ECN List

extend Product Suite

Version 8.1.1

E-01-UG-090701-ECN List-8.1.1

Chapter 1: Version 8.1.1 Release Overview and ECN List

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Version 8.1.1 Release Overview and ECN List

Key Topics

Release Overview

Welcome and thank you for your interest in *extend* version 8.1.1. *extend* is the product suite name for the ACUCOBOL-GT development, deployment, and data access technologies.

Version 8.1.1 is a maintenance release that includes over 100 corrections. Several minor enhancements are also included and are described below. Products not listed in this document received no changes in version 8.1.1.

Java interoperability: calling COBOL from a Java command line

This functionality gives the developer the ability to call a COBOL program from the command line using Java without having to write a Java program. The syntax for using this is:

```
java -cp path-to-CVM.jar com.acucorp.acucobolgt.runcbl
  --acugt path-to-AcuGT-runtime [java-options]
  runtime-command-line path-to-cobol-program
```

It also possible to call this functionality from another Java program by calling the static method RunCbl in runcbl class and passing a Java String array that contains a valid runtime command line and logging switches.

This functionality is detailed in the Interoperating with *ACUCOBOL-GT User's Guide*, section 2.2.1Calling COBOL from a Java Command Line.

AcuXDBC: remote processing with command-line query tool

Remote processing functionality has been added to the command-line query tool, asql.bat (Windows) asql.sh (UNIX/Linux). asql can now be used to execute queries against both local and remote databases. The new syntax is:

asql.sh [-c config] [-u user] [-p password] [-r script] [-s server] [-p port]

AcuXDBC: new install files

The 8.1.1 AcuXDBC install will install Visual Studio 2008 dlls onto the client machine.

Special Release Notes

This section provides important information that may impact your use of the extend product line.

ACUCOBOL-GT: XFD generation

XFDs are now by default generated in XML format, as opposed to the previous behavior of generating XFDs in standard flat text format. This changes the use of the -Fe compiler switch from generating XML format XFDs to generating flat text format XFDs.

ACUCOBOL-GT: read-only entry fields

As of Version 8.1, read-only entry fields were changed to conform to standard Windows behavior in that the background color is always gray (regardless of the COBOL program's Color setting). Some customers needed the ability to change the color of read-only entry fields. A new configuration variable called "ECN_3699" enables customers to decide which behavior they want.

To enable changing the color of a read-only entry fields, set the variable "ECN_3699" to "0".

AcuXUI: JRE use

When using AcuXUI with an early point release of Java (JRE 1.6) unusual behaviors have been observed that seem to be in the JRE itself. When using AcuXUI, it is better to use a more mature JRE such as JRE jdk1.5.0_18 or jdk1.6_0_13. The more mature JRE eliminate many behavioral issues.

AcuXDBC: Install changes

acuxdbc.cfg is no longer included on the installation medium. You now use genxconf (.bat or .sh) to generate any config files, based on settings in GENESIS_HOME and a template file (which can be customized to meet users' needs).

ACUCOBOL-GT ECN List

This section includes the ECNs relating to ACUCOBOL-GT.

ECN-3789: MPE File Equation to disk does not override ASSIGN to spooler

Type of Change:	Correction
Module:	Runcbl
Incidents:	2190881
RPI Number:	1062521
Machines Affected:	All MPE platforms
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

An ASSIGN statement like the following for a spoolfile

```
ASSIGN TO "ACUSPOOL,,,LP(CCTL)"
```

creates a spoolfile as expected. A file equation like the following to create a disk file, however,

```
FILE ACUSPOOL=ACUDISK;CCTL;DEV=DISC
```

continues to create a spoolfile rather than the expected disk file. This behavior has been corrected.

ECN-3790: cblutil sometimes left temporary files on disk

Type of Change:	Correction
Module:	Cblutil
Incidents:	2191114
RPI Number:	1062467
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

If, when running cblutil stand-alone, the user named the output file different from the input file, the utility left a temporary file on disk when it was finished. This behavior has been corrected.

ECN-3792: DISABLED and TRANSPARENT multi-line labels

Type of Change: Correction
Module: runtime
Incidents:
RPI Number: 1062300
Machines Affected: Windows
Known Versions Affected: 8.0.0 and later

DESCRIPTION of problem or enhancement:

When a label had both the TRANSPARENT style and ENABLED set to 0, and had long text that needed to wrap, the runtime would truncate the text. This behavior has been corrected.

ECN-3793: Paged List Box with 30 or more columns caused problems

Type of Change: Correction
Module: ATERMMGR.DLL
Incidents: 2192404
RPI Number: 1062554
Machines Affected: All
Known Versions Affected: All

DESCRIPTION of problem or enhancement:

Paged list boxes with 30 or more columns and running on Vista would not display the data properly or would cause a MAV. ACUCOBOL-GT has a limit of 30 columns for list boxes; however, this limit was not consistently enforced by the runtime, which lead to memory corruption with unknown effects.

The runtime now consistently enforces the 30 column maximum rule and will ignore any columns after column 30. This applies to the DISPLAY-COLUMNS special property for grids, list boxes, and paged list boxes.

ECN-3796: MPE file equation of spoolfile to disk did not keep characteristics

Type of Change:	Correction
Module:	Runcbl
Incidents:	2193343
Machines Affected:	All MPE platforms
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

An ASSIGN statement like the following for a spoolfile:

```
ASSIGN TO "ACUSPOOL,,,LP(CCTL)"
```

created a spoolfile as expected. But if you had a file equation like the following to create a disk file instead:

```
FILE ACUSPOOL=ACUDISK;CCTL;DEV=DISC
```

the file characteristics of the disk file should have had VARIABLE length records and a filetype of SPOOL. Instead it had FIXED length records and a filetype of STD. This behavior has been corrected.

ECN-3797: Memory access violation when getting hostname

Type of Change:Correction

Module:	All
Incidents:	None
RPI Number:	None
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

If the socket subsystem had not been initialized before an application requested the hostname, the application crashed with a memory access violation. Most of our tools initialize the socket subsystem if they need it. The runtime does so if the client library is available (aclnt.dll or libaclnt.a is linked in). But if that library is missing or not used, and some other part of the runtime tries to get the current hostname, the runtime crashes. This behavior has been corrected.

ECN-3799: Linkage binding error gave incorrect results to MOVE

Type of Change:	Correction
Module:	Runtime
Incidents:	2190973
RPI Number:	1062690
Machines Affected:	Windows
Known Versions Affected:	7.1.0 and later

DESCRIPTION of problem or enhancement:

ECN 3214 (Version 7.1.0) caused a problem when different parameters were passed to a CALL statement in separate locations of a program. In that case, later parameters sometimes pointed to random data, causing bugs in the called program.

ECN-3804: Java Interoperability: Calling COBOL programs from a Java command line

Type of Change:	Enhancement
Module:	runtime
Incidents:	none
RPI Number:	none
Machines Affected:	all

Known Versions Affected: 7.0.0 and later

DESCRIPTION of problem or enhancement:

This functionality gives the developer the ability to call a COBOL program from the command line using Java without having to write a Java program. The syntax for using this is:

```
java -cp path-to-CVM.jar com.acucorp.acucobolgt.runcbl
  --acugt path-to-AcuGT-runtime [java-options]
  runtime-command-line path-to-cobol-program
```

It also possible to call this functionality from another Java program by calling the static method RunCbl in runcbl class and passing a Java String array that contains a valid runtime command line and logging switches.

This functionality is detailed in the Interoperating with *ACUCOBOL-GT User's Guide*, section 2.2.1Calling COBOL from a Java Command Line.

ECN-3805: Memory leak on MPE platforms

Type of Change:	Correction
Module:	Runcbl
Incidents:	2193627
RPI Number:	1062634
Machines Affected:	All MPE platforms
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

Memory was not being freed after calling some MPE intrinsic functions, such as HPFOPEN. This behavior has been corrected.

ECN-3806: File status 35 on file open that should be 39

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Numbers:	1062770
Machines Affected:	All
Known Versions Affected:	8.x

DESCRIPTION of problem or enhancement:

When using the same name for a data file and executing open statements to look for the file in multiple file systems, the system incorrectly returned a file status of 35 when the file status should have been 39. This behavior has been corrected.

ECN-3807: Improvements to Java interoperability program samples

Type of Change:	Enhancement
Module:	Runtime
Incidents:	None
RPI Number:	All
Machines Affected:	Windows
Known Versions Affected:	7.0 to 8.1

DESCRIPTION of problem or enhancement:

Your ACUCOBOL-GT distribution includes Java interoperability sample programs. You will find them in the \acugt\sample\java\ directory where ACUCOBOL-GT is installed. You will also find a text file containing detailed instructions on runnning these sample programs.

The sample programs have been made easier for users to configure and use.

ECN-3808: EXTSM not returning file error codes

Type of Change:	Correction
Module:	EXTSM
Incidents:	2192572
RPI Number:	1062642, 1062660
Machines Affected:	All UNIX
Known Versions Affected:	All UNIX containing EXTSM support

DESCRIPTION of problem or enhancement:

When using the EXTSM interface with a third-party SORT module, the file status was not correctly returned to the runtime in the event of a file error. This behavior has been corrected.

ECN-3811: REPLACE failure when no space between tokens

Type of Change:	Correction
Module:	Compiler
Incidents:	2192875
RPI Number:	1062917
Machines Affected:	All
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When using COPY/REPLACING or REPLACE with COBOL that had strings with embedded quotes immediately preceding or following data names, the compiler became confused about how to rescan the collection of tokens, even if the REPLACE or COPY/REPLACING should not have any effect.

For example, the following line of COBOL generated errors if any REPLACE or COPY/REPLACING was in effect:

```
DISPLAY "This is a test of quotes'"data-name"'and done"
```

This should be equivalent to

```
DISPLAY "This is a test of quotes'" data-name "'and done"
```

but the compiler became confused with the first construct and not with the second.

This behavior has been corrected.

ECN-3812: Name size limit when setting breakpoints with addresses

Type of Change:	Correction
Module:	Runtime
Incidents:	2194937
RPI Number:	1062794
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

We recently raised the limit from 10 characters to 30 for COBOL program names that are available to access when debugging. However, we missed one location where the original limit was still enforced. When setting breakpoints with the syntax

```
b .52,this-is-a-test-of-a-long-name
```

the runtime truncated the name of the COBOL program to 10 characters. (Note that this is the method that the runtime uses internally when using the menu Breakpoints->Set.) This location now allows up to 30 characters for the COBOL program names for debugging.

ECN-3814: VMS runtime not printing to print file like VMS COBOL does

Type of Change:	Correction
Module:	Runtime
Incidents:	2194839
RPI Number:	1062896
Machines Affected:	All VMS platforms
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When printing to a print file on VMS platforms, ACUCOBOL-GT did not write the same printing control codes as VMS COBOL. If programs depended on the format of the printing file to be exactly like VMS COBOL, the programs failed. This behavior has been corrected with the addition of the VMS_COBOL runtime configuration variable.

INSTRUCTIONS for use:

Set the VMS_COBOL runtime configuration variable to "1" to enable the same behavior/format of the resulting print file as that of VMS COBOL. VMS_COBOL is documented in the *ACUCOBOL-GT Appendices* manual, Appendix H.

ECN-3815: Runtime MAV when calling a program from an ongoing print job program

Type of Change:	Correction
Module:	Atermmgr.dll
Incidents:	None

RPI Number: 1063009

Machines Affected: Win32, Win64

Known Versions Affected: 7.x, 8.x

DESCRIPTION of problem or enhancement:

When a called program ("print-job-1") performed a print job to a printer and then called another program ("print-job-2") that performed a second print job to a print file (MS Image Writer, for example) the call to "print-job-2" resulted in a MAV.

The failed call and MAV were caused in part by the print driver changing the current directory of the COBOL application, which resulted in the runtime being unable to find the object being called. The runtime has been modified so that it will find the object and thereby eliminate the MAV.

ECN-3816: Compiler failed to correctly record debugging lines longer than 240 characters

Type of Change: Correction

Module: Compiler

Incidents: 2198242

RPI Number: 1063049

Machines Affected: All

Known Versions Affected: All

DESCRIPTION of problem or enhancement:

When lines longer than about 240 characters were used in COBOL source that was compiled for debugging, and that source was then debugged using the runtime debugger, the runtime sometimes hung when trying to display that source on the screen. This behavior has been corrected.

ECN-3819: Event procedures interfered with indexing

Type of Change: Correction

Module: Runtime

Incidents:	2195887
RPI Number:	1063028
Machines Affected:	All
Known Versions Affected:	5.0 and later

DESCRIPTION of problem or enhancement:

When the compiler/runtime optimized index references, it sometimes generated an incorrect index if an event procedure executed before the index was used in the intended way. For example, if a grid had an event procedure that popped up a floating window, and the window handle was returned into an indexed variable, the runtime could have stored that value in an incorrect table item.

ECN-3820: Compiler crash when using -0,0 and DECIMAL POINT IS COMMA

Type of Change:	Correction
Module:	Compiler
Incidents:	2198546
RPI Number:	1063039
Machines Affected:	All
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When using a constant literal of -0,0 and DECIMAL POINT IS COMMA, the compiler failed to recognize the literal as valid, resulting in a crash or Internal Error #45. This behavior has been corrected.

ECN-3821: W$MOUSE returned the wrong values of mouse-row and mouse-col

Type of Change:	Correction
Module:	Thin Client
Incidents:	2185699

RPI Number:	1061896
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

Under certain conditions, W$MOUSE always returned row=1, col=1 regardless of what the values really were. This behavior has been changed.

ECN-3823: Runtime SORT failed to report file errors during output phase

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	1063034
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When a runtime SORT failed, a file error was not always reported. The runtime will now report file errors during the output phase of a SORT.

ECN-3824: C$XML reading from URL

Type of Change:	Correction
Module:	Runtime
Incidents:	2198449
RPI Number:	1063064
Machines Affected:	All
Known Versions Affected:	6.1.0 and later

DESCRIPTION of problem or enhancement:

When parsing an XML file using C$XML with a file from a URL, the runtime sometimes failed to read the file from the remote server, thus causing the parse to fail. This was caused by the failure of the remote web server to specify a text length, which was in turn caused by C$XML specifying HTTP 1.1. This behavior has been corrected.

ECN-3825: DISPLAY_REG_QUERY_VALUE_EX and Win 2003

Type of Change:	Correction
Module:	Thin Client
Incidents:	2191159
RPI Number:	1062448
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

DISPLAY_REG_QUERY_VALUE_EX returned nothing on thin client. This behavior has been corrected.

ECN-3826: AXDEFGEN generated source code beyond column 73

Type of Change:	Correction
Module:	AxDefGen
Incidents:	2198221
RPI Number:	1062997
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When using the AXDEFGEN utility on some controls it sometimes wrote copybook lines longer than the maximum of 73. This behavior has been corrected.

ECN-3827: VMS runtime didn't include LINES AT TOP in print file like VMS COBOL

Type of Change:	Correction
Module:	Runtime
Incidents:	2194839
RPI Number:	1063140
Machines Affected:	All VMS platforms
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When printing to a print file on VMS platforms, ACUCOBOL-GT did not include the value of LINES AT TOP when writing to a print file. If programs depended on the format of the printing file to be exactly like VMS COBOL, the programs failed.

INSTRUCTIONS for use:

Set the VMS_COBOL runtime configuration variable to "1" to enable the same behavior/format of the resulting print file. VMS_COBOL is documented in the ACUCOBOL-GT Appendices manual, Appendix H.

ECN-3829: DISPLAY containing % character gave error in MPE environment

Type of Change:	Correction
Module:	Runtime
Incidents:	2201574

RPI Number:	1063256
Machines Affected:	All MPE platforms
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

On MPE platforms under certain conditions, if you had a DISPLAY statement that contained a percent character (%), for example:

```
DISPLAY "This is a test %s".
```

it sometimes caused a memory access violation. This behavior has been corrected.

ECN-3830: W$Bitmap failed to load 8-bit grayscale JPEG

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	1063218
Machines Affected:	Windows
Known Versions Affected:	All
DESCRIPTION of problem or enhancement:	

W$Bitmap failed to load 8-bit grayscale JPEGs, although 24-bit color images loaded properly. This behavior has been corrected.

ECN-3831: vutil -check, vutil -deleted memory error on short record files

Type of Change:	Correction
Module:	Vutil
Incidents:	2201765
RPI Number:	1063351
Machines Affected:	All
Known Versions Affected:	6.0.0 and higher

DESCRIPTION of problem or enhancement:

The vutil -check -fx and vutil -deleted options sometimes encountered a memory error when processing a file in which the maximum record length was less than the record header size. An example of this is a Vision 5 file with a maximum record length less than 15. This behavior has been corrected.

ECN-3833: Grid cell accepted fewer digits than in previous versions

Type of Change:	Correction
Module:	Win3grid.c
Incidents:	None
RPI Number:	1063276
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

In previous versions, the grid cell accepted seven digits. Changes made in Version 8.0 reduced the number of digits accepted by the grid to six. This behavior has been corrected: the grid accepts seven digits.

ECN-3835: MOVE large unsigned value to unsigned-long with -Dw32 failed

Type of Change:	Correction
Module:	Compiler
Incidents:	2201849
RPI Number:	1063285
Machines Affected:	All
Known Versions Affected:	7.3.0 and later

DESCRIPTION of problem or enhancement:

When compiling with -Dw32, and moving a large literal integer value to an unsigned data item (larger than 2147483647), the compiler truncated the value to this largest value. This behavior has been corrected.

INSTRUCTIONS for use:

Recompile any affected programs.

ECN-3836: Fixed possible infinite loops in the socket layer

Type of Change:	Correction
Module:	Socks
Incidents:	2199774
RPI Number:	1063321
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

It was possible for an infinite loop to form if a socket closed or timed out during handshaking. This is no longer possible under these circumstances.

ECN-3838: SEND statement hung runtime

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	None
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

If a thread died before it received all of the messages sent to it, those messages remained in the message queue. If this occurred often enough, the queue sometimes filled to the point where a SEND statement hung waiting for the queue to empty when there was no way for it to empty.

With this correction, when a thread dies, any messages directed to that specific thread are removed from the queue. (This does not affect broadcast messages, only messages directed specifically to the dying thread.)

ECN-3840: Compiler looped with error when program was missing ")"

Type of Change:	Correction
Module:	Compiler
Incidents:	None
RPI Number:	1063336
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When trying to compile a sample program that was missing a terminating parenthesis, the compiler looped and returned an unnecessary error. This behavior has been corrected.

ECN-3841: 64-bit Sparc incorrect comparison (native code)

Type of Change:	Correction
Module:	Cblutil
Incidents:	None
RPI Number:	1063385
Machines Affected:	Sun (sparc - 64-bit)
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

In rare cases, an IF statement produced incorrect results when using 64-bit Sparc native code (--sparc_v9). This occurred because of a faulty comparison instruction in a few cases. This behavior has been corrected.

INSTRUCTIONS for use:

Install the corrected "cblutil" and retranslate to native-code.

3844: XFDs are now by default generated in XML format

Type of Change:	Correction
Incidents:	None
RPI Number:	None
Module:	runtime
Machines Affected:	All
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

XFDs are now by default generated in XML format, as opposed to the previous behavior of generating XFDs in standard flat text format. This changes the use of the -Fe compiler switch from generating XML format XFDs to generating flat text format XFDs.

ECN-3845: Unhandled mouse messages interfered with menu item processing

Type of Change:	Correction
Module:	Thin Client
Incidents:	None
RPI Number:	1063147
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When running a thin client application on a UNIX/Linux server and double-clicking a Treeview control item, the selected item on a subwindow of a menu was not activated as it should have been. This behavior has been corrected.

ECN-3846: Java calling COBOL hung

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	1065492
Machines Affected:	Linux
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When running Java interoperability from a J2EE application server running on Linux, Java calling COBOL calls failed in the runtime. This behavior has been corrected.

ECN-3848: Colors of read-only entry-fields couldn't be changed

Type of Change:	Correction
Module:	Runtime
Incidents:	N/A
RPI Numbers:	1065645, 1066077, 1066294
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

As of Version 8.1, read-only entry fields were changed to conform to standard Windows behavior in that the background color is always gray (regardless of the COBOL program's Color setting). Some customers needed the ability to change the color of read-only entry fields. A new configuration variable called "ECN_3699" enables customers to decide which behavior they want.

INSTRUCTIONS for use:

Set the runtime configuration variable "ECN_3699" as desired. To enable changing the color of a read-only entry fields, set this variable to "0".

The default behavior will not allow color changes and matches Windows behavior: read-only entry fields have gray backgrounds.

ECN-3849: C$XML wrote incorrect low-value bytes in element data

Type of Change:	Correction
Module:	Runtime
Incidents:	2257512
RPI Number:	1065649
Machines Affected:	All
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

Previous versions of ACUCOBOL-GT truncated data at the first byte of low-values when writing element data to an XML file with C$XML, regardless of the length of the data given to the CXML-ADD-CHILD call. Version 8.1.0 and later included the low-value bytes in the data, but incorrectly. This behavior has been corrected; C$XML now includes correct low-value bytes in the data.

ECN-3851: Image quality degraded when resized

Type of Change:	Enhancement
Module:	Runtime
Incidents:	None
RPI Number:	1065576
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When bitmaps were resized, the default stretching mode was still being used rather than taking advantage of current XP and Vista painting styles. This resulted in lower-quality bitmaps than are now possible with these operating systems. Bitmaps now resize using XP and Vista stretching capabilities when these operating systems are used.

ECN-3852: Restored default setting of ON for ECN-3228 (SORT enhancement)

Type of Change:	Correction
Module:	Runtime
Incidents:	2220579
RPI Number:	N/A
Machines Affected:	All
Known Versions Affected:	7.2.0 to 8.2.0

DESCRIPTION of problem or enhancement:

The default setting of ON for configuration variable ECN-3228 was inadvertently omitted in versions starting with 7.2.0, causing the enhancement to be turned off by default. This change restores the default setting to ON. Set ECN-3228 to "1" (on, true) in the ACUCOBOL-GT configuration file or in the environment.

ECN-3853: OCCURS DEPENDING ON didn't work when compiled with -n -Za

Type of Change:	Correction
Module:	Compiler
Incidents:	2258758
RPI Number:	1065719
Machines Affected:	All machines that support native code generation
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

If a data item had the OCCURS DEPENDING ON phrase specified and you compiled with both the n and Za options or compiled with Za and then used the cblutil native option, your program did not always reference the correct elements of the array. This behavior has been corrected.

ECN-3854: Tab Control displayed the Flat Button style regardless of setting

Type of Change:	Correction
Module:	Runtime
Incidents:	none
RPI Number:	1065672
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

The Tab Control displayed the flat button style for tabs regardless of whether the COBOL programs set it to BUTTONS or not. This behavior has been corrected.

ECN-3855: Declaratives not run after C$RECOVER error

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	556186
Machines Affected:	All
Known Versions Affected:	5.2.0 and higher

DESCRIPTION of problem or enhancement:

Declaratives were not run as expected after an error in C$RECOVER. This was caused by an update in Version 5.2.0 that modified the way declaratives were handled for transactions. This behavior has been corrected.

ECN-3856: File status error for unhandled errors not returned to External Sort Module

Type of Change:	Correction
Module:	Runtime
Incidents:	2192572
RPI Number:	N/A
Machines Affected:	All
Known Versions Affected:	None (additional change to new ECN)

DESCRIPTION of problem or enhancement:

ECN-3808 did not return a file status error for unhandled errors returned by the external SORT module. This could have led to the appearance that a SORT operation was successful when it actually had failed. This behavior has been corrected.

This ECN addresses one additional External Sort Module error (9/223: invalid license) by returning error 30 to the COBOL program. In addition, any other unhandled errors returned by the external SORT module will generate an error 30. The particular unhandled error status will be logged to the runtime error output if A_TRACE is set.

ECN-3858: Compiling some SORTs for native code failed

Type of Change:	Correction
Module:	Compiler
Incidents:	N/A
RPI Number:	1065808
Machines Affected:	All
Known Versions Affected:	8.1 and higher

DESCRIPTION of problem or enhancement:

The compilation of SORT or MERGE verbs with USING and GIVING files for native code sometimes caused the native code translator to fail, resulting in an invalid object file. This ECN fixes this behavior.

ECN-3859: Compiler crashed with unexpected WHEN

Type of Change:	Correction
Module:	Compiler
Incidents:	2259009
RPI Number:	1065855
Machines Affected:	All
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

If a period terminated an EVALUATE that still had more WHEN conditions, compiler memory was corrupted, causing a crash.

ECN-3860: Modified solution for loading AcuSecurityManager class

Type of Change:	Enhancement
Module:	Runtime
Incidents:	None
RPI Number:	1065825

Machines Affected: All

Known Versions Affected: 8.0.0 and later

DESCRIPTION of problem or enhancement:

ECN-3236 (Version 8.0.0) solved a security issue that arose when calling a COBOL program from a Java program from a COBOL program (runcbl --> java --> runcbl). Even though this issue was rarely encountered, the resolution involved the attempted loading of AcuSecurityManager every time the runtime loaded, regardless of whether it was needed or not. In fact, the default java.lang.SecurityManager class is sufficient to handle this type of issue in the vast majority of cases. This ECN corrects the behavior introduced in ECN-3236 by attempting to load AcuSecurityManager only when a SecurityException has been triggered while attempting to load the runtime shared libraries.

This ECN also removes calls to create monitor objects, because monitor objects are no longer used in version 8.1.1.

ECN-3862: Compiler crashed when using functions in the STRING statement

Type of Change: Correction

Module: Compiler

Incidents: 2260875

RPI Number: 1065906

Machines Affected: All

Known Versions Affected: 8.1.0 and later

DESCRIPTION of problem or enhancement:

When using functions (such as LOWER-CASE) in a STRING statement, the compiler crashed. This behavior has been corrected.

ECN-3863: Grid Row Color Pattern not working

Type of Change: Correction

Module:	Runtime
Incidents:	99-030814
RPI Number:	1065841
Machines Affected:	Windows
Known Versions Affected:	8.0.0 and 8.1.0

DESCRIPTION of problem or enhancement:

The row color pattern was no longer displayed initially nor after modification; all rows remained gray. This behavior has been corrected.

ECN-3864: CALL error when using a blank name

Type of Change:	Correction
Module:	Runtime
Incidents:	2260048
RPI Number:	1065956
Machines Affected:	All
Known Versions Affected:	5.2.1 and later

DESCRIPTION of problem or enhancement:

With the introduction of entry points in COBOL programs, an error was introduced in which calling a blank program name called the current program recursively. If recursion was not allowed, this caused an error (correctly). But if recursion was allowed, unpredictable results occurred. This behavior has been corrected.

ECN-3865: Slow OPEN INPUT on file on a shared drive

Type of Change:	Correction
Module:	Runtime
Incidents:	2190738
RPI Number:	1065901
Machines Affected:	Windows
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

In a multi-user environment using shared drives, an OPEN INPUT was slower in Version 8.0.0 than in previous versions. This behavior has been corrected.

ECN-3867: Grid scrollbar couldn't access records above 64,000

Type of Change:	Correction
Module:	Runtime
Incidents:	2259674
RPI Number:	1065793
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

In a non-paged grid control with more than 64,000 records, the vertical scrollbar scrolled only up to record 65,535 and then rolled over to zero and started counting up again. No record past the 65,535th could be accessed. This behavior has been corrected.

ECN-3868: Home key didn't work in grid

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	1065897, I1066234
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When the HOME key was used in the grid, the cursor didn't move back to the first cell in the row. This behavior has been corrected.

ECN-3869: Console runtime with ANSI ACCEPT/DISPLAY

Type of Change:	Correction
Module:	Console runtime
Incidents:	2262183
RPI Number:	1066012
Machines Affected:	Windows only
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When using ANSI style ACCEPT and DISPLAY with the Console runtime and with an initialized terminal manager (not running with -b), the runtime neither displayed to nor accepted from the user. This behavior has been corrected.

ECN-3870: Focus on grid lost after entry in cell

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	1065967
Machines Affected:	Windows
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

Focus did not return to the grid after editing a cell in the grid and then hitting enter. This behavior has been corrected.

ECN-3871: COPY/REPLACING failure

Type of Change:	Correction
Module:	Compiler
Incidents:	2257758
RPI Number:	1065665

Machines Affected: All
Known Versions Affected: 8.0.0 and later

DESCRIPTION of problem or enhancement:

When using COPY/REPLACING with "= =" and numbers, the replace failed in some situations. This behavior has been corrected.

ECN-3872: axdefgen not generating the class for events

Type of Change: Correction
Module: AxDefGen.exe
Incidents: None
RPI Number: 1066032
Machines Affected: Windows
Known Versions Affected: 8.0.0

DESCRIPTION of problem or enhancement:

When generating a def file, axdefgen didn't prefix events with the Class. This behavior has been corrected

ECN-3874: Memory leak when calling .NET with reference parameters

Type of Change: Correction
Module: Runtime
Incidents: None
RPI Number: 1065969
Machines Affected: Windows
Known Versions Affected: All

DESCRIPTION of problem or enhancement:

When calling a .NET method with BY REFERENCE parameters, memory was allocated but not released, resulting in a memory leak. This behavior has been corrected.

ECN-3875: Clearer error message when class name is duplicated

Type of Change:	Enhancement
Module:	Ccbl32.exe, ccbl
Incidents:	2262253
RPI Number:	1066033
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

This enhancement clarifies the error message issued by the compiler when a class name (literal) had been previously used (duplicate reference).

For example, working with a COM object's .def file and a class called HtmlInputImage is referenced in the definition of the object as both an enumerator (value 5) and a class.

With this enhancement, the literal name will show instead of the enumerator value. In this case:

```
'@HTMLInputImage' is not a valid CLASS name
```

ECN-3876: Compiler crashed with reference modified items

Type of Change:	Correction
Module:	Compiler
Incidents:	2203872
RPI Number:	1063381

Machines Affected: All
Known Versions Affected: Unknown

DESCRIPTION of problem or enhancement:

When moving a reference modified item to multiple destinations, and the reference modifiers were expressions (sums or index items, for example), the compiler tried to re-use freed memory. This caused unpredictable results, including possibly a crash.

For example:

```
MOVE A(OFF(X):LEN(X)) TO B C
```

ECN-3877: AND condition incorrect in XFD files

Type of Change: Correction
Module: Compiler
Incidents: None
RPI Number: 557259
Machines Affected: All

DESCRIPTION of problem or enhancement:

When XFD files were written in XML format, any nested conditions (AND) were written incorrectly: the same condition was listed as being both sides of the AND. This behavior has been corrected.

ECN-3878: Event procedures sometime had their thread locked

Type of Change: Correction
Module: Runtime
Incidents: 2263378
RPI Number: 1066094
Machines Affected: Windows
Known Versions Affected: 8.1.0 and later

DESCRIPTION of problem or enhancement:

When an event procedure was executing, its thread was sometimes locked (because of uninitialized data in the runtime). This behavior has been corrected.

ECN-3879: Version 8.1.0 64-bit Windows runtime executable failed to start/initialize

Type of Change:	Correction
Module:	Runtime
Incidents:	2259559
RPI Number:	1065782
Machines Affected:	64-bit AMD(x64) only
Known Versions Affected:	8.1.0

DESCRIPTION of problem or enhancement:

When trying to execute the 64-bit Windows runtime, users saw the following error:

```
    The application failed to initialize properly
(0xc0150002)
```

This was because atermmgr.dll was looking for a 32-bit version of comctl32.dll instead of the 64-bit version. This behavior has been corrected.

ECN-3884: Updating Status Bar in BEFORE procedure caused Push Button, Check Box malfunction

Type of Change:	Correction
Module:	Runtime
Incidents:	2257254
RPI Number:	1065631, 1065993, 1066319
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

ECN 3784 (Version 8.1) introduced the ability to use the panels on the Status Bar as two-state buttons. Part of the process restored the focus to the control that had it before the Status Bar was clicked. An unwanted side-effect of this modification was that simply changing the text of the Status Bar during a BEFORE procedure caused, in certain cases, Push Buttons, Check Boxes, and possibly other controls to behave incorrectly. This behavior has been corrected.

ECN-3886: Version 8.1 Calendar control not generating NTF-CHANGED event

Type of Change:	Correction
Module:	Runtime
Incidents:	None
RPI Number:	1065829
Machines Affected:	Windows
Known Versions Affected:	8.1.0

DESCRIPTION of problem or enhancement:

A change of the date in a Date Entry control resulted in a terminating event, which the runtime placed in an event queue before processing. The end result of this was that after two month changes, the control did not generate an NTF-CHANGED event, and the queue became full, causing any further events to be rejected until the calendar closed and the queue was emptied. This behavior has been corrected.

ECN-3902: New ENTRY-REASON encode for identifying when CANC or DELETE key is pressed

Type of Change:	Correction
Incidents:	None
RPI Number:	1065977
Module:	Runtime

Machines Affected: Windows

DESCRIPTION of problem or enhancement:

An additional encoding parameter has been added to the ENTRY-REASON grid special property. The encode (x"18") can be used to identify when the user presses the Delete key.

INSTRUCTIONS for use:

The ENTRY-REASON grid special property is documented in the *ACUCOBOL-GT User Interface Programming* guide, Section 5.11.2

ECN-3907: Compiler MAV when too many periods

Type of Change:	Correction
Module:	Compiler
Incidents:	2266429
RPI Number:	1066290
Machines Affected:	All
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

When a program had IF or PERFORM statements that were terminated by periods, and then later terminated by END-IF or END-PERFORM, the compiler sometimes entered an invalid state, causing a crash. This behavior has been corrected.

ECN-3908: Memory leak caused by not deallocating all COBOL parameters converted to Java objects

Type of Change:	Correction
Module:	Runtime
Incidents:	none
RPI Number:	1066180

Machines Affected:	All
Known Versions Affected:	8.1.0

DESCRIPTION of problem or enhancement:

Not all COBOL data passed as parameters to a C$JAVA call, and which were converted to Java objects, were locally deallocated before returning from the C$JAVA call. This behavior has been corrected. (This ECN reverses ECN-3771, Version 8.1.0.)

ECN-3909: Incorrect return value from the second call to a routine in a DLL

Type of Change:	Correction
Module:	Runtime
Incidents:	99-049287
RPI Number:	1065838
Machines Affected:	All
Known Versions Affected:	7.2.1

DESCRIPTION of problem or enhancement:

Calling a routine in a DLL that returned a signed short sometimes returned an incorrect value on the second call. This behavior has been corrected.

ECN-3910: Internal error #11022

Type of Change:	Correction
Module:	Compiler
Incidents:	2264609
RPI Number:	1066165
Machines Affected:	All
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

When using certain types of reference modification in an EVALUATE
sentence, the compiler reported an internal error #11022. This behavior has
been corrected.

ECN-3911: No error message when thin client loses network connection

Type of Change:	Correction
Module:	Thin Client
Incidents:	2258852
RPI Number:	1065868
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

In a thin client application, when the network connection was lost on the
client side, the application shut down without displaying any message. This
behavior has been corrected.

ECN-3912: Incorrect result from MULTIPLY

Type of Change:	Correction
Module:	Compiler
Incidents:	None
RPI Number:	None
Machines Affected:	All
Known Versions Affected:	8.0 or later

DESCRIPTION of problem or enhancement:

Internal testing revealed that if the destination field contained more post-decimal digits than any of the source fields, the compiler sometimes generated code for the multiply operation that overflowed an internal register, producing an incorrect result. This occurred only when using the binary math package. The error can be avoided by recompiling with "--dec".

ECN-3913: Access violations from interfaces linked with wfsi32.lib

Type of Change:	Correction
Module:	Runtime
Incidents:	99-049287
RPI Number:	1065838
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

Products that linked with our file system interface library wfsi32.lib and called routines that set indicators with the ACDefineIndicator routine sometimes left indicators pointing to invalid memory areas when the dll unloaded.

In this example, the client dll was calling A4Init(), which registered some indicator variables. When the dll was unloaded, the indicator was left pointing to an invalid memory area. If the dll was called a second time, the runtime attempted to set the indicator variable to its default value, resulting in an access violation.

INSTRUCTIONS for use:

Install the new acme.dll. Relink with the new wfsi32.dll.

ECN-3914: Abbreviated combined relation conditions defaults

Type of Change:	Correction
Module:	Compiler
Incidents:	2267235
RPI Number:	1066353
Machines Affected:	Windows
Known Versions Affected:	8.1.0

DESCRIPTION of problem or enhancement:

Code was changed for abbreviated combined relation conditions, and the default became "--newARC" when it should have been "--oldARC". The default is now "--oldARC", and "--newARC" is available to users who want modified abbreviated relational conditions.

Abbreviated combined relation syntax is described in Section 6.3.8 in the *ACUCOBOL-GT Reference Manual*.

With "--newARC", the syntax rules for abbreviated combined relation conditions become relaxed to allow for parenthesis to appear immediately after the relation.

For example:

```
IF A = (B OR C OR D)
```

would now be accepted by the compiler.

The default behavior requires moving the parenthesis to form a well-defined condition. Typically, this means moving the left parenthesis to in front of the value being compared. For example this:

```
IF A = (B OR C)
```

Should be changed to:

```
IF (A = B OR C)
```

ECN-3915: COPY/REPLACE continued replacing after end of copybook

Type of Change:	Correction
Module:	Compiler
Incidents:	2267986
RPI Number:	1066396
Machines Affected:	All
Known Versions Affected:	7.3.0 and later

DESCRIPTION of problem or enhancement:

COPY/REPLACE continued replacing tokens after the end of the copybook. This behavior has been corrected.

ECN-3918: Bitmap transparent-color property

Type of Change:	Correction
Incidents:	2267264
RPI Number:	1066362
Module:	Runtime
Machines Affected:	Windows
Known Versions Affected:	8.1 and earlier

DESCRIPTION of problem or enhancement:

The TRANSPARENT-COLOR bitmap property was not functioning properly and led to unexpected bitmap transparencies. This behavior has been corrected.

ECN-3920: Non-ASCII data in XML files

Type of Change:	Correction
Incidents:	2277721
RPI Number:	1066437
Module:	runtime

Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When writing non-ASCII data in an XML file with ASCII encoding, the runtime would just write the data, instead of writing the hex values. This behavior has been corrected.

ECN-3922: Printer dialog WINPRINT-SETUP would not show on Vista

Type of Change:	Correction
Incidents:	2267953
RPI Number:	1066532
Module:	Runtime
Machines Affected:	Vista
Known Versions Affected:	8.0.x, 8.1.0

DESCRIPTION of problem or enhancement:

When running the sample program "prndemox.cbl", which is supplied with ACUCOBOL-GT, it would fail on the call to WINPRINT-SETUP returning error -2 (not supported).

The problem is related to the use of WINPRINT-DATA as the parameter to the op-code. The member WPRTDATA-SETUP-EX-FLAGS, which set certain features of the dialog when using the WINPRINT-SETUP-EX op code was not initialized.

On Vista the dialog did not recognize the flags and would not run. This behavior has been corrected.

ECN-3926: Java calling COBOL string conversion for pic x data using wrong length for source argument

Type of Change:	Correction

RPI Number:	1066747
Module:	runtime
Machines Affected:	all
Known Versions Affected:	8.1.0

DESCRIPTION of problem or enhancement:

When converting a Java string to a PIC x data item, the length being calculated for conversion was twice as long as the real length. This behavior has been corrected.

ECN-3927: Consecutive calls to the same DLL fails

Type of Change:	Correction
Incidents:	None
RPI Number:	1066558
Module:	Runtime
New Version:	8.1.1
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

A COBOL program would successful call a DLL the first time, but the second time it called the same DLL the call would fail and the program would crash. This behavior has been corrected.

ECN-3928: Accept recursion limit reached

Type of Change:	Enhancement
Incidents:	2259877
RPI Number:	1066492
Module:	Runtime
Machines Affected:	Windows
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

This functionality gives the developer the ability to see additional tracing when accept recursion limit has been reached.

Acu4GL ECN List

This section includes the ECNs relating to Acu4GL.

ECN-GL425: Invalid syntax on READ or READ NEXT

Type of Change:	Correction
Module:	MSSQL
Incidents:	2192552
RPI Number:	1062570
Machines Affected:	Windows
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When a file had so much data that it spanned multiple tables, a READ or READ NEXT resulted in an "Invalid syntax" error. This behavior has been corrected.

ECN-GL427: READ NEXT after record lock sometimes failed to get new record

Type of Change:	Correction
Module:	Sybase
Incidents:	2189337
RPI Number:	1062687
Machines Affected:	All

Known Versions Affected: 7.2.0 and later

DESCRIPTION of problem or enhancement:

When reading a record that was locked by another user and then retrying the read, the interface returned the wrong record. This behavior has been corrected.

ECN-GL428: Use of smallint in tables and stored procedures

Type of Change:	Enhancement
Module:	MSSQL/Sybase
Incidents:	2196493
RPI Number:	1063024
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

The Sybase and MSSQL Server interfaces have used smallint in various tables and stored procedures. At rare times, these values have overflowed, causing problems for users. The use of such have been removed, and we now use int exclusively in tables and stored procedures.

INSTRUCTIONS for use:

Install the new interface. Note that you will need to update the Acucorp-provided stored procedures and tables by running the installation SQL script provided with your distribution.

ECN-GL429: Error 9D,952 on login to Informix database with authentication

Type of Change:	Correction
Module:	Informix

Incidents:	None
RPI Number:	1065402
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

The INF_PASSWD configuration variable was not being correctly read, resulting in an error 9D,952 "incorrect password" being returned if your application attempted to connect to a database with authentication. This behavior has been corrected.

ECN-GL430: WHEN conditions incorrectly processed for XFDs stored in XML format

Type of Change:	Correction
Module:	All
Incidents:	None
RPI Number:	None
Machines Affected:	All
Known Versions Affected:	6.2.0 and later

DESCRIPTION of problem or enhancement:

When XFD files were written in XML format, WHEN conditions were incorrectly processed. This resulted in the wrong fields being filled in when processing WHEN conditions. This behavior has been corrected.

Note that this affected any product that processed XFD files, such as C$PARSEXFD in the runtime and AcuXDBC.

ECN-GL431: A_MSSQL_ROWCOUNT not functional

Type of Change:	Correction
Module:	MSSQL
Incidents:	None

RPI Number:	1065849
Machines Affected:	Windows
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

Acu4gl for MSSQL did not process the A_MSSQL_ROWCOUNT configuration variable, which sometimes caused performance degradation in applications that relied on this functionality. This behavior has been corrected.

ECN-GL432: Number of digits stored incorrectly for XFD files in XML format

Type of Change:	Correction
Module:	All
Incidents:	None
RPI Number:	None
Machines Affected:	All
Known Versions Affected:	6.2.0 and later

DESCRIPTION of problem or enhancement:

When XFD files were created using XML format (the default in Version 8.1.1), the number of digits stored in the compiled XFD data was incorrect. This behavior has been changed.

ECN-GL433: RTS114 Error when using date field

Type of Change:	Correction
Module:	MSSQL
Incidents:	2262914
RPI Number:	1066063
Machines Affected:	Windows
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

Acu4gl for MSSQL was not setting the buffer address for a datetime item, leading to a "Signal 11" and error 114. This behavior has been corrected.

ECN-GL434: Stored procedures for "_insert", "_read", "_delete", "_update" broken in Version 8.1.0

Type of Change:	Correction
Module:	MSSQL
Incidents:	2264159
RPI Number:	1066169
Machines Affected:	Windows
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

If a user created stored procedures for a table to handle inserts, deletes, or updates, an error 9d,00 was reported on the first WRITE, DELETE, or REWRITE that tried to use one of these stored procedures. This behavior has been corrected.

ECN-GL435: File status 23 error with Version 7.2.2 and error 10 with Version 8.1.0

Type of Change:	Correction
Module:	MSSQL
Incidents:	2258816
RPI Number:	1065805
Machines Affected:	Windows
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

When processing a START statement, the contents of
A4GL-WHERE-CONSTRAINT were saved but not used. Thus, a START
followed by a READ NEXT sometimes returned a file status of 00 for the
START and 10 for the READ NEXT, when it should have returned a file
status of 23 for the START. This behavior has been corrected.

ECN-GL436: Read with lock / delete problem starting with Version 8.x

Type of Change:	Correction
Module:	MSSQL
Incidents:	2259121
RPI Number:	1065742
Machines Affected:	Windows
Known Versions Affected:	8.0.1 and later

DESCRIPTION of problem or enhancement:

When the default locking mechanism (AcuLocks table) was used, if the
primary key was longer than 127 bytes, an attempt to lock a record returned
file status of 94. The error log showed an SQL error 22018, "Invalid character
value for cast specification". This behavior has been corrected.

ECN-GL438: VAR_LENGTH created no real VARCHAR

Type of Change:	Correction
Module:	MSSQL
Incidents:	2220691
RPI Number:	1065789
Machines Affected:	Windows
Known Versions Affected:	8.0.1 and later

DESCRIPTION of problem or enhancement:

In a database table created by previous versions of Acu4GL, trailing spaces were trimmed from values written to a variable-length data item (an item to which the VAR_LENGTH directive was applied). The affected versions of Acu4GL no longer created database tables in the same way. The result was that the value written to the database was always the maximum length of the item. This behavior has been corrected.

ECN-GL439: A_MSSQL_USE_DROPDOWN_QUERIES returned incorrect values in combination with A_MSSQL_FAST_ACCESS

Type of Change:	Correction
Module:	MSSQL
Incidents:	2265081
RPI Number:	1066207
Machines Affected:	Windows
Known Versions Affected:	8.1.0 and later

DESCRIPTION of problem or enhancement:

When both the A_MSSQL_FAST_ACCESS and A_MSSQL_USE_DROPDOWN_QUERIES configuration variables were used, the wrong records were read. When either of these configuration variables was turned off, the problem did not occur. This behavior has been corrected.

AcuSQL ECN List

This section includes the ECNs relating to AcuSQL.

ECN-SQL117: AcuSQL for MSSQL MAV

Type of Change:	Correction

Module:	Asqlsrvr.dll
Incidents:	2191832
RPI Number:	1062548
Machines Affected:	Windows
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When declaring a cursor multiple times (with an OPEN and CLOSE between declares), the AcuSQL for MSSQL runtime MAVed on the first FETCH after the second OPEN. This behavior has been corrected.

ECN-SQL118: Empty literal warning caused compiler error

Type of Change:	Correction
Module:	Ccbl
Incidents:	2191784
RPI Number:	1062588
Machines Affected:	All
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

An empty string inside of an embedded SQL statement caused the compiler to generate a warning about the empty literal, and then to fail to send the empty string correctly to the preprocessor, causing a syntax error.

ECN-SQL119: EXEC SQL INCLUDE unable to span lines inside a DECLARE SECTION

Type of Change:	Correction
Incidents:	2259761
RPI Number:	1065800
Module:	Precompiler
Machines Affected:	All Platforms
Known Versions Affected:	N/A

DESCRIPTION of problem or enhancement:

If an EXEC SQL INCLUDE command was split between lines (after the EXEC SQL)

inside of an EXEC SQL BEGIN DECLARE SECTION, a parse error was reported. You can now put the rest of the INCLUDE command (after EXEC SQL)on subsequent lines.

ECN-SQL120: Duplicate cursor name

Type of Change: Correction

Priority:	Medium
Incidents:	2221154
RPI Number:	1065676
Module:	esqllib
Machines Affected:	All Platforms
Known Versions Affected:	N/A

DESCRIPTION of problem or enhancement:

A duplicate cursor error was occurring due to AcuSQL runtime not performing a DROP cursor as well as a CLOSE cursor. This behavior has been corrected.

AcuXDBC ECN List

This section includes the ECNs relating to AcuXDBC.

ECN-XD020: Configuration variable not accepting the digit '0'

Type of Change: Correction

Module:	Xvision.dll
Incidents:	None
RPI Number:	1062564
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

Some of the configuration options didn't accept both the word "zero" and the digit '0' as a value. This behavior has been corrected: both "zero" and "0" are accepted.

ECN-XD025: Support for partial date format masks

Type of Change:	Correction
Incidents:	None
RPI Number:	1065424
Module:	All
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

AcuXDBC supports incomplete date types, which is documented in section 3.3.4 of the user's guide:

it is sometimes desirable to have incomplete date types, for example to have YYYYMM to simply store the year and month. AcuXDBC defaults the month and day to 1, so that incomplete types will be valid. Note that AcuXDBC can handle incomplete date types, but if you have a complete type and invalid date data, AcuXDBC cannot handle the date.

If only a partial date mask is specified, the unspecified portion would notdefault to the correct value. For exmple, with a date mask of YYYYMM, the field might assume the value 2008-OCT-00 instead of the correct value of 2008-OCT-01.

AcuXDBC now implements this functionality correctly.

ECN-XD026: "Error converting string to numeric" returned when field used a comma as the decimal point

Type of Change:	Correction
Module:	All
Incidents:	None
RPI Number:	1065405
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

Newer XFD files encode the decimal and comma characters into the XFD file. If the application used "decimal point is comma", AcuXDBC returned the error:

```
error converting string "33,123" to numeric
```

where the value in quotation marks was the number AcuXDBC was attempting to convert. This behavior has been corrected.

ECN-XD027: Linked table in MS Access showed #Deleted instead of data

Type of Change:	Correction
Module:	All
Incidents:	None
RPI Number:	1065903
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When creating a link in Access to a view based upon a primary key, if you selected the same field as the Unique Record Identifier, the rows were returned with #Deleted in every column instead of the value.

For example, if you had the view:

```
CREATE VIEW public.test_pets AS SELECT * FROM pets WHERE
  patient_id > 1;
```

and then created a link in Access to the view public.test_pets with the field patient_id as the primary key, the error was demonstrated.

ECN-XD028: Dropping VIEW resulting in a "Duplicate key" error

Type of Change:	Correction
Module:	All
Incidents:	None
RPI Number:	1063384
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

When a table was added that contained the directive

```
((XFD WHEN field = value TABLENAME=viewname ))
```

VIEWS were created in the system catalog for each of the items that were listed in the TABLENAME clause. When these VIEWS were dropped, if they contained non-contiguous columns, this sometimes resulted in entries being left in the GENESIS_COLUMNS table, which caused a "Duplicate key" error if an attempt was made to add the file again. This behavior has been corrected.

ECN-XD032: Enhanced AcuXDBC script and batch files

Type of Change:	Enhancement
Incidents:	None
RPI Number:	None
Module:	AcuXDBC
New Version:	8.1.1
Machines Affected:	All

Known Versions Affected: All

DESCRIPTION of problem or enhancement:

The Windows batch (*.bat) and UNIX script (*.sh) files for AcuXDBC have been upgraded to improve functionality, flexibility and ease of maintainence.

These enhancements include:

Centralized default settings file called axset.bat. The user can make changes for all scripts in a single file as opposed to having to modify each of the script files to change the default.

Default configuration file generation script for UNIX called genxconf.sh. This is a UNIX implementation of the windows batch file genxconf.bat. It will generate a default configuration file for your use based upon the setting of the environment variable $GENESIS_HOME and a template

 file located in ${GENESIS_HOME}/sample/acuxdbc/acuxdbc.in. The user is able to customize the contents of this file to meet their given needs.

Remote processing has been added to the command line query tool asql.(bat/sh). Asql can now be used to execute queries against both local and remote databases. The new syntax for the tool is:

```
asql.sh [-c config][-u user][-p password][-r script]
  [-s server] [-n port]
```

ECN-XD033: "End of buffer reached" error when selecting from tablename view

Type of Change:	Correction
Incidents:	None
RPI Number:	1066597
Module:	AcuXDBC
Machines Affected:	All
Known Versions Affected:	All

DESCRIPTION of problem or enhancement:

If the WHEN directive with the tablename clause is used, an error "End of buffer reached" may result.

This error will occur if all of the fields subordinate to the tablename clauseare excluded due to the rules of field exclusion such as with key columns.

INSTRUCTIONS for use:

Intall the new files xdbcutil(.exe. You must recreate and populate your system catalog.

AcuXUI ECN List

This section includes the ECNs relating to AcuXDBC.

ECN-XUI026: Enhancements for three messages and message ID size

Type of Change:	Enhancement
Module:	AcuXUI.jar
Incidents:	None
RPI Number:	None
Machines Affected:	All
Known Versions Affected:	8.1.0

DESCRIPTION of problem or enhancement:

The following enhancements have been made to AcuXUI for thin client:

* The message ID size is increased from 8 to 16 bit
* The library routines C$MAKEDIR and C$DELETE have been implemented

You can use the C$MAKEDIR routine to create new directories and the C$DELETE routine to delete files.

For detailed information on C$MAKEDIR and C$DELETE, please see Book 4, Appendices, of the ACUCOBOL-GT manual set, Appendix I, ACUCOBOL Library Routines.

ECN-XUI029: Fixes to List box control and debugger

Type of Change:	Correction
Module:	AcuXUI.jar
Incidents:	None
RPI Number:	1065550, 1065592
Machines Affected:	All
Known Versions Affected:	8.0 and later

DESCRIPTION of problem or enhancement:

When the user started a program in debug mode using AcuXUI, double-clicked on a variable, and then selected the menu items "selection" and "accept," the area in which the data should be entered was behind the border between the source code and the command-line window. This ECN fixes the location and size of the scroll bar thumb position and fixes the debugger cursor location for "accept" and "accept hex" from the menu when "variable" is selected.

ECN-XUI030: Fixes for cancel and default button properties in push button control

Type of Change:	Correction
Module:	AcuXUI.jar
Incidents:	None
RPI Number:	1065634, 1065635
Machines Affected:	All
Known Versions Affected:	8.0 and later

DESCRIPTION of problem or enhancement:

The cancel and default properties for push button controls did not work correctly. This behavior has been corrected.

ECN-XUI031: Character screen ACCEPT using AUTO keyword fixed

Type of Change:	Correction
Module:	AcuXUI.jar
Incidents:	None
RPI Number:	1065585
Machines Affected:	All
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When running the AcuBench sample "dgetday.cbl", the ACCEPT terminated incorrectly and the cursor did not move to the following field correctly. These behaviors have been corrected.

ECN-XUI033: Transferring bitmaps in Applet mode did not work

Type of Change:	Correction
Module:	AcuXUI.jar
Incidents:	None
RPI Number:	1066080
Machines Affected:	All
Known Versions Affected:	8.0.0 and later

DESCRIPTION of problem or enhancement:

When AcuXUI runs, graphical image files are transferred from the application host to the display host. The graphical files are stored on the display host in a local directory. The directory that was being created when

using AcuXUI in applet mode, however, did not exist, and was using a null Java string when attempting to copy the file locally. This behavior has been corrected.