z/OS Introduction and Workshop
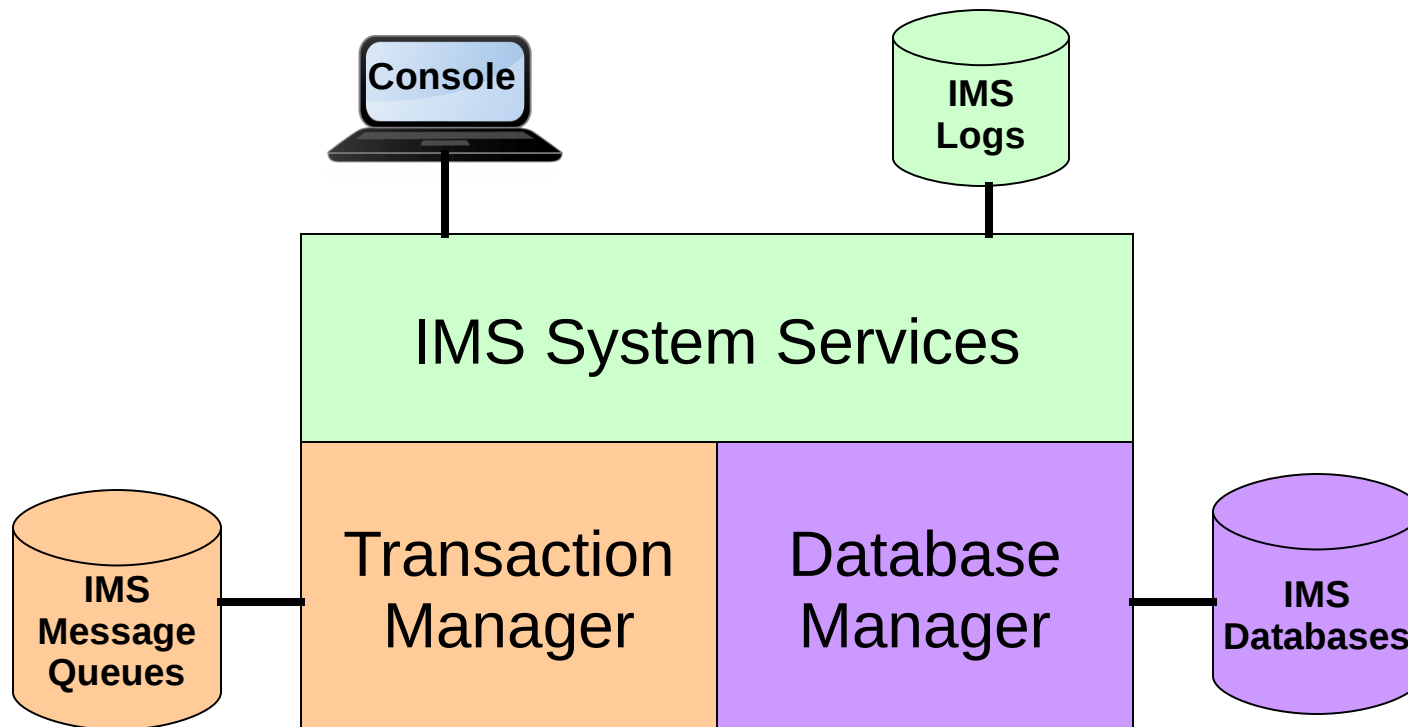
IMS

Unit Objectives

After completing this unit, you should be able to:

•Describe IMS
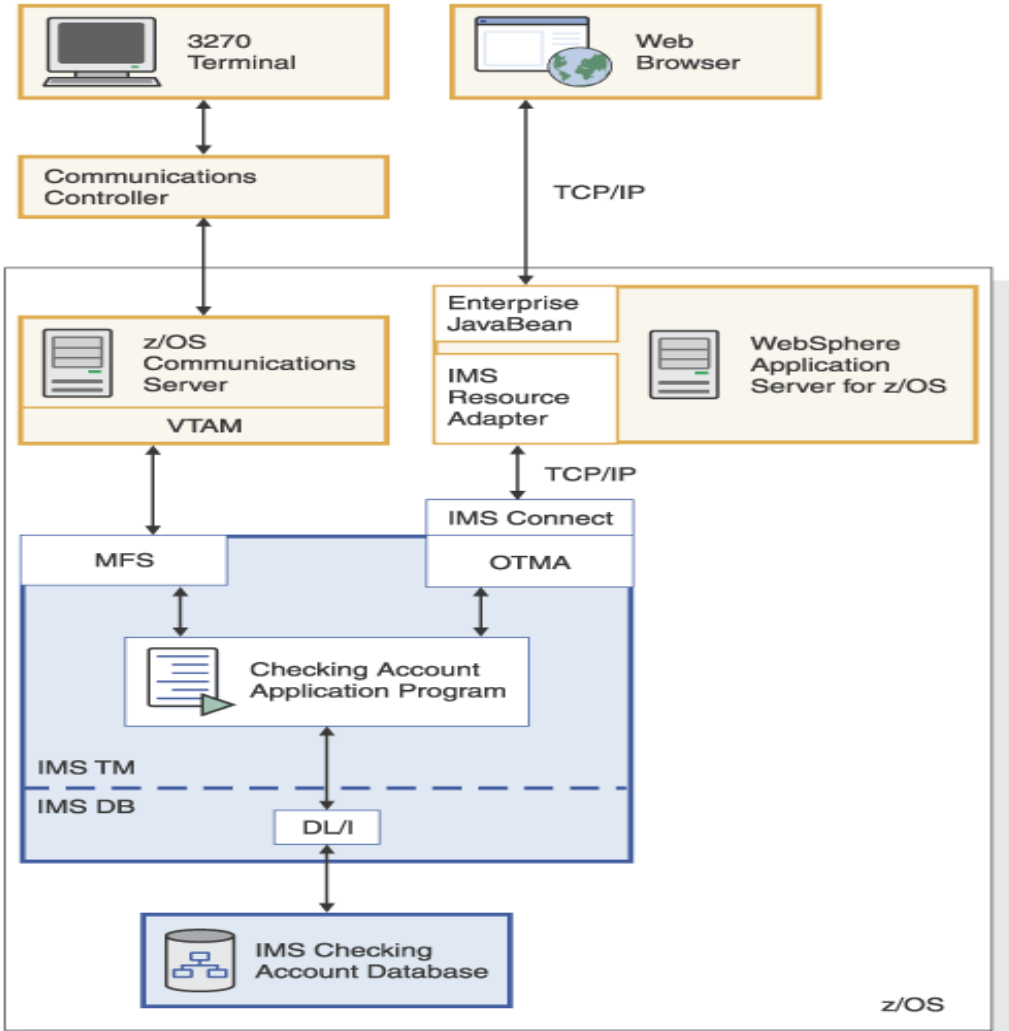
•List 3 IMS Components

Information Management System (IMS)
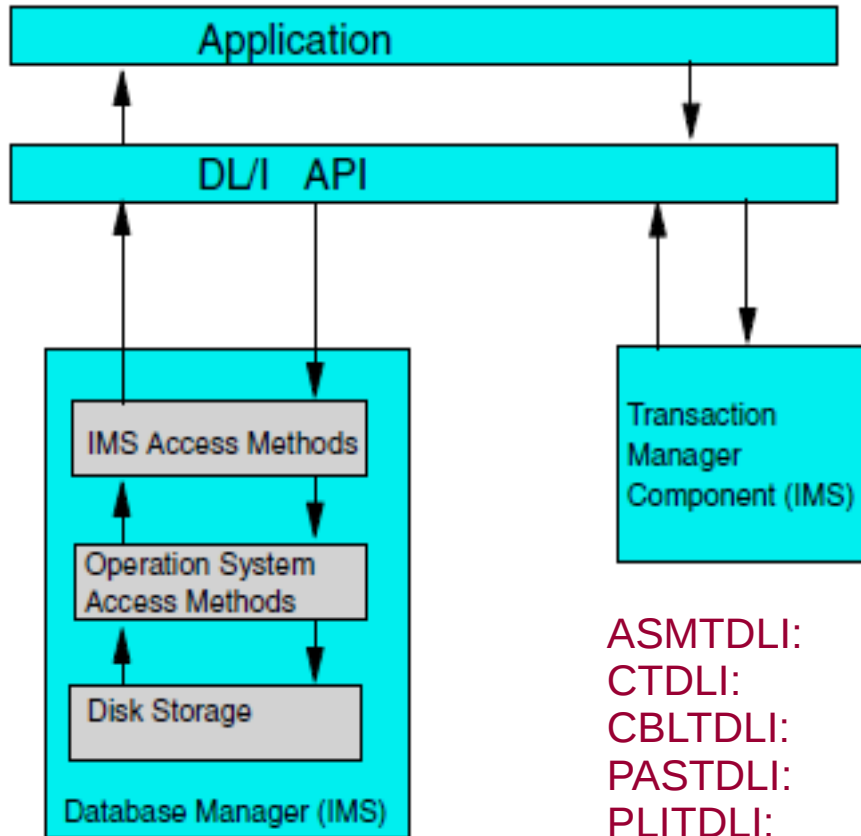
IMS consists of 3 components
1. System Services component
2. Transaction Manager (TM) component
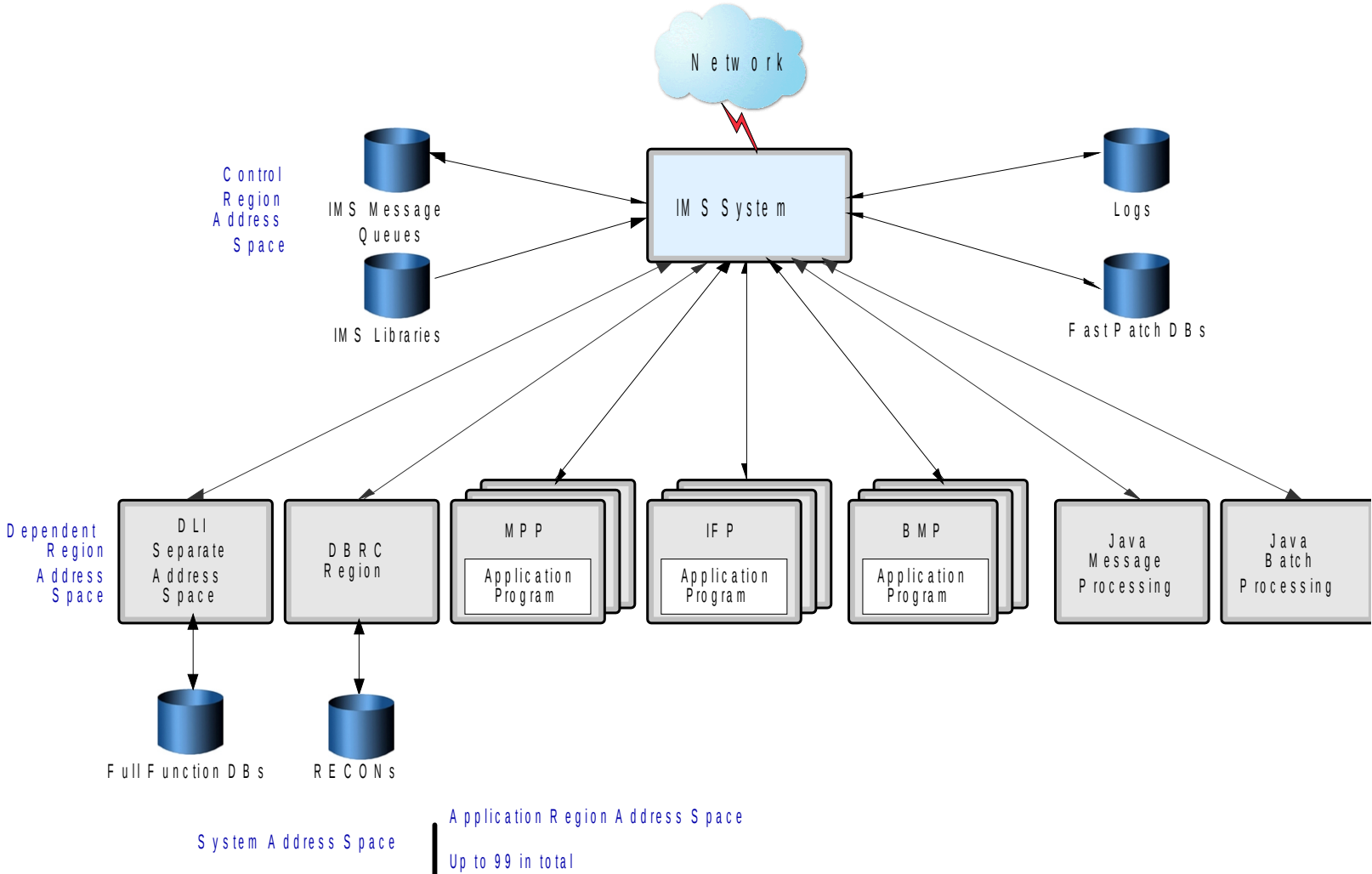3. Database Manager (DB) component

IMS Network Connectivity

IMS Application Programming Interface (API)

Application

DL/I   API

Database Manager (IMS)
- IMS Access Methods
- Operation System Access Methods
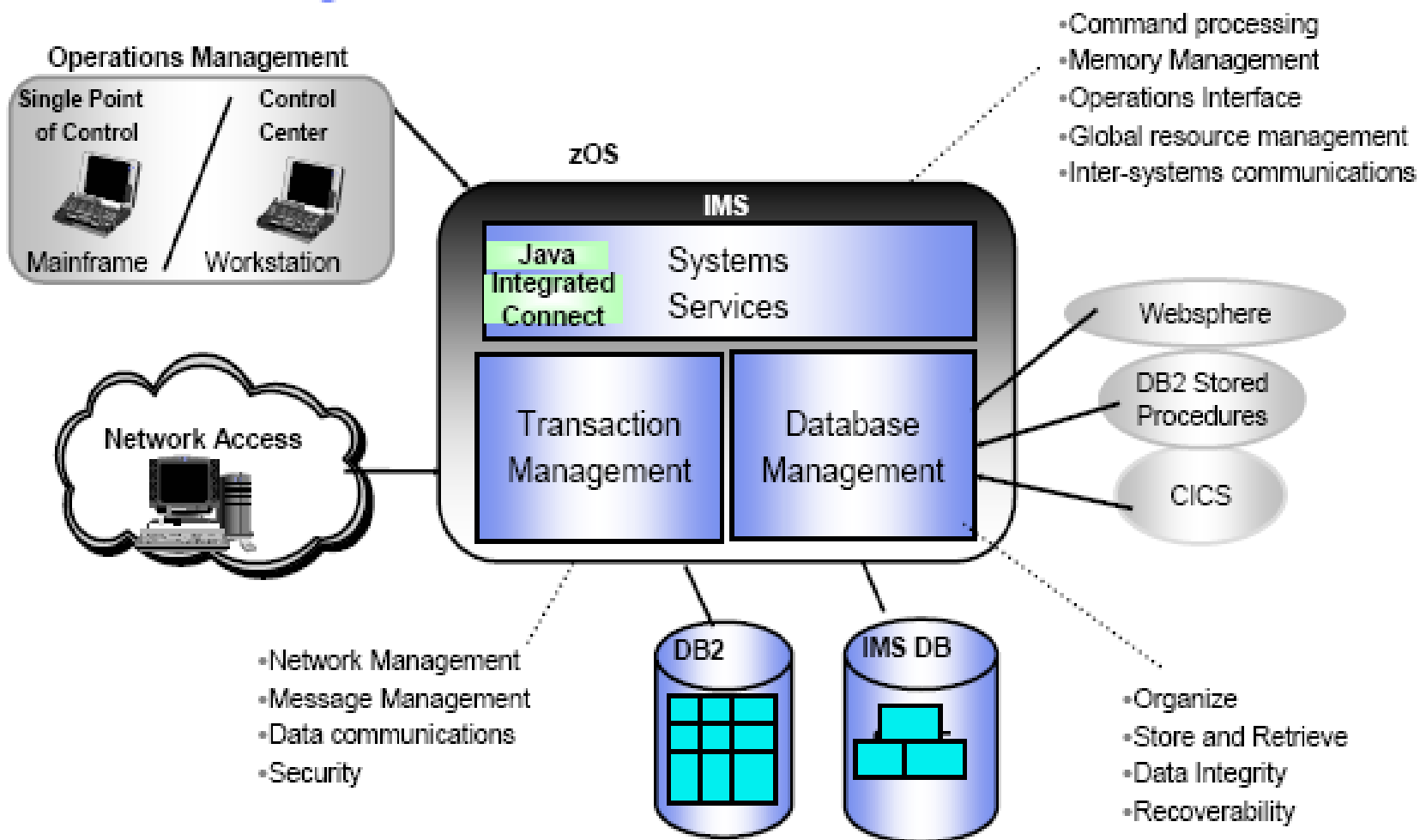- Disk Storage

Transaction Manager Component (IMS)

EXEC SQLIMS
now available to
use SQL against
IMS DB

ASMTDLI: Assembler language interface to IMS
CTDLI: C language interface to IMS
CBLTDLI: COBOL language interface to IMS
PASTDLI: PASCAL language interface IMS
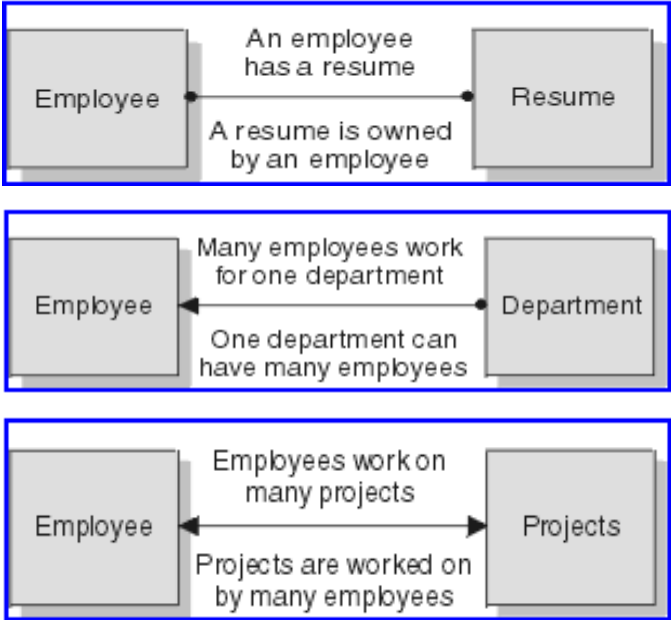PLITDLI: PL/I language interface to IMS

IMS Environment

IMS Today

Operations Management
- Single Point of Control — Mainframe
- Control Center — Workstation

Network Access

zOS

IMS
- Java Integrated Connect
- Systems Services
- Transaction Management
- Database Management

- Command processing
- Memory Management
- Operations Interface
- Global resource management
- Inter-systems communications

- Websphere
- DB2 Stored Procedures
- CICS

- Network Management
- Message Management
- Data communications
- Security

DB2

IMS DB

- Organize
- Store and Retrieve
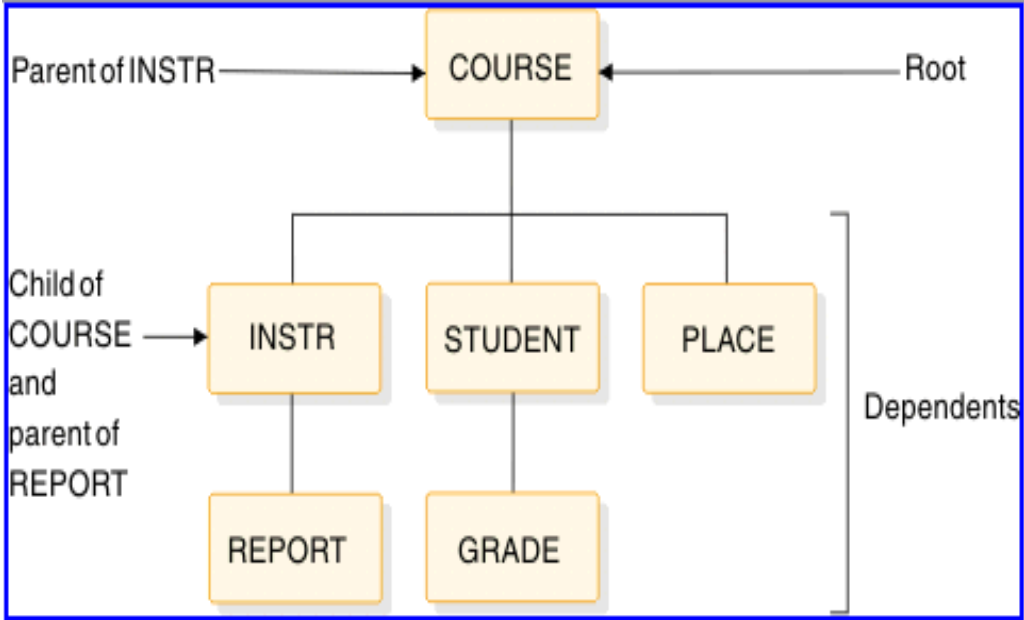- Data Integrity
- Recoverability

Hierarchical vs. Relational and Data Bases

DB2

IMS DB

Starting IMS (Operations)

S IMS10RL1
$HASP373 IMS10RL1 STARTED
DXR117I IRLM001 INITIALIZATION COMPLETE

S IMS10CR1
$HASP373 IMS10CR1 STARTED
DFS1929I * IMS SYSTEM PARAMETERS INITIAL FOR THIS V10.1 DBDC EXECUTION:
START IMS10DL1,PARM=(DLS,IVP1)
DFS0578I - READ SUCCESSFUL FOR DDNAME PROCLIB MEMBER = IMS10RC1
START IMS10RC1,IMSID=IVP1
$HASP373 IMS10DL1 STARTED
$HASP373 IMS10RC1 STARTED
*DFS225A - CTL REGION WAITING FOR DBRC REGION (IMS10RC1) INIT

*03 DFS810A IMS READY

R 03,/NRE CHKPT 0 FORMAT ALL
IEE600I REPLY TO 03 IS;/NRE CHKPT 0 FORMAT ALL
DFS994I COLD START COMPLETED.
S IMS10RD1,MBR=IMSMSG
$HASP373 **IMS10RD1** STARTED
$HASP373 **IMS10M11** STARTED
$HASP373 **IMS10F12** STARTED
$HASP373 **IMS10F11** STARTED

Address Spaces

SDSF STATUS DISPLAY ALL CLASSES
PREFIX=IM* DEST=(ALL) OWNER=*
NP   JOBNAME   JobID   Queue
     IMS10J11   JOB01633   EXECUTION
     IMS10F12   JOB01632   EXECUTION
     IMS10F11   JOB01631   EXECUTION
     IMS10M11   JOB01630   EXECUTION
     IMS10RC1STC01628   EXECUTION
     IMS10DL1   STC01627   EXECUTION
     IMS10CR1STC01626   EXECUTION
     IMS10RL1   STC01625   EXECUTION

 *04 DFS996I *IMS READY*

Stopping IMS (Operations)

R 04,/CHECKPOINT FREEZE.

REPLY TO 04 IS;/CHECKPOINT FREEZE.
DFS058I 14:52:06 CHECKPOINT COMMAND IN PROGRESS
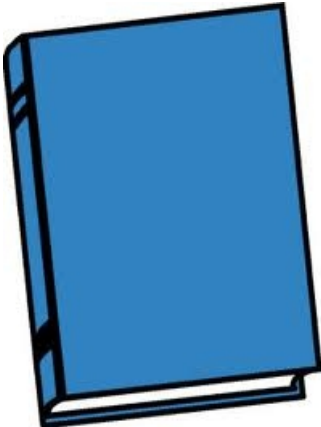   *05 DFS996I *IMS READY*
DFS552I   IFP REGION IMS10F11 STOPPED
DFS552I   IFP REGION IMS10F12 STOPPED
DFS552I   MESSAGE REGION IMS10M11 STOPPED
DFS552I   JMP REGION IMS10J11 STOPPED

IMS Professional Manuals and Documentation

Unit summary

Having completed this unit, you should be able to:

✓ Describe IMS

✓ List 3 IMS components