

# Fieldbus Systems

가

## Telematic Systems

<

가 가

가

>

가

( )

가

가

IEC 61131-3

),

(

( )

(Structuring)

가  
(Foundation Fieldbus,  
PROFIBUS, Interbus, ControlNet,  
LONWorks  
.)

가  
( IEC  
61499(  
) ) IEC TC65/WG6  
“ ”

가  
IEC 61499 Part 1  
Part 2

“ ”  
IEC 61131-3 PLC  
( )  
4-20mA

가  
( )  
( , )  
, (

, ) 가 .  
가 .  
가

(XML ) 가 가

( )

가 . “ ”/ “ ”

Win-Win 가 가

가  
가 GUI

가  
가

가

가

가

가가

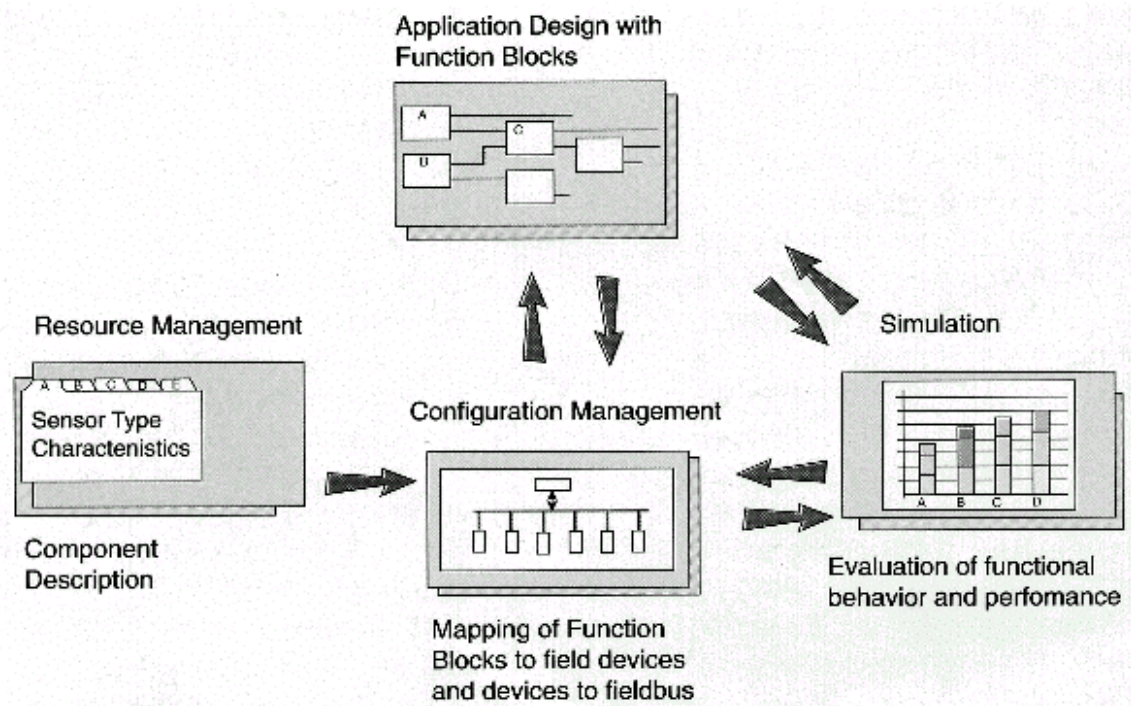
가

(1 )

SDL(Specification and Description Language), UML(Unified Modeling Language) Petri Nets

가

가



1. ACORN Toolkit

..)

(

..)

ACORN(Advanced Control Network : BRITE-EURAM 95-1479)

가

ACORN Application Design Tool, Resource Manafement Tool, Configuration Management Tool, Simulation Tool

4가 .( 1 )

가

Application Design Tool

Resource Management Tool

가

Configuration Management Tool

Application Designdml

Configuration Management Tool

가 (

가

)

Simulation Tool

ACORN OPERA

가 . Animation Layout

ACORN

OPERA

OPERA (Operators Training Distributed Real-Time Simulation; ESPRIT 24950)

OPERA

가 (DiSOM) .(

2 )

IT . OPERA

( , )

(Windows NT, FastEthernet, CORBA

PC) . OPERA

OPERA

가

Atomic DiSOM

(ADC)

가

ADC

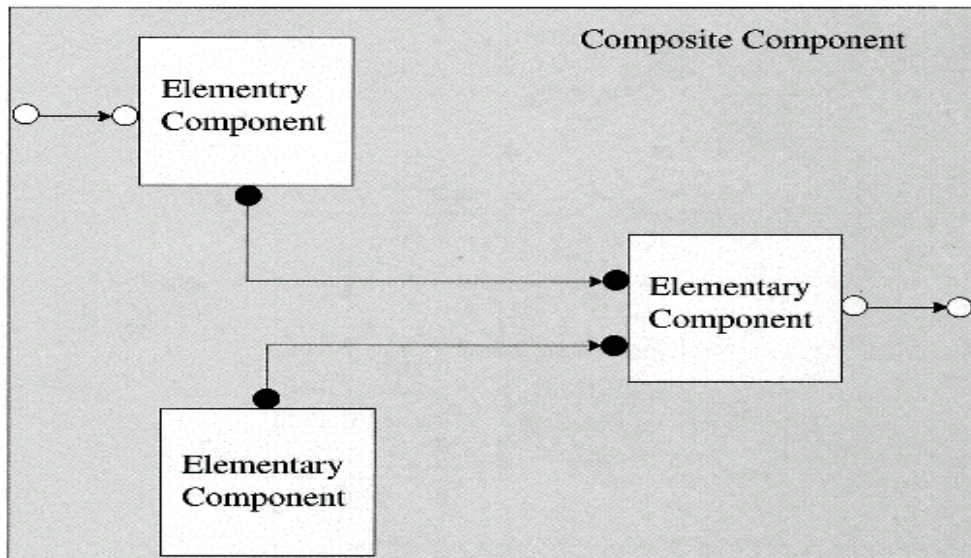
ADC

. ADC

( 가

가 10m )

가



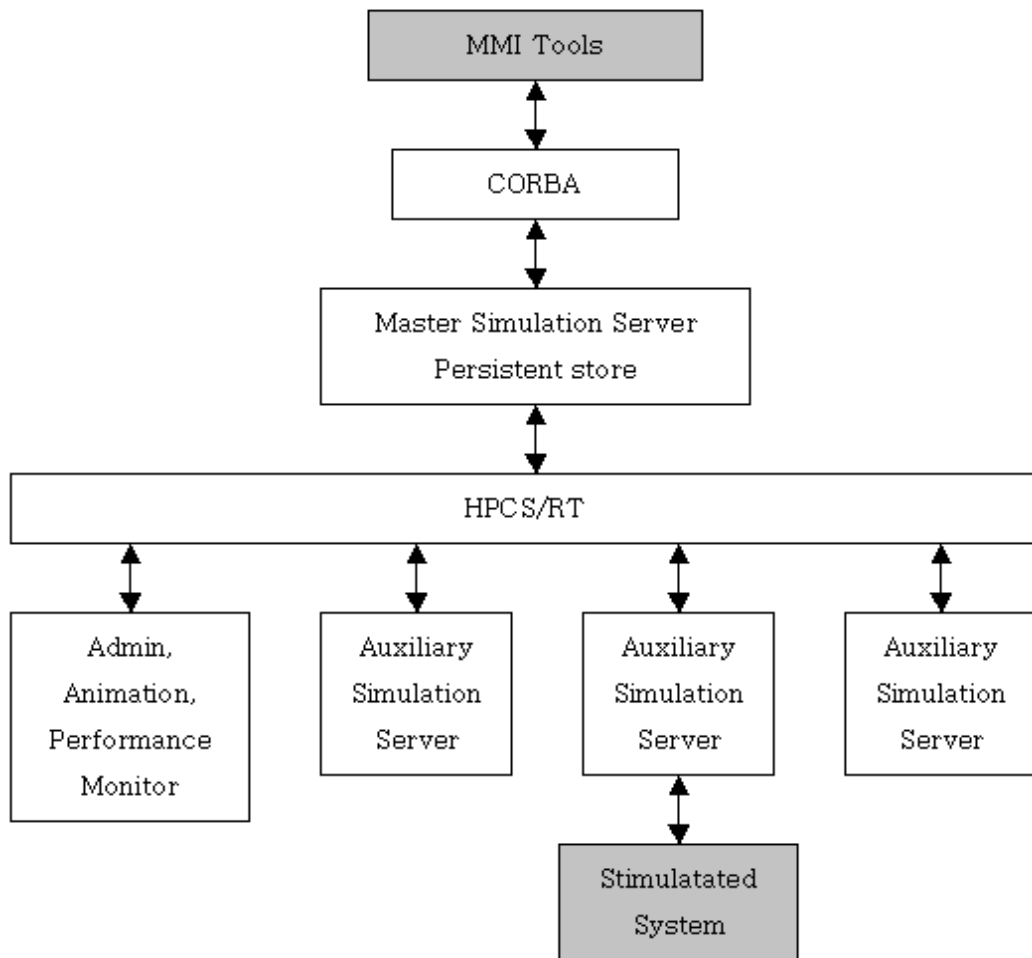
○ Ports of Composite Component

● Ports of Elementary Component

2. OPERA

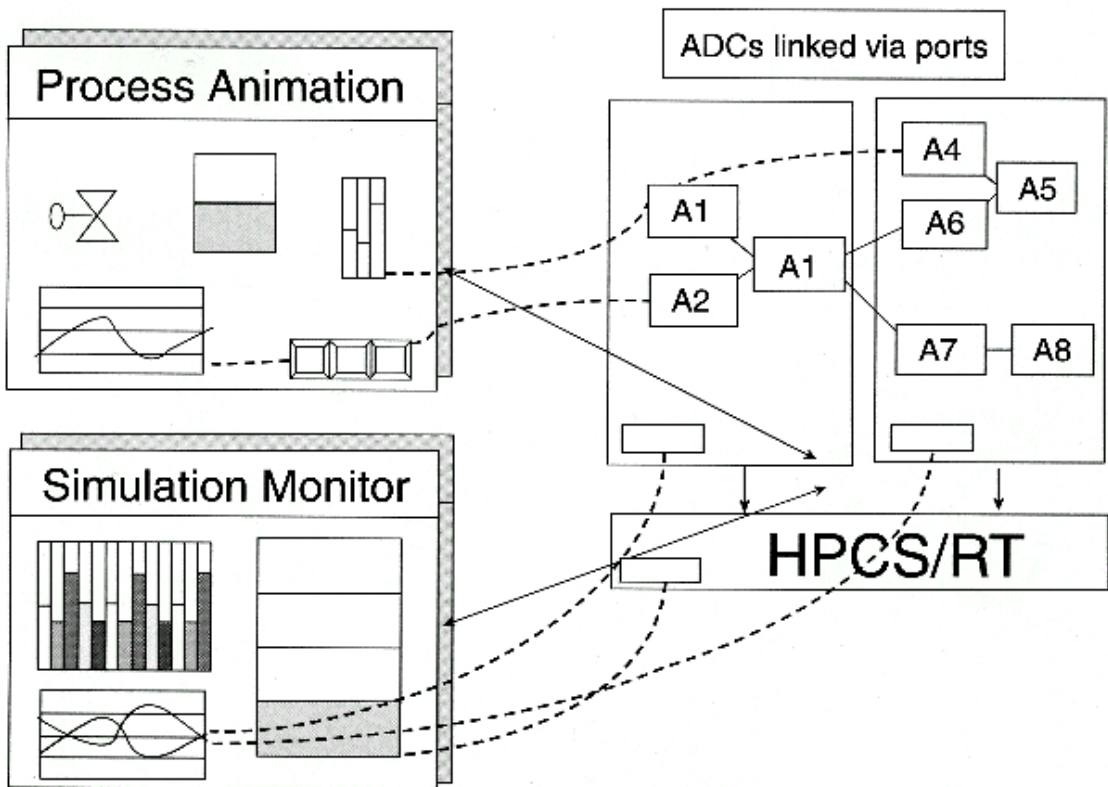
ADC / 가  
 OPERA  
 PC가 LAN  
 ADC  
 OPERA  
 ADC DiSOM 가  
 DiSOM Central Conductor  
 ADC  
 ADC 가  
 가

(Time Synchronization)



3. OPERA

HPCS-RT



4. OPERA

HPCS-RT

).

(MMI)

. MMI

가

가

. OPERA

ADC

. ( DiSOM  
가 .)

( 4 )

OPERA

CORBA  
LAN

.( 3 )

Windows/NT PC

(

(~200ms). OPERA API



OLE/COM

(10ms

)

LAN(100 Mbit/s Ethernet)

CORBA

CORBA

Legacy

o

DCS

가

( , )

CPU , ) 가

( 4 ).