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Design of data processing model for efficient retrieval and management of science and technology information

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DBMS

, DBMS

DBMS

KRISTAL-2002

DB

Abstract

It constructs a database generally and service it does, to use a commercial business DBMS that manages information and to use a retrieval system that supports a search, it adopts the gearing method of the DBMS and information retrieval system. But like this method is inconvenient must operate the DBMS and information retrieval system with duplication to be, there is a weak point where the data management and processing become accomplished with duplication. It presents the DB construction and information search and the management model of the KRISTAL-2002 information retrieval and management system base for the scientific and technical information data management and processing from the dissertation which it sees.

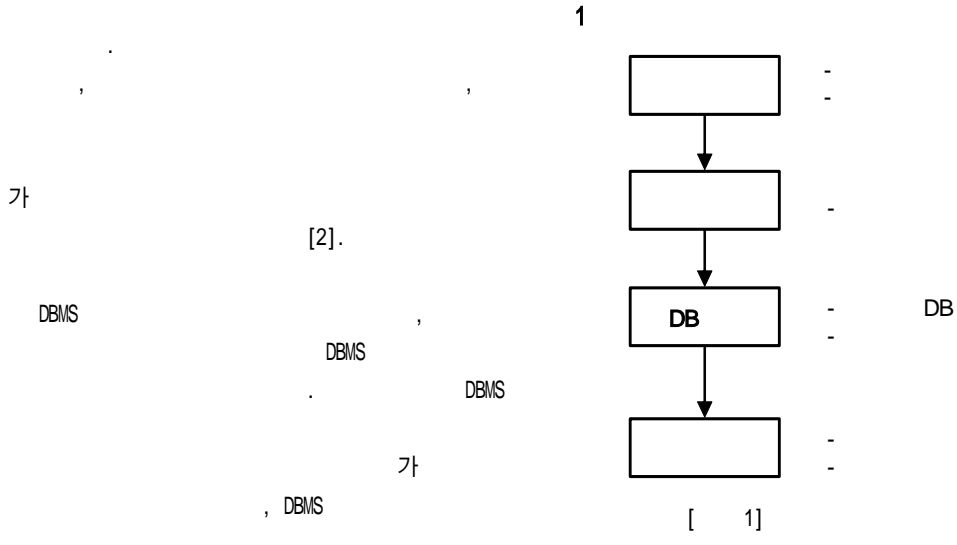
I.

[1].

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DB, 2004 11 가, 가
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15
KRISTAL-2002 [4].
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[3]. [1]

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DB, DBMS

2 DB 가 DB DB DB

DBMS DB DB DB

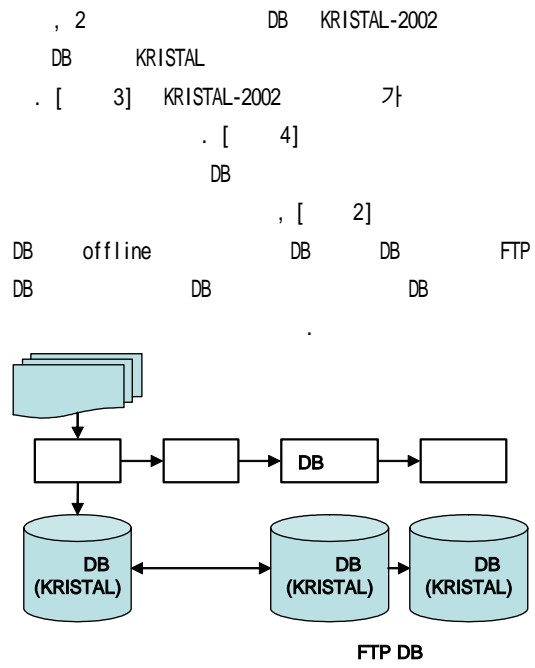
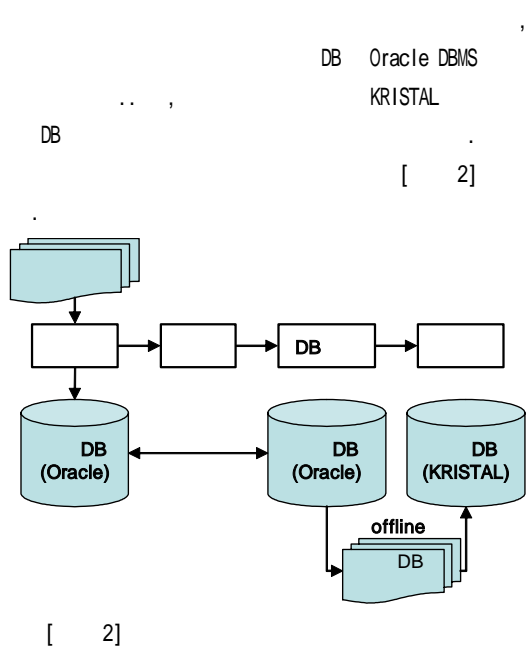
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KRISTAL-2002, DBMS

4 DBMS

2 [1]

II. DBMS



III.

KRISTAL-2002

DBMS

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1 KRISTAL-2002

KRISTAL-2002 KISTI

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XML

DB

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10,000

(60Mb)

KRISTAL-2002

Oracle

DBMS

DBMS

[3].

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DBMS

2 KRISTAL-2002

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KRISTAL-2002

```

public static boolean insert(String tn,
HashMap hm) {
    Iterator iter = null;
    String secName,secValue = null;
    ParameterType pOut = null;
    ParameterType pIn = new ParameterType();
    DocumentType docType = new DocumentType();
    ClientLIB cl = new ClientLIB(ip,port);
    iter = hm.keySet().iterator();
    while (iter.hasNext()) {
        secName = (String) iter.next();
        secValue = (String) hm.get(secName);
        docType.sections.add(new
SectionType(secName, secValue));
    }
    pIn.documents.add(docType);

    pOut=cl.Request(KristalHeader.APPEND_DOCUMENT,
pIn);
    //System.out.println(pOut.service_time);
    return true;
}

```

[5] DB KRISTAL DB API

DB

(Indexing)

[5]

KRISTAL-2002 API

KRISTAL DB

Java API

[1]

	()		&	
	Oracle	KRISTAL	Oracle	KRISTAL
	28m58s	15m35s	29m38s	26m14s

[1] KRISTAL
DBMS Oracle
55% 가

IV.

KRISTAL-2002

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DBMS가 가

KRISTAL-2002

V.

[1] , , , , "Implementation of the XML based Science and Technology Information System using KRISTAL", The 7th IASTED International Conference , IMSA 2003 , 2003.08

[2] , , , , , , " KRISTAL-2000 " , Vol.30,No.1, p653-655,2003

[3] , , , , " KRISTAL-2002 JAVA API " , 가 Vol.31,No.2, p433-435, 2003

[4] , , " " , 2004