IMS/TP Installation and Operation

This chapter covers the following topics:

- Overview

- Generating the Runtime Control Tables

- CALLDLI Interface

- ADL Pre-load Program

- User Exit

- JCL Requirements

Overview

For application programs accessing ADL to be able to run under IMS/TP, the batch-specific steps of the installation procedure must have been performed.

Each application program affected must be re-linked with an ADL front-end program, DAZENTRY. This front-end program then passes control to ADL for PSB initialization every time the application program is entered. After this, control is given to the application program.

Each DL/I call issued by the application program is passed on to the ADL CALLDLI Interface, which then determines whether it must be passed on to IMS, handled by ADL itself, or both. Calls using a DB PCB are handled as if the application program were running in mixed mode. All calls against converted data bases are handled by ADL; all other calls are passed on to IMS. Calls using an I/O PCB are generally passed on to IMS, except for the GU and CHKP calls using the first I/O PCB. These are treated first of all by ADL as a checkpoint call (i.e. an Adabas ET call is issued), and are then passed on to IMS.

If all DB PCBs of a PSB refer to converted databases, the DB PCBs can be deleted from the IMS PSB (but not from the ADL PSB). This avoids warning messages from IMS/TP at start-up of the message region, if the corresponding VSAM file is no longer available.

Generating the Runtime Control Tables

To operate the ADL Interfaces under IMS/TP you need to generate three runtime control tables:

DAZPSB	a table containing an entry for each PSB to be used in the IMS/TP system. A PSB, which does not contain DB PCBs (i.e., it contains TP-PCBs only) should not be included in the table.
DAZDBD	a table which is used to store DBD internal control blocks.
DAZBUF	a table used as a buffer for PSB related internal control blocks which are subject to roll in/roll out mechanisms.

These tables are exactly the same as those needed to operate the ADL Interfaces under CICS. For brevity, the generation of these tables is described only once, in the section *CICS Installation and Operation*.

As is the case under CICS, the ADL CALLDLI Interface will only route those data base requests to ADL which reference a PSB contained in the DAZPSB table.

A summary report on the performance of these tables in a particular message region will be written to the file DAZOUT2 when the message region is terminated.

CALLDLI Interface

IMS/TP Message Region Execution

To invoke an IMS/TP Message Region under ADL, execute the DAZIFP initialization program. This program requires input (positional and keyword) parameters similar to those for the IMS Message Region Controller. These are explained below.

The JCL describing the original IMS data bases which have been converted is not required.

The ADL load library containing the executable ADL batch module and the Adabas load library must be included in the JCL. ADARUN control statements must also be provided, as is the case with any Adabas application program. For a detailed description of JCL requirements, see the end of this section.

Pre-requirements for IMS/TP Application Programs

Each application program running under a Message Region Controller started with ADL must be re-linked with DAZENTRY using the following link edit directives:

```
ENTRY DAZENTRY
CHANGE pgment(DLITASM)
INCLUDE APPL(pgmname)
INCLUDE ADLLOAD(DAZENTRY)
NAME pgmname(R)
```

where

pgmname	is the name of the application program and
pgment	is the name of the entry part of the application program.

Only main programs, i.e., programs which are initially called by a transaction, should be linked with DAZENTRY, but not subprograms, etc..

Parameters for the ADL Message Region Control Program

All IMS parameters (i.e. those parameters specified in the `EXEC` statement) will be passed on unchanged to IMS. The first positional parameter is also interpreted by DAZIFP and should be specified as follows:

```
MSG
```

This indicates an IMS/TP Message Region run.

In addition to the positional parameter mentioned above, you may specify one or more keyword parameters in order to control operation of ADL. Such keyword parameters must be specified in a separate control statement with the following format:

```
keyword,
```

The following table provides a brief explanation of the various keywords which can be specified. For further information on all the parameters (including default settings), see the section *ADL Parameter Module* in the *ADL Installation* documentation.

Keyword	Description
BUFSF	A two-character suffix for the name of the buffer table module.
DBD	The size (in kilobytes) of the ADL DBD ICB buffer.
DBDSF	A two-character suffix for the name of the DBD table module.
DBID	The Adabas data base ID for the ADL directory file.
EBUF	The size (in kilobytes) of the ADL ECB buffer.
FNR	The Adabas file number of the ADL directory file.
IMSY	IMS/TP syncpoint/Adabas ET synchronization.
PLI	Passes parameters on to PL/I. See the section *Batch Installation and Operation* in this documentation for details.
PSB	The size (in kilobytes) of the ADL PSB ICB buffer.
PSBSF	A two-character suffix for the name of the PSB table module used under CICS.
STACK	The size (in kilobytes) of the ADL internal subroutine stack.
TRACE	Activates the TRACE facility and specifies what is to be traced.

ADL Pre-load Program

Add an entry for DAZMPL to the IMS/TP pre-load list DFSMPLxx. The module DAZMPL is delivered in the ADL load library. It is linked as re-usable and not re-entrant. This ensures that IMS/TP will reload it after a failure.

User Exit

ADL Interfaces optionally pass control to a user written routine (user exit) before each call to Adabas. This user exit may be used for monitoring purposes as well as to apply modifications to the call parameters before Adabas receives control. The conventions for this user exit and how it is activated is described in the section *Adabas Call User Exit* in the *ADL Installation* documentation.

JCL Requirements

The following table lists the data sets used by the ADL batch monitor when an IMS/TP Message Processing Region is run.

DDname	Medium	Description
DAZIN2	Reader	Control input for the ADL batch monitor, DAZIFP, and the keyword parameters.
DAZOUT1	Printer	Messages and codes.
DAZOUT2	Printer	DAZIFP initialization and termination report.

Example

```
//REGION   EXEC PGM=DAZIFP,PARM=(MSG,.......)
//STEPLIB  DD   DSN=IMSVS.PGMLIB,DISP=SHR
//         DD   DSN=IMSVS.RESLIB,DISP=SHR
//         DD   DSN=ADL.LOAD,DISP=SHR
//         DD   DSN=ADABAS.LOAD,DISP=SHR
//DDCARD   DD   *
ADARUN PROGRAM=USER,...
//DAZIN2   DD   *
DBID=9,FNR=30
//DAZOUT1  DD   SYSOUT=X
//DAZOUT2  DD   SYSOUT=X
```