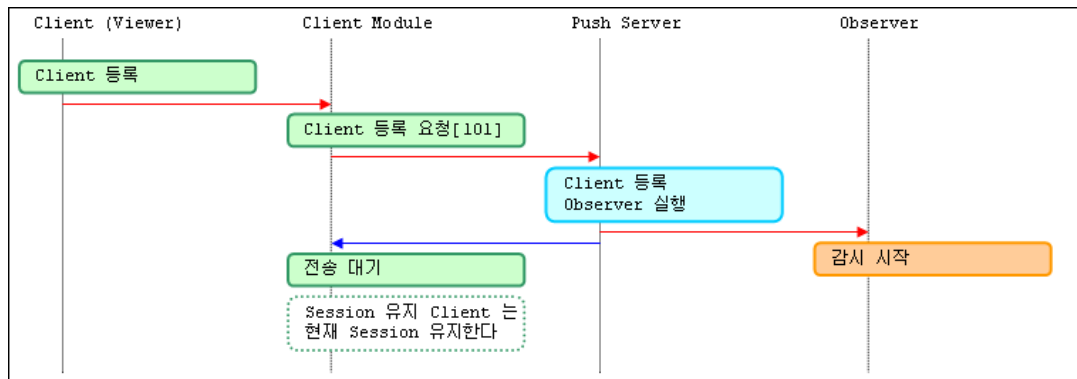


OZ Data Push Server Manual

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Push

Push (Daemon)
 , Push Push Observer가
 Push



- , Observer
- Session
- Thread Thread
- Observer ID 가
- Observer / /Session interval pushserver.xml
- Log4j

: Push 가 가

Observer

- Observer 인터페이스를 구현하는 클래스가 Queue를 사용하여 Observer를 호출합니다.
 - Observer 인터페이스를 구현하는 클래스가 sdm을 사용하여 Observer를 호출합니다.
 - ObserverID를 사용하여 Observer 인터페이스를 구현하는 클래스가 Observer를 호출합니다.
- ```
Observer : Observer
ObserverImpl : ObserverImpl
```

## Client Module

- Push를 사용하여 Observer를 호출합니다.

## Push

| bin     | ozpushcntrl.bat                  | (.bat) (.sh)                          |
|---------|----------------------------------|---------------------------------------|
|         | ozpushcntrl.sh                   | Push                                  |
|         | ozpushstart.bat                  | (.bat) (.sh) Push                     |
|         | ozpushstart.sh                   |                                       |
|         | ozpushstop.bat                   | (.bat) (.sh) Push                     |
|         | ozpushstop.sh                    |                                       |
|         | OZServicePS.exe                  |                                       |
|         | OZPushServerInstallService.bat   | NT                                    |
|         | OZPushServerUninstallService.bat | Push NT                               |
|         | pushserver.ico                   | Push                                  |
| conf    | pushserver.properties            | Push                                  |
|         | pushserver.xml                   | Push, session, transmission, Observer |
| lib     | crimson.jar                      | XML                                   |
|         | log4j.jar                        |                                       |
|         | ozpush50.jar                     | Push                                  |
|         | ozsfw50.jar                      |                                       |
|         | OZServiceBootstrap.jar           | NT                                    |
|         | OZUSLClientSession.jar           | USL                                   |
|         | parser.jar                       | XML                                   |
|         | sample.jar                       | Observer                              |
|         | xalan.jar                        | XML Xerces                            |
|         | xerces.jar                       | XML Xerces                            |
|         | xercesImpl.jar                   | XML Xerces                            |
|         | xml-apis.jar                     | XML Xerces                            |
| license | ozlicense.xml                    | Push                                  |
| logs    | pushserver.log                   | Push                                  |

Push

License

Push                      ozlicense.xml                      Push    가  
License                      .    License                      License  
,    IP    ,                      .    Push                      IP  
                    가                      License                      .

Push

■ ozpushcntrl.bat

JRE                      Push  
Windows                      JVM                      , UNIX  
ozpushcntrl.sh                      JRE Path                      .

```
@echo off
rem -----
rem
rem OZ Push Server Contorl(OZA SHELL)
rem
rem This script file written and tested under Windows 2000
rem
rem User should set following variables:
rem
rem JAVA_HOME - Determines the version of Java used to start
rem OZ Server. This variable must point to the
rem root directory of a JDK or JRE installation.
rem for an up-to-date list of supported JVMs your platform.
rem MAX_MEMORY - Maximum memory used by OZ Push Server. (The unit is mega-byte.)
rem MIN_MEMORY - Minimum memory used by OZ Push Server. (The unit is mega-byte.)
rem
rem -----
rem -----
```

```
rem Set user-defined variables
rem -----

set JAVA_HOME=.. .. JRE
set MAX_MEMORY=256
set MIN_MEMORY=256
set JAVA_OPTION=

set OZPUSHSERVER_HOME=..
set OZLIBALL=%OZPUSHSERVER_HOME% lib

rem -----
rem OZ Main Class
rem -----
set OZLIB=%OZLIBALL% ozpush50.jar;%OZPUSHSERVER_HOME% conf ;

rem -----
rem OZ Server Class
rem -----
set OZLIB=%OZLIB%;%OZLIBALL% ozsfw50.jar

rem -----
rem Library for Logging
rem -----
set OZLIB=%OZLIB%;%OZLIBALL% log4j.jar

rem -----
rem Library for XML
rem -----
set OZLIB=%OZLIB%;%OZLIBALL% xalan.jar
set OZLIB=%OZLIB%;%OZLIBALL% xercesImpl.jar
set OZLIB=%OZLIB%;%OZLIBALL% xml-apis.jar
set OZLIB=%OZLIB%;%OZLIBALL% parser.jar
set OZLIB=%OZLIB%;%OZLIBALL% xerces.jar
set OZLIB=%OZLIB%;%OZLIBALL% crimson.jar

rem -----
rem User Library
rem -----
rem set OZLIB=%OZLIB%;%OZLIBALL% sample.jar

echo %OZLIB%

if not "%1" == "-start" goto notStart
```

```
set JAVA_OPTION= %JAVA_OPTION% -Xms%MIN_MEMORY%m -Xmx%MAX_MEMORY%m
:notStart
%JAVA_HOME% bin java %JAVA_OPTION% -cp %OZLIB% oz.push.server.Console %1 %2 %3 %4
```

```

: MAX_MEMORY, MIN_MEMORY JVM
/
,
JAVA_OPTION
JAVA_OPTION
.
```

■ **ozpushcntrl.sh**

```
JRE Push
Windows JVM
, UNIX
ozpushcntrl.sh JRE Path
.
```

```
#!/bin/sh
#-----
#
OZ Push Contorl.
#
This script file written and tested under HP-UX
#
User should set following variables:
#
JAVA_HOME - Determines the version of Java used to start
OZ Server. This variable must point to the
root directory of a JDK or JRE installation.
for an up-to-date list of supported JVMs your platform.
MAX_MEMORY - Maximum memory used by OZ Server. (The unit is mega-byte.)
MIN_MEMORY - Minimum memory used by OZ Server. (The unit is mega-byte.)
JAVA_OPTIONS - On some platforms, certain java command-line options are
recommanded when running OZ Server.
#
#-----
#

Set user-defined variables

JAVA_HOME=../../jre
MAX_MEMORY=256
```

```
MIN_MEMORY=128
JAVA_OPTION=-hotspot

OZPUSHSERVER_HOME=..
OZLIB=.:$OZPUSHSERVER_HOME/conf
OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/ozpush50.jar

OZ Server Library

OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/ozsfw50.jar

Library for Logging

OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/log4j.jar

Library for XML

OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/xalan.jar
OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/xercesImpl.jar
OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/xml-apis.jar
OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/parser.jar
OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/xerces.jar
OZLIB=$OZLIB:$OZPUSHSERVER_HOME/lib/crimson.jar

rem -----
rem User Library
rem -----
rem set OZLIB=%OZLIB%;%OZLIBALL% sample.jar

if ["$1" != "-start"]; then
 JAVA_OPTION=
else
 JAVA_OPTION="$JAVA_OPTION -ms$MIN_MEMORY"m
 JAVA_OPTION="$JAVA_OPTION -mx$MAX_MEMORY"m
fi

echo ""
echo $OZLIB
echo ""

$JAVA_HOME/bin/java $JAVA_OPTION -classpath $OZLIB oz.push.server.Console $1 $2 $3 $4
```

```

: MAX_MEMORY, MIN_MEMORY JVM
/ , JAVA_OPTION
. JAVA_OPTION
.

```

## ■ pushserver.properties

Push .

```

#-----
Main configuration of push
#-----

path.oz.push.home=..

```

| <b>path.oz.push.home</b> | Push . ( / 가 ) |
|--------------------------|----------------|

## ■ pushserver.xml

Push , session, transmission, Observer .

```

<?xml version="1.0" encoding="EUC-KR"?>
<ozpushserver port="8088">
 <log priority="DEBUG" path="../logs/">
 <logger type="Console" aync="false" />
 <!--
 DailyRollingFile
 <logger type="DailyRollingFile" filename="pushserver.log" append="true" immediateFlush="true"
datepattern="yyyy-MM-dd" />
 -->
 <logger type="RollingFile" filename="pushserver.log" append="true" immediateFlush="true"
maxbackupindex="5" maxFileSize="10KB" />
</log>
<session interval='5000'/>
<transmission multi='false'/>
<observers>
<!--
 가 observer
 <observer name="OB1" classname="sample.observer.OB1" checkInterval="5000" />
 <observer name="OB2" classname="sample.observer.OB2" checkInterval="5000"/>

```

```
-->
</observers>
</ozpushserver>#-----
Main configuration of ozpushserver
#-----
```

| Element      |          |                                                                                                         |
|--------------|----------|---------------------------------------------------------------------------------------------------------|
| ozpushserver | port     | Push . ( :8088)                                                                                         |
| log          | priority | . ( :DEBUG)                                                                                             |
|              |          | FATAL Log level 가 ,<br>가<br>log .                                                                       |
|              |          | ERROR log level ,<br>log<br>.                                                                           |
|              |          | INFO "ERROR" level log<br>log .                                                                         |
|              |          | DEBUG "ERROR", "INFO" level log<br>log .                                                                |
|              | path     | . ( : %OZPushHome%\log)                                                                                 |
| logger       | type     | logger , . ( :Console)<br>: logger<br>Console RollingFile<br>Console DaillyRollingFile<br>.             |
|              |          | Console .                                                                                               |
|              |          | RollingFile .<br>ex) pushserver.log, pushserver.log.1,<br>pushserver.log.2, ...                         |
|              |          | DaillyRolling File (DatePattern)<br>.<br>ex) pushserver.log, pushserver.log.<br>, pushserver.log. , ... |

|              |                |                                                               |
|--------------|----------------|---------------------------------------------------------------|
|              | async          | logger Console<br>. ( :false)                                 |
|              | filename       | logger RollingFile DaillyRollingFile<br>. ( :pushserver.log)  |
|              | append         | logger RollingFile DaillyRollingFile<br>가 . ( :true) 가        |
|              | immediateFlush | logger RollingFile DaillyRollingFile<br>. ( :false)           |
|              | datepattern    | logger DaillyRollingFile<br>"DatePattern"<br>. ( :YYYY-MM-DD) |
|              | maxBackupIndex | logger RollingFile Backup<br>가<br>. ( :5)                     |
|              | maxFileSize    | logger RollingFile<br>. ( :1MB)                               |
| session      | interval       | . ( :5000)                                                    |
| transmission | multi          | . ( :false)                                                   |
| Observer     | name           | Observer .                                                    |
|              | classname      | Observer .                                                    |
|              | checkInterval  | . ( :5000)                                                    |

- DatePattern

| yyyy-MM |  | 6 12<br>pushserver.log<br>pushserver.log.2005-06<br>pushserver.log<br>. |
|---------|--|-------------------------------------------------------------------------|

|               |     |                                                                              |
|---------------|-----|------------------------------------------------------------------------------|
| yyyy-ww       | ( ) | 가 , 1<br>12 pushserver.log<br>pushserver.log.2005-01<br>pushserver.log<br>.  |
| yyyy-MM-dd    | ( ) | 7 1 pushserver.log<br>pushserver.log.2005-07-01<br>pushserver.log<br>.       |
| yyyy-MM-dd-HH |     | 7 1 10 pushserver.log<br>pushserver.log.2005-07-01-09<br>pushserver.log<br>. |

## Push

### ■ -help

) ozpushcntrl -help

### ■ -obinfo

ObserverID

ObserverID | ObserverName | ObserverClassName | client

) ozpushcntrl -obinfo ip:127.0.0.1 port:8088 id:ObserverID

### ■ -oblist

ip Observer

ObserverID | ObserverName | ObserverClassName | client

) ozpushcntrl -oblist ip:127.0.0.1 port:8088

### ■ -obruninfo

Observer

ObserverID | ObserverName | ObserverClassName | client

) ozpushcntrl -obruninfo ip:127.0.0.1 port:8088

### ■ -obstop

ObserverID 가 Observer

) ozpushcntrl -obstop ip:127.0.0.1 port:8088 id:ObserverID

### ■ -stop

OZ Push

) ozpushcntrl -stop ip:127.0.0.1 port:8088

■ **-usage**

```
start
) ozpushcntrl -usage
```

■ **-version**

```
Push
) ozpushcntrl -version -ip:127.0.0.1 -port:8080
```

Push

Push

■ DataModule.StartPush

|            |                                                                                 |      |          |
|------------|---------------------------------------------------------------------------------|------|----------|
| Prototype  | BOOL StartPush(string ObserverIP,<br>integer ObserverPort, string Observername) |      |          |
|            | Push                                                                            |      |          |
| Definition | 가<br>SynchronizeToDataSet true                                                  |      |          |
|            | ObserverIP                                                                      | Push | IP       |
| Argument   | ObserverPort                                                                    | Push | Port     |
|            | Observername                                                                    | Push | Observer |

■ DataModule.EndPush

|            |                |  |  |
|------------|----------------|--|--|
| Prototype  | BOOL EndPush() |  |  |
| Definition | Push           |  |  |
|            |                |  |  |

Observer

가 Observer 가

1) 가 가

가 Push Server

## 2) ODI , 가

- Observer 가 ("OB1", "OB2", "OB3")  
Observer가 pushsample.jar .)
- pushsample.jar Push Server가 /lib
- Push Server가 /bin ozpushcntrl.bat

```
rem -----
rem User Library
rem -----
set OZLIB= %OZLIB%;%OZLIBALL% pushsample.jar
```

- Push Server가 /conf pushserver.xml  
Observer

```
<?xml version="1.0" encoding="EUC-KR"?>
<ozpushserver port="8088">
 <log priority="DEBUG" path="../logs/">
 <logger type="Console" aync="false" />
 <!--
 DailyRollingFile
 <logger type="DailyRollingFile" filename="logfile.log" append="true" immediateFlush="true"
datepattern="yyyy-MM-dd" />
 -->
 <logger type="RollingFile" filename="PushServer.log" append="true" immediateFlush="true"
maxbackupindex="5" maxFileSize="10KB" />
 </log>
 <session interval='5000'/>
```

```
<transmission multi='false'/>
<observers>
 <observer name="OB1" classname="sample.observer.OB1" checkInterval="5000" />
 <observer name="OB2" classname="sample.observer.OB2" checkInterval="5000" />
 <observer name="OB2" classname="sample.observer.OB2" checkInterval="5000" />
</observers>
</ozpushserver>
```

OZ Application Viewer    OZ Push Server

➤ Board    ozcar.odi    가    Table    Table

```
➤ Board Button 가 Button "OnClick"
 가 .
```

- Button1(StartPush)

```
//Push Server Push Server
var dm = _GetDataManager.GetDataModule("ozcar");
//Push Server IP, Port, Observer Name
var push = dm.StartPush("127.0.0.1","8088","OB1");
```

- Button2(EndPush)

```
// Push Server
var dm = _GetDataManager.GetDataModule("ozcar");
var push = dm.EndPush();
```

➤  $\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} - \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

OZApplicationViewer

	CarID	Maker	EMaker	CarName	ECarName
0	08	현대자동차	HYUNDAI	EF소나타	EFSONATA
1	05	현대자동차	HYUNDAI	다미네스티	DYNASTY
2	07	현대자동차	HYUNDAI	그랜저	GRANDEUR
3	04	현대자동차	HYUNDAI	에쿠우스	EQUUS
4	09	현대자동차	HYUNDAI	베르나	VERNA
5	10	현대자동차	HYUNDAI	아토스	ATOZ
6	01	대우자동차	DaeWoo	라노스	RANOS
7	02	대우자동차	DaeWoo	누비라	NUBIRA
8	03	대우자동차	DaeWoo	매그너스	MAGNUS
9	11	기아자동차	KIA	세피아	SEPHIA

StartPush EndPush

- "StartPush" Push Server .  
ozcar.odi DB 가
- "EndPush" Push Server .  
ozcar.odi DB 가