

Decision Analyzer for Mainframes Release 4.4.0

Executive Summary

Release 4.4.0 of Decision Analyzer contains enhancements as well as corrections to prior releases. You must upgrade both your batch and online components; install the latest DALIBS, as well as the latest release of the PC Clients, if applicable. In addition, this release introduces some name changes to existing components to reflect their relationship to each other more accurately. All documentation reflects the new nomenclature. Backup your production DECALIB and DALIB files using your current version of DECAUTIL and DAPHUTIL batch programs before installing Decision Analyzer Release 4.4.0.

Following is a list of enhancements in Release 4.4.0. Please refer to the *Release Notice* for detailed information regarding installation requirements, enhancements, and a complete list of all corrections. The *Release Notice* also contains important information specifically for ADABAS installations.

e-Networks Standalone Interface. Unlike VTAM, using the e-Networks Standalone Interface with TCP/IP does not require an emulator in order for PC clients to communicate with a mainframe running the “web-aware” version of Decision Analyzer.

FDD Editor. This new utility provides a Windows interface to create FDDs and update the DALIB interactively without the need to run a batch utility. You can also display and modify existing FDDs and have the changes available immediately.

Windows and Browser Clients

- “Save” the output from a request as either text (.txt) or html (.htm), or send the output as an e-mail message. When you select “Save”, the output becomes a file on your PC. If you select e-mail, the output is attached as a .txt file.
- Although record selection is limited to 16 rules, an individual rule may be up to 250 characters long. Similarly, sub-selection rules and rules associated with conditional new fields have been expanded from 67 to 250 characters.
- When adding a new sort break to an existing request, the default calculates the break function at the new break.
- When the output is a mainframe extract file, create numeric fields as either packed decimal (PN) or zoned decimal (CN).

New options for reports

- Insert from 1 to 9 blank lines before printing subtotals and the grand total.
- Change the starting column for page titles. The titles can range from column 1 to column 58.
- Display dollar signs (fixed or floating) in “Financial style”
- Changes made in the System Profile to the values for the reporting defaults for Lines per Page, Date, Page Number, Page Width, and spacing are now reflected on the Request Options dialog when creating a new request.
- The date calculation routines, DATEJ and DATEC, can now use fields defined with “0” decimal places.
- Specify a sort break on the low order sort field of a summary report request. By allowing this sort break, you can affect the spacing of the “detail” lines of a summary report

New options for the Administrator

- When defining the mainframe file used for transfer of data to the PC, you may specify that the file is a multi-volume data set spread across from 1 to 8 volumes.
- When the Administrator logs in, the “look in” combo boxes show all known Decision Analyzer user-ids.
- There are two new System Profile options, one to eliminate “Transfer” as a menu bar command and another to add “Convert” as a menu bar command.
- Remove the requirement that all D2 names be unique within a set of files that are being matched.
- If your environment is OS/390 CICS (or Transaction Server) and RACF, Top Secret, or ACF2, requests run by your users will now run with the security profile (ACEE) of the user rather than the security profile of CICS.

Batch

- The DEFINE command creates more “friendly” column headings from COBOL data names.
- A new command, FDDRENAME, allows a user to change the name of an FDD associated with an existing request. This command is useful when implementing a new naming convention for files.
- The command, FDDXREF REFRESH, which refreshes or updates information associated with fields in existing requests when those field definitions have changed has been implemented for DB2 and ADABAS. Where in earlier releases, you had to process FDDs one DALIB at a time, you can now use REFRESH with up to 100 DALIBs in a single execution.
- The BACKUP/RESTORE commands in VSE/ESA can now process files on disk as well as tape.

DECISION ANALYZER FOR MAINFRAMES RELEASE NOTICE

Release 4.4.0
April 2002

Release 4.4.0 of Decision Analyzer contains enhancements as well as corrections to prior releases. Therefore, you should use it to replace your existing release. You must upgrade both your batch and online components; install the latest DALIBS, as well as the latest release of the PC Clients, if applicable. First, backup your current DECALIB file using your current DECAUTIL batch program. Second, use your existing version of DAPHUTIL to back up your production DALIB files before installing Decision Analyzer Release 4.4.0.

In addition to the enhancements listed below, this release introduces name changes to some of the existing components of the Decision Analyzer to reflect their relationship to each other more accurately. All the documentation has been updated to reflect the new nomenclature. This table summarizes these changes:

Former Name	New Name
On-Demand	<i>Library Editor</i>
On-Cue and On-Down	<i>3270 Client</i>
Interface for Windows	<i>Windows Client</i>
Browser Edition	<i>Browser Client</i>
VTAM Interface	<i>e-Networks Standalone Interface</i>

All Users Upgrading from Release 4.2.3 or Earlier

Release 4.4.0 requires that you convert your DECALIB from its present format to a new format compatible with Release 4.3.0 and later. Once converted, you cannot go back and run an earlier release of Decision Analyzer. For this reason, we strongly suggest you create a permanent backup of your current DECALIB before installing Release 4.4.0 and save that backup in case you have to revert to a release earlier than Release 4.3.0. Follow this procedure:

1. Use your current release of Decision Analyzer (Release 4.2.3 or earlier) and backup DECALIB using DECAUTIL with the control statement, BACKUP. Save this backup.
2. Install Release 4.4.0.
3. Run the Release 4.4.0 version of DECAUTIL with the control statement, CONVERT.

Existing requests can now be used with Release 4.4.0.

Adabas Users Upgrading from Release 4.2.0 or Earlier

Note: Skip this step if your current release is 4.2.3 or later. This release supports ADABAS database IDs up to 65,535 and file numbers up to 5,000. If you are upgrading from Release 4.2.0 or earlier, you must follow the steps outlined below using the Release 4.4.0 versions of the programs DECAUTIL and DAPHADIC. These steps must be performed before you access any existing ADABAS requests:

1. Use the Release 4.4.0 version of DECAUTIL to backup up DECALIB. Save this backup.
2. Run the Release 4.4.0 version of DAPHADIC.

Existing requests can now be used with Release 4.4.0.

Support Discontinued

- The Windows Client no longer supports Microsoft Windows 3.1x nor does it support a screen resolution of 640 × 480. The minimum supported screen resolution is 800 × 600. Currently supported Microsoft operating systems are Windows 9x, NT, 2000, and XP.
- The obsolete file formats of Lotus 1-2-3 Release 1 (.wks) and Lotus Symphony 1 (.wkr) have been dropped from the Type of Output selections.
- Releases of the Decision Analyzer earlier than Release 4.2.3 are no longer supported.

Enhancements

e-Networks Standalone Interface

The former VTAM Standalone Interface has been enhanced to support, in addition to VTAM, native TCP/IP as a communication protocol. Unlike VTAM, using the e-Networks Standalone Interface with TCP/IP does not require an emulator in order for the PC clients to communicate with your mainframe and the “web-aware” version of Decision Analyzer running there. The e-Networks Standalone Interface is described in the *Installation Guide (OS/390)* and *(VSE/ESA)*.

FDD Editor

This new utility provides a Windows interface for defining and modifying File and Data Definitions (FDDs). New FDDs can be created and the DALIB updated interactively without the need to run a batch utility. Existing FDDs can be displayed and modified and those modifications made immediately available. Column dependency has been completely removed from consideration. See the *FDD Editor User Guide* for a complete description of the FDD Editor.

CICS users: To use this client, you must change the way all your DALIBs are defined to CICS. See the *Installation Guide*, Section 4.6.4.

PC Clients

The following enhancements have been implemented for the Windows Client and the Browser Client.

When viewing the output of a request, in addition to deleting or printing the output, you now have the option to “Save” the output as text (.txt) or html (.htm), or e-mail the output to someone else. When you “Save”, the output becomes a file on your PC. When your e-mail, a new e-mail message is started with the output already attached as a .txt file.

You can specify up to 10 times more selection criteria with a request than was possible in earlier releases. Record selection is still limited to 16 rules but an individual rule can be up to 250 characters long. The previous limit was 67 characters (and, it was not possible to have 16 rules each of 67 characters). Similarly, sub-selection rules and rules associated with conditional new fields have also been expanded from 67 to 250 characters.

When adding a new sort break to an existing request, the default has been changed so that the break function, if any, is calculated at this new break. In prior releases, the default was to not calculate the break function at the new break.

When the Type of Output is a mainframe extract file, the user now has the option of having numeric fields created as either packed decimal (PN) or zoned decimal (CN). Prior to this release, all numeric fields in mainframe extract files were created as zoned decimal.

New options for reports:

- Insert from 1 to 9 blank lines before printing subtotals and the grand total. An additional option for the grand total is skipping to a new page before printing. The default is to skip no blank lines.
- Change the starting column for page titles. The titles can start anywhere from column 1 to column 58. The default is 30.
- Display dollar signs (fixed or floating) in “Financial style” (dollar signs print only on first detail line and subtotal line of a group of lines in a detail report).
- Changes made in the System Profile to the values for the reporting defaults for Lines per Page, Date, Page Number, Page Width, and spacing are now reflected on the Request Options dialog when creating a new request.
- The date calculation routines, DATEJ and DATEC, can now use fields defined with “0” decimal places – that is both integer and decimal fields if there are zero decimal places in the decimal fields.

- You can now specify a sort break on the low order sort field of a summary report request. By allowing this sort break, you can affect the spacing of the “detail” lines of a summary report. Prior to this release, these lines were always single-spaced.

New options for the Administrator:

- When defining the mainframe file used for transfer of data to the PC, you can specify that the file is a multi-volume data set spread across from 1 to 8 volumes.
- When you login as the Administrator, the “look in” combo boxes (Request and Member Directory) are automatically populated with all known user-ids of Decision Analyzer users.
- There are two new System Profile options, one to eliminate “Transfer” as a menu bar command and another to add “Convert” as a menu bar command. Since Transfer contains the logic to complete the creation of an Excel (.xls) spreadsheet format from the Decision Analyzer internal format, we have made this same logic available as a separate menu bar command, “Convert”, (under Transfer). It is up to the user, if not using Transfer, to complete the creation of the .xls format by invoking Convert after transferring the file to the PC by whatever means they are using (such as FTP).
- Remove the requirement that all D2 names be unique within a set of files that are being matched. D2 names need only be unique within a file regardless of which file(s) it can be matched to.
- If your environment is OS/390 CICS (or Transaction Server) and RACF, Top Secret, or ACF2, requests run by your users will now run with the security profile (ACEE) of the user rather than the security profile of CICS.

Windows Client

The following enhancements have been implemented for the Windows Client:

The View button has been made the default button on Job Status and Directory of Output so that double-clicking a job or job number displays the output.

Job Status now monitors a running request and sounds a tone when the request completes and its output is available for viewing. Monitoring takes place only while the Job Status dialog is displayed.

Output display now allows you to “copy-and-paste” from the displayed output.

ADABAS

Enhanced ADABAS match to include secondary file selection criteria in the S1 call to retrieve the secondary file records. Since access to the secondary file is always by descriptor, adding the additional non-descriptor fields to the S1 call results in an improvement in efficiency by using the power of ADABAS to return only the desired records.

Added support for record selection on Predict logical fields (data type ‘L’).

Batch

Several enhancements have been made to the DECALIB batch utility program, DECAUTIL:

- The DEFINE command has been enhanced so that it creates more “friendly” column headings from COBOL data names.
- A new command, FDDRENAME, allows a user to change the name of an FDD associated with an existing request. This command is useful when implementing a new naming convention for files.
- The command, FDDXREF REFRESH, which refreshes or updates information associated with fields in existing requests when those field definitions have changed has been implemented for DB2 and ADABAS. Prior to this release, REFRESH was available for all other file types. Where in earlier releases, you had to process FDDs 1 DALIB at a time, you can now use REFRESH with up to 100 DALIBs in a single execution.
- The BACKUP/RESTORE commands in VSE/ESA can now process files on disk as well as tape.

Problems Corrected:

Bug Nbr	Area of Product Affected	Description of Problem That Has Been Corrected
1150	DAPHUTIL	CA Field with a number in the “number of decimals” column is not flagged as an error.
1970	Periodic Field	Decision Analyzer erroneously calculates the location of a periodic field when the subscript numeric value and the array field are in different 4K ranges of memory.
4290	DAPHUTIL	DAPHUTIL program does not validate the file name for special characters. Batch request then abend with a 0013 Error in File Name message.
5060	DAPHOPTS & Online Decision Analyzer	Online Decision Analyzer load library does not have DAPHOPTS module included in its load library. Documentation of the JCL needs to be changed to concatenate the batch Analyzer load library in the online address space.
5530	Breakfn	When a field is deleted from the fields dialog, and is a sort break, break levels are not adjusted for fields using the break level. This causes an invalid parcel when switching to the breakfn dialog.
5540	New Fields	If the user creates a numeric new field and “sums” it in a column, the default column heading of “sum” does not appear as it does for other columns being summed.
5550	TABLOOK	The file DEPARTMENT (DALIB data file) is in the list box for a lookup file, but when it is chosen, the message is displayed that it is not a valid choice
5670	USERPRF	Support multiple volumes for VOLSER= parameter in the USERPRF.
5680	Label Layout	If the user modifies Number of records read or number of records selected on the Request Options dialog after the label has been laid out, the layout is deleted.
5820	DAPHUTIL	Packed numeric fields greater than eight bytes in length are not flagged as an error in the batch execution or by the DAPHUTIL program during a CATALOG operation.
5850	Profile Manager USERPRF VSE File tab	VSE file tab does not have a specification for allocation type – tracks, cylinders or records.
5870	DB2 & VSAM Output Spooling	Duplicate error message number being generated for two different errors. 9203E - Invalid Spool Parameter Specified message is being produced when &SPLPARM is not initialized in ANALYZV JCL Proc. This conflicts with the 9203E Insufficient Memory for the Decision Analyzer DB2 Interface message.
5890	Bit Fields	Use of a bit field with a displacement greater than 4096 results in an abend when that bit field is used in the output phase.
5900	Passwords	Prevent abend on access to password-protected file.
5910	DAPHUTIL	Does not check fields for “number of lines of column heading” and “length of column heading” to make sure they have numeric values. Results in abend when FDD is used.
5950	Job Status	User cannot View but can Print or Delete jobs in other than the output class for viewing.
5980	MIGRATE	Has bug when writing LN/RN format fields in zoned-decimal format in the Read/Extract Phase.
6000	&SYSDATE in Page Title	CICS transaction abends with an ASRA when you run a request that has &SYSDATE on the far right side of the page title.
6030	BCLMATCH	When User Profile contains more than 1 BCLMATCH keyword, an abend results when the request is run.
6040	DBF Files	When a request creates a .dbf file and the total data length of all fields for a record is 4 or less, an invalid file is generated.
6050	Adabas	Search Buffer is not generated when the request contains a redefined field causing the file to be read sequentially.
6070	Report Layout	Detail Reports are not correctly suppressing repeating values when asked to do so.
6100	Request Options & DECAPRF	Administrator set LINES=53 in DECAPRF but does not see the change on the Request Options dialog box when creating a new request. “Lines” comes up as 53 in 3270 Client, but 56 in the Windows Client.

6130	Profile Manager DECAPRF	Cannot get .WK1 listed as a type of output on Request Options dialog box. The option is set in the profile manager.
6140	Sort	Sort break is being set incorrectly for a request that is changed to an XLS. If a report request has a sort break of 'Next page on break' and the type of output is changed to a XLS, the sort break changes to 'Skip 9 lines on break'. It should be 'New sheet on break'. This works correctly when going from report to WK3, but not when going from Report or WK3 to XLS.
6150	Add Analyzer Statements	Dialog box locks up when an Invalid BCL statement is entered, i.e. NEWFLD,ABC,). Any BCL statements entered after this are deleted and must be re-entered.
6160	New Field Calculation	Length of * for &SYSDATE causes a "Length Omitted" error msg.
6170	Report Layout	Cannot change the edit options or column heading for a field that is at the end of the detail line. Error message, "field xxx will extend beyond the report width" is generated. You cannot change the edit options to make the field smaller – take the commas out of a numeric field.
6180	Request Options	Double- or Triple-spacing a Summary Quick Path request with only one sort field does not work. The report is not double-spaced and after run, spacing is set back to single-spaced. Double-spacing a Summary Sub-selection request works fine.
6190	Library Editor	CICS 360 abend occurs when you update a Library Editor member in the Common Library, then run a request from "my library".
6200	On-Demand	Library Editor "Save As" does not allow blanks in the Description.
6210	Profile Manager User Defined tab	Profile manager only displays 4 user-defined submit keywords. If you add keywords to the USER screen, they are written to the USERPRF, but they are not displayed when you open it again with the Profile Manager.
6220	User Submit Keywords in a BCLFILE member	A select statement in a BCLFILE member that has been continued on multiple lines and contains a user submit keyword that was defined with the option, REQUIRED=DROP, may cause syntax errors if a value is not specified for the user defined submit keyword at run time.
6230	Report Layout	Set "display repeating values" on the report layout for a summary request and it does not stay checked. Click back and next and the display repeating values will not be checked. Checked is not the default for a summary request. It is the default for detail request. Still does this on a summary quick path.
6240	New Field Calculations	New Field Calculations & Add/Edit Selection Rules – Value is longer than the field length error message appears in Record Selection Rules after Next button hit. This occurs if a field is specified in the Calculation portion of Edit: New Field Calculations dialog box that has to be truncated to fit the New Field and it is specified as one of the Add/Edit Selection Rules.
6250	Windows Client Trace	When user gives trace file name without file extension, file should be saved using default extension ".trc".
6260	Windows Client Procs and Macros EPRINT	Customer codes two EPRINT calls in the Windows Client and runs the request. Edit the request, both EPRINT macros are listed, but the first one is blank – no control statements are listed. User is also having a problem formatting the control statements on the screen. There is no way to tell where a line ends or how to do a continuation. Try to print a line of '='. You cannot get it on one line and you can't figure out how to continue it.
6270	Windows Logoff	Current logoff does not update the mainframe flag, i.e. set administrator to false. TONY TO TEST
6280	TABLOOK	CICS 421 abend when going to any other dialog from the TABLOOK dialog.
6290	ADABAS DAPHADIC	Abend S0C7 – data exception - in DAPHADIC in OS/390 - MVS offset +812 or VSE/ESA offset +872 when using Predict version 4.1.2.
6310	Request Options	A request that generates a m/f extract file does not list the FDD name when you open it a second time. The FDD name is listed if you edit it in the 3270 Client, but not in the Windows or Browser Clients. You get an error message that you need to supply an FDD name and the Next button is not enabled.
6320	Report Layout	When the user changes the font on a report to a small point size, the report dialog resizes too narrow for any of the buttons to be available. The Add, Cancel, Done, and Font buttons are not on the screen.

6320	Help File and the Windows Client	Help file is not being downloaded even though the HELPPRF member has been changed and is newer than the version on the PC.
6330	Library Editor New under TSO	Creating a new member on TSO causes a page fault in Analyzer32.exe at offset 167.
6340	Profile Manager MVS file tab	Set allocate space in: records and attempt to create a m/f extract file and you get an error that the space parameter has not been set. Set this value to tracks or cylinders and you get a message that it must be set to records.
6360	Transfer & Trace Dialogs	Modify the File dialog boxes for Trace and Transfer to be the common dialog.
6370	Multifile	Multifile does not work for MVS.
6380	VSE/ESA Output Security Level 3	When running in output security level 3, someone logged in as the administrator should be able to look at any jobs in the output class for viewing. You cannot do this unless you are logged in with the Master Password.
6390	Windows Client	Have an option in DECAPRF that enables/disables the Transfer menu bar command.
6400	Windows Client Browser Client	Excel conversion crashes on a specific file. It seems that when EOF is the only cell in the block, the conversion crashes.
6410	Windows Client Browser Client	The right-click in the directory of requests dialog does not pop up the menu after the following scenario: Choose Request->Copy from the menu, copy a member to another person's library. Try a right-click on the request dialog
6420	Windows Client	Column expression in .XLS is causing errors in Excel. Create a summary column path request where column 1 is the dept no, column 2 is the sum of this year salary, column 3 has the column expression C2/C2.0*100. The request runs fine, and you can transfer it to the PC. When you open it with Excel, you get a page fault in KERNEL32.DLL. You can create a column expression with C2/C2.0 and it works fine.
6430	ADABAS	ADABAS run gives following error message when selection rule uses CONTAINS or NOT CONTAINS – *9269E INTERNAL LOGIC ERROR. CODE 05.
6440	ADABAS DAPHADIC	DAPHADIC may not get field synonym if "V" statement that defines file or view name is not first in FDD.
6450	DV Files	Error message, "Internal logic error. Code=8" when attempting to read a file defined as DV with the first part of the key. The key is packed numeric. Customer has defined a 1LN field (first digit of the key) and used it in a selection rule.
6460	Windows Client Record Selection Rules	Adding additional record selection rules causes a prompt asking if you want to use the default connections. If you click on No to leave the record connection in place, the connections no longer make any sense because the new rule is added in alphabetical order. If you add a rule for a field beginning with 'A', then all other records are now changed and your connectors have to be changed.
6480	Add Analyzer Statements	Long field names are not being replaced with 6-character short name when a request is run. Seems to happen when Enter statement has multiple fields on it, first is replaced, others are not. The run abends with "Invalid or missing field names".
6500	Spreadsheet Formats	Excel has a limitation of 30 arguments to a worksheet function. Lotus seems to have a 49-argument limitation. If a request contains more than this number of breaks, the resulting spreadsheet's functions are invalid. The Excel converter in WC has to be modified to display an error when a function contains more than 30 arguments.
6510	Fields Selection Dialog	ZZ fields that have a displacement greater than 9999 are displayed in the Field Selection dialog when FILTERZZ=YES is set.
6520	Profile Manager, USERPRF	The SPACE parameter must always be written to USERPRF. Currently, if the user does not modify the default, the SPACE parameter is never written out, which is a required entry in USERPRF.
6530	Run ADABAS Request	Sporadically, pre-R430 converted ADABAS requests produce 0C1 abends when the request is run. If the user logs back on and reruns the request, it nearly always works fine.
6550	ADABAS DAPHADIC	ADABAS redefined fields defined to Predict with redefinition level 3 or higher are not retrieved correctly by batch Analyzer.

6560	ADABAS DAPHADIC	Introduced support for Predict logical field (data type 'L'). Create Analyzer field of type binary with length 1 (BN1).
6570	ADABAS Batch Analyzer	Batch Analyzer gives unpredictable results if ADABAS Analyzer request accesses more than 1 file (via match or TABLOOK) and system date or time variable &SYSDATE or &SYSTIME is used.
6580	View Output	When viewing output, the page number in the status bar disappears after printing.
6590	Column Definition	Using the Windows client, cannot create the maximum (68) number of columns.
6600	Conditional New Field	When creating a conditional new field with many "DOES NOT CONTAIN" test options, the generated code will truncate anything past one line of generated code. (In the call to DACNTN?) Error *3501 occurs.
6610	Record Selection Rules	Delete a selection rule when 4 rules have been defined and you get prompted to set the default record connection. If you click no, then the rule is left in the rule connection. You do not get prompted when you delete a selection rule if only 3 are defined.
6630	Add/Edit Selection Rules	Add a selection rule, click on the drop down box for a list of fields; the fields are not sorted. Field names are sorted in alphabetic order in all other dialogs.
6640	Batch Analyzer	Suppress repeating values for a summary report does not print the suppressed fields at the beginning of each page. All fields should be printed on the first line of a new page, even if "suppress repeating values" has been set for that field.
6650	Procs & Macros	For DATEC and DATEJ, allow fields defined with 0 decimal digits (a non-integer number) to be eligible for date conversions.
6660	Field Selection Dialog	Redesigned "Trim" of numeric (packed) fields so that packed fields that are numerically negative retain the minus sign when trimmed.
6680	Record Selection Rules	Decision Analyzer does not display character conditional new field in the Record Selection Rules dialog box.
6710	System Date (&SYSDNUM)	&SYSDNUM used as a "value" field in a Record Selection rule causes this error message when the request is run: "SELECT in ASYSDNUM: Syntax error, expecting field or (value) after EQ". This error message is generated only if the USERPRF contains a BCLFILE= or BCLGLOBAL= keyword. Without these keywords, the request runs fine. Module generating error code appears to be DECA500 – see label SEL66.
6740	Report Output	When using the PROC VARHEAD on a report in which the page width has been changed to a number larger than 132, the PROC hard codes a PAGEW of 132 and overrides the user's specification of number>132.
6780	FILTERZZ	FILTERZZ=YES does not work if the ZZ fieldname was defined and started in column 2 of the D statement.
6810	DECAUTIL DEFINE	COBOL occurs fields are not being defined correctly by DECAUTIL Define facility.

DECISION ANALYZER SUPPLEMENT TO RELEASE NOTICE R4.4.0

Release 4.4.1 and 4.4.2
September 2002

Release 4.4.1 and Release 4.4.2 are supplements to Release 4.4.0 and introduce several additional enhancements that were not in the earlier release. Those enhancements are described below.

All Users Upgrading from Release 4.2.3 or Earlier

Note: Skip this step if your current release is 4.3.0 or later. Release 4.4.1 requires that you convert your DECALIB from its present format to a new format compatible with Release 4.3.0 and later. Once converted, you cannot go back and run an earlier release of Decision Analyzer. For this reason, we strongly suggest you create a permanent backup of your current DECALIB before installing Release 4.4.1 and save that backup in case you have to revert to a release earlier than Release 4.3.0. Follow this procedure:

1. Use your current release of Decision Analyzer (Release 4.2.3 or earlier) and backup DECALIB using DECAUTIL with the control statement, BACKUP. Save this backup.
2. Install Release 4.4.1.
3. Run the Release 4.4.1 version of DECAUTIL with the control statement, CONVERT.

Existing requests can now be used with Release 4.4.1.

Adabas Users Upgrading from Release 4.2.0 or Earlier

Note: Skip this step if your current release is 4.2.3 or later. This release supports ADABAS database IDs up to 65,535 and file numbers up to 5,000. If you are upgrading from Release 4.2.0 or earlier, you must follow the steps outlined below using the Release 4.4.1 versions of the programs DECAUTIL and DAPHADIC. These steps must be performed before you access any existing ADABAS requests:

1. Use the Release 4.4.1 version of DECAUTIL to backup up DECALIB. Save this backup.
2. Run the Release 4.4.1 version of DAPHADIC.

Existing requests can now be used with Release 4.4.1.

Enhancements

FDD Editor May now be used with native TCP/IP as well as emulator connections to the mainframe.

PC Clients When type of output is Mainframe Extract File, The generated FDD to describe the file now contains D2 statements (long names) that are derived from the source file(s) D2 statements. In the case of Adabas and DB2, the long names from those database files are used as the D2 statement name.

The maximum number of columns in a spreadsheet or an extract file has been increased from 64 to 120.

When matching VSAM files, the One-To-Many (OTM) was valid only when matching 2 files. This has been expanded to support all files in a match (up to 6).

ADABAS Added support for an MU field as an element of a Superdescriptor.

Added support for MU fields as elements of a PE group.