

WWW

CORBA

# CORBA-Based Object Trader Service in the World-Wide Web

1996. 12. 10

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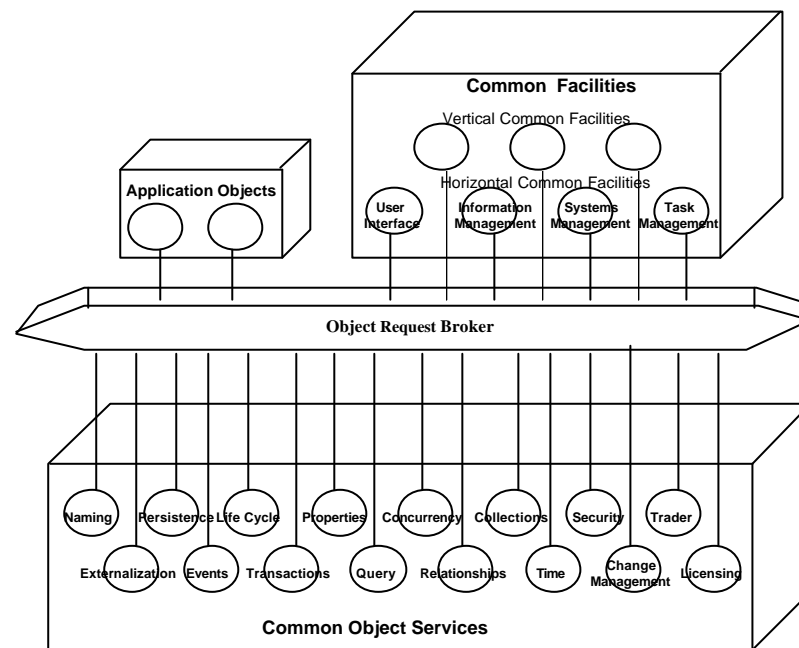
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## 2.

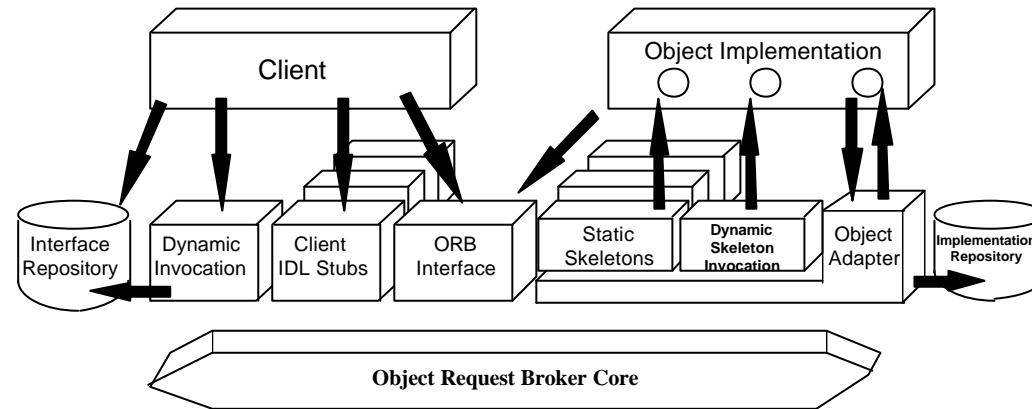
### 2.1 OMG CORBA

- OMA (Object Management Architecture)



#### 1. OMG OMA

## 2.1 OMG CORBA ( )

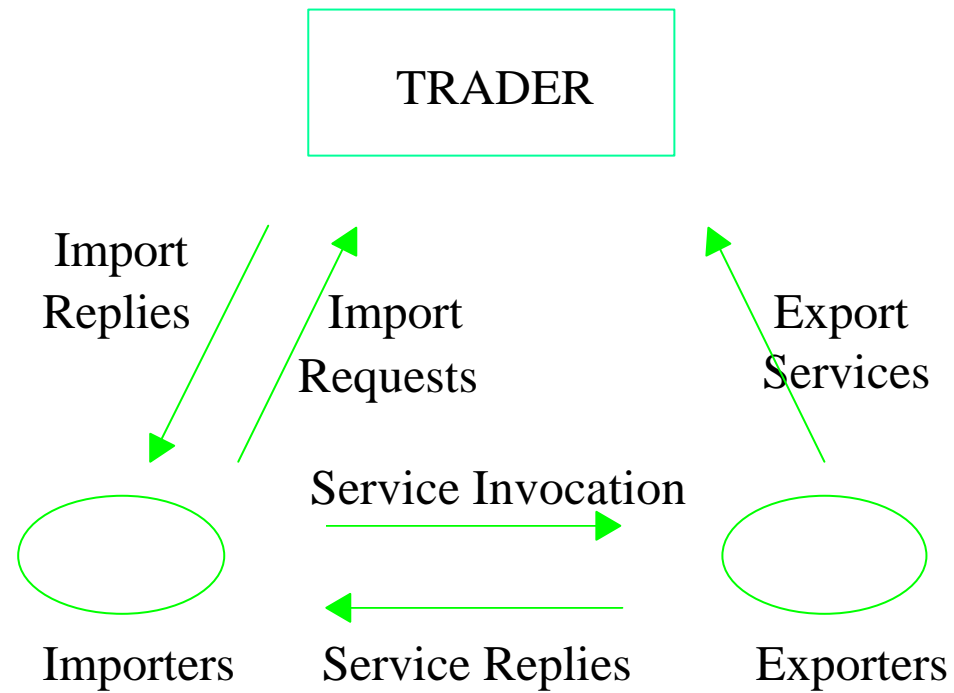


2. OMG CORBA

CORBA

OMG가

## 2.2 ODP



### 3. Trader and Its Users

## 2.2 ODP ( )

- 가  
3 .
- DCE ODP : CRC for  
Distributed Systems Technology DCE  
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- TRADEr: DCE  
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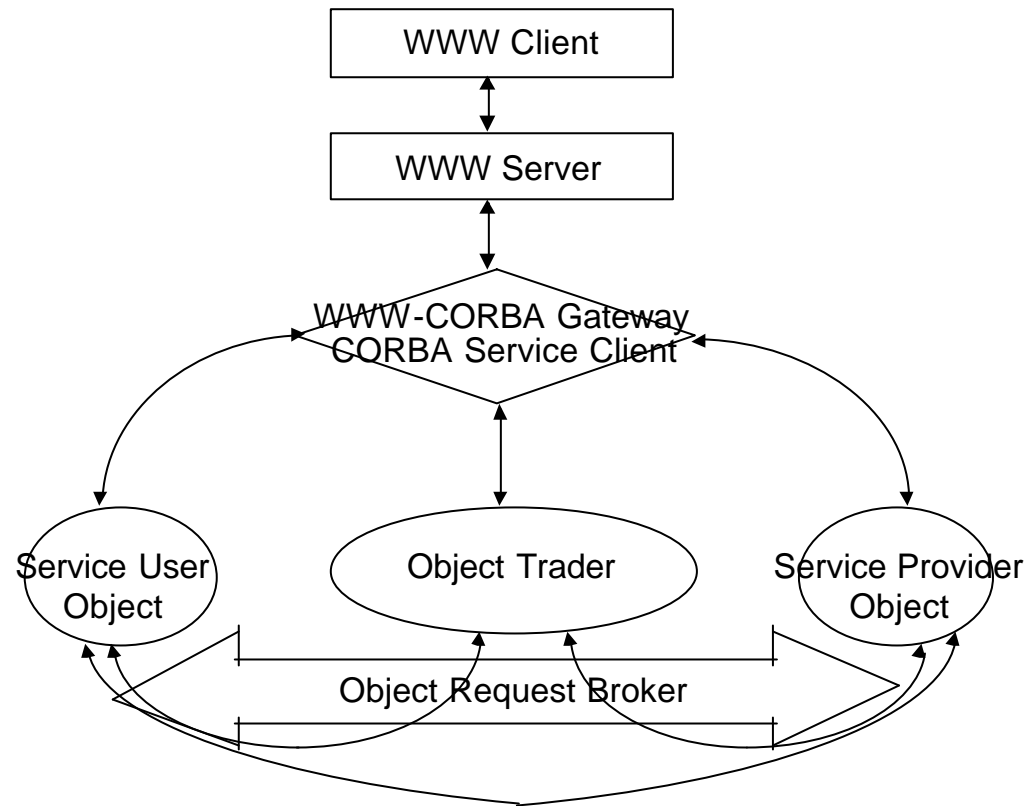
## 2.3

## WWW

- WWW :  
WWW 가 ,  
▪
- DCE-Web
- Web\*
- ANSA Web
- Java ORB
- Netscape ONE

# 3. WWW

# CORBA



4. Object Trader Service in WWW

# 3. WWW

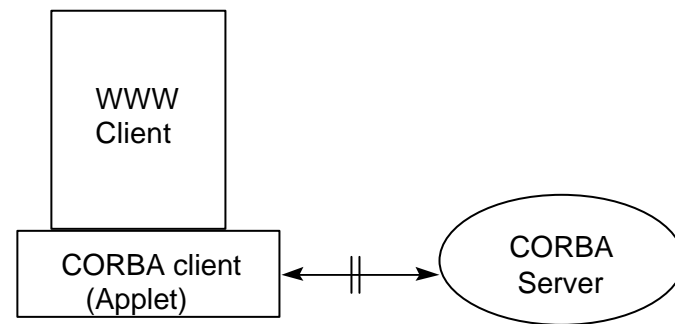
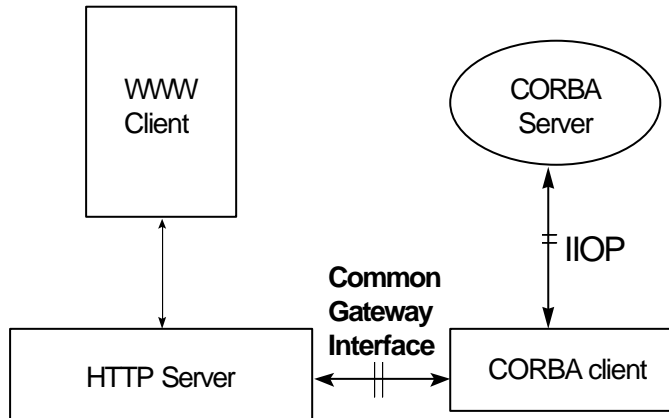
# CORBA

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## WWW-CORBA

### CGI

### Java ORB



5. CGI-based Integration

6. Java ORB

# 4.

## 4.1

- (Properties)

```
struct Property {  
    string name;  
    any value;  
};  
typedef sequence<Property> PropertyList;  
typedef sequence<string> PropertyNameList;
```

- (Service Offer)

```
struct Offer {  
    Object reference;  
    PropertyList properties;  
};  
typedef sequence<Offer> OfferList;  
typedef sequence<Object> ObjectList;
```

4.1

( )

4.2



```
struct Record {  
    string repository_id;  
    OfferList objects;  
};  
typedef sequence<Record> Database;
```



```
typedef string Constraint;
```

```
: ==, !=, >, >=, <, <=, ~
```

```
: &&, ||, !
```

```
: +, -, *, /
```

## 4.2 ( )

- (Preference)

```
typedef string Preference;
```

- (Policies)

```
struct Policy {  
    string name;  
    any value;  
};  
typedef sequence<Policy> PolicyList;
```

## 4.3

- Export

```
void export (  
    in Object reference,  
    in string repository_id,  
    in PropertyList list  
) raises (  
    DuplicatedObjectRef,  
    IllegalObjectRef,  
    IllegalPropertyName,  
    IllegalRepID  
);
```

## 4.3

( )

- Withdraw

```
void withdraw (  
    in Object reference,  
    in string repository_id  
) raises (  
    ObjectNotRegistered,  
    IllegalObjectRef,  
    IllegalRepID,  
    RepIDNotRegistered  
);
```



## 4.3

( )

- **Modify**

```
void modify (  
    in Object reference,  
    in string repository_id,  
    in PropertyList list  
) raises (  
    IllegalObjectRef,  
    IllegalPropertyName,  
    ObjectNotRegistered,  
    IllegalRepID,  
    RepIDNotRegistered  
);
```

## 4.3

( )

- **Describe**

*Offer describe (*  
    *in Object reference,*  
    *in string repository\_id*  
*) raises (*  
    *ObjectNotRegistered,*  
    *IllegalObjectRef,*  
    *IllegalRepID,*  
    *RepIDNotRegistered*  
*);*

- **Browse**

*OfferList browse ( );*

## 4.3

( )

- Import

```
ObjectList import (  
    in string repository_id,  
    in Constraint criteria,  
    in Preference Pref,  
    in PolicyList Policies  
) raises (  
    IllegalPreference,  
    IllegalPolicyName,  
    IllegalRepID,  
    RepIDNotRegistered  
);
```

# 4.4

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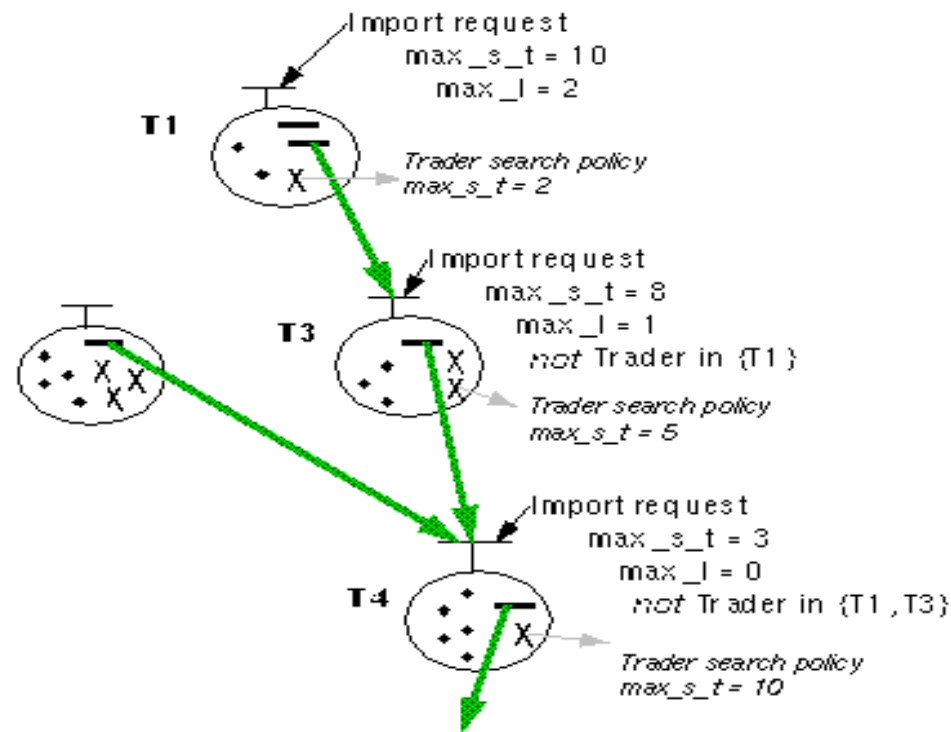
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# 4.4

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## 4.4

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- Add Link

```
void add_link (  
    in string LinkName,  
    in Object reference,  
    in PropertyList list  
) raises (  
    DuplicatedLinkName,  
    IllegalObjectRef,  
    DuplicatedObjectRef,  
    IllegalPropertyName  
);
```

## 4.4

( )

- **Remove Link**

```
void remove_link (  
    in string LinkName  
) raises (  
    LinkNameNotRegistered  
);
```

- **Modify Link**

```
void modify_link (  
    in string LinkName,  
    in Object reference,  
    in PropertyList list  
) raises (  
    LinkNameNotRegistered,  
    IllegalObjectRef,  
    IllegalPropertyName  
);
```

## 4.4

( )

- Describe Link

```
void describe_link (  
    in string LinkName,  
    out Object reference,  
    out PropertyList list  
) raises (  
    LinkNameNotRegistered  
);
```

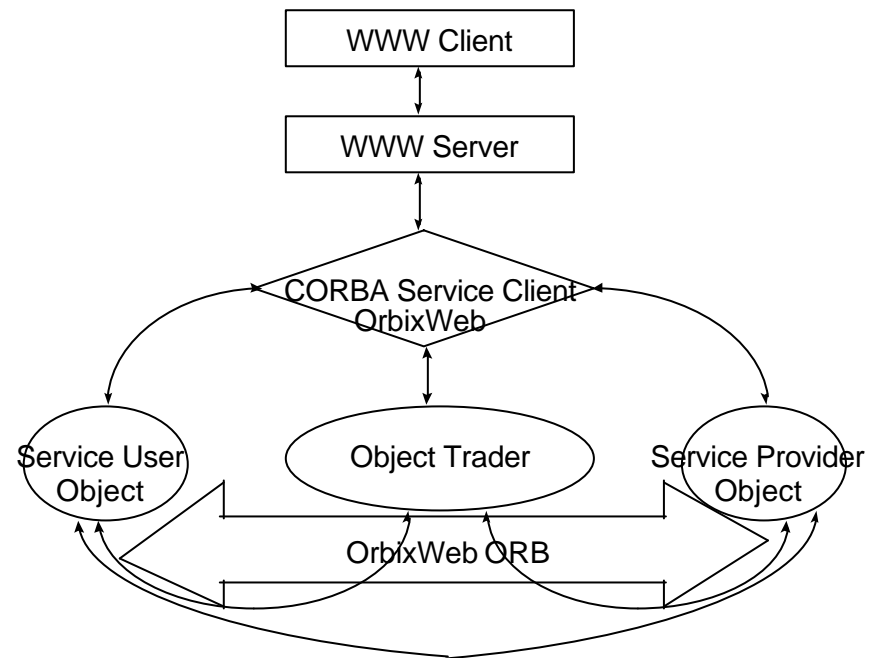
- List Link

```
typedef sequence<string> LinkNameList;  
LinkNameList list_links ( );
```



# 5. WWW

# CORBA



8. Object Trader Service in WWW using Orbix and OrbixWeb

## 5. WWW

## CORBA

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### 5.1

SUO, SPO

```
//
```

```
struct Property {
```

```
    string name;
```

```
    any value;
```

```
};
```

```
typedef sequence<Property> PropertyList;
```

```
typedef sequence<string> PropertyNameList;
```

```
typedef string Constraint;
```

## 5.1

SUO, SPO  
( )

```
//  
  
struct Offer {  
    Object reference;  
    PropertyList properties;  
};  
typedef sequence<Offer> OfferList;  
typedef sequence<Object> ObjectList;  
  
//  
  
typedef string Preference;  
struct Policy {  
    string name;  
    any value;  
};  
typedef sequence<Policy> PolicyList;
```

## 5.1

SUO, SPO  
( )

```
interface Registry {  
  // Export  
  void export (  
    in Object reference,  
    in string repository_id,  
    in PropertyList list  
  ) raises (  
    DuplicatedObjectRef,  
    IllegalObjectRef,  
    IllegalPropertyName,  
    IllegalRepID  
  );
```

# 5.1

SUO, SPO  
( )

// Withdraw

```
void withdraw (  
    in Object reference,  
    in string repository_id  
) raises (  
    ObjectNotRegistered,  
    IllegalObjectRef,  
    IllegalRepID,  
    RepIDNotRegistered  
);
```

## 5.1

SUO, SPO  
( )

// Modify

```
void modify (  
    in Object reference,  
    in string repository_id,  
    in PropertyList list  
) raises (  
    IllegalObjectRef,  
    IllegalPropertyName,  
    ObjectNotRegistered,  
    IllegalRepID,  
    RepIDNotRegistered  
);
```

# 5.1

SUO, SPO  
( )

// Describe

```
Offer describe (  
    in Object reference,  
    in string repository_id  
) raises (  
    ObjectNotRegistered,  
    IllegalObjectRef,  
    IllegalRepID,  
    RepIDNotRegistered  
);
```

// Browse

```
OfferList browse ();
```

## 5.1

SUO, SPO  
( )

```
//  
ObjectList import (  
    in string repository_id,  
    in Constraint criteria,  
    in Preference Pref,  
    in PolicyList Policies  
) raises (  
    IllegalPreference,  
    IllegalPolicyName,  
    IllegalRepID,  
    RepIDNotRegistered  
);  
} // End of Interface Registry
```



## 5.2 CORBA

SUO

```
void import_request (  
    in Constraint criteria,  
    in Preference Pref,  
    in PolicyList Policies,  
    out string result  
) raises (  
    OperationFailed  
);
```

## 5.3 CORBA

## SPO

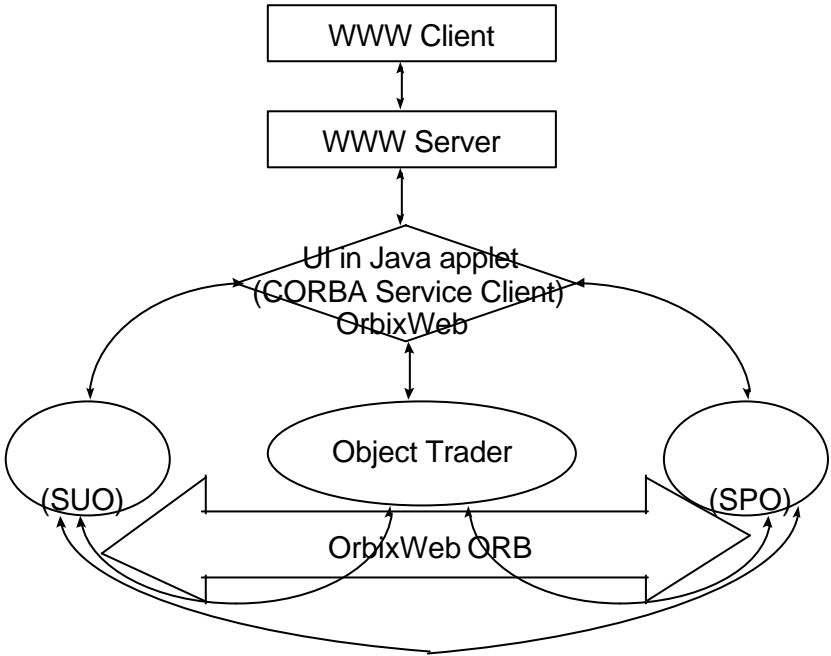
```
void export_request (  
    in PropertyList list  
) raises (  
    OperationFailed  
);
```

```
void withdraw_request ( )  
raises (  
    OperationFailed  
);
```

```
void modify_request (  
    in PropertyList list  
) raises (  
    OperationFailed  
);
```

# 5.4

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# 5.4

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## 6.

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- CORBA
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