

Version 7.2 | Why Upgrade?

Over 80 enhancements focusing on production performance and customizable development controls highlights Version 7.2. Here is a preview of what these enhancements deliver.

	The Enhancement	The Value
ACUCOBOL-GT® Development System – Compiler		
Automatic Java/.NET interface generation	New compiler options automatically create Java or .NET interfaces for calling COBOL applications.	Interoperability/Productivity. Developers unfamiliar with Java/.NET can create interfaces for calling COBOL.
Recording compiler options	The compiler options selected for a particular program can be recorded in the listing or object file.	Productivity. Helpful in determining what compiler options were used by a former programmer or for a program compiled long ago.
Additional error reporting options	Control over the number of errors allowed before compiling is stopped. Control for skipping entire sections of code when an error is encountered (cascading errors).	Productivity. More customizable options for matching your preferred development and maintenance style.
Remote compiling enhancement	The compiler detects if the object file is remote and creates a local temporary object file first. It then copies that file to the remote computer.	Faster processing. Compiling to a remote server is much faster with this new method.
ACUCOBOL-GT Development System – Utilities/Tools		
New sort utility, AcuSort	Performs sorts and merges on any binary, line sequential, or Vision file from the command line or a control file, as opposed to using COBOL SORT and MERGE verbs from within the program.	Faster processing. Reduces sort times. Leads to significant time savings. Expands an application's sort capacity, so that much larger data files can be sorted within a required time period.
Cblutil enhancement – adding comments	Lets you attach a comment to an object library and later retrieve it by the "cblutil -info" command.	Productivity. Developers can provide more descriptive information about an object library's content.

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ACUCOBOL-GT Development System – Runtime		
.NET native API	A new native .NET application programming interface (API) that also allows a .NET program to call a COBOL program.	Interoperability. Web services exposure. COBOL applications can be called by .NET and incorporated into a Web services project.
Debugger enhancements: Reference modification of arrays Source line break points	Enables you to look at substrings of data within the debugger. You can preset a breakpoint at a source line, even source contained in a copybook.	Productivity. Easier debugging. Developers can stop programs at certain points and evaluate the results more easily.
Overall, 25 performance enhancements added to the Runtime, compiler, and native code generator.	Numerous enhancements made that improve execution speed in the following areas: 1. CALL statements 2. SORT/MERGE 3. Reference modification 4. Numeric comparisons 5. Native code	Faster processing. Most noticeable in large batch jobs. The enhancements increase the speed in which certain program areas execute; thereby, decreasing processing time.
New time indicator (“--time”)	Displays the time it took to run the program.	Productivity. Quickly determine if the time to run the program is within acceptable parameters.
Improved Profiler report generation (“-p0”)	The runtime profiler no longer writes records to the profiler report (acumon.xml) for program paragraphs that have zero execution count and zero execution time.	Faster processing. Reduces the file size and processing time.

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<p>Library Routines (new and enhanced)</p> <p>C\$SYSLOG (new)</p> <p>Screen attribute routines (new)</p> <p>C\$COPY (enhanced)</p> <p>WIN\$PRINTER (enhanced)</p>	<p>You can programmatically have an application “report” to the operating system log (UNIX) or the event log (Windows) any errors occurring during program execution. Any broken files detected by the runtime can also be reported.</p> <p>The runtime has 16 new library routines for reading and writing characters and attributes on the screen.</p> <p>The “@[DISPLAY]” function has new capabilities to access files on the display host (thin client). If a filename on the client starts with a special directory specifier, the thin client attempts to locate the file in special Windows directories.</p> <p>You can specify the start position of the page as an absolute value from the left edge.</p> <p>The runtime can use the page margins specified in the Windows Print Setup dialog box.</p> <p>Users can get the current value of the page margin for the runtime.</p>	<p>Productivity. Faster pinpointing of errors. No reliance on end users to report errors.</p> <p>Conversions. Easier conversion of character-based screens from other COBOL environments.</p> <p>Faster processing. Easier and more efficient file transfers, especially when different versions of Windows are used by end users or when directories are located on mapped drives.</p> <p>Windows look and feel. More printing options (margin settings) available to your programs from the Windows Print Dialog box.</p>
<p>Additional character set support</p>	<p>The “-Q” option that allows you to simulate traditional style printing using the Windows print spooler has a new CHARSET configuration entry, enabling you to specify any of the character sets defined in “fonts.def”.</p>	<p>Windows look and feel. More language print options. Documents can be printed in any of the languages supported by Windows “fonts.def” including Arabic, Chinese, Greek, Hebrew, and Russian.</p>

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<p>Configuration Variables (new and enhanced)</p> <p>A_EXTFH_VARIABLE_IDX A_EXTFH_VARIABLE_REL A_EXTFH_VARIABLE_SEQ (enhanced)</p>	<p>When using the EXTFH interface, these variables indicate whether the file system you are accessing can handle variable length files. These new configuration variables correspond to indexed, relative, and sequential files.</p>	<p>Data access. Enhanced access to data. You can work with file systems like SFS that would otherwise not process variable length files.</p>
<p>AXML_IGNORE_EMPTY_DATA (enhanced)</p>	<p>Allows you to omit empty and zero-filled data from the XML output file.</p>	<p>Data access. More concise and easier to read output files – especially if you have many empty records.</p>
<p>FILE_ALIAS_PREFIX (enhanced)</p>	<p>Enables you to specify a list of strings to prepend to a file name before searching for that name in the configuration file or environment.</p>	<p>Productivity. Easier and faster location of file alias names.</p>
<p>IO_FLUSH_COUNT (new)</p>	<p>Enables you to specify how often the runtime should flush pending screen output during file operations. When set to a positive value, the variable indicates the number of file operations to perform between each screen flush.</p>	<p>Faster processing. When set to zero, COBOL file verbs do not automatically flush, which leads to optimal performance.</p>
<p>SORT_FILES SORT_MEMORY (enhanced)</p>	<p>Default SORT-FILES values have been increased from “4” to “8” and the maximum allowable value is increased to “64”. The SORT_MEMORY is increased to 256KB and the maximum allowable value is increased to 1GB.</p>	<p>Faster processing. Improved SORT performance.</p>

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AcuBench®		
Context-sensitive help	Press F1 and help from the online manual automatically displays.	Productivity. Much faster than looking up material manually.
Auto-load feature	Drag-and-drop creation for list boxes, combo boxes, paged grids, paged list boxes, as well as automatic code generation for loading data into these controls.	Productivity. These controls can be created in minutes instead of hours.
Command line interface	Developers can automatically generate and build multiple programs from a batch file.	Productivity. Faster builds for projects with multiple and large programs. Developers can also move on to other tasks while their programs automatically generate and build.
AcuServer®		
Native security option available to UNIX users	AcuServer can use the native security facility on UNIX as well as Windows now.	Security. Users can use their usual passwords when connecting to the server.
UNIX machine restrictions	You now have the ability to include UNIX machine restrictions. Some UNIX machines have the ability to restrict access to the machine based on various parameters.	Security. Better protection of data from unauthorized access.
System log access	You can programmatically have AcuServer “report” to the operating system log (UNIX) or the event log (Windows) any error or informational messaging.	Productivity. Faster pinpointing of errors. No reliance on end users to report errors.
Start-up status codes	AcuServer now returns its status to the operating system on a start-up attempt. AcuServer returns a status code of “0” after a successful start.	Productivity. In cases involving a failed start, AcuServer identifies the reason for the failure making it easier to address the problem.
Windows graphical control panel enhancements	The control panel now includes statistics for servers controlled by the server that was queried in a child runtime process. The control panel also has a new automatic refresh feature on the Info tab.	Productivity. Makes the control panel more useful and informative. Easier and more custom control for monitoring the status of child runtime processes.

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AcuConnect® – Server		
Debugging in a distributed processing environment	You can now debug remote programs in a number of ways: with a TTY, an xterm, or the thin client.	Productivity. Flexibility in accessing the runtime debugger when troubleshooting remote programs.
Native security option available to UNIX users	AcuConnect can use the native security facility on UNIX as well as Windows now.	Security. Users can use their usual passwords when connecting to the server.
System log access	You can programmatically have an application “report” to the operating system log (UNIX) or the event log (Windows) any errors occurring during program use. It also reports to the log when any broken files are detected by the runtime.	Productivity. Faster pinpointing of errors. No reliance on end users to report errors.
Automatic refresh – Info tab	Gives you control over having information on a query update at certain time intervals, which you determine.	Productivity. Easier and more custom control for monitoring the status of child runtime processes.
Start-up status codes on UNIX	AcuConnect returns its status to the operating system on a start-up attempt.	Productivity. In cases involving a failed start, AcuConnect identifies the reason for the failure making it easier to address the problem.
AcuConnect – Thin Client		
Auto update	Thin client automatically downloads, installs, and re-launches applications on user machines when needed. There are little or no requirements of the end user.	Productivity. Decreased maintenance time and cost. Developers avoid updating each end user machine manually. Avoid downtime. End users will not experience a work stoppage when server updates are required.
Enhanced “@[DISPLAY]”	The “@[DISPLAY]” function has new capabilities to access files on the thin client. If a filename on the client starts with a special directory specifier, the thin client attempts to locate the file in special Windows directories.	Faster processing. Easier and more efficient file transfers. In particular, when different versions of Windows are used by end users or when directories are located on mapped drives.
Trace file name improvement	The thin client trace file name now includes a line that identifies the corresponding server trace file.	Productivity. Finding trace files is easier – especially when multiple clients trace to the same application on a server.

	The Enhancement	The Value
AcuSQL®		
MySQL support	AcuSQL now supports the open source database, MySQL, on UNIX, Linux, and Windows.	Data access. Additional choice in RDBMS.
Stored procedure support	AcuSQL now calls stored procedures via embedded Microsoft SQL (MS SQL) Server syntax.	Data access. Stored procedures execute on the database server meaning faster processing. Centralized control: The procedure is accessible by multiple programs resulting in uniformity and easier maintenance.
New configuration variable, ASQL_SCROLL_CURSOR	Control over whether or not your application uses scroll cursors	Performance. Scroll cursors can affect performance when connecting to MS SQL.
Acu4GL®		
Unrestricted number of key columns	Enables files with any number of key columns to be parsed from an XFD file. Previously, the number of columns allowed was 16.	Data access. Applications can access data from files with greater than 16 key columns.
Support for mixed-case identifiers	Database drivers not conforming strictly to SQL-92 may require mixed-case identifiers. Acu4GL now supports mixed-case identifiers.	Data access. Table names not complying with SQL-92 standards can now be accessed by end users.
AcuODBC® and AcuODBC Server		
Unrestricted number of key columns (AcuODBC)	Enables files with any number of key columns to be parsed from an XFD file. Previously, the number of columns allowed was 16.	Data access. Applications can access data from files with greater than 16 key columns.
Native security option available to UNIX users	AcuODBC Server can use the native security facility on UNIX as well as Windows now.	Security. Users can use their usual passwords when connecting to the server.
System log access	AcuODBC Server can “report” to the operating system log (UNIX) or the event log (Windows) any error or informational messaging.	Productivity. Faster pinpointing of errors. No reliance on end users to report errors.

For more information on these enhancements, contact your Acucorp Sales Professional today.

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