

DATA SHEET

AID (BS2000/OSD) Version 3.4

Advanced Interactive Debugger

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AID is a powerful debugging system for program monitoring, error diagnosis and temporary correction of program errors.

Product Characteristic

AID supports symbolic debugging of COBOL, Fortran, C/C++, C, Assembler and PL/I programs, and non-symbolic debugging of any BS2000 programs at machine code level. During symbolic debugging, the source code symbols of the programming languages mentioned can be used to address memory elements and stop labels. Non-symbolic debugging at machine code level can be used wherever symbolic debugging is insufficient or not possible, e.g. because the symbol information is not available.

The user can direct AID to interrupt program execution at specified addresses or when selected statement types are executed or defined events occur, and then to execute subcommands. A subcommand is a single command or a sequence of AID and BS2000 commands.

With AID you can see the call-hierarchy of programs. AID supports the diagnosis of a program as well as in the current system also as in a dump.

In order to be able to test a program with AID, it needs neither additional translator, or binder-runs, still the program must be loaded again.

AID can reload information, that is necessary for the symbolic test, from a PLAM-module library also dynamically.

AID supports the Unicode data type NATIONAL implemented with COBOL2000.

Program Description

The AID debugging system comprises two components:

- the AID user interface and
- the AIDSYS system interface.

AID is a standalone tool, independent of the various BS2000 system versions. All the necessary system functions are handled via AIDSYS.

AID and AIDSYS are loaded as subsystems by the system administrator. The debugging system is then available to all users. All AID functions are invoked using AID commands. These start with a % character followed by the command name.

AID commands are input and AID messages output via system files. Memory contents can be output to system files or to cataloged files.

When data is output, AID edits the field contents in accordance with the data definition in the source program, i.e.

data field length, data type and structures are taken into account and output along with the symbolic names.

When data elements are modified, AID performs the necessary conversions, carries out the transfer according to the data type of the destination field and truncates or pads the source field to correspond to the length of the destination field. Data groups are treated as alphanumeric fields.

To enable the user to reference program names, variable names and source statement lines during symbolic debugging, the required information must be available in the * file or in a library at object compilation time.

This supplementary information consists of two parts:

- LSD records (list for symbolic debugging): list of symbolic names and statements defined in the module
- ESD records (external symbol dictionary): directory of symbolic external references of a module.

TECHNICAL DETAILS

AID V3.4

Technical Requirement

Hardware

BS2000/OSD Business Server

Technical Requirement

Software

BS2000/OSD-BC V6.0 or
OSD/XC V2.0 or higher

Operating Mode

Batch and interactive

Implementation Language

SPL, assembler

User Interface

Commands: English
Message texts optionally English or German

Installation

Refer to the relevant
Release Notice.

Documentation

Documentation in English and German:
Debugging of C/C++-Programs
Debugging at Machine Code Level
Core Manual

Debugging under POSIX
Debugging of COBOL Programs
Tabellenheft (ready reference, in German only)
AID Supplement
Debugging of PL/I Programs
Debugging of ASSEMBH Programs
Debugging of FORTRAN Programs

The documentation is available as online manuals, see
<http://manuals.ts.fujitsu.com/mainframes.html>, or in printed
form which must be paid for and ordered separately at
<http://manualshop.ts.fujitsu.com>.

User Requirements

Knowledge of the COBOL programming language and
BS2000/OSD

Training

See course offer at:
[http://training-
mediaserver.ts.fujitsu.com/elearningmedia/catalog](http://training-mediaserver.ts.fujitsu.com/elearningmedia/catalog)

Conditions

This software product is supplied to the customer against a
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