

COBOL in 2020

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Why are we talking about this?

- "New Jersey needs volunteers who know COBOL, a 60-year-old programming language" CNBC, 6 April 2020
- "NJ seeking help from COBOL programmers in coronavirus fight" The Hill, 7 April 2020
- "Why N.J. wants coders fluent in a 60-year-old language in the middle of a pandemic" WHYY, 9 April 2020

Why are YOU talking about this?

- My background is as a distributed, cloud-native Linux Systems Administrator.
- I have participated in distributed environment "modernization" efforts. At the end, there was still a mainframe.
- Today I work as a Developer Advocate focused on Linux on IBM Z, and COBOL workloads on z/OS touch my work frequently.

COBOL is a modern language

- Yes, the first version of COBOL came out in 1959, but the first version of C came out in 1972!
- The current COBOL standard was refreshed in 2014, and a new standard is being developed now.
- COBOL supports handling of XML and JSON (check out <https://developer.ibm.com/tutorials/parse-json-using-ibm-enterprise-cobol/>)

COBOL on the mainframe

- Mainframes are big, s390x (zArchitecture) architecture, servers that have up to 190 processors and 40TB of RAM.
- The latest IBM mainframe came out in September 2019, the latest model of which came out in April 2020.
- Learning COBOL is not just about syntax, you have to understand the data and environment you're working in.



COBOL is not going anywhere

- "There are 240 billion lines of COBOL in operation, and another 5 billion new lines are added each year. \$3 trillion of commercial transactions are processed by COBOL applications each day." (source: <https://ibmsystemsmag.com/IBM-Z/10/2019/closing-cobol-programming-skills-gap>)
- The reliability of COBOL on the mainframe remains unmatched elsewhere in the market.

Modern COBOL Development Environments

- IBM Z Open Editor for VS Code
<https://marketplace.visualstudio.com/items?itemName=IBM.zopeneditor>
- Zowe Explorer for VS Code
<https://marketplace.visualstudio.com/items?itemName=Zowe.vscode-extension-for-zowe>
- IBM Wazi for Red Hat CodeReady Workspaces on OpenShift
<https://www.ibm.com/products/wazi-for-red-hat-codeready-workspaces>

Learning COBOL

- IBM Developer COBOL portal <https://developer.ibm.com/technologies/cobol/>
 - 10 minute Introduction to COBOL programming language video <https://developer.ibm.com/technologies/cobol/videos/intro-to-cobol-write-your-first-program>
 - COBOL Fridays! <https://developer.ibm.com/technologies/cobol/series/cobol-fridays-webinar-videos>
- Open Mainframe Project
 - Resources:
<https://www.openmainframeproject.org/blog/2020/04/17/open-mainframe-project-launches-new-cobol-training-course>
 - COBOL Training Course <https://www.openmainframeproject.org/projects/coboltrainingcourse>
 - COBOL Skills announcement
<https://newsroom.ibm.com/2020-04-09-IBM-and-Open-Mainframe-Project-Mobilize-to-Connect-States-with-COBOL-Skills>
- Coursera: COBOL programming with VS Code
<https://www.coursera.org/learn/cobol-programming-vscode>