

Migrating to IMS Version 12.1

This topic discusses our experiences with migrating our production 8-way IMS data sharing group (composed of members IMS8, IMS9, IMSA, IMSB, IMSC, IMSE, IMSF, and IMS0) from IMS Version 11 to IMS Version 12. It is not intended to be a step-by-step procedure because each migration is unique due to the IMS configuration and features selected.

We used the following documentation to plan the migration:

- *IMS Version 12 Release Planning*
- *IMS Version 12 Installation*
- *IMS Version 12 System Definition*
- *IMS Version 12 Technical Overview* (an IBM Redbooks publication)
- *IMS Version 12 Information Center*

You can access all of this documentation through the IMS [Version 12 Information Center](#).

Migration and coexistence software

Before starting the migration, we installed the following service:

- **DBRC migration SPE:** IMS V11 PM05244/UK62971 allows IMS V11 to use IMS V12 RECONs
- **Resource Management:** IMS V11 PM32766/UK68882 and PM19026/UK63964 if a CSL RM is being used

Staging our migration

We performed the following staged migration of our IMS V12 systems:

1. We migrated two of our IMS systems from IMS V11 to V12 on an IBM System z10 Enterprise Class (z10 EC) server.
2. We migrated three IMS systems to V12 on an IBM zEnterprise (z196) server.
3. We migrated three IMS systems to V12 on an IBM zEnterprise EC12 server.

After each step of the migration, we ran all of our workloads and performed regression tests. The migration was completed in approximately eight months.

Migrating IMS V10 RECON data sets to IMS V12

IMS V11 RECON data sets can be concurrently upgraded to IMS V12 by executing the DBRC utility (DSPURX00) and using the CHANGE.RECON UPGRADE command

with an IMS V12 SDFSRESL library. Before doing the upgrade, we applied the IMS V11 SPE PM05244, which permits IMS V11 systems to use IMS V12 RECONS.

We then made backups of our RECON data sets.

RECON status before migration

The following display shows our IMS V11 RECON status before our migration:

```
RECON
RECOVERY CONTROL DATA SET, IMS V11R1
DMB#=5225                      INIT TOKEN=02249F1302471F
NOFORCER LOG DSN CHECK=CHECK44  STARTNEW=NO
TAPE UNIT=3400                 DASD UNIT=SYSDA    TRACEOFF  SSID=**NULL**
LIST DLOG=NO                    CA/IC/LOG DATA SETS CATALOGED=YES
MINIMUM VERSION = 11.1          CROSS DBRC SERVICE LEVEL ID= 00001
REORG NUMBER VERIFICATION=NO
LOG RETENTION PERIOD=00.001 00:00:00.0
COMMAND AUTH=NONE HLQ=**NULL**
RCNQUAL=**NULL**
ACCESS=SERIAL                  LIST=STATIC
SIZALERT DSNUM=15              VOLNUM=16          PERCENT= 95
LOGALERT DSNUM=3              VOLNUM=16
```

TIME STAMP INFORMATION:

```
TIMEZIN = %SYS

OUTPUT FORMAT:  DEFAULT = LOCORG NONE    PUNC YY
                  CURRENT = LOCORG NONE   PUNC YY

IMSPLEX = PROD                GROUP ID = 001
```

-DDNAME-	-STATUS-	-DATA SET NAME-
RECON1	COPY1	RECON1.PROD
RECON2	COPY2	RECON2.PROD
RECON3	SPARE	RECON3.PROD

RECON upgrade

We used the DBRC CHANGE.RECON UPGRADE command to migrate our IMS V11 data sets to V12:

```
DSP1123I UPGRADE2 DBRC REGISTERED WITH IMSPLEX PROD USING EXIT
          IMS VERSION 12 RELEASE 1 DATA BASE RECOVERY CONTROL
PAGE 0002
CHANGE.RECON UPGRADE
DSP0251I RECON COPY 1 UPGRADE IS BEGINNING
DSP1100I DBRC IS BUILDING THE DMB TABLE RECORD
DSP0252I RECON COPY 1 UPGRADED SUCCESSFULLY
DSP0251I RECON COPY 2 UPGRADE IS BEGINNING
```

```
DSP0252I  RECON COPY 2 UPGRADED SUCCESSFULLY
DSP0203I  COMMAND COMPLETED WITH CONDITION CODE 00
DSP0220I  COMMAND COMPLETION TIME 12.045 09:02:38.216109
          IMS VERSION 12 RELEASE 1 DATA BASE RECOVERY CONTROL
PAGE 0003
DSP0211I  COMMAND PROCESSING COMPLETE
DSP0211I  HIGHEST CONDITION CODE = 00
```

RECON status after migration

The following display shows the LIST.RECON STATUS after the upgrade to IMS V12:

```
RECON
RECOVERY CONTROL DATA SET, IMS V12R1
DMB#=5225                INIT TOKEN=02249F1302471F
NOFORCER LOG DSN CHECK=CHECK44  STARTNEW=NO
TAPE UNIT=3400          DASD UNIT=SYSDA    TRACEOFF  SSID=**NULL**
LIST DLOG=NO            CA/IC/LOG DATA SETS CATALOGED=YES
MINIMUM VERSION = 11.1    CROSS DBRC SERVICE LEVEL ID= 00001
REORG NUMBER VERIFICATION=NO
LOG RETENTION PERIOD=00.001 00:00:00.0
COMMAND AUTH=NONE  HLQ=**NULL**
RCNQUAL=**NULL**
ACCESS=SERIAL        LIST=STATIC
SIZALERT DSNUM=15      VOLNUM=16      PERCENT= 95
LOGALERT DSNUM=3       VOLNUM=16
```

TIME STAMP INFORMATION:

```
TIMEZIN = %SYS

OUTPUT FORMAT:  DEFAULT = LOCORG NONE    PUNC YY
                 CURRENT = LOCORG NONE   PUNC YY

IMSPLEX = PROD          GROUP ID = 001
```

-DDNAME-	-STATUS-	-DATA SET NAME-
RECON1	COPY1	RECON1.PROD
RECON2	COPY2	RECON2.PROD
RECON3	SPARE	RECON3.PROD

IRLM support in IMS V12

Both IRLM 2.2 and IRLM 2.3 are delivered with IMS 12. Both of these IRLMs can be used.

We are running IRLM 2.2

Upgrading IMS utilities

We needed to apply service to some of our IBM IMS utilities for IMS V12 support.

You can find a complete list of IMS tools and V11 compatibility at [IMS Tools and IMS Compatibility > IMS Version 12](#).

Summary

Our migration from IMS Version 11 to Version 12 was easy and straight forward with no major issues encountered.