

Dump Detective is a full-function CICS transaction dump analyzer providing a quick analysis of more common causes of problems and easy access to the significant areas of the dump for the solution of more involved problems.

It speeds up the resolution of transaction dumps significantly and provides an important management facility, storing and directing transaction dumps in a CICS region where many users may be working.

It provides diagnostic information to point to the causes of the problem using program source, when available, to pinpoint the line of code where the failure occurred together with variable contents.



Dump Detective Features:

- Automatic dump capture
- Duplicate dump elimination
- Point and click techniques for navigation and display
- Menu based command structure
- Directory of stored dumps giving abbreviated information
- Source based dump analysis
- Automatic association of source with object program
- Point of failure analysis and display
- Dump Contents listing all areas contained in the dump
- Display of working storage contents, general storage areas, BLL cells, register contents and CICS areas such as EIB, TWA, CWA, TCT and others
- Formatted trace table display
- COBOL expanded data structure display

- Each user may personalise their Dump Detective session
- Full function contextual and indexed help displays

Dump Detective Benefits

- Dumps immediately available for analysis
- Improved dump analysis
- Faster problem resolution
- Reduced dump storage

Dump Detective Features in Detail

Automatic Dump Capture

Once started Dump Detective stores dumps automatically as they are produced by the CICS system. Dumps may also be stored on the CICS transactions dump dataset although normally the writing of dumps to the CICS dump dataset is suppressed which conserves space but a system option permits a copy of the dump to be written on the CICS transaction dump dataset.

Duplicate Dump Suppression

When this option is selected, Dump Detective determines the cause of the dump request and matches the symptoms against dump that are already stored. If a match is found the duplicate dump is suppressed thus avoiding the storage of superfluous dumps and also conserving storage space.

Ease of Use

The Dump Detective system is easy to use being menu and PF key driven system with on-line help screens. All facilities are accessible from clear informative menus or by use of commands many of which are associated with function keys.

Point and Click

Wherever feasible commands are effected by positioning the cursor and then pressing an appropriate function key to cause a command to be executed. This technique is used on all menus to select a function, on source displays to select variables for display, on source and link data directories to select source or link data for display and on other displays to select items for expansion or deletion.

Menu Based Command Structure

All Dump Detective facilities are accessible via clearly informative menu screens. Each menu provides an indication of the functions available to allow easy use of them. Options may be selected from a menu by positioning the cursor on the appropriate line and pressing the ZOOM PF key. Alternatively the option number shown on the left of the option description may be typed into the command field that is present on every Dump Detective display.

Each line on the menu also shows the fast path id associated with the option. These fast path ids can be used by more experienced users to navigate directly to any XRAY display from any point in the system.

Directory of Dumps

The system provides a directory of the dumps that have been captured detailing such things as date and time, region, transaction ID, dump code program in error and problem description so that a programmer can easily select a dump for further analysis.

Source Level Analysis

Dump Detective captures compile and link data into its own source repository that may contain multiple versions of one program to enable analysis of dumps containing the same program at different version levels. This data is used to facilitate the display of program source and variables during the problem analysis procedure.

Source file data may be shared by Dump Detective and companion debugging products TRACK and XRAY thus avoiding duplication of data.

Automatic Association of Source and Object Program

During initial analysis of a dump, Dump Detective attempts to associate the object program in the dump with an appropriate version of the source. When an exact match is not found, an attempt is made to determine the nearest matching version of the source.

Point of Failure Analysis and Display

When a dump is first accessed Dump Detective identifies where the problem occurred, searches for the correct version of the program source and produces diagnostic information. Standard diagnostic information includes the command or instruction at the point of failure and the contents of relevant data fields or program variables. This provides the primary display when a dump is selected for analysis.

Dump Contents

All areas in the dump are listed by category via one or more dump contents displays. This facilitates the viewing of any program available in the dump and the various storage areas associated with the dump. Whenever a program is selected for display, Dump Detective attempts to determine the current point of execution within that program and displays the source and variables at that point.

Display Storage Areas

Storage areas or program variables may be displayed singly or collectively in a number of ways. The display may occur as the result of a direct display command, as the result of a variable being acted upon by the current program statement, as the result of a Group variable display command. The data may be displayed

in various formats depending on the type of display command and user selected display format options.

For COBOL programs an expanded view of data structures can be displayed using the GROUP command. This gives a fully formatted display including all data types and subscripted areas.

Formatted Trace Table Display

Any CICS trace table entries stored with the dump are formatted and displayed showing the significant data fields associated with the entries. The trace display has the option to display data at three levels: all entries, a summary to eliminate irrelevant entries and CICS command calls only. The abbreviated formats enable the programmer to concentrate on the entries most closely associated with the commands issues in the program.

Session Personalisation

Each programmer can personalise the way information is displayed by Dump Detective using the User Preferences functions available in the system. These settings are remembered and applied each time the programmer uses the system.

Contextual Help

Help data is available for all displays and all error messages. When the help key is pressed the information displayed relates to the currently displayed screen or error message if the latest command resulted in the display of a message.

Dump Detective Benefits in Detail

Dumps Immediately Available for Analysis

As the Dump Detective dump collection file is available on-line, dumps that occur appear immediately and may be selected for analysis straight away rather than having to wait for an off-line procedure to be performed.

Improved Dump Analysis

The use of source and link data to pinpoint the current statement and variables at the time the dump was taken makes it easier to determine what was happening at the time of the dump. The subsequent ability to review all program variables and details of any program in the link

path aids the detection of the causes of the problem.

Faster Problem Resolution

With Dump Detective highlighting the point of failure and providing diagnostic information at that point, the causes of the error can be determined much quicker than by conventional means enabling the failing program to be corrected more rapidly.

Reduced Dump Storage

Because Dump Detective can be directed to eliminate duplicate dumps, multiple copies of problems with the same symptoms are not stored reducing the amount of data stored in those situations.

Supported Environments

Systems: VSE/ESA, z/VSE: all releases
OS/390, z/OS: all releases
CICS: 1.7 - TS 1.1 (VSE) or TS 3.1 (z/OS)
Languages: Cobol, Cobol II, COBOL for MVS/VSE, Enterprise COBOL, PL/1 for MVS/VSE, Enterprise PL/1, and Assembler

Pricing

Dump Detective is competitively priced compared to equivalent products that are considerably more expensive. The product is not subject to large upgrade charges for version changes, operating system upgrades or CPU replacement.

Free Trial

See the benefits yourself with a no obligation free trial as Dump Detective is quick to install and requires no modifications to the operating system environment.

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