

CORBA

○ *, **, *

Forecast Model for Load Balancing on CORBA Environment

○ W. K. Kim *, Y. S. Lee*, S. H. Lee**, C. J. Wang*

*Dept. of Computer Science & Engineering, Inha University

**Dept of Computer Engineering, Inha Technical College

CORBA 가 (Server utilization) , CORBA 가 CPU
CORBA 가
CORBA 가
CORBA 가

1.

4, 5].

가

CPU

가

2.2

[6].

가

가 [1].

가

-
-
-
-

가

(load balancing)

가

2.3

CORBA [2]

가

[7].

가

2.

가

(Transfer policy)

2.1

(Selection policy)

가

(Load Indices)가

(Location policy)

가

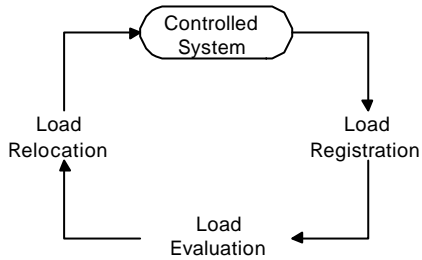
[3,

(Information policy)

(Demand-driven)

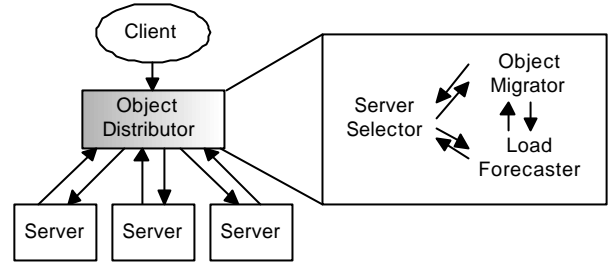
(Sender-initiated)
(Symmetrically-initiated)
(Periodic)

(Receiver-initiated)
[8, 9].



1.

3.3



2.

2 CORBA

가 가 가

(Load Forecaster)

3.4

가

2.4

1

[6].

가

가

CORBA

가 가

가

3. CORBA

CORBA

3.1

CORBA

CORBA 가
CORBA 가

CORBA 가
CPU 가

3.2 CORBA

CORBA

가

가

Migration)

CORBA

(Object

MA

가

가

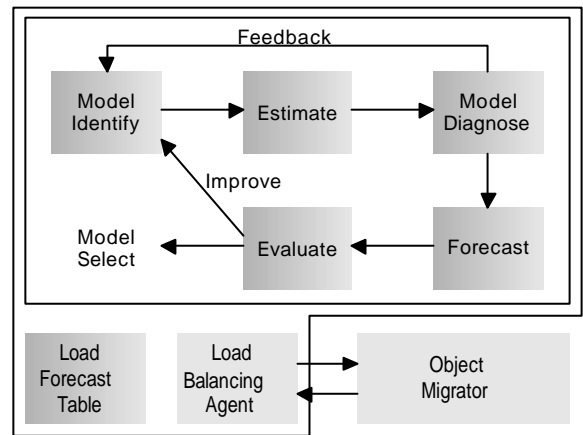
ARIMA

MA

ACF(Auto Correlation

Function)

[2].



3.

3

가

가

가

가

가

가

$$r(s) = \text{Corr}(Y_t, Y_{t+s}) = \frac{\text{Cov}(Y_t, Y_{t+s})}{\sqrt{\text{Var}(Y_t) \cdot \text{Var}(Y_{t+s})}}$$

1.

CORBA

가

가

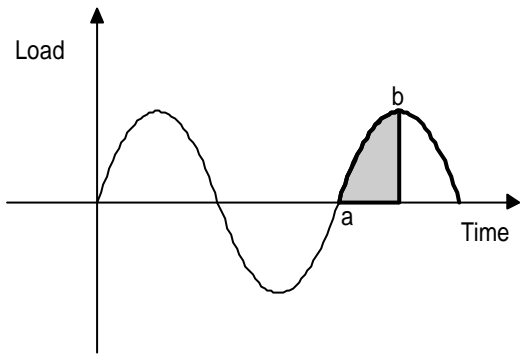
가

가 . 가

가

1.

(load balancing agent)



4.

4
a-b

a
가

b

```

if( model is acceptable ) {
    migrated_object_acceptance++;
    send_server_acceptance++;
    received_server_acceptance++;
    if ( migrated_object_acceptance > _ACCEPT_VALUE_ )
        migrated_object_model_select();
    if ( send_server_acceptance > _ACCEPT_VALUE_ )
        send_server_model_select();
    if ( received_server_acceptance > _ACCEPT_VALUE_ )
        received_server_model_select();
}
else {
    if ( ma_model is not acceptable ) {
        delete ma_model;
        goto new_model ();
    }
    else {
        modify ma_model;
        migrated_object_acceptance--;
        send_server_acceptance--;
        received_server_acceptance--;
    }
}

```

(Forecast Load Table)

가

가

가

가

가

1

4.

CORBA

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