IMS Simplification: Shrinking the Generation Gap for IMS Application Development

Session 1900

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Information On Demand **2011**

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IMS Simplification

Reduce skills, time and cost required to
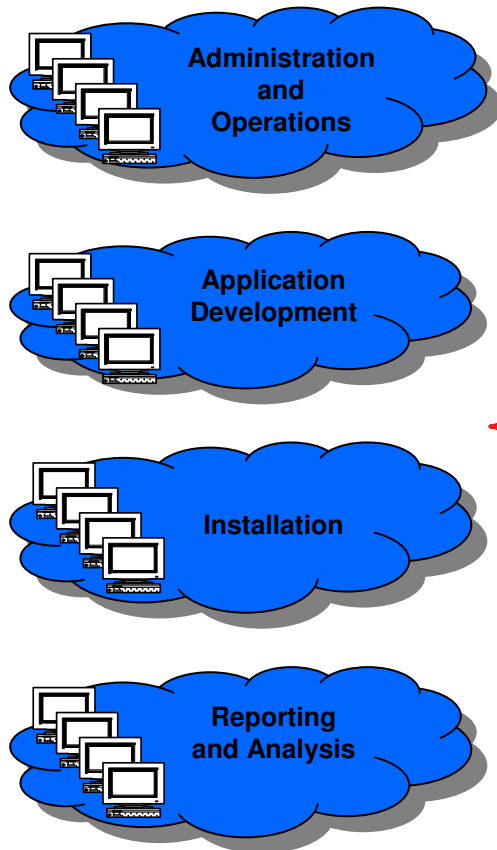manage IMS systems and to develop IMS applications

✓ Using industry standards

✓ Consistent look and feel

✓ Integration

IMS Simplification

New IMS interfaces and models	IMS interfaces		IMS

Administration and Operations

Application Development

Installation

Reporting and Analysis

SQL / JDBC

IMS Tools

Rational

Optim

Cognos

InfoSphere

JavaEE

pureQuery

JCL
ISPF
SDSF
JES
User Mods
User Exits
DBDGEN
PSBGEN
ACBGEN
OLC
DRD
DLI

TM

Database

IMS Tools
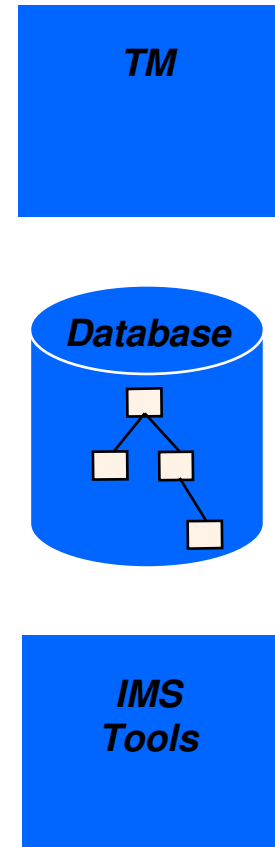
Reduce the need for in-depth IMS skills

Areas to Simplify

Administration And Operations

Application and DB Development

Installation
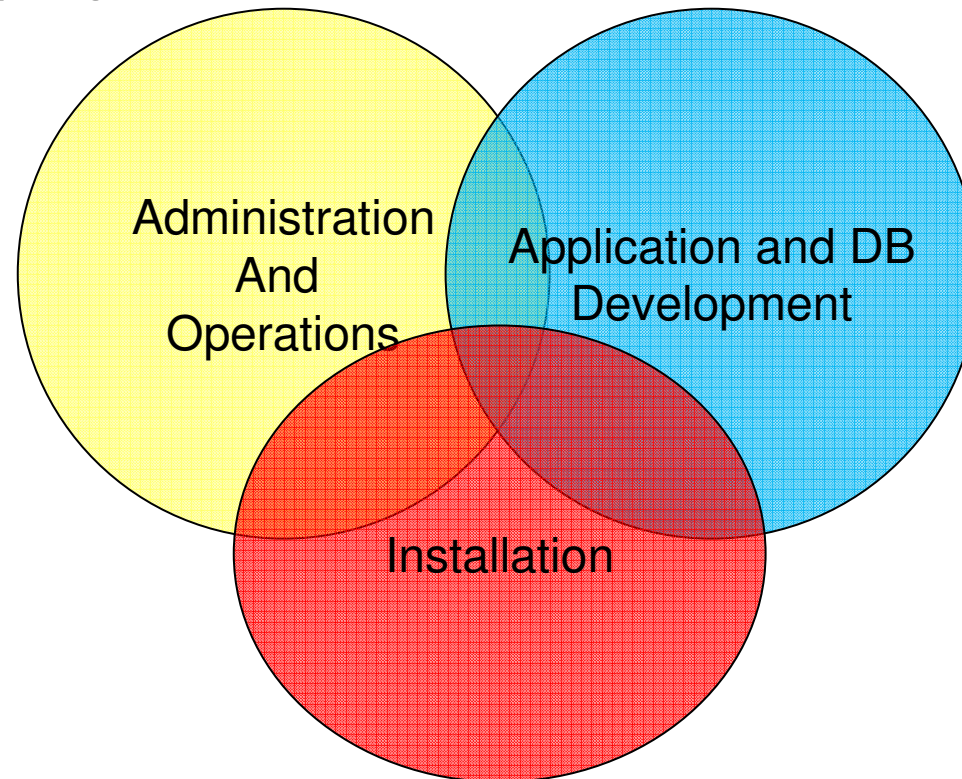
IMS Simplification – Externals

**Development
(Eclipse)**

**Administration
(Web Browser)**
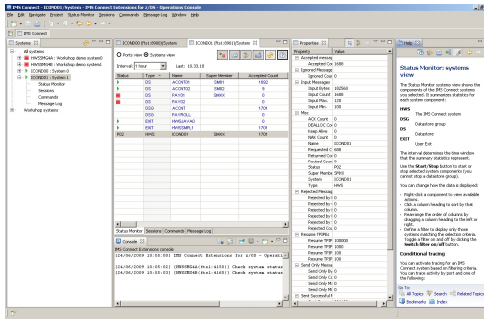
Developer

Administrator

- **ISPF**

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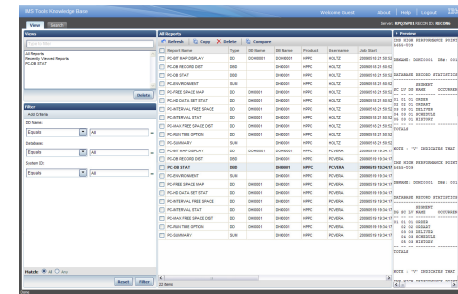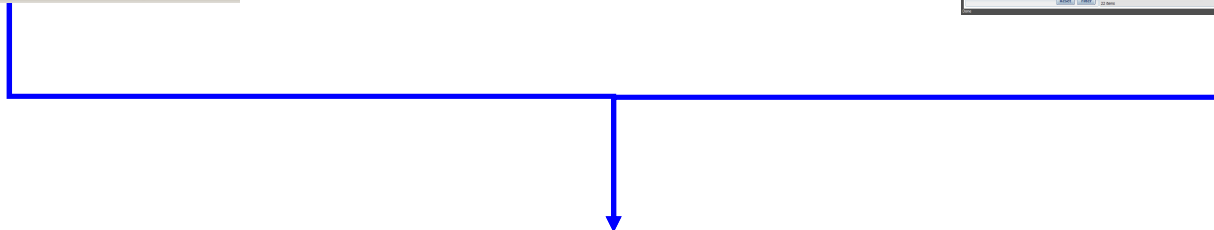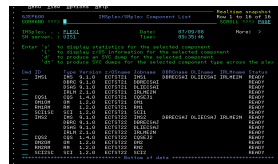
IMS Application and Database Development

Application Development Life Cycle

- **Visualize Database (Design / Understand)**

    IMS Explorer for Development

- **Define Queries (Build and test)**

    IMS Explorer for Development

- **Code (Remote development and build)**

    Rational Developer for System z

- **Unit Test**
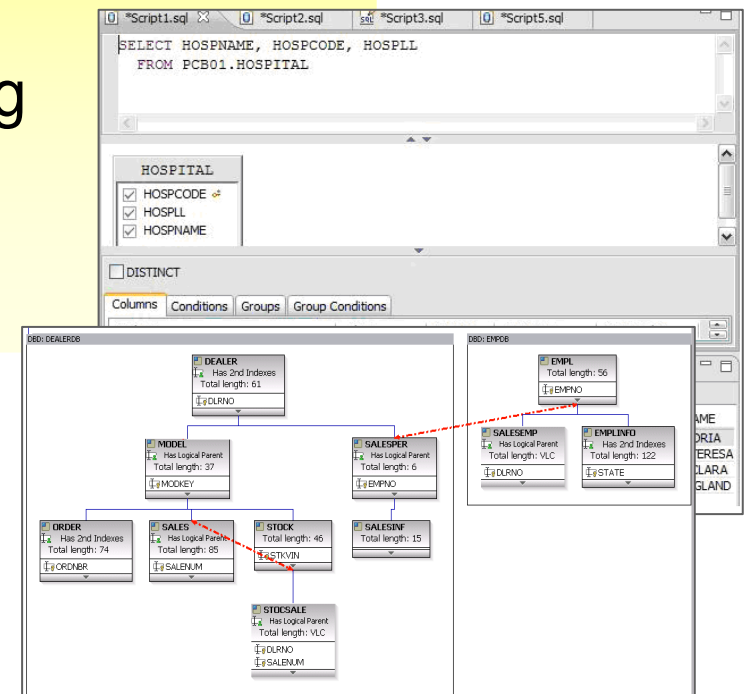
    Batch Terminal Simulator

- **Debug**

    Debug Tool for z/OS

- **Deploy**

IMS Explorer for Development

- Visualize IMS database structure as defined by DBD source

- Change IMS Database and Program Definitions sources

- **Graphically** access IMS data using SQL

- View your mainframe datasets

- Submit JCL and inspect output in JES

- IMS Explorer

IMS Explorer for Development – Short Term Candidates

- View programs and transactions

- Stop/start programs and transactions

- Put transactions in a queue

Application Development Life Cycle

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    IMS Explorer for Development

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RDz based z/OS development environment

Common development environment for COBOL, PL/I, C/C++, and Java

The Debug Tool for z/OS

- Interactive debugging for applications

- Multiple languages:
  - COBOL, PL/I, C/C++, Assembler

- Multiple z/OS environments
  - Batch, TSO, CICS, IMS/TM, DB2 stored procedures,
  - Websphere application server, Unix system services

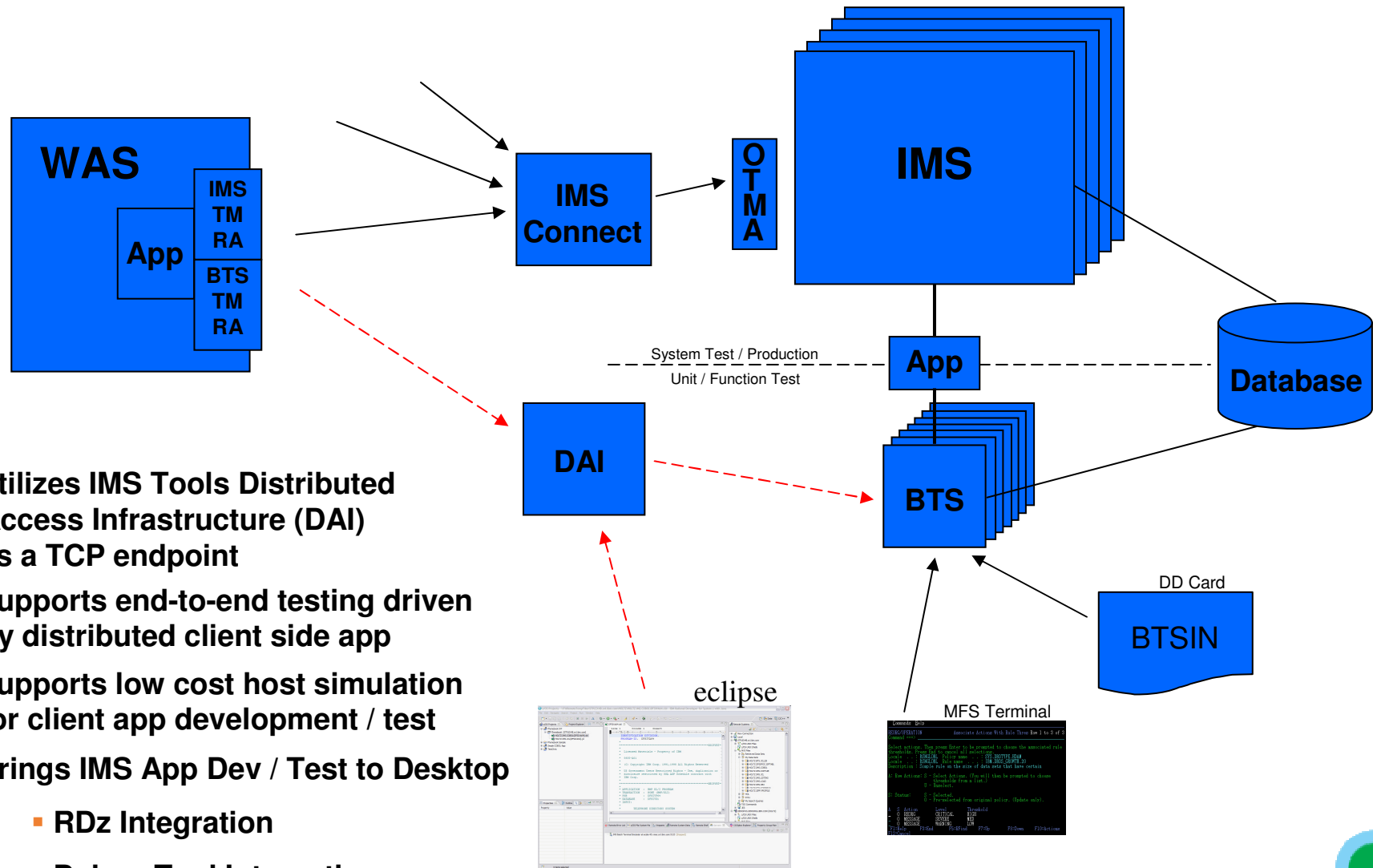- GUI Eclipse plug-in **at no additional cost!**

IMS Batch Terminal Simulator Modernization

- **Tool for Unit Testing and Debugging IMS applications**
  - **Runs in TSO, IMS Batch (DL/I DBB) or IMS Online (BMP/JBP)**
  - **Simulates IMS DC calls**

- **Driven through BTSIN control statements or interactive full screen TSO simulation**

- **Playback utility**
  - **Generates BTSIN with the corresponding MFS associated with the MOD name from IMS transaction log records ('01'X, '03'X).**
  - **Prints containing screen images of transactions including data, USER/LTERM identification, time by extracting from BTSOUT**


IMS

App

System Test / Production

Unit / Function Test

BTS

Database

DD Card

BTSIN
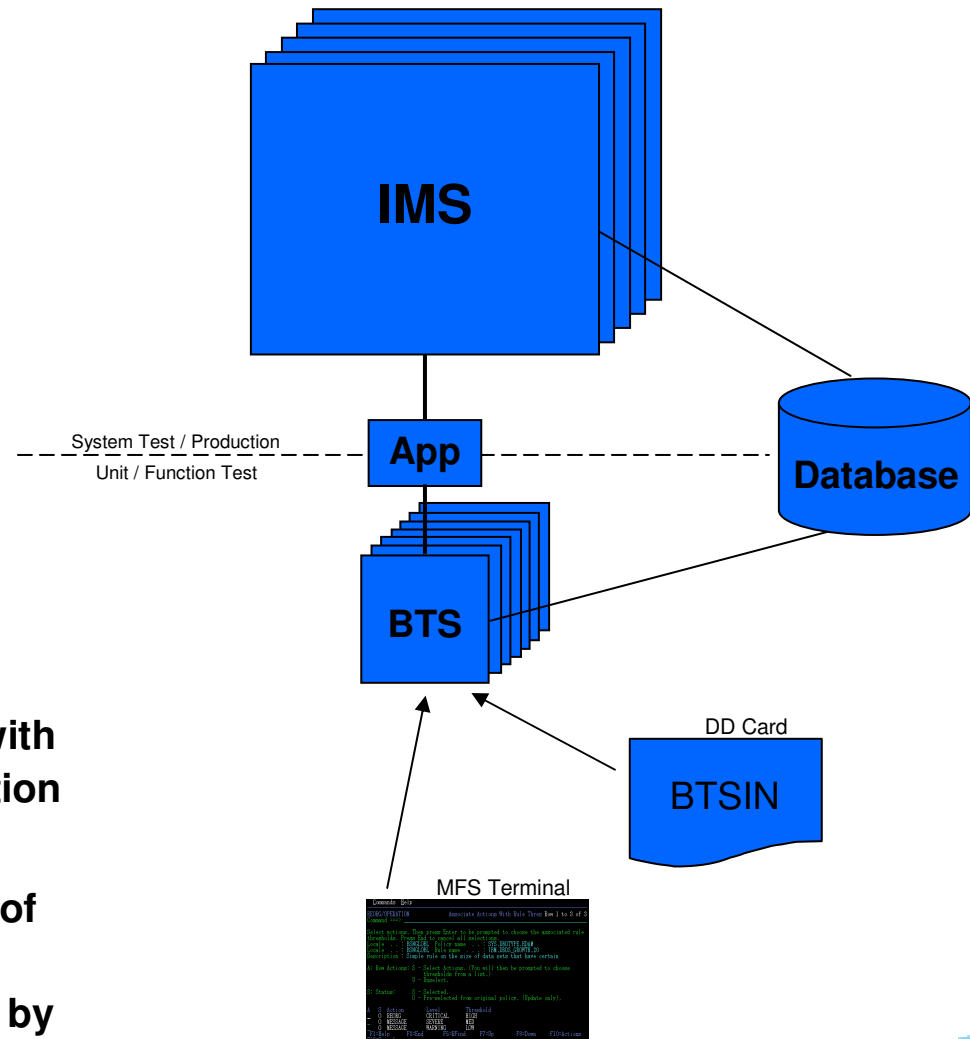
MFS Terminal

IMS Batch Terminal Simulator Modernization

- **Utilizes IMS Tools Distributed Access Infrastructure (DAI) as a TCP endpoint**
- **Supports end-to-end testing driven by distributed client side app**
- **Supports low cost host simulation for client app development / test**
- **Brings IMS App Dev / Test to Desktop**
  - **RDz Integration**
  - **Debug Tool Integration**

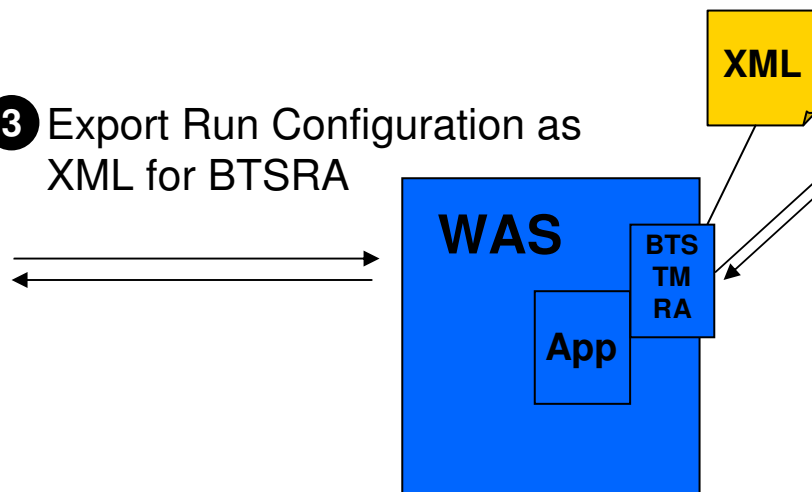# Application Development Modernization with BTS

XML

1 System Programmer defines common datasets, attributes, etc (similar to PROCLIB) and exports as XML
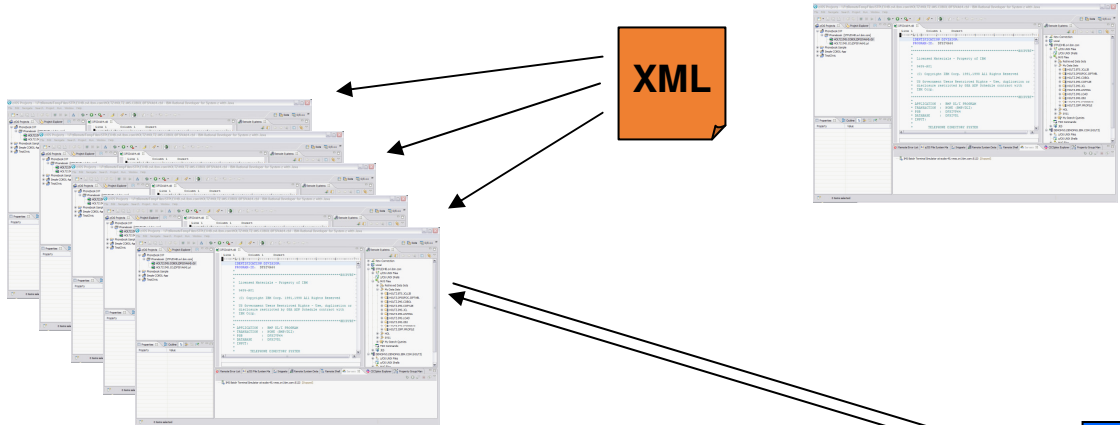
2 Developers import XML and use to create Run Configuration… to test applications

DAI

BTS   BTS   BTS
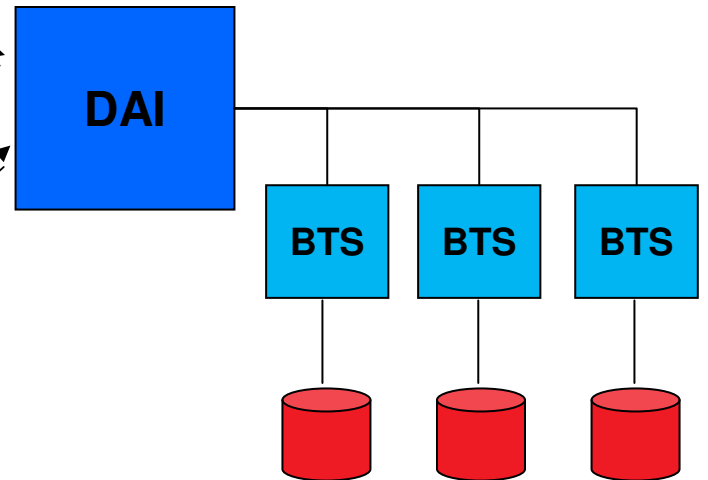
3 Export Run Configuration as XML for BTSRA

XML

WAS

BTS TM RA

App

- RDz
- BTS
- Debug Tool

IMS Simplification for AD – Our Vision

- Lessen the need of IMS specialized knowledge

- Same look and feel across:
  - Language (Java, COBOL, etc)
  - Platform (Mainframe, Distributed)
  - Transaction (WAS/CICS/TM)
  - Database (IMS/DB2)

- An environment with a single interface that integrates design, coding, testing, and debugging