

CORBA CORBA .[2]  
CORBA Java !

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CORBA

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가? 가  
가? 가  
가 .  
OMG CORBA IDL C, C++, SmallTalk, Ada  
Java COBOL , ORB  
C Ada Java C++ 가  
Java CORBA 가 . Java CORBA JDK1.2 Java  
CORBA ORB  
CORBA  
가

, CORBA CORBA ?  
CORBA 가 , CORBA 가  
CORBA , CORBA  
가 가 CORBA Java  
가 가 ...)

!  
CORBA C++ 3가 (Standalone, COM, CORBA)  
CORBA Java CORBA  
CD Visibroker for Java(vbj34.exe) Visibroker

CORBA Java Visibroker for Java CD  
vbj33.exe vbj33.exe vbj34.exe 가  
vbj33.exe Visibroker for Java 3.3 vbj34.exe 3.4 가  
, Visibroker for Java 3.3 JDK1.2 Java ORB( Sun  
CORBA ) Java ORB JDK1.2  
vbj34.exe , JDK1.2  
Java 3.4 Visibroker for Java 3.4 JDK1.2 Visibroker for  
idl2java  
가 가 , Visibroker for C++ 3.3 Visibroker



Window NT autoexec.bat 가 [ Administrator ]  
 ] 가 가 가 Administrator  
 ] 가 Administrator  
 Administrator  
 가 [ ]

**JDK1.2** : PATH

JDK1.2 PATH CLASSPATH 1.2  
 PATH 가 가 JDK1.2 classes.zip  
 jre/lib/rt.jar , Java 가 CLASSPATH 가  
 가 (. CLASSPATH 가  
 . JDK1.2  
 가

[Window 95/98 ]  
 autoexec.bat

SET PATH=C:\jdk1.2\bin;%PATH%

가 .( .)

[Window NT ]  
 [ / ] [ ] PATH C:\jdk1.2\bin 가 .

## Visibroker for Java

CD Window 95/98, Window NT 4.0

PLATFORM	PRIMARY JAVA VM	ADDITIONAL SUPPORTED JAVA VMs	CURRENT RELEASE
Solaris 2.5.1, 2.6	<a href="#">JavaSoft JDK 1.1.7B</a> <a href="#">JavaSoft JDK/JRE 1.2</a>	JavaSoft JDK 1.0.2	VBJ 3.4
Windows 95/98 NT 3.51/4.0	<a href="#">JavaSoft JDK 1.1.7B</a> <a href="#">JavaSoft JDK/JRE 1.2</a>	JavaSoft JDK 1.0.2 <a href="#">MS Java SDK 2.0</a>	VBJ 3.4
HP-UX 10.20, 11.0	<a href="#">HP-UX Java C.01.16.00</a>	<a href="#">HP-UX Java C.01.17.00</a>	VBJ 3.4
IRIX 6.3/6.4	<a href="#">SGI Java 3.1.1 (JDK 1.1.6)</a>		VBJ 3.4
AIX 4.1/4.2	<a href="#">IBM Java 1.1.6</a>		VBJ 3.4
Digital Unix 4.0a	<a href="#">DEC JDK 1.1.7</a>		VBJ 3.4
Siemens Nixdorf SINIX 5.32	JDK 1.1.4		VBJ 3.3
DG/UX 4.20	<a href="#">JDK 1.1.7</a>		VBJ 3.3

UNIX Inprise(http://www.inprise.com)  
 Window NT Administrator  
 Visibroker for Java 3.4 가 Visibroker for Java  
 3.4 3.3 , Visibroker for C++ 3.3  
 [ ] CD vbj34.exe  
 Serial Number  
 60 Evaluation  
 Version .  
 Visibroker for Java 가  
 .( 24M .)  
 C:\Inprise\vbroker , Visibroker for C++ C++ 가  
 가 , Visibroker for C++ Java 가  
 가  
 Visibroker for Java 3.4 Visibroker for C++ 3.3  
 가 Java ORB, Event Service,  
 Naming Service, GateKeeper가  
 Change . Visibroker for C++ GateKeeper 가  
 , CORBA Client Applet IIOP  
 OSAGENT\_PORT VBROKER\_ADM  
 . OSAGENT\_PORT VBROKER\_ADM Visibroker  
 Window Registry 가  
 Setup Option Screen , Please modify my PATH NT  
 Service . Visibroker for C++ 가 NT Service  
 [ / ]  
 가  
 Program Folder 가  
 가 Window Registry Visibroker  
 Visibroker for C++가 osagent.exe 가  
 가 . Visibroker for C++ 3.3 Visibroker for Java 3.4  
 Yes  
 Win95/98 가 autoexec.bat autoexec.X  
 autoexec.bat Visibroker 가 Visibroker for C++  
 가  
 [Yes] .  
[your old autoexec.bat has been saved to autoecex.X.](#)  
[Click OK to continue](#)  
 가 Visibroker for Java 가 .  
 가

## Visibroker for Java

Visibroker for Java 가 . Window 95/98 autoexec.bat  
Visibroker 가 가 , Visibroker for  
C++ C++ Visibroker path 가 가

```
set path=C:\inprise\vbroker\bin
```

```
(CORBA Java vbjc javac vbjc  
CORBA Java  
, javac CLASSPATH c:\inprise\vbroker\lib\vbjorb.jar  
가 . vbjorb.jar CORBA  
, classpath C:\inprise\vbroker\lib\vbjorb.jar 가 .)
```

```
prompt> vbjc Sample.java
```

```
prompt> javac Sample.java
```

```
Window NT [ / ] [ ] Path C:\inprise\vbroker\bin  
가 . 가가 가 .  
[ / ] [Visibroker]  
. [Visibroker] Visibroker Smart Agent Agent
```

```
C:\>idl2java -version
```

```
VisiBroker Developer for Java [03.04.00.C5.01] (MAR 04 1999 15:08:05)  
Java: Version 1.2 from Sun Microsystems Inc.  
OS: Windows NT version 4.0; CPU: x86
```

```
가 가 Visibroker for Java  
가 .
```

## Visibroker for Java

```
Visibroker for Java 가  
. [ ] [ 가/ ]  
,[ / ] [Visibroker] uninstall Visibroker for Java  
shared libraries , Visibroker for  
C++가 NO YES YES TO  
ALL . Visibroker for C++ 가 가
```



```
prompt>cd C:\Inprise\vbroker\java_examples\bank
prompt> vbmake.bat
```

```
vbmake.bat
Bank
가
가
Java
가
class
```

```
//PATH Visibroker for Java bin
```

```
C:\Inprise\vbroker\java_examples\bank>vbmake
Building the bank example ...
```

```
//JDK1.2 Visibroker for Java 3.4
```

```
C:\Inprise\vbroker\java_examples\bank>vbmake
Exception in thread "main" java.lang.ClassCastException
at com.visigenic.vbroker.tools.idl2java.main(Compiled Code)
```

```
가 [ ]
```

- **OSAGENT**
- [ / ] [Visibroker] Visibroker smart agent

```
prompt>osagent -C
```

```
prompt>cd C:\Inprise\vbroker\java_examples\bank
prompt>start vbj Server
```

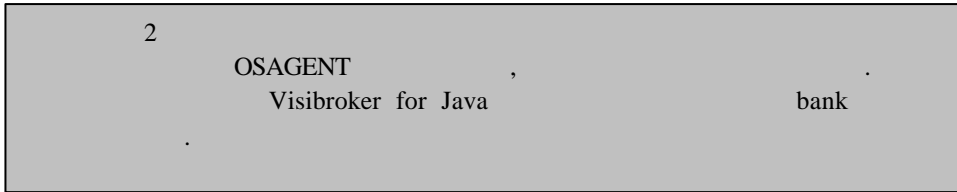
```
AccountManagerImpl[Server,oid=PersistentId[repId=IDL:Bank/AccountManager:1.0,objectName=BankManager]] is ready.
```

```
가
```

- **Client**

```
prompt> vbj Client
```

```
The balance in Jack B. Quick's account is $203.53
```



- 

2 class

- 

**OSAGENT**

[ / ] [Visibroker] Visibroker smart agent

prompt>osagent -C

- 

prompt>cd C:\Inprise\vbroker\java\_examples\bank  
 prompt>start vbj Server

AccountManagerImpl[Server,oid=PersistentId[repId=IDL:Bank/AccountManager:1.0,objectName=BankManager]] is ready.

가

- 

**gatekeeper**

gatekeeper 가 가 CORBA 가  
 Java CORBA 가

prompt>start gatekeeper



[ 1] gatekeeper ( 1.gif)

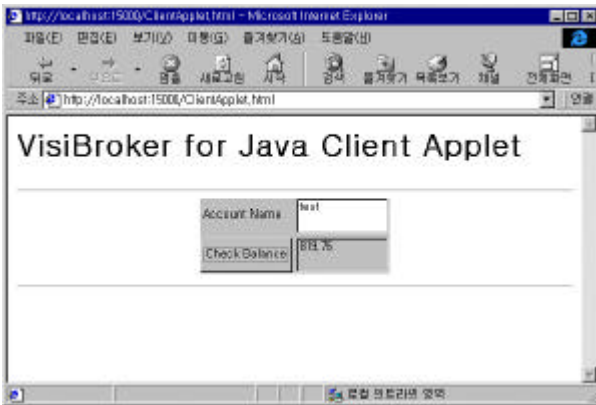


●  
URL <http://IPAddress:15000/ClientApplet.html>

. Account Name  
가 . IPAddress ipconfig . (Window 95  
winipcfg .)

prompt>ipconfig  
Ethernet adapter Elnk31:

IP Address. . . . . : 192.168.1.61  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.1.1



[ 2] ( 2.gif)

### CORBA Java

```
: Java  
: JDK1.2  
CORBA : Visibroker for JAVA 3.4  
O/S : Window 95/98, NT
```

2

### ● CORBA Java

CORBA Java

### ● CORBA Java

CORBA Java

### CORBA Java

CORBA Java

CORBA Java



2. IDL stub/skeleton

prompt>idl2java Calculator.idl

Calcuator 가 8 ORB  
가 . \_example\_CalcuObject.java  
IDLtoJava  
Java

//\_example\_CalcuObject.java

package Calculator;

... ..

```
public class _example_CalcuObject extends Calculator._CalcuObjectImplBase {
    /** Construct a persistently named object. */
    public _example_CalcuObject(java.lang.String name) {
        super(name);
    }
    /** Construct a transient object. */
    public _example_CalcuObject() {
        super();
    }
    /**
    <p>Operation: <b>::Calculator::CalcuObject::AddEnd</b>.
    <pre>
    #pragma prefix "Calculator/CalcuObject"
    long AddEnd(
        in long EndVal
    );
    </pre>
    </p>
    */
    public int AddEnd(
        int EndVal
    ) {
        // IMPLEMENT: Operation
        return 0;
    }
}
```

3.

IDLtoJava 가 \_example\_CalcuObject.java  
IDL CORBA 가

// CalcuObjectImpl.java

import Calculator.\*;

```
class CalcuObjectImpl extends _CalcuObjectImplBase
{
```

```

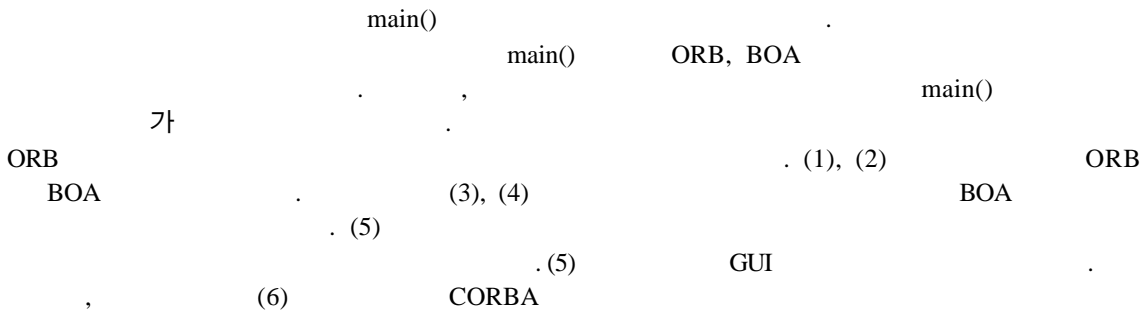
    CalcuObjectImpl()
    {
        super();
    }

    CalcuObjectImpl(String obj_name)
    {
        super(obj_name);
    }

//EndVal
    public int AddEnd(int EndVal)
    {
        int Sum = 0;
        for(int i=0; i <= EndVal;i++)
        {
            Sum += i;
        }
        return Sum;
    }
}

```

4. main()  
/



```

import Calculator.*;
import org.omg.CORBA.*;

```

```

class Server
{
    public static void main(String[] args)
    {
        try
        {
            //ORB
            ORB orb = ORB.init(); //Visibroker 3.3
            ORB orb = ORB.init(args, null); //Visibroker 3.4 -----(1)
            //BOA
            BOA boa = orb.BOA_init();//Visibroker 3.3
            //Visibroker 3.4
            BOA boa = ((com.visigenic.vbroker.ORB)orb).BOA_init();----(2)
            CalcuObjectImpl impl = new CalcuObjectImpl("cal"); ----(3)
            boa.obj_is_ready(impl); ----(4)
        }
    }
}

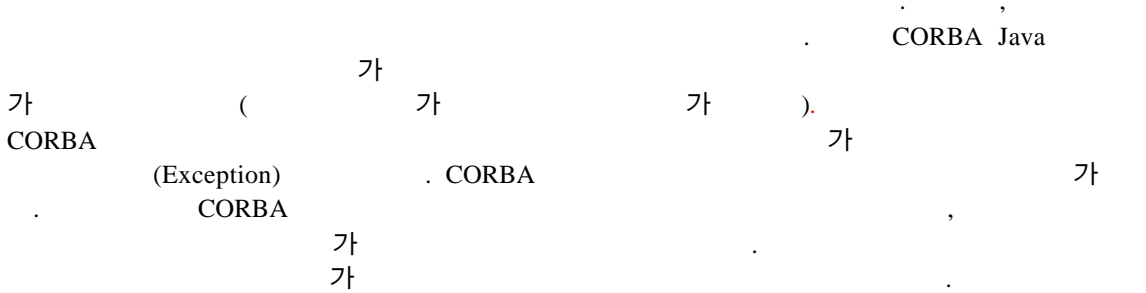
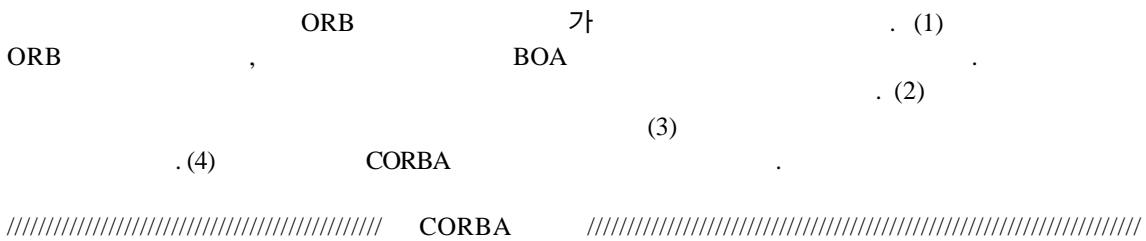
```

```

        // Wait for incoming requests
        System.out.println("          ...");
        boa.impl_is_ready();          ----(5)
    }
    catch(SystemException e)        ----(6)
    {
        System.err.println("          : " + e);
    }
}

```

5.



// Client.java

```

//stub
import Calculator.*;
// CORBA
import org.omg.CORBA.*;
import java.io.*;

public class Client
{
    public static void main(String[] args)
    {
        try
        {
            //ORB
            ORB orb = ORB.init(args,null);          ----(1)
            //CalcuObject
            CalcuObject cal = CalcuObjectHelper.bind(orb,"cal");  ----(2)
            BufferedReader stdIn = new BufferedReader(new InputStreamReader(System.in));
            String tempString;
            System.out.println("          ?(          :.)");
        }
    }
}

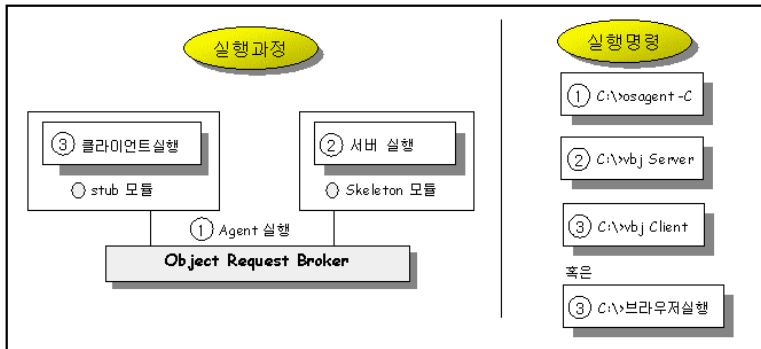
```

```

while ((tempString = stdIn.readLine()) != null)
{
    if (tempString.equals("."))
        break;
    int Sum = 0;
    int EndVal = 0;
    Integer Int = new Integer(0);
    EndVal = Int.valueOf(tempString).intValue();
    Sum = cal.AddEnd(EndVal);
    System.out.println(EndVal+" "+Sum+"\n");
    System.out.println("?( :.)");
}
System.out.println(" .");
}
catch (Exception e)
{
    System.err.println("exception: " + e.getMessage());
    e.printStackTrace();
}
}
}

```

6.



[ 4] CORBA Java ( 4.gif)

prompt>vbjc \*.java

Agent

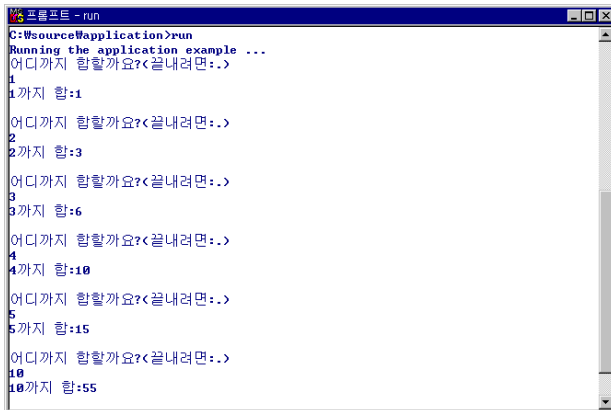
prompt>osagent -C

prompt>start vbj Server

...

가

prompt> vbj Client



[ 5] ( 5.gif)

## CORBA Java

1. IDL CORBA Java

2.

CORBA Java

. CORBA Java

CORBA

AddButton\_actionPerformed( )

ORB

```
//Client.java
import java.awt.*;
import java.awt.event.*;
import java.applet.*;
import Calculator.*;
import org.omg.CORBA.*;

public class Client extends Applet
{
    //
    Button AddButton = new Button();
    TextField AddEndField = new TextField();
    TextField SumField = new TextField();
    Label label1 = new Label();
    Label label2 = new Label();
    FlowLayout flowLayout = new FlowLayout();

    //CORBA
    ORB orb = null;
}
```

```

CalcuObject cal = null;

public void init()
{
    try
    {
        this.setSize(new Dimension(289, 46));
        AddButton.setLabel(" ");
        AddButton.addActionListener(new java.awt.event.ActionListener() {
            public void actionPerformed(ActionEvent e) {
                AddButton_actionPerformed(e);
            }
        });
        SumField.setEditable(false);
        label1.setText(" ");
        label2.setText(" .");
        this.setLayout(flowLayout);
        this.add(AddEndField, null);
        this.add(label1, null);
        this.add(SumField, null);
        this.add(label2, null);
        this.add(AddButton, null);

        //ORB
        //orb = ORB.init(this); //Visibroker 3.3
        orb = ORB.init(this, null); //Visibroker 3.4
        //CalcuObject
        cal = CalcuObjectHelper.bind(orb, "cal");
    }
    catch (Exception e)
    {
        System.err.println(e);
    }
}

void AddButton_actionPerformed(ActionEvent e)
{
    String tempString = AddEndField.getText();
    int Sum = 0;
    int EndVal = 0;
    Integer Int = new Integer(0);
    EndVal = Int.valueOf(tempString).intValue();
    Sum = cal.AddEnd(EndVal);
    SumField.setText(tempString.valueOf(Sum));
}
}

```

### 3. HTML .

```

<HTML>
<HEAD>
<CENTER><H4>                </H4></CENTER>
</HEAD>
<BODY>
<CENTER>
<APPLET

```



```

CODEBASE = "http://127.0.0.1:15000/"
CODE     = "Client.class"
NAME     = "Applet"
WIDTH    = 289
HEIGHT   = 50
HSPACE   = 0
VSPACE   = 0
ALIGN    = middle
>
<param name=org.omg.CORBA.ORBClass value=com.visigenic.vbroker.orb.ORB>
</APPLET>
</CENTER>
</BODY>
</HTML>

```

4.

```

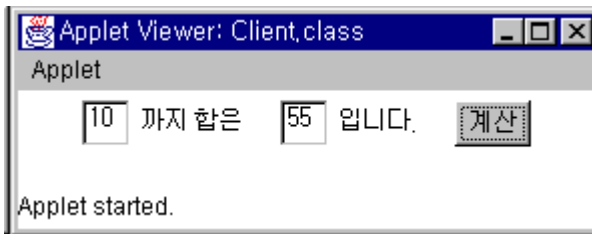
prompt>vbjc *.java
prompt>osagent -C
prompt>start vbj Server
prompt>start gatekeeper

```

```

prompt> appletviewer Calculator.html

```



[ 6] ( 6.gif)

CORBA Java

run.bat

```

prompt> make
prompt> run

```

IP Address

CORBA Java

make.bat

Calculator.html

127.0.0.1