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<JSTORM>

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Version Number



JSTORM  
<http://www.jstorm.pe.kr>

### Document Information

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### Content Information

Audience	EJB
Abstract	가  .  가  ?
Reference	<a href="http://www.theserverside.com/resources/patterns_review.jsp">http://www.theserverside.com/resources/patterns_review.jsp</a>
Benchmark information	

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# Version Number

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가

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가

EJB  
"Session Façade"

(  
)

가

가

가

가

가

가 "

"

가

(EJB 가 ).  
가

가

가  
A B가

- 1. A가 X
- 2. B가 X
- 3. A가
- 4. B가
- 5. A가 X
- 6. B가 X

가 A가 B가  
X A

B

가

A B

가

"Version Number"

"Version Number" ( )  
가

"Version Number"가 가 가 "Version Number"

1. "Version Number" Object "Version Number" 가 "Data Tranfer Object" .
  2. "Version Number" "Version Number" "Version Number" .
  3. 가 "Version Number" 가 "Version Number"가 "Version Number" 가 .
  4. "Version Number"가 "Version Number"가 "Version Number" 가 .
- X "Version Number"가 4 , A B가 가 A "Version Number"(4)가 X 가 "Version Number" 4 5 가 B 가 "Version Number"(4) X "Version Number"(5)

"Version Number"  
. get/set "Data Transfer Object"  
(EJB 1.x),  
getXXXDTO DTO "Version Number" 가 ,  
setXXXDTO "Version Number" .

```
public void setMessageDTO(MessageDTO aMessageDTO)
throws NoSuchMessageException
{
    if (aMessageDTO.getVersion() != this.getVersion())
        throw new NoSuchMessageException();

    this.setSubject(aMessageDTO.getSubject());
    this.setBody(aMessageDTO.getBody());
}
```

"DTOFactory" DTO  
EJB 2.0  
"DTOFactory" "Session Façade"  
get/set  
가 .

```

                                set
"Version Number"
                                가
    "Version Number"

public void updateMessage(MessageDTO aMessageDTO)
{
    Message aMessage;
    try //to update the desired message
    {
        aMessage = this.messageHome.findByPrimaryKey(new
MessagePK(messageID));

        aMessage.checkAndUpdateVersion(aMessageDTO.getVersion());

        //update the message
        aMessage.setBody(aMessageDTO.getBody());
        aMessage.setSubject(aMessageDTO.getSubject());
    }
    catch (IncorrectVersionException e)
    {
        this.ctx.setRollbackOnly();
        throw new StaleUpdateException();
    }
    catch (...)
        ...
}

```





"rollback"

가

/

가

1. CMP READ\_COMMITTED Isolation.

가 ("Version  
Number" ) "commit"  
( "Version Number"  
) 가 "rollback"

READ\_COMMITTED 가

2. BMP READ\_COMMITTED Isolation.

BMP ejbStore "Version Number"  
Version=X 가 SQL "Update" where  
A가

3. DB SERIALIZABLE Isolation.

가

SERIALIZABLE

가

B가 ejbStore

"rollback"

4. DB SERIALIZABLE Isolation.

가

SERIALIZABLE

가

X

(row)  
"commot" ejbStore()

ejbLoad()

A가 "commit"

X가 ejbLoad()

B가 checkAndUpdateVersion

5. SERIALIZABLE "SELECT FOR UPDATE" .  
ejbLoad CMP "SELECT FOR  
UPDATE" .  
가  
checkAndUpdateVersion  
"rollback" .  
"Version Number" "Data Transfer Object" . DTO  
가 "Version Number"