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THE YEAR OPEN MAINFRAME PROJECT BROKE THE MOLD

Written by **Len Santalucia**, *Chair of the Open Mainframe Project Governing Board*

As we reflect upon 2019, the Linux Foundation's Open Mainframe Project had a stellar year with many significant accomplishments. We doubled the number of projects that are hosted under the Open Mainframe Project - we now have nine – and became more of an umbrella entity that helps each project with technical momentum much like CNCF and Hyperledger. These are big shoes to fill but I have no doubt that our vendor-neutral community will continue to surpass our goals and make big impacts in the mainframe industry.

Additionally, our ecosystem grew with 10 new members from different parts of the globe, effectively solidifying our global footprint and our mission to create the tools and resources

needed to innovate technology for mainframes. These new members highlight the range of interest in supporting mainframe development across software consultants, vendors, and academia. Speaking of academia, the Open

Mainframe Project is committed to training the next generation of mainframers and is proud to do this through our mentorship program. Now in its fourth year, the annual OMP mentorship program has helped more than 30 students progress their education in mainframe technology. In fact, with their key learnings, networking with members and real-world experience, several former mentees have been hired by member companies or friends of member companies.

The outlook for 2020 is even more exciting. We will be focusing on project maturity so more exceptional open source solutions can be contributed to the mainframe

community. Along that same vein, we intend to encourage more organizations to become active contributors to our projects. We have a strategic plan to focus where the mainframe is not typically found to connect with people, places, and events unfamiliar with mainframe technology. And for the first time in our history, we will be conducting our inaugural Linux Foundation Open Mainframe Project Summit at the new Marist College Executive Center in Manhattan NYC September 2020, which you will not want to miss.

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TECHNICAL MILESTONES AND PROJECT MOMENTUM

Written by
John Mertic,
The Linux Foundation Director of Program Management and Open Mainframe Project

2019 was very busy in terms of project activity for the Open Mainframe Project. Zowe, which continued to be one of our most popular projects with an active community, reached a milestone that demonstrated steady forward progress while we added several new projects to our roster. These are extraordinary accomplishments, which speaks to the commitment that companies of all sizes have made to be good partners in the OMP community.
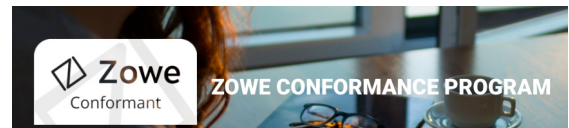
The success we've seen with OMP breaks apart the false narrative that potential contributors don't want to spend their time in projects

that lack proper incentives for participation and leave in place large barriers to entry that some established committers fear. We've got a technical infrastructure that lets contributors share responsibility for the project, which ensures that the people contributors trust with decision making are in-fact granted ownership over that decision making and also that responsibilities are distributed rather than centralized whenever possible.

Thanks to OMP's Technical Advisory Committee for their leadership and guidance for the Zowe Conformance Program and the addition of these new projects (logos listed by date launched):

Feilong
TerseDecompress
Zorow
Polycephaly

ZOWE CONFORMANCE PROGRAM

Open Mainframe Project's Zowe is unprecedented to get every developer and enterprise software provider in the industry to support a conformance program. Zowe turned one year old this year and the project is ready to help the ecosystem incorporate it with new and existing products that will enable integration of mainframe applications and data across the enterprise. To ensure vendors are delivering offerings that align with the Zowe framework, each vendor can follow the Testing Guidelines to ensure their offering is aligned with the conformance standards developed by the Zowe community. Products achieving conformance will have exclusive logos and marks they can use in the promotion of their product, as well as be listed in the Zowe Conformance Directory. Vendors that have offerings that are a part of the initial launch include Broadcom, IBM, Phoenix Software, and Rocket Software but there are many more to come!

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OPEN **MAINFRAME** PROJECT
ZOROW

z/OS Open Repository of Workflows (zorow) is a new open source community dedicated to contributing and collaborating on z/OSMF workflows. Many tenured systems administrators use their own processes to perform common system management tasks. Workflows help to create efficiency and reduce the complexities of these tasks while enabling the transfer of knowledge from tenured systems administrators to early career professionals in a seamless and consistent way. By creating this community, we can centralize workflows from clients and numerous IBM offerings, for common systems management tasks. Systems administrators can collaborate on various workflows to reduce complexities by using familiar templates that integrate seamlessly with their respective enterprise operations. And tenured systems administrators can be energized to transfer their systems management skills to the early tenured systems administrators.

OPEN **MAINFRAME** PROJECT
TerseDecompress

TerseDecompress helps IBM mainframe customers uncompress large files like system dumps with the TERSE program on a mainframe. Normally, if the receiving does not have a mainframe in their datacenter it is not possible to uncompress files. With TerseDecompress the files can be decompressed on any workstation that supports JAVA. There is no need to have access to a mainframe to uncompress files that are tersed on a mainframe. TerseDecompress specifically aims to provide Independent Software Vendors (ISVs) who normally wouldn't have access to a mainframe an opportunity to benefit from the power of one to uncompress their

files. As JAVA programs can virtually run on any platform or operating system with a JVM, this JAVA decompression program can be very useful if you don't have access to a mainframe but need to analyze or process a file.

OPEN **MAINFRAME** PROJECT
Feilong

Feilong is a z/VM Cloud Connector that provides virtual resource management for z/VM. Users can manage the VM lifecycle dynamically and automatically without deep knowledge of z/VM itself through REST API. Users do not need to manually provision, manage, and destroy guests. Feilong also provides an SDK to make it easy to develop system management tools. Fundamentally, Feilong allows IaaS/PaaS solutions such as Openstack or Terraform to consume z/VM by providing REST APIs, making time to market faster.
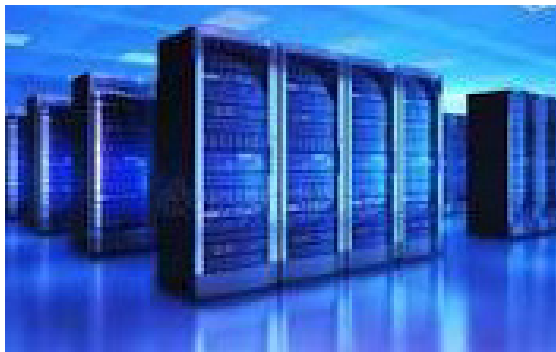
OPEN **MAINFRAME** PROJECT
Polycephaly

Polycephaly is intended to be a key technology in expanding access to mainframes. The name comes from the Greek word meaning "a condition of having more than one head," because the project marries two different development life cycle methodologies, distributed and z/OS. Polycephaly requires minimal z/OS system programming, and provides flexible development paths and options, moving from linear to non-linear development. It removes the need for separate development paths for distributed and z/OS workloads. Developers can develop on any platform, store to Git and Jenkins to deploy. Plus it all the benefits of the 1000+ Jenkins plugins. The project is actively looking for individuals or companies to assist in extending and moving the project forward.

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GROWING ECOSYSTEM OF PARTNERS AND EDUCATORS

There has been tremendous growth in open source this year that has helped OMP experience strong momentum. There's a lot that we've learned and are ready to share that encompasses not only tools to help scale the infrastructure, but culture and core values: transparency, participation, and efficiency. We believe these ideas and practices will end up shaping not just the future our project but mainframes for years to come.

Currently, 36 members – 5 Platinum, 8 Silver, 18 academic institutions and 5 associates – make up the OMP ecosystem. Eight of those members joined our vibrant community just this year. They recognize OMP's role and value in the sector, which creates trust throughout the open source community, credibility among professional organizations and businesses, and credibility among policy makers.

In August, Open Mainframe Project welcomed Phoenix Software, Syncsort, Western University, and Zoss Team LLC. In December, we welcomed three new universities from China including Beijing Institute of Technology, South China University of Technology, and Xidian University.

PLATINUM MEMBERS

ADP · ca technologies A Broadcom Company · IBM · Rocket · SUSE

SILVER MEMBERS

CANONICAL · docker · GTSoftware · PHOENIX Software International · SINE NOMINE ASSOCIATES · syncsort · VICOM Infinity · Zoss Team LLC

ACADEMIC INSTITUTIONS

Albany State University · hochschule coburg university of applied sciences · East Carolina University · EPSI l'école d'ingénierie informatique · htl donaustadt · GOETHE UNIVERSITÄT FRANKFURT AM MAIN · Marist College · A&T · University of Bedfordshire · CEAC · UNIVERSITY OF WOLVERHAMPTON · UNIVERSITÄT LEIPZIG · VCU · Western UNIVERSITY · CANADA · WILLIAM PATERSON UNIVERSITY

ASSOCIATE MEMBERS

AMC Academic Mainframe Consortium · FMA fit for mainframe · GSE GUIDE SHARE EUROPE · GSE GUIDE SHARE EUROPE UK Region · SHARE EDUCATE · NETWORK · INFLUENCE

Additionally, this year, Open Mainframe Project was represented at some of the industry's best tradeshows and events including SHARE Pittsburgh, SHARE Phoenix, IBM Tech U, Open Source Summit North America, Open Source Summit Europe, several zCouncil events, IDUG and THINK2019 on topics ranging from diversity to Zowe. Our community leaders shared OMP messages and insight in more than 40 speaking engagements this year.

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OUR LANDSCAPE

The Open Mainframe Project was created to be the focal point for open source in the mainframe ecosystem. To help illustrate the state of open source in mainframe and the organizations creating the sustainability behind it, we have created the Open Mainframe Landscape.

The Open Mainframe Landscape leverages infrastructure created for the CNCF Landscape and being leveraged by other foundations hosted at the Linux Foundation. This resource is community maintained, meaning anyone can issue a pull request to add or update a listing.

Requirements to have a project included in this landscape are very simple; mainly projects should have a presence on GitHub, be active with at least 300 stars, and be a project focused on the mainframe (whether Linux, z/OS, or any other mainframe operating system based). Projects that become inactive are subject to removal.

The landscape also showcases additional efforts within the open source ecosystem on mainframe, namely:

• Linux Distributions supported on the mainframe
• Broad open source projects being supported through the Open Mainframe Project
• Zowe Conformant offerings
• Open Mainframe Project members

We invite the entire community to participate in the sustainability of this resource, namely by…

• Reviewing the existing entries for accuracy, including to ensure entries are pointing to the correct GitHub repository and organization.
• Submit projects we are missing to be included.
• Share the landscape with others! You can include the landscape in presentations or promotion of your project (both png and pdf versions are available).

Big thanks to CNCF for the original project development of the landscapeapp, along with Open Mainframe Project community members helping with the categorization and curation of the initial entries.

OUR COMMITMENT TO DIVERSITY

Part of Open Mainframe Project's mission is to build an inclusive community through investment in programs, career development, and events that provide opportunities to underrepresented and disadvantaged groups around the world. We want to make sure everyone who wants to participate feels welcome to do so regardless of gender, gender identity, sexual orientation, disability, race, ethnicity, age, religion, or economic status. Education, inclusion, and collaboration are pillars of our project and we strive to continue this trend.

WOMEN IN IT

There has been a lack of representation of women in technology that is especially more notable in the mainframe industry. In fact, OMP partnered with SHARE again this year on their Women in IT initiative at both the Phoenix and the Pittsburgh conference this year. Both events were successful with more than 200 participants and Open Mainframe Project is committed to continue the support for women in technology with more partnership next year.

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NEXT GENERATION OF MAINFRAMERS

The fourth annual OMP mentorship program offers an opportunity for students to select a development project – presented by member companies – that's based on Linux and open source software. Mentees work remotely with a mentor for the duration of the mentorship and learn more about all things open source and mainframes. This year, almost 100 applicants applied, which is a 43% increase from 2018, so this year's class was a little bigger than last year. We added nine mentees for six projects: compliance, DockerHub development stack. Big-Endian support for Boring SSL, Boost Context Module implementation for s390x, Cloud Foundry Operator for Kubernates on Z and Zowe features addition.

CHEERS TO 2020!

Written by
Meredith Stowell,
Open Mainframe Project Governing Board Member and Vice President IBM Z Ecosystems for IBM

2019 set the stage for Open Mainframe Project to be an umbrella resource for mainframe innovation with progression of existing projects, expansion of education programs, new members and contributors from around the world, as well as the kickoff of new projects. As we build upon this foundation in 2020, we look forward to sustaining our momentum and helping our projects grow and hit technical milestones.

We will also continue making strides in diversity and inclusion in the industry and our project. The world is filled with people from a variety of backgrounds who bring different levels of expertise and perspectives. To create and build a project that serves everyone and delivers innovation and excellence, we need to encourage participation from a diverse, global community. We'll do this through sponsorships, developer engagement, our enhanced mentorship program and more.

Whether you are a member or contributor, we couldn't have had the success we did without your collaboration and support. Thank you for a wonderful year and we look forward to more mainframe momentum in the new year.
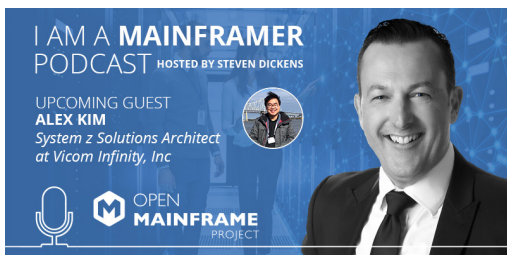
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I AM A MAINFRAMER PODCASTS

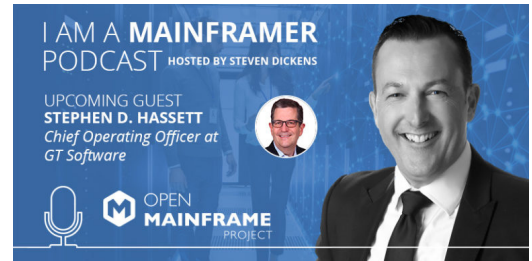**Ludmila Salimena - January**

Andy Youniss - February

Alex Kim - March

Usman Haider - April

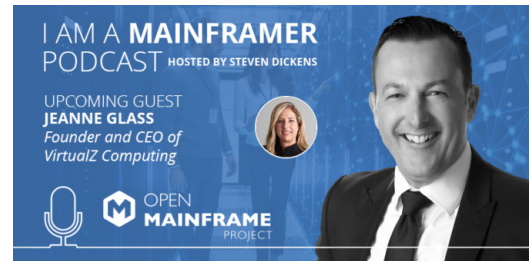**Stephen D. Hassett - July**

Jeanne Glass - September

Rose Sakach - October

Elizabeth Joseph - November