IMS Version 12

Information Management software

Class Agenda

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Class Agenda

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Software Prerequisites

- Minimum software level prerequisites
  - z/OS V1R11 (5694-A01)
  - DFSMS APAR OA33409 for z/OS V1R11
  - High Level Assembler Toolkit (5696-234), Version 1 Release 5
  - SMP/E V3R5
  - RACF, or equivalent, if security is used
  - IRLM 2.2, if IRLM is used
- Minimum software levels for optional functions:
  - Parallel RECON Access requires Transactional VSAM
  - Java Dependent Regions require JDK 6.0
  - The IMS Universal Drivers require JDK 6.0
  - Greater than 16 VSAM pools requires DFSMS APAR OA32318
  - CA Reclaim requires z/OS V1R12
  - EAV support for non-VSAM data sets requires z/OS V1R12

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The minimum level of z/OS required for IMS 12 is z/OS V1R11.

DFSMS APAR OA33409 is required for z/OS V1R11.

High Level Assembler Toolkit (5696-234) is a separately orderable feature of z/OS.

SMP/E Version 3 Release 5 is required.

If security is used, RACF or an equivalent product is required.

The IRLM is not required with IMS 12 unless you implement block level data sharing. If IRLM is used, it must be IRLM 2.2 or later.

Transactional VSAM (TVS) is included in the separately orderable feature z/OS DFSMS Transactional VSAM Services.

Java dependent regions require JDK 6.0 or later. The IMS Universal Drivers require JDK 6.0 or later.

VSAM support for more than 16 full function database buffer pools requires DFSMS APAR OA32318. The PTFs are UA57797 for z/OS V1R11 and UA57798 for z/OS V1 R12.

The CA Reclaim capability and EAV support for non-VSAM data sets are available only with z/OS V1R12 or a later release of z/OS.

Hardware Prerequisites

- IMS 12 runs only on 64 bit processors running in z/Architecture mode
  - Processors must also support the Long-Displacement Facility of the z/Architecture
- Sysplex data sharing
  - Requires Coupling Facility (CF) level 9 or later
- Shared Queues and Shared EMH
  - Require Coupling Facility (CF) level 9 or later
  - System managed duplexing requires CF level 12 or later and bidirectional CF to CF links

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IMS 12, IMS 11 and IMS 10 run only on 64 bit processors in z/Architecture mode. IMS 12 adds another hardware prerequisite which was not required for IMS 11 or IMS 10. This is the Long-Displacement Facility of the z/Architecture. This is included in all z800, z890, z990, z9, z10 and z196 processors. For the z900 processor, all current service levels of the microcode level 3G or later include the facility. The Long-Displacement Facility is also required for DB2 for z/OS Version 8 and later. If an IMS 12 control region or batch job is started on a system which does not include the Long-Displacement Facility the following message is issued which is followed by abend U0684.

```
DFS2342E IMS 12.1 REQUIRES LONG DISPLACEMENT FACILITY
```

If a BPE region (CQS, ODBM, OM, RM, SCI, IMS Connect) is started on a system which does not include the Long-Displacement Facility the following message is issued which is followed by abend U3400.

```
BPE0045E BPE 1.8 REQUIRES LONG DISPLACEMENT FACILITY
```

The coupling facility requirements for IMS Parallel Sysplex data sharing and for shared queues and Shared EMH are the same as they are for IMS Versions 10 and 11.

Supported Migrations and Coexistence - DBRC

- IMS 11 to IMS 12
  - Upgrade RECONs from IMS 11 to IMS 12
  - Databases are compatible
  - Application programs are compatible
- IMS 10 to IMS 12
  - Upgrade RECONs from IMS 10 to IMS 12
  - Databases are compatible
  - Application programs are compatible

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The details for installing IMS 12 and migrating systems from IMS 10 and IMS 11 to IMS 12 are discussed in the Installation and Migration section of the class. This will include an explanation of the Small Program Enhancements (SPEs) for IMS 10 and IMS 11 that provide compatibility during the migration process.

Databases and application programs do not have to be modified, upgraded, recompiled, or relinked for use with IMS 12. Those used with IMS 10 and IMS 11 and earlier IMS releases are compatible with IMS 12.