

# z/OS Installation Tape

The Adabas Bridge for DL/I installation tape is a standard-label tape. The Report of Tape Creation that accompanies the installation tape lists the volume serial number, tape density, media type, data sets and sequence numbers. The tape is compatible with Software AG's System Maintenance Aid (SMA). Refer to the SMA documentation for more details.

The ADL installation tape for systems operating under the IBM z/OS Operating System contains the data sets as described in the table below. The "LOAD", "LC23" and "SOURCE" data sets have been unloaded to tape using the IBM IEBCOPY utility, and the other data sets have been copied by the IBM IEBGENER utility.

In this table, *vrs* indicates the current version, release and system maintenance (SM) level as indicated on the Report of Tape Creation, for example **123** for Version 1, Release 2 and SM 3.

| Library     | Description                                                                                                                                                                                                                |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADLvrs.LOAD | This data set contains the ADL Load Library, which comprises the load modules used to link edit executable ADL modules.                                                                                                    |
| ADLvrs.LC23 | This data set contains the executable ADL modules required for CICS TS 2.3 and below.                                                                                                                                      |
| ADLvrs.SRCE | The ADL Source Library. This data set contains JCL examples for installing the ADL and converting DL/I data bases, as well as macros for reassembling DBDs and PSBs, and source code for sample data base unload programs. |
| ADLvrs.SYSF | An unloaded Adabas file for use as the ADL directory file.                                                                                                                                                                 |
| ADLvrs.INPL | An unloaded Natural library containing the ADL Online Services and the ADL Installation Verification Package.                                                                                                              |

The following sections describe the libraries in more detail.

This chapter covers the following topics:

- ADL Load Library
- ADL Load Library for CICS TS 2.3 and below
- ADL Source Library
- ADL Directory File
- ADL Natural Programs

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## ADL Load Library

When loaded from the installation tape, the ADL Load Library contains executable ADL load modules and load modules used in the installation process to create executable load modules. The precise contents of the library are listed in the following table.

| Module   | Description                                                                                             |
|----------|---------------------------------------------------------------------------------------------------------|
| ADLEXITB | Adabas User Exit for the ADL Consistence Interface under CICS/ESA.                                      |
| DAZAXES  | ADL nucleus module containing the logic for generating and issuing Adabas calls.                        |
| DAZBDOKE | Batch doorkeeper for the ADL Consistency Interface.                                                     |
| DAZBENT  | Batch entry point module.                                                                               |
| DAZBIFP  | Batch interface program (object module).                                                                |
| DAZBRQH  | Batch request handler.                                                                                  |
| DAZCAPRI | CICS application program interface.                                                                     |
| DAZCCGEN | ADL nucleus module for the CBC utility.                                                                 |
| DAZCCOUT | ADL nucleus module for the CBC utility.                                                                 |
| DAZCCSUB | ADL nucleus module for the CBC utility.                                                                 |
| DAZCDOKE | CICS doorkeeper for the ADL Consistency Interface.                                                      |
| DAZCDPOS | ADL nucleus module containing the logic for retrieval calls and for maintaining positional information. |
| DAZCDUMP | CICS — Write ADL tables on dump file.                                                                   |
| DAZCEND  | CICS — ADL shut-down program (PLT).                                                                     |
| DAZCICS  | CICS control program.                                                                                   |
| DAZCIFP  | CICS interface program.                                                                                 |
| DAZCINF  | CICS — Return status of ADL.                                                                            |
| DAZCINIT | CICS — ADL start-up program (PLT).                                                                      |
| DAZCLUB  | CICS – Allocate local user blocks.                                                                      |
| DAZCONSI | Environment independent routines of the ADL Consistency Interface.                                      |
| DAZCRQH  | CICS request handler.                                                                                   |
| DAZCSVC  | ADL SVC for CICS.                                                                                       |
| DAZCTOFF | CICS — Switch off ADL trace.                                                                            |
| DAZCTON  | CICS — Switch on ADL trace.                                                                             |
| DAZDEBUG | ADL nucleus module containing tracing and debugging routines.                                           |
| DAZDREIN | ADL nucleus module containing the logic for DELETE, REPLACE and INSERT calls.                           |
| DAZELORE | Establish Logical Relationships utility.                                                                |
| DAZENTRY | Entry program for IMS/TP application programs.                                                          |
| DAZEXEC  | ADL nucleus module containing the logic for the EXEC command precompiler.                               |
| DAZIFP   | Batch interface program - executable module (AMODE=24).                                                 |
| DAZINICB | ADL nucleus module containing the logic for initializing internal control blocks.                       |
| DAZLANP  | ADL nucleus module containing the logic for the language processor.                                     |

| Module   | Description                                                     |
|----------|-----------------------------------------------------------------|
| DAZLIBAT | Language Interface for batch mode.                              |
| DAZLICI3 | Language interface for CICS.                                    |
| DAZMIX   | Batch mixed mode module.                                        |
| DAZMPL   | Pre-load program for IMS/TP.                                    |
| DAZREFOR | Reformat utility.                                               |
| DAZSERV  | ADL nucleus module containing general purpose service routines. |
| DAZSTUB  | CICS — Stub for the ADL task-related user exit.                 |
| DAZSYNC  | CICS — ADL task-related user exit.                              |
| DAZSYXTB | ADL nucleus module containing the EXEC command syntax.          |
| DAZUEX06 | Adabas User Exit 6.                                             |
| DAZUEXMI | Adabas User Exit 6 for migration to ADL 2.3.                    |
| DAZUNDLI | Data Base Unload utility (automated procedure).                 |
| DAZZAP   | ADL nucleus module containing zaps for nucleus routines.        |
| DAZZLER  | Program to test DL/I calls in batch.                            |

## ADL Load Library for CICS TS 2.3 and below

The standard ADL load library contains the modules for CICS TS 3.1 and CICS TS 3.2. For CICS releases with changes relevant to ADL, an additional library is delivered containing the ADL modules affected. This library is not a complete ADL load library; it contains only the CICS release dependent ADL modules.

When loaded from the installation tape, the ADL Load Library for CICS TS 2.3 and below contains executable ADL load modules required to operate the ADL under CICS TS 2.3 or below (until CICS 3.2). When you run under any of these CICS releases, concatenate this library in front of the ADL load library when you link the ADL CICS nucleus DAZNUCC, and in the concatenation list of the CICS steplibs.

If your current CICS version is not compatible to the ADL modules, ADL will issue a message ADL0906 at start-up.

The precise contents of the library are listed in the following table.

| Module  | Description                        |
|---------|------------------------------------|
| DAZCICS | CICS control program.              |
| DAZCIFP | CICS interface program.            |
| DAZCLUB | CICS – Allocate local user blocks. |
| DAZCRQH | CICS request handler.              |

## ADL Source Library

When loaded from the installation tape, the ADL Source Library contains:

- Macros for creating an ADL parameter module;
- Macros for creating Adabas User Exit 6 extensions;
- Macros for creating the CICS runtime control tables;
- Macros for assembling DBDs and PSBs (substitutes for the original DL/IDBDGEN and PSBGEN macros);
- Source code for sample unload programs;
- Source code for performing ADL functions under CICS;
- Source code for the ADL supplied Adabas link module substitutes;
- Sample JCL.

The following table lists the other macros contained in this library.

| Member   | Description                                                                                                                                            |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| DAZLDT   | Macro used to create entries for logical DBID/FNR assignments in the ADL parameter module. This macro is provided for compatibility with ADL 2.2 only. |
| DAZTCF   | Macro used to create the table of converted files for the ADL Consistency Interface (batch or CICS).                                                   |
| DAZPARM  | Macro used to create the ADL parameter module.                                                                                                         |
| ZFNR     | Macro used to create Adabas User Exit 6 extensions.                                                                                                    |
| ZPCK     | Macro used to create Adabas User Exit 6 extensions.                                                                                                    |
| ZREC     | Macro used to create Adabas User Exit 6 extensions.                                                                                                    |
| ZSEG     | Macro used to create Adabas User Exit 6 extensions.                                                                                                    |
| ZSEX     | Macro used to create Adabas User Exit 6 extensions.                                                                                                    |
| ZVCK     | Macro used to create Adabas User Exit 6 extensions.                                                                                                    |
| MGPSTIN  | Macro used to create the DAZPSB table.                                                                                                                 |
| MGPSTEN  | Macro used to create the DAZPSB table.                                                                                                                 |
| MGPSTFI  | Macro used to create the DAZPSB table.                                                                                                                 |
| DFHDLPSB | Macro used to create a DAZPSB table from a CICS PDIR.                                                                                                  |
| BUFMAC   | Macro used to create the DAZBUF table.                                                                                                                 |
| DBDMAC   | Macro used to create the DAZDBD table.                                                                                                                 |
| MEXRENDS | DSECT describing an entry in the exit routine table for index maintenance.                                                                             |

The following table lists the source members used during the assembly of the ADL supplied Adabas link module substitute:

| Member  | Description                                                                                   |
|---------|-----------------------------------------------------------------------------------------------|
| DAZLNKO | Source member to be assembled as the ADL supplied Adabas link module substitute in batch.     |
| DAZLNK  | Operating system independent part of the ADL supplied Adabas link module substitute in batch. |
| LNKOS   | Operating system dependent part of the ADL supplied Adabas link module substitute in batch.   |

The following table lists the sample JCL streams for the installation and conversion processes:

| Member   | Description                                                                                                                                                                                                               |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADLINS1  | JCL for loading the ADL source and load library from tape.                                                                                                                                                                |
| ADLINS2  | JCL for loading the ADL directory file from tape.                                                                                                                                                                         |
| ADLINS2A | JCL for updating an existing ADL directory file.                                                                                                                                                                          |
| ADLINS3  | JCL for an initial program load of the ADL Online Services, the ADL supplied Natural subprograms ADLERROR and ADLACTIV and an initial program load of the Natural programs for the ADL Installation Verification Package. |
| ADLINS4  | JCL for creating the ADL parameter module.                                                                                                                                                                                |
| ADLINS5U | JCL for creating an executable ADL CBC utility module.                                                                                                                                                                    |
| ADLINS6P | JCL for creating an executable ADL precompiler module.                                                                                                                                                                    |
| ADLINS7B | JCL for creating an executable ADL batch module.                                                                                                                                                                          |
| ADLINS8A | JCL for creating an executable ADL Consistency Interface module for batch.                                                                                                                                                |
| ADLINS9C | JCL for creating an executable ADL CICS module.                                                                                                                                                                           |
| ADLINS10 | JCL for creating an executable ADL Batch Region Controller.                                                                                                                                                               |
| ADLINS11 | JCL for assembly and link-edit of the ADL substitute for the Adabas link module in batch.                                                                                                                                 |
| ADLINS12 | JCL for assembly and link-edit of the ADL substitute for the Adabas link module under CICS.                                                                                                                               |
| ADLDPC   | JCL for running a physical DBD through the DBD conversion process.                                                                                                                                                        |
| ADLDPC1  | JCL for assembling and link editing a DBD/PSB.                                                                                                                                                                            |
| ADLDPC2  | JCL for converting PSBs and logical DBDs.                                                                                                                                                                                 |
| ADLDPC23 | JCL for converting physical DBDs.                                                                                                                                                                                         |
| ADLDPC4  | JCL for assembling the User Exit 6 extension.                                                                                                                                                                             |
| ADLDBC4  | JCL for unloading a DL/I data base with the DAZUNDLI utility                                                                                                                                                              |
| ADLDBC6  | JCL for loading a DL/I data base into Adabas (initial load).                                                                                                                                                              |

| Member   | Description                                                               |
|----------|---------------------------------------------------------------------------|
| ADLDBC7  | JCL for loading a DL/I data base to Adabas (mass update).                 |
| ADLDBC9  | JCL for establishing a logical relationship.                              |
| ADLCSD   | Sample CICS system definition file.                                       |
| ADLCTG1  | JCL for assembling the DAZPSB table.                                      |
| ADLCTG2  | JCL for running the "DAZSHINE" utility.                                   |
| ADLCTG3  | JCL for assembling the DAZBUF table.                                      |
| ADLCTG4  | JCL for assembling the DAZDBD table.                                      |
| ADLCFCT  | JCL for precompile, assembly and link-edit of DAZCFCT.                    |
| ADLTCF   | JCL for assembly of the DAZTCF table.                                     |
| ADLBATCH | JCL for running the DAZZLER CALLDLI test program with the trace facility. |

Note the naming conventions for the JCL examples:

ADLxxxxnn General sample JCL

IVPxxxxnn JCL for the Installation Verification package

where xxx is

|     |                                                                                                                                                                  |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INS | for the installation steps (refer to the <i>z/OS Installation</i> documentation;                                                                                 |
| DPC | for the DBD/PSB conversion steps (section <i>ADL Conversion Utilities for DBDs and PSBs</i> in the <i>ADL Conversion</i> documentation);                         |
| DBC | for the data base conversion steps (section <i>ADL Data Conversion Utilities</i> in the <i>ADL Conversion</i> documentation);                                    |
| CTG | for the CICS table generation (section <i>Generating the Runtime Control Tables</i> ), in the <i>ADL Interfaces</i> documentation;                               |
| TCF | for the generation of the table of converted Adabas files. (see the section <i>Batch Installation and Operation</i> in the <i>ADL Interfaces</i> documentation); |

and nn is the number of the step.

The other members in the Source Library are as follows:

| Member   | Description                                                            |
|----------|------------------------------------------------------------------------|
| \$INFO\$ | Information about the current ADL release.                             |
| DAZUNLOD | Source of the sample unload program.                                   |
| DAZREFOR | Source of the sample reformatting program.                             |
| DAZCFCT  | Source of the sample program to perform ADL functions under CICS.      |
| DAZEISTG | DSECT used by DAZCFCT                                                  |
| ADLEX06  | ADACMP User Exit 6 skeleton, for changing the layout of an ADL file.   |
| ADLIMEX  | Sample user exit routine for index maintenance.                        |
| IVPINFO  | Abbreviations used by the ADL Installation Verification Package (IVP). |
| IVPARUN  | ADARUN cards for the ADL IVP.                                          |
| IVPCOB   | Execute a COBOL batch program of the ADL IVP.                          |
| ADLXPCn  | COBOL sources for the ADL IVP.                                         |
| ADLXPIIn | Input streams for the COBOL programs for the ADL IVP.                  |
| ADLXPAn  | Assembler sources for the ADL IVP to run under CICS.                   |
| ADLXPDn  | DAZZLER input streams for the ADL IVP.                                 |
| COURSEDB | Physical DBD definitions for the ADL IVP.                              |
| COURSEL  | Logical DBD definitions for the ADL IVP.                               |
| INSTDB   | Physical DBD definitions for the ADL IVP.                              |
| INSTL    | Logical DBD definitions for the ADL IVP.                               |
| MAINIDX  | Primary Index DBD definition for the ADL IVP.                          |
| INSTIDX  | Primary Index DBD definition for the ADL IVP.                          |
| STUDIDX  | Secondary Index DBD definitions for the ADL IVP.                       |
| SCHOOL   | PSB definitions for the ADL IVP.                                       |
| COURSUNL | PSB definitions for the ADL IVP (DAZUNDLI utility).                    |
| INSTUNL  | PSB definitions for the ADL IVP (DAZUNDLI utility).                    |
| INSTELO  | PSB definitions for the ADL IVP (DAZELORE utility).                    |

## ADL Directory File

The unloaded Adabas Directory file on the installation tape was created by the Adabas Unload utility, ADAULD. At installation, the file contains the texts of the ADL error messages. Later, it will also be used as the directory file for storing the DBDs and PSBs for ADL and any checkpoint information.

## ADL Natural Programs

This file contains the unloaded Natural programs comprising the ADL Online Services, together with the ADL supplied Natural subprograms **ADLERROR** and **ADLACTIV** and the ADL Installation Verification Package. The **ADLERROR** subprogram may be used by Natural applications to retrieve the comprehensive error messages of the ADL Consistency Interface. The **ADLACTIV** subprogram may be used by Natural applications to verify whether the ADL Consistency Interface is active or not.

The files were created with the Natural **SYSOBJH** utility.