide Area Object Management
and Field Distribute System

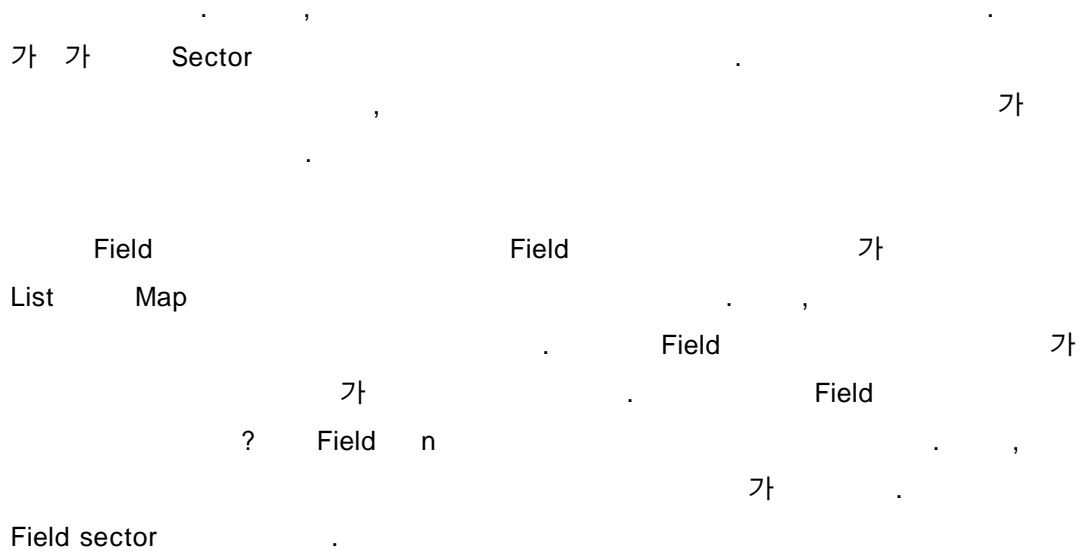
:

Lainer@hitel.net

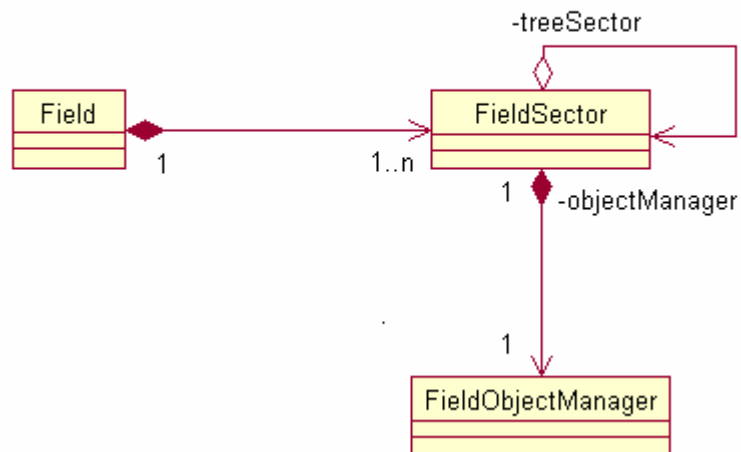
1. Wide Area Object Management+



1. Splitting a field by sector unit (Quad / Octet Tree)

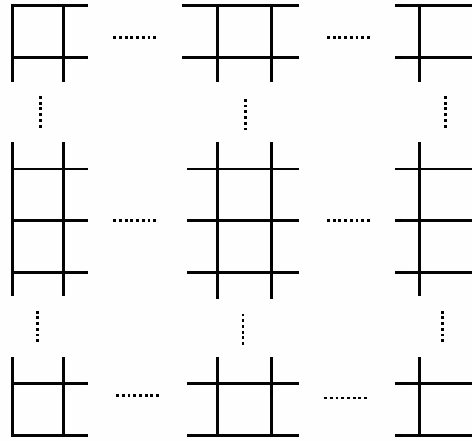


[Class Diagram: Aggregation of Field and FieldSector]



[1.1]

UML FieldSector Self aggregation
Field sector sector , Sector
Field



[1.2]

Field Sector
Sector , , , 4 Sector ,
Sector

1.1 , FieldSector FieldObjectManager 1
가

Sector Sector 가
Sector 가 ,

FieldObjectManager

가 Destination Sector

Sector

2 Sector Sector
Sector , Field Sector

Sector 가 .
/ / / / / / /

2. More Speedy Searching in Object list

Octet Tree Sector FieldObjectManager . Field 가

가 Quad/Octet Tree ? Object List
Object List ,
가 .

가

Field object
Building, Dropped item, Town Portal,
Effect가 . Monster PC가
Field Sector Sector

가

Message packet PC Broadcasting . Item
Monster 가 ?

Field Item . Character Building
가 ?

Monster, NPC , Field . Broadcasting 가 PC
List

Client Broadcasting
=> listBroadcastObject

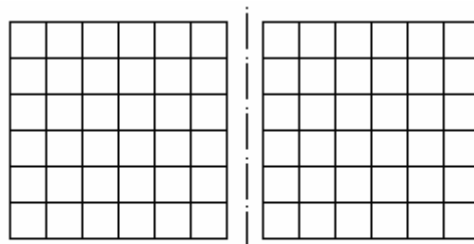
Monster
=> listNPCObject

Item
=> listItemObject

=> list...Object

2. Distributed Virtual Sector

Sector Real sector Virtual Sector 가 가
Field Sector (D.V.S, 가 .) Sector 8
Sector , Field가 Sector Sector 가



Splitted sector area

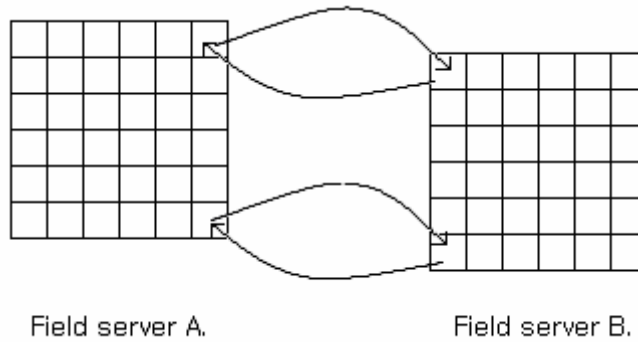
□ : Sector

[2.1]

Sector Field 가 Sector .
Sector Sector
Sector
D.V.S

1. Real Sector and Virtual Sector

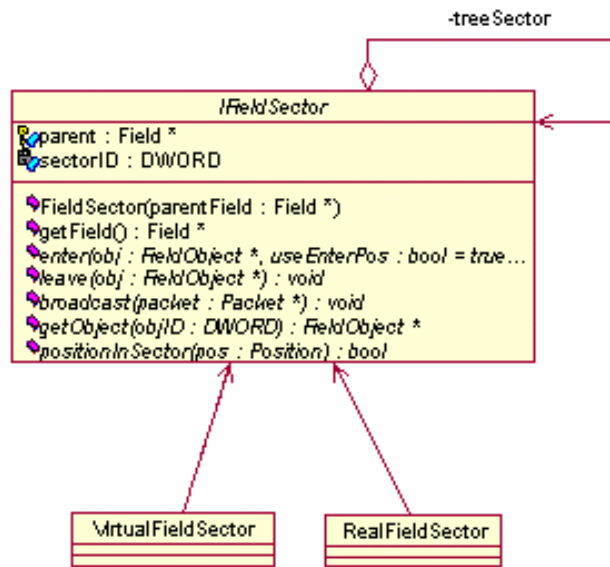
Field server가 Real Sector Virtual Sector Virtual Sector가 Distribute System 가 (0, 0, 999, 999) , Field Server A가 (0, 0, 499, 999) B가 (500, 0, 999, 999) X 499 ~ 500 가 X 가 499 Sector 500 Sector Real Sector 가 Virtual Sector (x, y)가 1 Sector .)



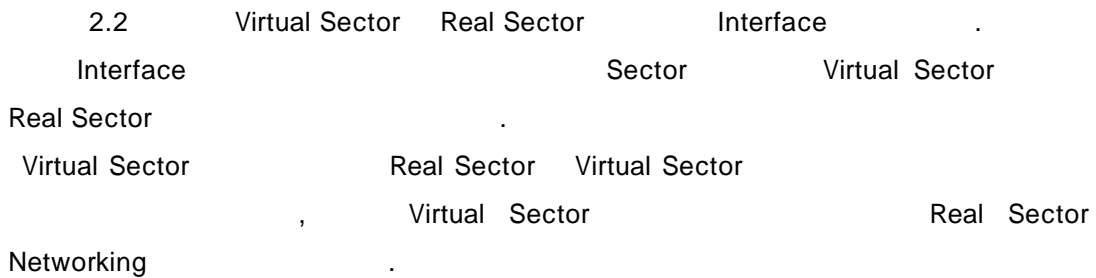
[2.2] Real sector

Virtual Sector Real Sector Method Real Sector Virtual Sector Real Sector Real Sector Virtual Sector

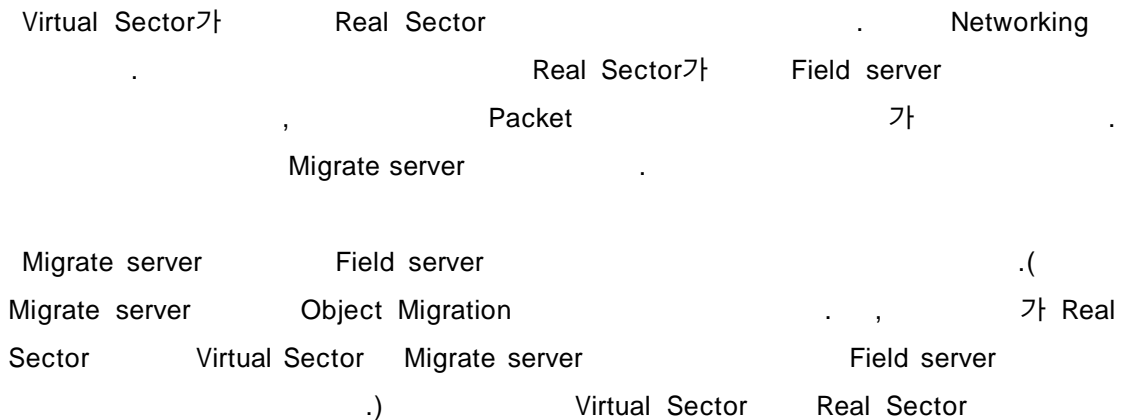
Real Sector(Field server A) -----> Virtual Sector -----> Real Sector(Field Server B)

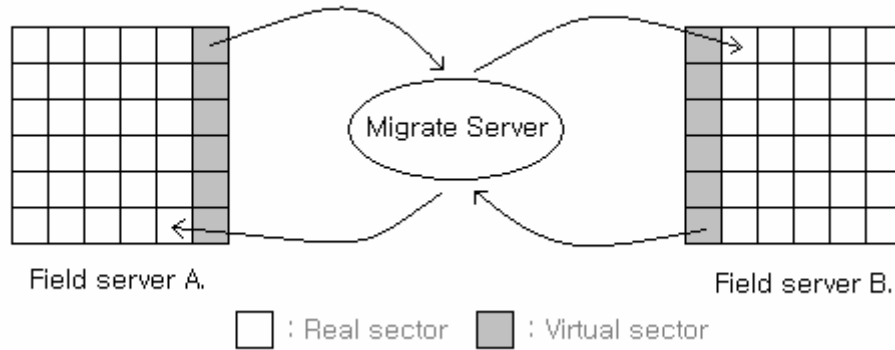


[2.2] Interface of Field sector

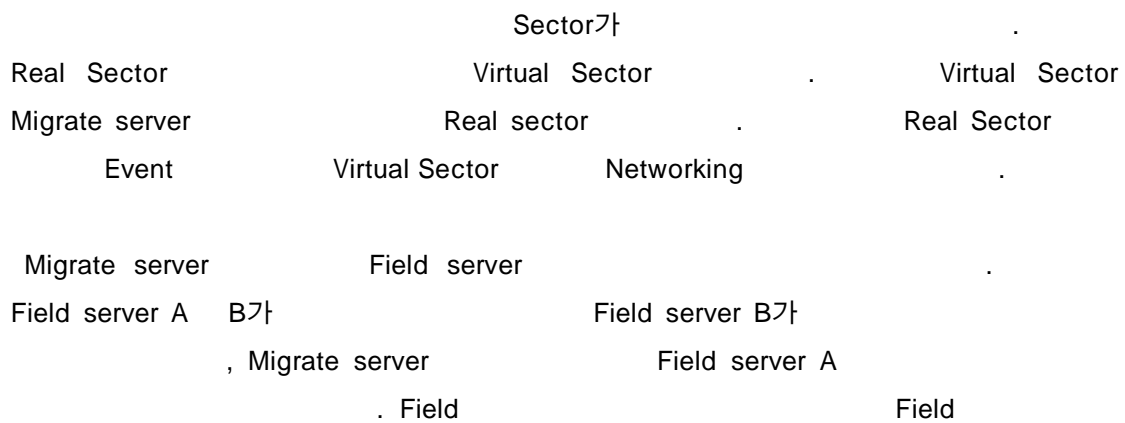


2. Migrate server

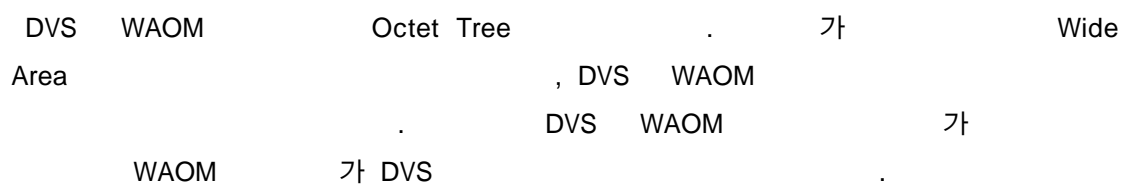




[2.3]

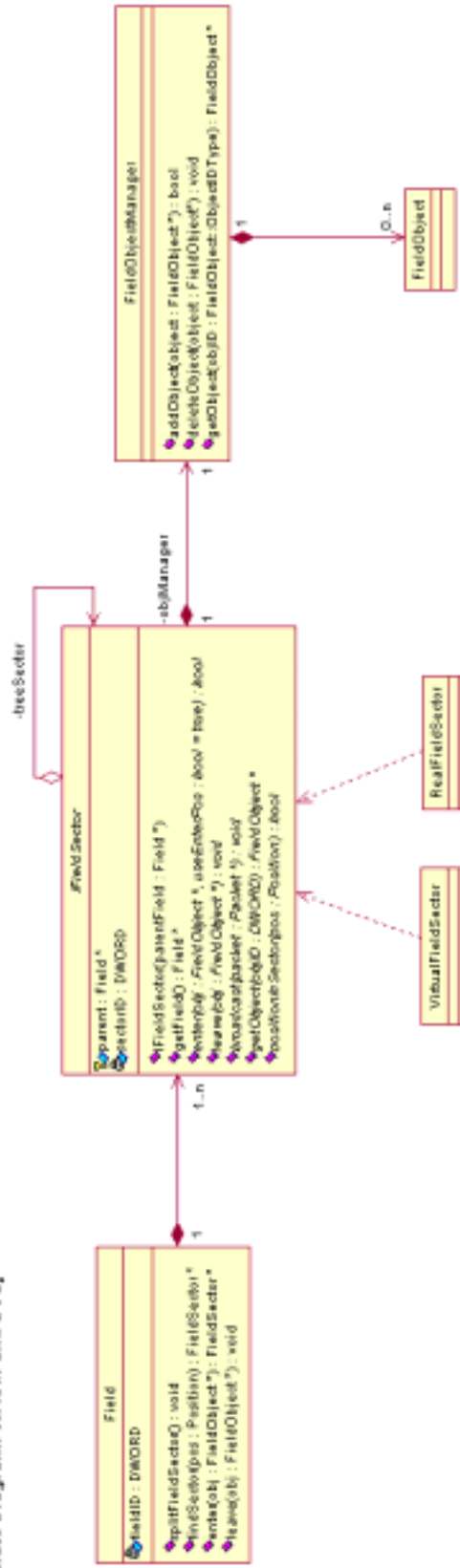


3. Design of Wide Area Object Management and Distributed Virtual Sector



UML(Unified Modeling Language) 가

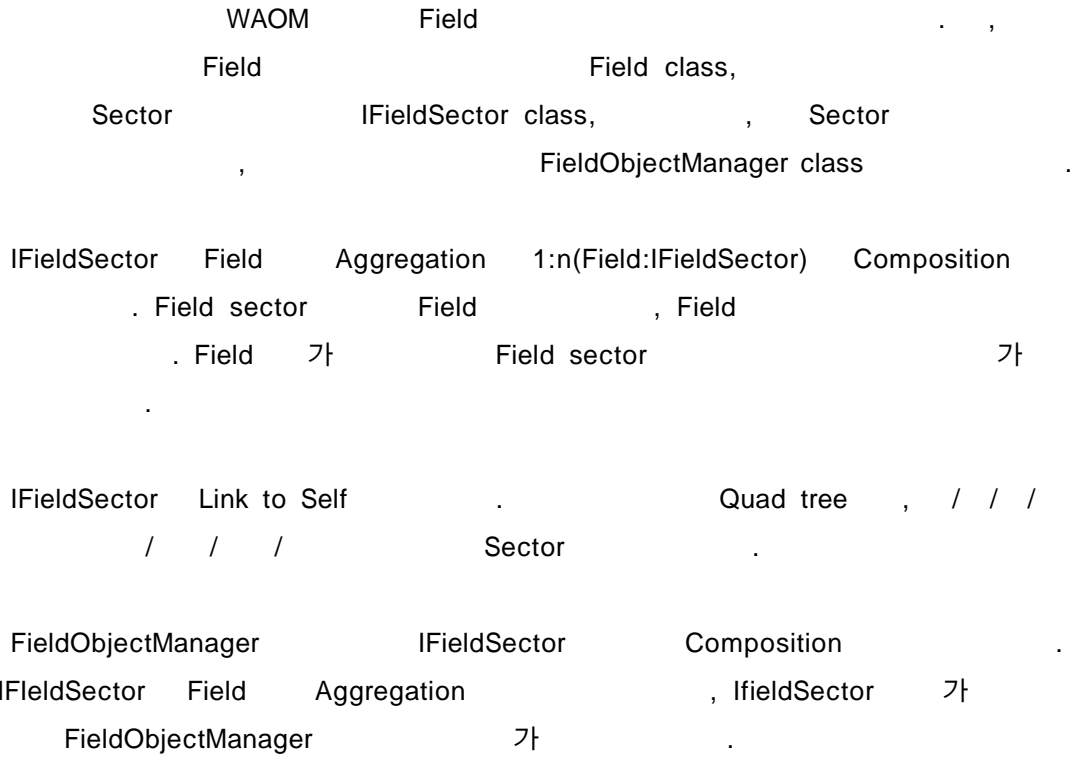
[Class Diagram: WAOM and DVS]



3. Class diagram of WAOM and DVS

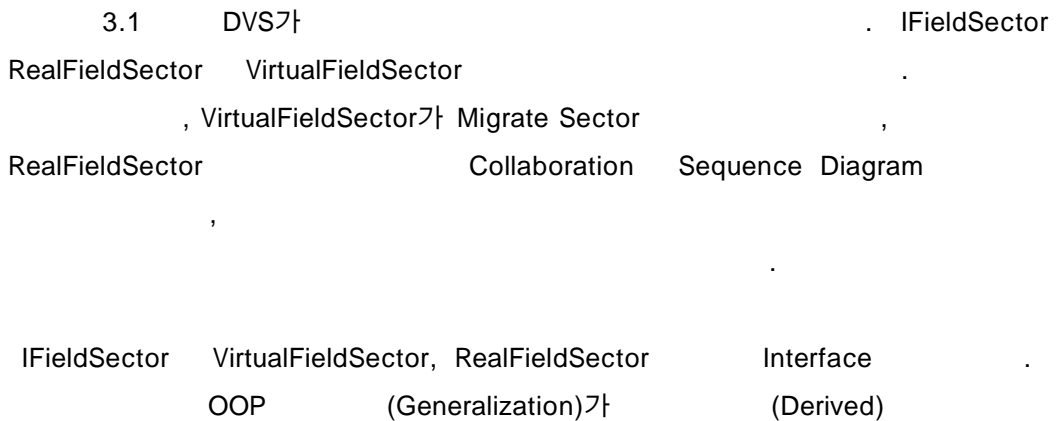
1) WAOM in diagram

3.1 WAOM

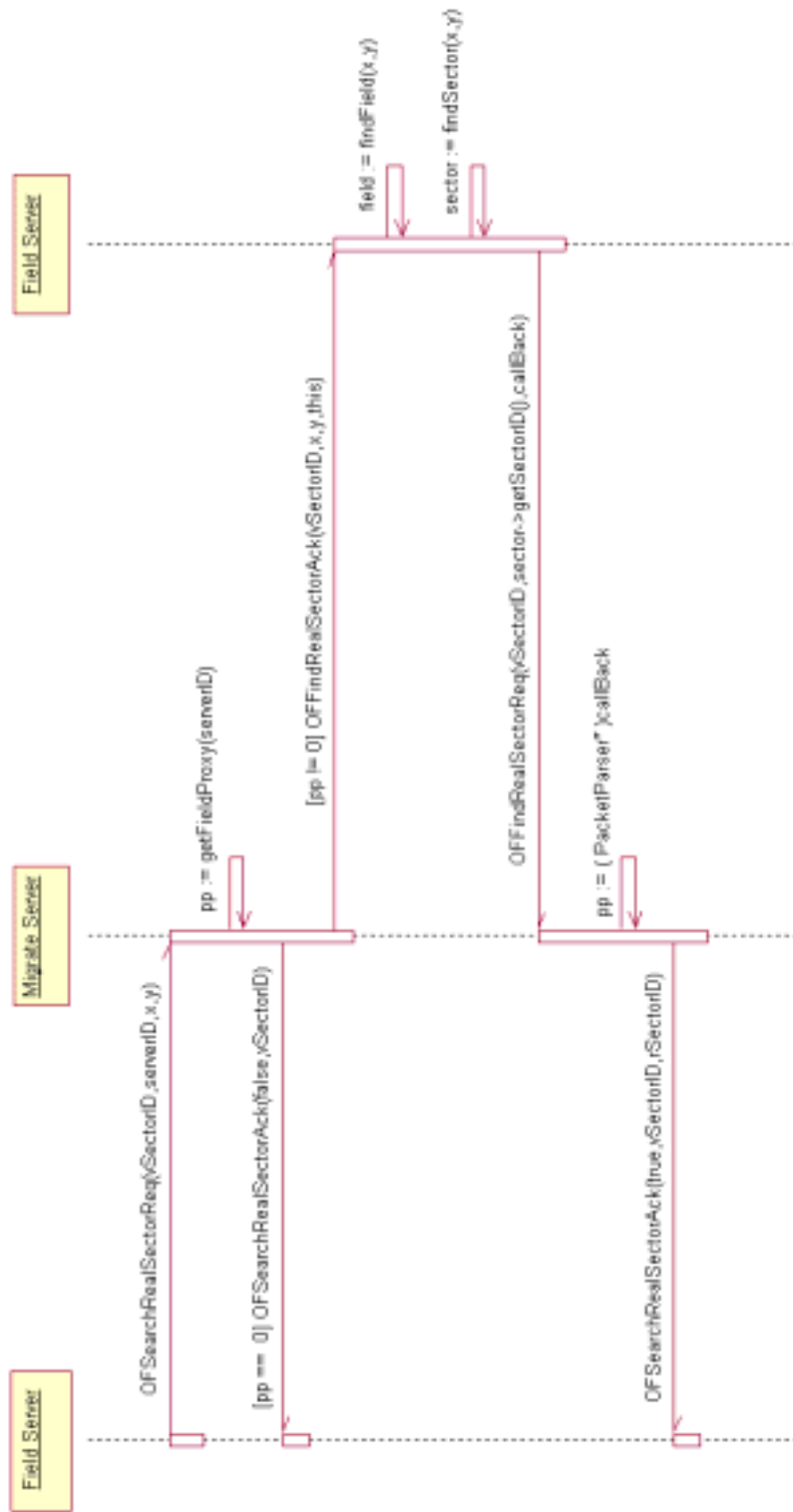


2) DVS in diagram

3.1 DVS가



[Sequence Diagram: Distribute Field Sector]



3.2 Field Virtual Sector가 Migrate Server Real Sector
 .(,
 .) Field server Virtual Sector
 Migrateserver Real Sector .

4. Conclusion

Field , Virtual
 Sector Migrate server
 가 , Field Migrate server .
 Virtual Sector가 Migrate server .
 Migrate server Network performance DVS .
 DVS 가 Field
 ,
 가 가 가