

Integration
Mobilization
Data Unification
Migration

It's Possible™



ReFOCUS Your COBOL: It Could Mean Millions in Savings!



NetCOBOL

e-Book

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More than 42% of technology professionals indicated that their organizational operations rely on mainframe applications written in COBOL.

According to a recent IDC survey of 7,500 U.S. technology professionals regarding IT challenges faced by enterprise organizations, more than 42% indicated that their organizational operations rely on mainframe applications written in Common Business Oriented Language, (COBOL) That's an impressive figure, given that COBOL code dates back to 1959. Think about it – IBM had not yet introduced the first personal computer, the internet and mobile technology didn't exist, and many of the programmers in the workforce today were not yet born!

What's the Secret to COBOL's Longevity?

COBOL's use is pervasive throughout businesses around the globe. An underlying mission of the COBOL language development over the years has been to keep its syntax and features relevant to modern application development. Today's COBOL is the result of dedicated work by the various COBOL committees contributing to its evolution, among them ISO, INCITS, ANSI, CODASYL, ECMA and the national COBOL Committees represented around the world. In fact it has successfully evolved and remained relevant even amongst the tremendous technology advancements of the last 55 years, prompting tens of thousands of mainframe-dependent enterprises to continue leveraging the COBOL language.



AGILITY

Taking Advantage of COBOL Off the Mainframe

Make no mistake – today’s programmers understand that innovation cannot stand still. So while they may be using a language that dates back to the Eisenhower era, they expect modern tools to enhance and extend their COBOL applications. In fact many enterprise organizations want to take advantage of their COBOL applications on more modern and cost-effective distributed platforms.

Consider this: in the same survey of technology professionals, respondents ranked the following as a 3 or higher on a scale of 1-5, with 5 considered “very important”: * **increase COBOL performance without converting data;** * **remove obstacles to mobile/Web;** and * **improve interoperability by enabling COBOL to run as a .NET language.** Translated, today’s business wants to retain the business logic and years of dependencies built into their COBOL programs while taking advantage of it on a Windows platform.

COBOL is perfectly suited to rise to the challenge of these modern demands. However when assessing this transition, it is critical to evaluate three important aspects, cost, agility and quality, when considering the various alternative COBOL compilers available. The objective being to ensure continued use of the COBOL applications remains advantageous.

COBOL is perfectly suited to rise to the challenge of these modern demands.

Considerations when Choosing Alternative COBOL Compilers – Cost, Agility, Quality

Cost: Runtime Fees Can Run Up Quickly if Not Careful

Cost can become a significant barrier to getting the most from COBOL assets. When considering a COBOL solution, it's critical to factor not only the cost of the compiler, but also annual runtime fees. Although often overlooked, it is the runtime fees that have the most significant impact on the bottom line.

Some COBOL compiler providers lock customers into their ecosystem, which thrives on charging high prices for maintenance and runtime fees which can be as high as \$15,000 per core. However, there is a very cost-effective solution available in Fujitsu NetCOBOL.

Organizations should thoroughly research COBOL compiler options for Total Cost of Ownership (TCO) and usability before making a decision. Fujitsu NetCOBOL compiler, does not charge any runtime fees and use is unlimited. The difference can add up to millions of dollars annually depending on the number of licenses required. In addition, NetCOBOL is easy to install and run, without the need for complex options, debugging or expensive technical support, which furthers cost savings.



Leverage Existing Business Knowledge

Freedom to Move, Or Not Move

With COBOL's long and rich history in the business world. It's not uncommon for an organization's lifeblood to be tied to the business logic rules embedded in COBOL programs. The ability to leverage this vital business knowledge for decision-making is of the utmost value. Fujitsu NetCOBOL is perfect for this as it provides the ability to retain existing business logic while expanding functionality with more modern technology. NetCOBOL lets mainframe programs evolve, rather than requiring replacement or a rewrite.



Being in the modern .NET world affords companies the flexibility to essentially cherry-pick the COBOL components or functionalities they want to migrate within the programming ecosystem.

In addition to agility, the NetCOBOL compiler allows organizations to confidently use the applications that have over the years, offered unparalleled reliability, stability, and predictability, yet on a .NET platform.

Thoroughly research COBOL compiler options for Total Cost of Ownership (TCO) and usability before making a decision.

Fujitsu NetCOBOL compiler, does not charge any run-time fees and use is unlimited. The difference can add up to millions of dollars annually.



NetCOBOL – The “Net-Net”

It's clear that the application development speed and flexibility associated with today's COBOL tools for off mainframe use have real-world business benefits. However, it's important to remain cognizant that some vendors use proprietary extensions, versus solutions like Fujitsu NetCOBOL which are ANSI-compliant. While moving code from an anti-standard COBOL compiler to an ANSI-compliant compiler is a reasonably straight forward process, the same can't necessarily be said between two proprietary platforms.

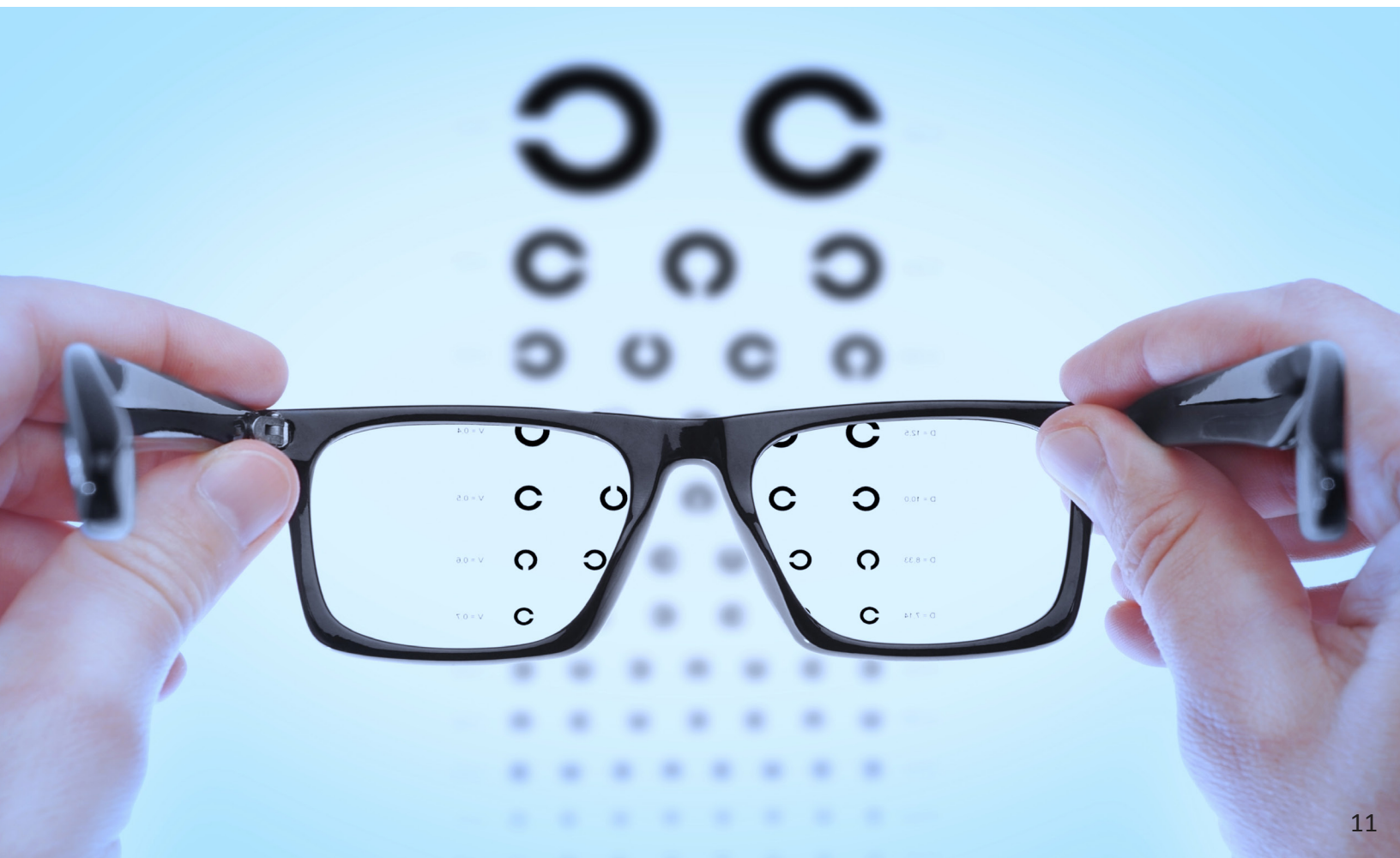


The Fujitsu Benefit

Fujitsu NetCOBOL has always been strictly ANSI compliant. In the Microsoft arena, Fujitsu is part of Visual Studio Integration Partners (VSIP), and thus follows best practices for Visual Studio and other Microsoft IDEs. Users on Linux/Unix systems and NetCOBOL users can develop using Eclipse, the popular open-source IDE.

NetCOBOL – Re-Focuses Skills

Also advantageous, with NetCOBOL you can leverage .NET skills. This becomes paramount as you consider that most COBOL programmers today are baby boomers and, according to government statistics, approximately 10,000 baby boomers a day are exiting the U.S. workforce. As more COBOL-specific developers leave the IT landscape, it's reassuring to know that any program compiled using NetCOBOL becomes a .NET component. This component can then be leveraged by any .NET programmer using languages like C#, VB.NET and more. This eliminates the need to hire replacement developers familiar with only one proprietary tool.





Savings of over
\$1 million per year



Elimination of the need for
specialty Unisys skills



Improved responsiveness to
legislative changes



Less dependence
on contractors



No runtime fees



1.5 million Lines of Code = \$1 Million in Annual Savings

The Washington State Department of Licensing (WADOL) moved 1.5 million lines of COBOL from a Unisys mainframe to a .NET target, and **saved \$1 million annually**. Working with GT Software and Fujitsu, the state agency successfully moved the code using the NetCOBOL compiler, which output native .NET MSIL code and without runtime fees. In all, 35 Unisys applications were moved to Windows/SQL Server.



Annual cost savings
of **\$720,000**



Eliminated average monthly
chargeback of **\$60,000**



Reduced average query
times **by Half**



Reduced weekly system
management from
400 hours to 80 hours



Completed in **2 months**
with **7 developers**



\$700k in Savings = Order in the Court

The Stanislaus County Superior Court system needed to update its legacy case management system, which consisted of an IBM Customer Information Control System running CICS software and 785 separate COBOL programs. After an unsuccessful initial experience with a JAVA-based solution, the court decided to use a Microsoft® .NET Framework running Microsoft Windows® Advanced Server, and Fujitsu NetCOBOL compiler, to upgrade its system.

As a result, the court will save \$720,000 in annual operating costs by eliminating an average monthly chargeback of \$60,000. The transition also reduced the average query times by half (from 120 seconds to 60 seconds), reduced weekly system management from 400 hours to 80 hours, providing an overall lower total cost of ownership.

Quality: A Solid Foundation Upon Which to Build

The benefit of working with a tried and true language like COBOL is that years of history, innovation and continued dependability are inherent in the technology. It takes experience to create a quality product, and continuous learning to grow, adapt and thrive in a modern business environment. For example, by constantly adhering to evolving industry standards, programmers can rest assured that the NetCOBOL compiler will remain rock solid and rigorously optimized.

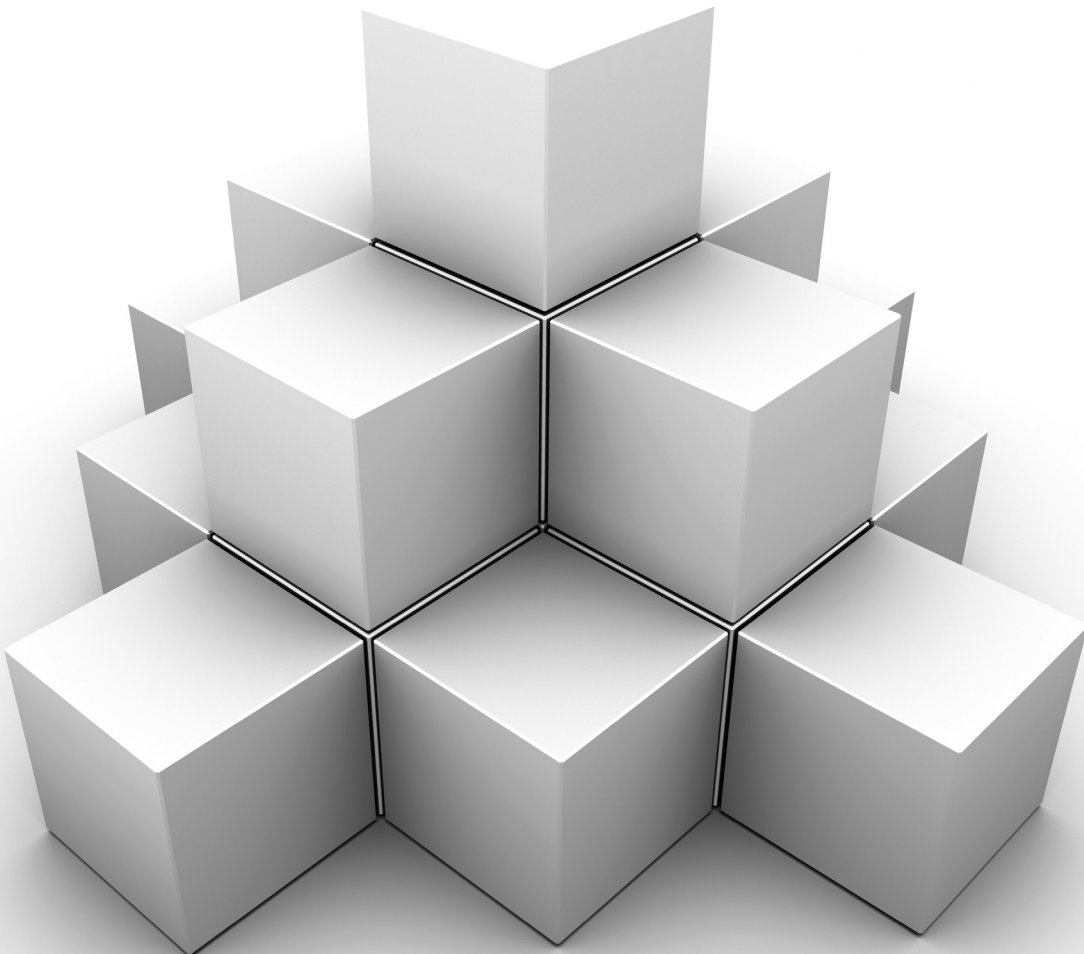
And, to underscore quality, work will push forward on enhancing the code base to take advantage of new features and capabilities, as showcased by today's NetCOBOL, which supports cloud deployment, including Microsoft's Azure cloud platform—without virtual machines or emulation. NetCOBOL also enables the use of an interactive debugger, which lets developers record, store and replay debug commands. It provides a range of features, including several types of breakpoints, varieties of execution control, data-item, monitoring/updates, and code coverage statistics.

NetCOBOL for .NET supports cloud deployment, including Microsoft's Azure cloud platform—without virtual machines or emulation.

Yesterday's Platform is Today's Asset

The pace of modern business demands tools that help, versus hinder, innovation. In the programming realm, COBOL is one of these tools. With a history of dependability and an eye toward technology advancement, the latest NetCOBOL solutions prime organizations to reap the greatest rewards from a rich mine of historic business intelligence, ensuring the most informed business decisions can be made based on the worthiest asset – data.

For more information on how GT Software's Fujitsu NetCOBOL offerings can meet your business needs, visit gtsoftware.com.



**Are you migrating from one version of COBOL to another?
Or are you interested in learning more about your options?**

Wherever you find yourself in the COBOL journey, NetCOBOL puts you in control of your application distribution costs because there is never an additional charge for distributing applications created with NetCOBOL.

NetCOBOL runs on:


- .NET
- Windows®
- Linux
- Solaris

A large graphic with the words "data migration" in a stylized, glowing blue font. The background is dark and filled with a pattern of hexadecimal characters (0-9, A-F) in various shades of blue and white, creating a digital or data-centric aesthetic.

**data
migration**

Which NetCOBOL Version is Right for You?

We've compiled this chart to highlight which versions allow you to execute specific tactics. This should help you gain a better understanding of which NetCOBOL best meets your organization's need:

	Create managed verifiable executables for Microsoft .NET	Create executables for Microsoft Windows	Create traditional (unmanaged) 32 bit executables	Create traditional (unmanaged) 64 bit executables	Compiler for Mainframe Migration - CICS (Requires GT Software's NeoKicks)	Compiler for Mainframe Migration - Batch (JCL requires GT Software's NeoBatch)	Create COBOL programs for Red Hat or more recent versions of SUSE Linux	Create COBOL Programs for Solaris (SPARC)	ODBC	Microsoft SQL Server	Oracle
	NetCOBOL for .NET	✓	✓			✓	✓		✓	✓	✓
	NetCOBOL Windows-32 bit		✓						✓	✓	✓
	NetCOBOL Windows- X64		✓	✓	✓				✓	✓	✓
	NetCOBOL for Linux						✓				✓
	NetCOBOL for Solaris							✓			✓
GT Software is a Certified Distributor of Fujitsu NetCOBOL Outside Japan.											



gtsoftware.com | 1-800-765-4348

For over 30 years, GT Software has helped enterprise organizations unify business information across platforms, data formats and programming languages — including the “hard to access” mainframe. More than 2,500 organizations across the globe trust GT Software to help them improve business intelligence, workforce productivity and customer experience.

The information contained in this document represents the current view of GT Software on the issues discussed as of the date of publication. Because GT Software must respond to changing market conditions, it should not be interpreted to be a commitment on the part of GT Software, and GT Software cannot guarantee the accuracy of any information presented after the date of publication. This white paper is for informational purposes only. GT Software makes no warranties, express or implied in the document.

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