

CALS/EC

A Design and Development Framework for CALS/EC System

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Abstract

The basic goal of CALS/EC is to improve transactions and relationships among organizations through information automation and integration. CALS/EC is an information strategy which needs strong cooperation in design stage among organizations such as departments and companies. However, the cooperation cannot be easily obtained because current design methodologies for CALS/EC do not support efficiently.

In this paper, we suggests the design and development framework for CALS/EC systems. The framework helps designers identify interactions and process among organizations clearly. With this framework, we have constructed the CALS/EC prototype system for construction industry.

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가 가

[3]. CALS/EC (BPR), CALS/EC (CE)[7]

[1]. , CALS/EC

가 (Virtual Corporation) 가

, CALS/EC

CALS/EC

가

가

IDEF0 IDEF1X CALS/EC

“Document Trace” IDEF0 (Function)

가 [4]. IDEF1 [5]. IDEF1X

IDEF0 IDEF0 CALS/EC

[6].

IDEF0

Document Trace IDEF

CALS/EC

CALS/EC

2. CALS/EC

2.1 Document Trace Diagram

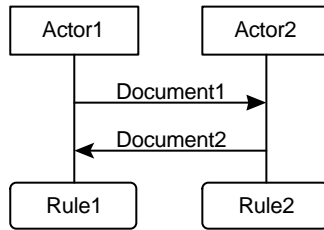
Document Trace Diagram(DTD)

CALS/EC

CALS/EC

actor actor
actor Actor
Actor

, CAD 가



1. Document Trace Diagram

2.2 DTD

CALS/EC

가

IDEF

IDEF

IDEF

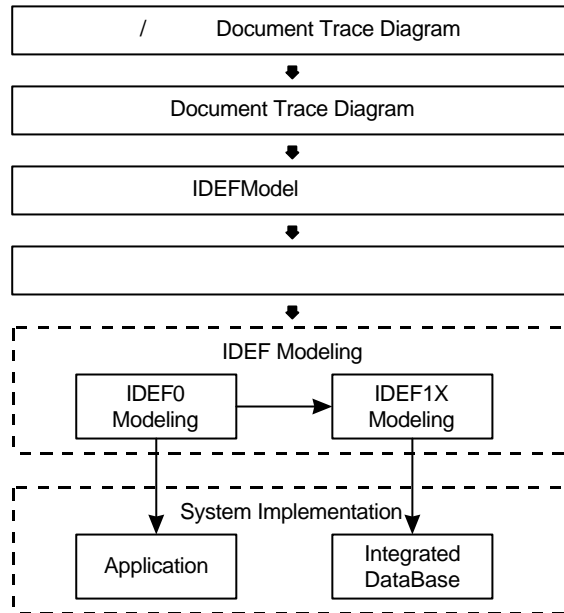
가 actor

DTD actor actor
actor actor
DTD 가

CALS/EC

. DTD

DTD CALS/EC

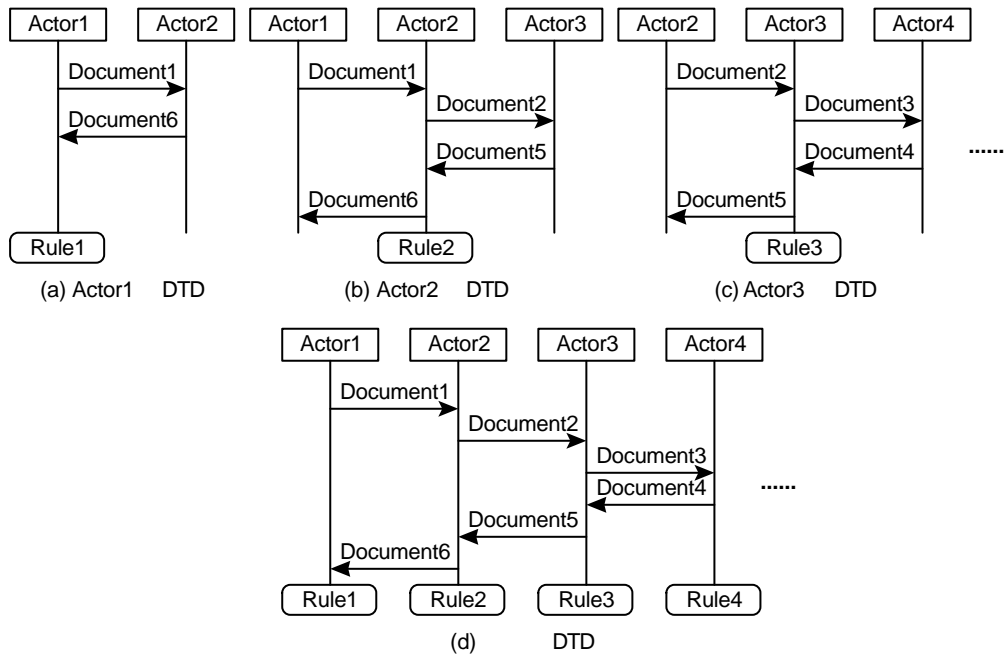


2. Document Trace Diagram CALS/EC

2.3 Actor Document Trace Diagram

Document Trace Diagram
Document Trace

Diagram



3. Document Trace Diagram

DTD

actor

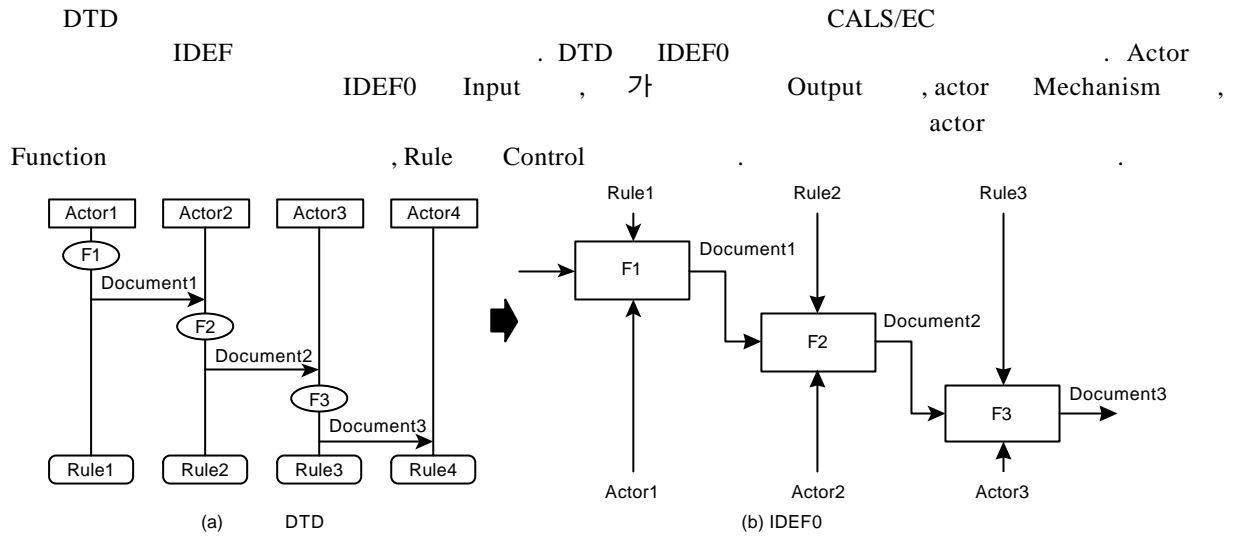
actor

DTD

actor

actor가

2.4 IDEF

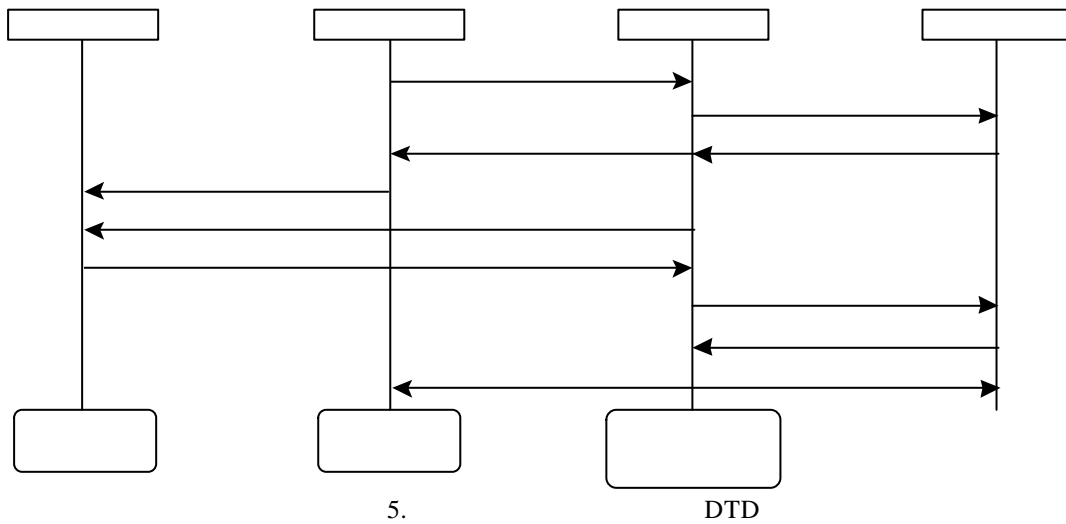


4. DTD IDEF0

IDEF0 IDEF0 IDEF1X IDEF1X et. al. [2]

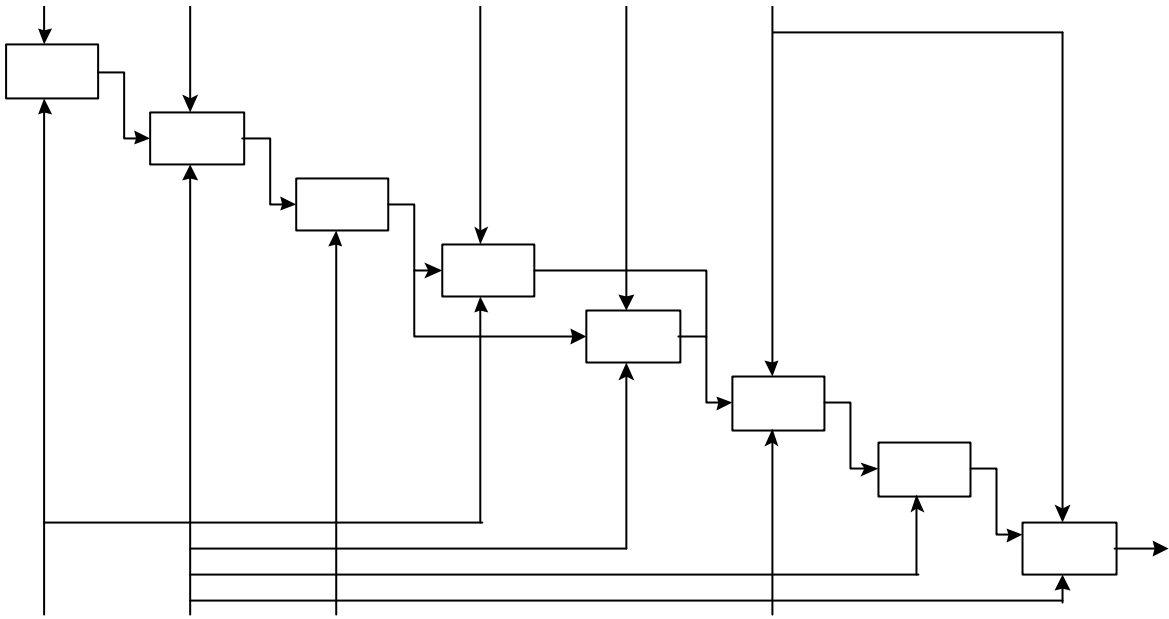
3. CALS/EC

3.1 가 DTD DTD DTD



3.2 IDEF0 DTD IDEF0 IDEF0 actor

가



6. DTD

IDEF0

4. CALS/EC

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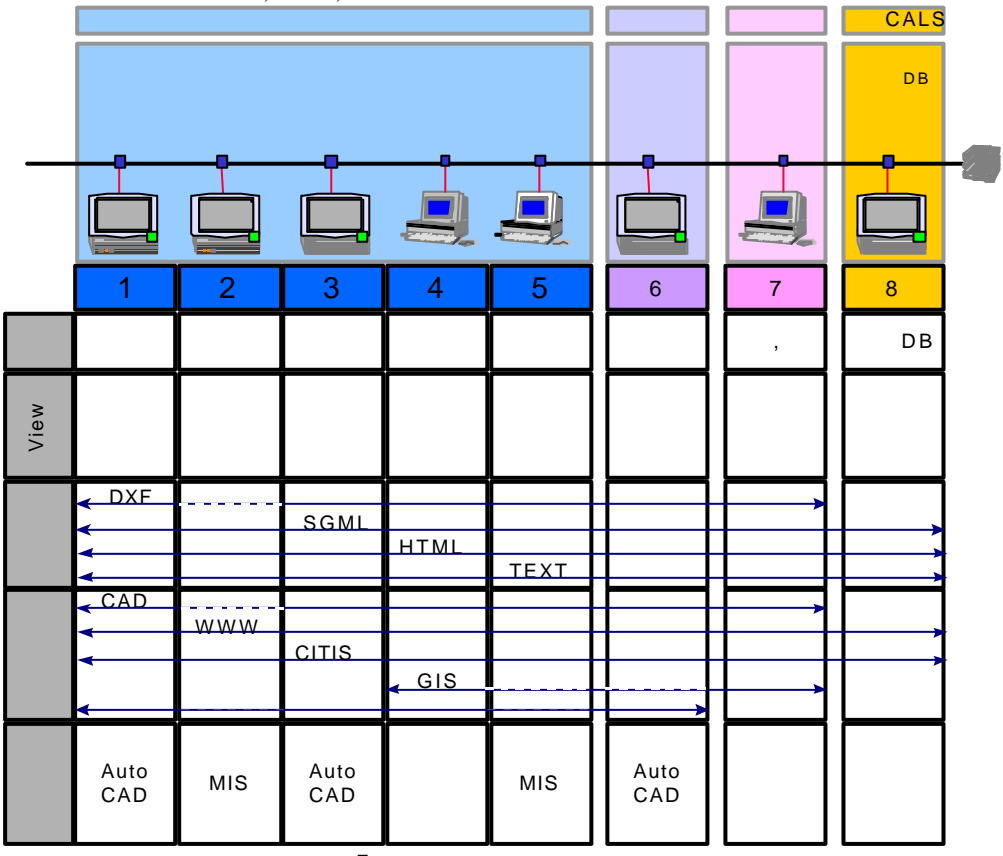
4.1

DTD

IDEF0

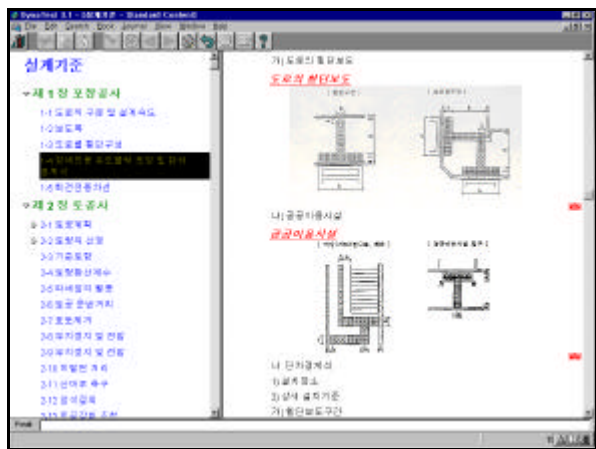
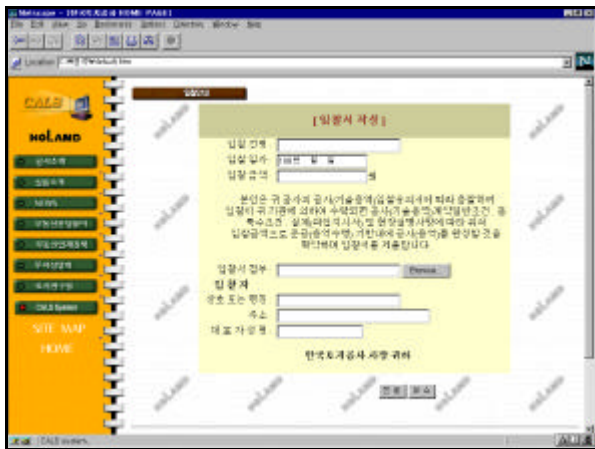
et. al.

actor



7.

DTD , 가 가 가 가 actor actor HTML 4.2 HTML SGML 가 HTML SGML IDEF0 Control



8.

5.

IDEF CALS/EC Document Trace Diagram IDEF Document Trace Diagram IDEF CALS/EC IDEF Document Trace Diagram IDEF Document Trace Diagram IDEF0

[1] , , “CALS CAD/CAM ,” *CALS Korea '95 Proceedings*, pp.204-215, 1995.
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