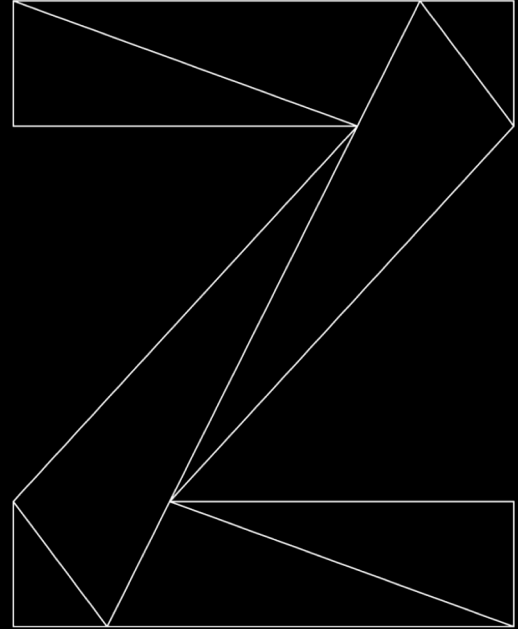


IBM Z

Open Innovation

Attracting the Next
Generation of Developers
and Architects to the
Mainframe





[@Calista Redmond](#)

Calista Redmond
Vice President
IBM Z Ecosystem



[@JLouisVignaud](#)

Jean- Louis Vignaud
Vice President, Product
Management, CA Technologies



[@stowellme](#)

Meredith Stowell
Director, IBM Z ISV
Success and
Community Advocacy

IBM Z priorities

Innovation

Expand IBM Z capabilities

Ignite hardware and software innovation

Grow IBM Z adoption across IT consumption models

Cultivate Z skills and career opportunities

Enhance ecosystem of developers, ISVs, System Integrators, and other partners

Community





Driving the future of IBM Z

New technologies dramatically changing the IT landscape

Innovation

Quantum computing

Solve the world's most complex problems and accelerate workloads

AI

will revolutionize society for greater productivity and actions built on data

Blockchain

will become a disruptive force for supply chains across industries



Driving the future of IBM Z

*Innovation for a secure
cloud infrastructure*

Innovation

Dynamic Multi-Cloud

will be the deployment platform for all workloads and a differentiator to obtain competitive advantage

Security

Cyber attacks and increased regulations make security a source of competitive advantage

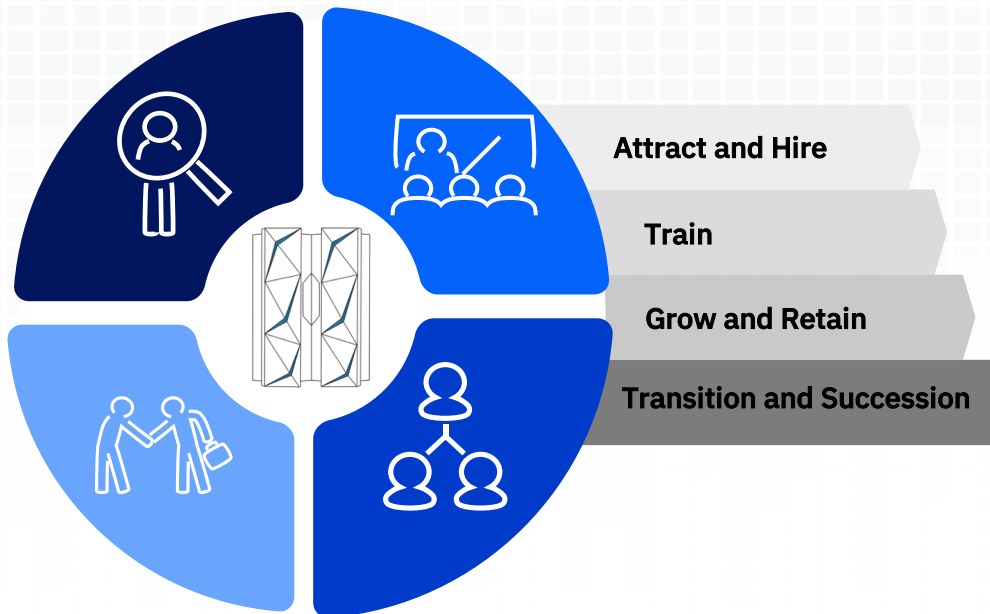
Compute Infrastructure

Ongoing innovation in core technology for highly modular cloud ready infrastructure

Cultivate Talent

Develop talent strategy

- Asses short-term and long-term skills requirements
- Determine types of candidates to hire to address the needs (college hires, apprentices, experienced hires, internal transfers)
- Develop a plan to attract targeted talent
- Build a training program that supports a successful career path
- Cultivate a positive environment to enrich, grow and connect talent
- Create programs to support talent as they transition to retirement



Attract Talent and Hire



- Shift perception - promote strengths, value, impact, and opportunities in enterprise computing careers
- Emphasize training, mentoring and career paths for success
- Offer internships, job shadowing and rotation assignments
- Remove acronyms and jargon from job descriptions
- Develop partnerships with IBM Z Academic Initiative schools
- Participate in career fairs
- Teach at schools, universities, bootcamps, etc.
- Guest lecture at industry events
- Sponsor a hackathon or a meetup
- Leverage Talent Match tool
- Hire in pairs (at a minimum)

Train



- Assign positive, technical mentors
- Develop career paths for growth
- Leverage Master the Mainframe Learning System
- Explore z/OS learning journeys
- Access no-cost IBM Z systems
- Access no-cost training (MOOC, videos, e-learning, tutorials)
- Enroll in mainframe certificate programs
- Earn digital badges

Grow and Retain



- Foster a positive and creative environment
- Provide leadership opportunities
- Build an early career community
- Host a no cost GenZ event
- Join Advocacy Hub
- Cultivate recent hires' eminence and amplify their messaging
- Leverage recent hires as recruiters for new talent
- Assign career mentors
- Send recent hires to conferences

Transition and Succession



- Share expertise (teach, blog, mentor, volunteer)
- Offer transition programs
- Develop structured knowledge transfer programs

Community

Cultivate Talent

Resource links to help your company

Find Talent

- [Academic Initiative Schools](#)
- [Talent Match](#)
- [Master the Mainframe Wall of Fame](#)
- [Open Mainframe Project](#)
- [Jobs Board](#)

Qualify Talent

- [MTM Learning System](#)
- [Digital Mainframe Badges](#)
- [Mainframe Foundation Test](#)

Build Eminence

- [IBM Conferences](#)
- [User Groups - SHARE](#)
- [Z-Related Community](#)
- [Gen Z Workshops](#)
- [Z Council Meetings](#)
- [Facebook Live - Z recent hire insights](#)
- [New Faces of Z](#)
- [Advocacy Hub](#)
- [Mentoring](#)

Train for No Cost

- [MTM Learning System](#)
- [z/OS Introduction Workshop](#)
- [Intro to z/OS Videos](#)
- [z/OS YouTube Videos](#)
- [CICS Redbooks Courses](#)
- [Mainframe Playground](#)
- [MOOC](#)
- [Code Patterns](#)

Train for a Fee

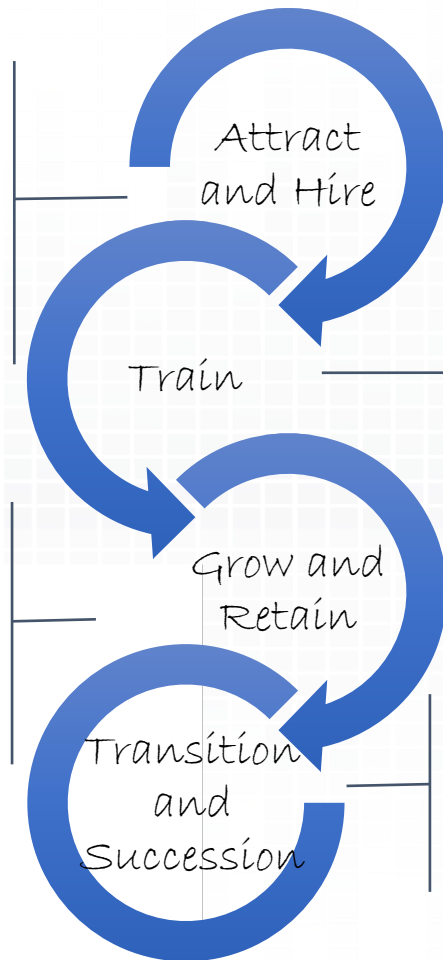
- [IBM Skills Gateway](#)
- [Tech U - z/OS Fast Start](#)
- [Mainframe Apprenticeship Program](#)
- [IDCP Certificate Programs](#)

Access IBM Z Systems

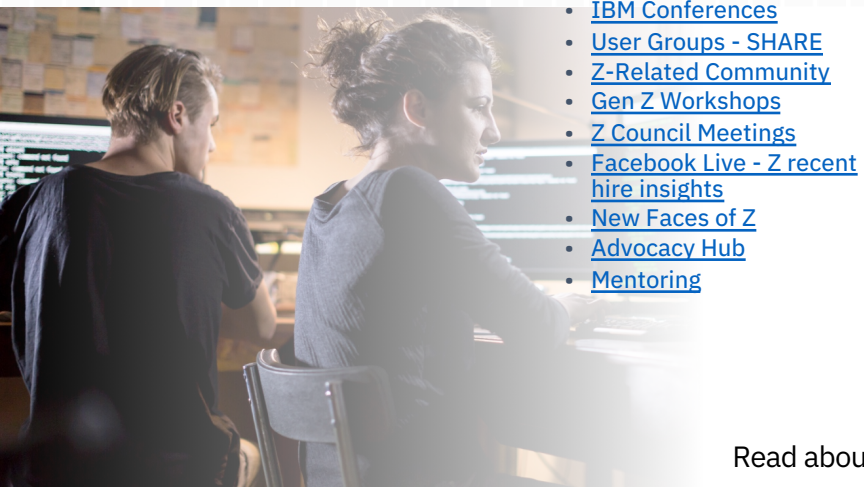
- [LinuxONE Community Cloud](#)
- [IBM Z Trial Program](#)

Transfer Knowledge

- [Transition to teaching](#)
- [Key steps for passing the torch](#)
- [Share expertise](#)



Community



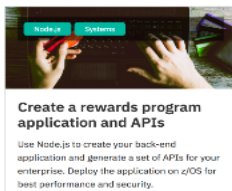
Learn more at ibm.biz/zskills

Read about IBM's skills initiatives in [Ross Mauri's recent Blog](#)

Cultivating community through direct engagement

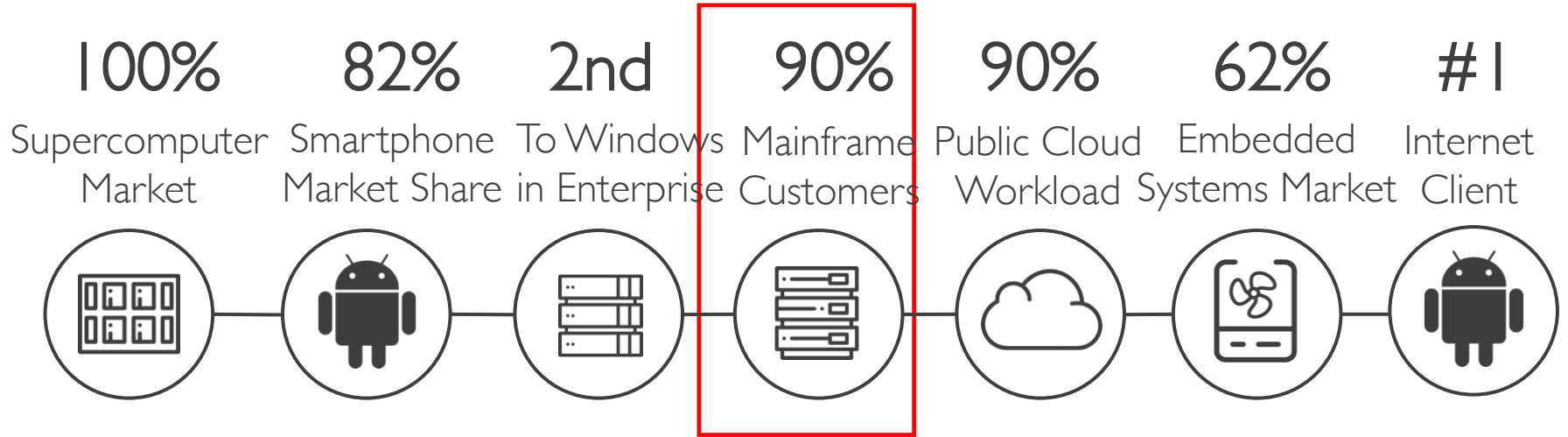
- *Expand New Collar: Onboarded 30+ Mainframe Sys Admin Apprentices* at IBM, Per Scholas Program, LaunchCode COBOL and z/OS Application Developer Program
- *Accessible Introductory Training*: Released on-demand, no-charge, video-based *Introduction to z/OS* course with over 15,000 views <http://www.redbooks.ibm.com/redbooks.nsf/redbookabstracts/crse0304.html?Open>
- *Code Patterns*: Released Node.js and microservice patterns
- *Connect Clients to Talent*: Launched Talent Match to connect Master the Mainframe talent and other digitally badged skills to clients www.ibm.com/services/learning/talentmatch
- *Shift Perception*: PR promoting Master the Mainframe, Videos, Cultivating Talent Blog, Code Like a Girl Blog, Analyst Blogs, Systems Magazine, etc.
- *Courses*: University of Canberra, HPI MOOC
- *Advocates: Activated 45 IBM Champions for IBM Z* who are now providing blogs and social content to support our marketing team efforts
- *Developer/Student Outreach*: Gen Z workshops, Conferences (OSS Europe), 33+ Legends of Z student meetups worldwide

Earned developer advocacy



Community

Mainframe is key part of Open Source success



Every market Linux has entered it eventually dominates



Jean- Louis Vignaud

*Vice President, Product Management
CA Technologies*

Introducing Zowe

- An extensible framework for connecting applications and tools to mainframe data and applications.
- Aims to make the mainframe an integrated and agile platform within the changing IT architectural landscape.
- First open source project on z/OS. All code is licensed under the Eclipse Public License version 2.0



Zowe

Why Zowe ?

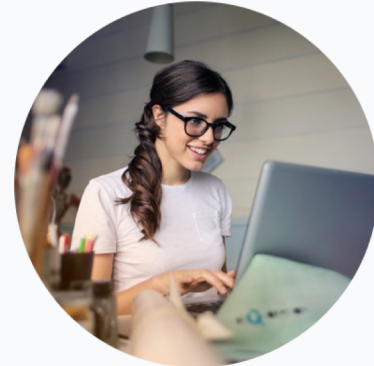
Information Technology is undergoing a revolution of changing architectures



**Co-Existence With
Other Cloud Models**



**Protecting Future
Investments**

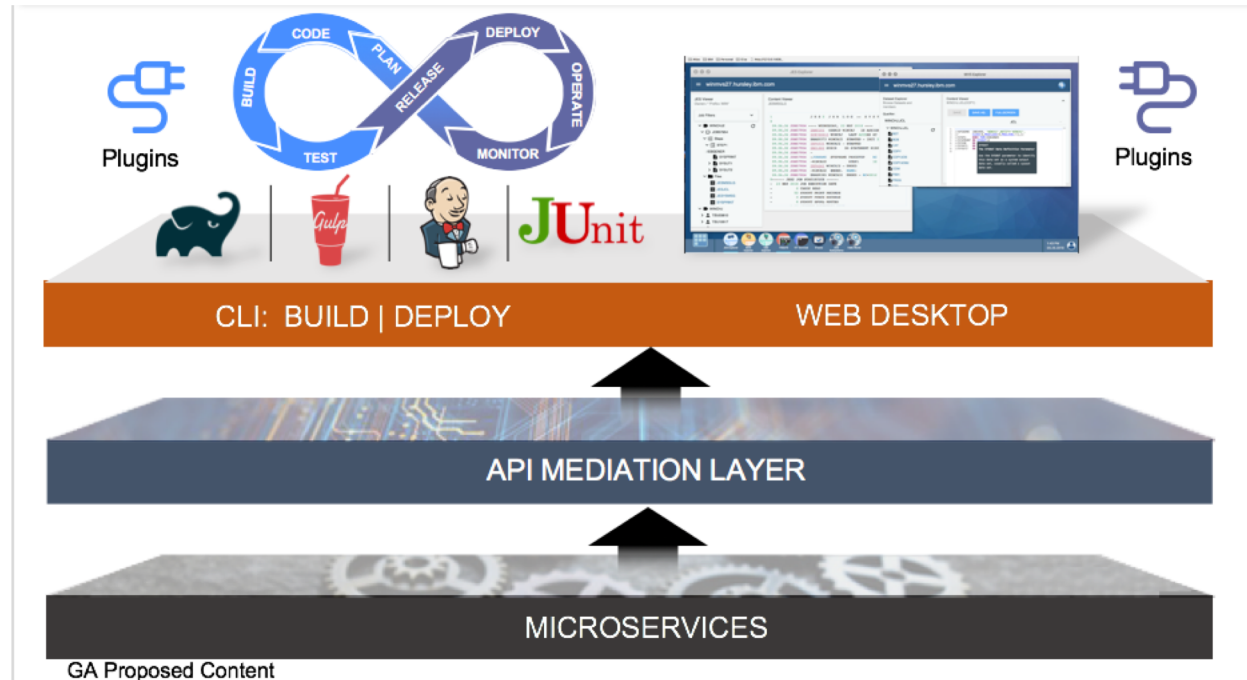


**Simple and
Familiar**

Zowe framework and ecosystem at a glance

Vendors can build 'Zowe Compliant' plugins that will leverage this framework.

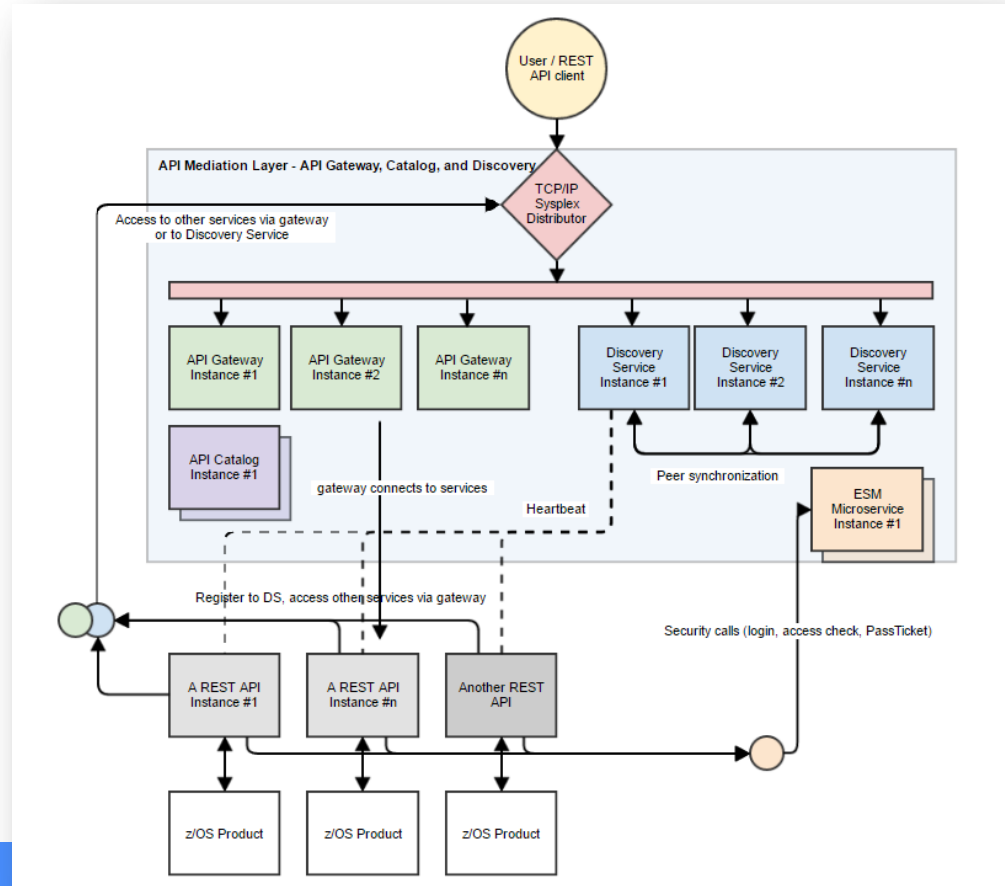
Core Zowe includes API Mediation Layer, Command Line Interface (CLI), and Web User Interface



“A scalable, highly available, lightweight mediation layer for all service-oriented Rest APIs originating from the mainframe platform.”

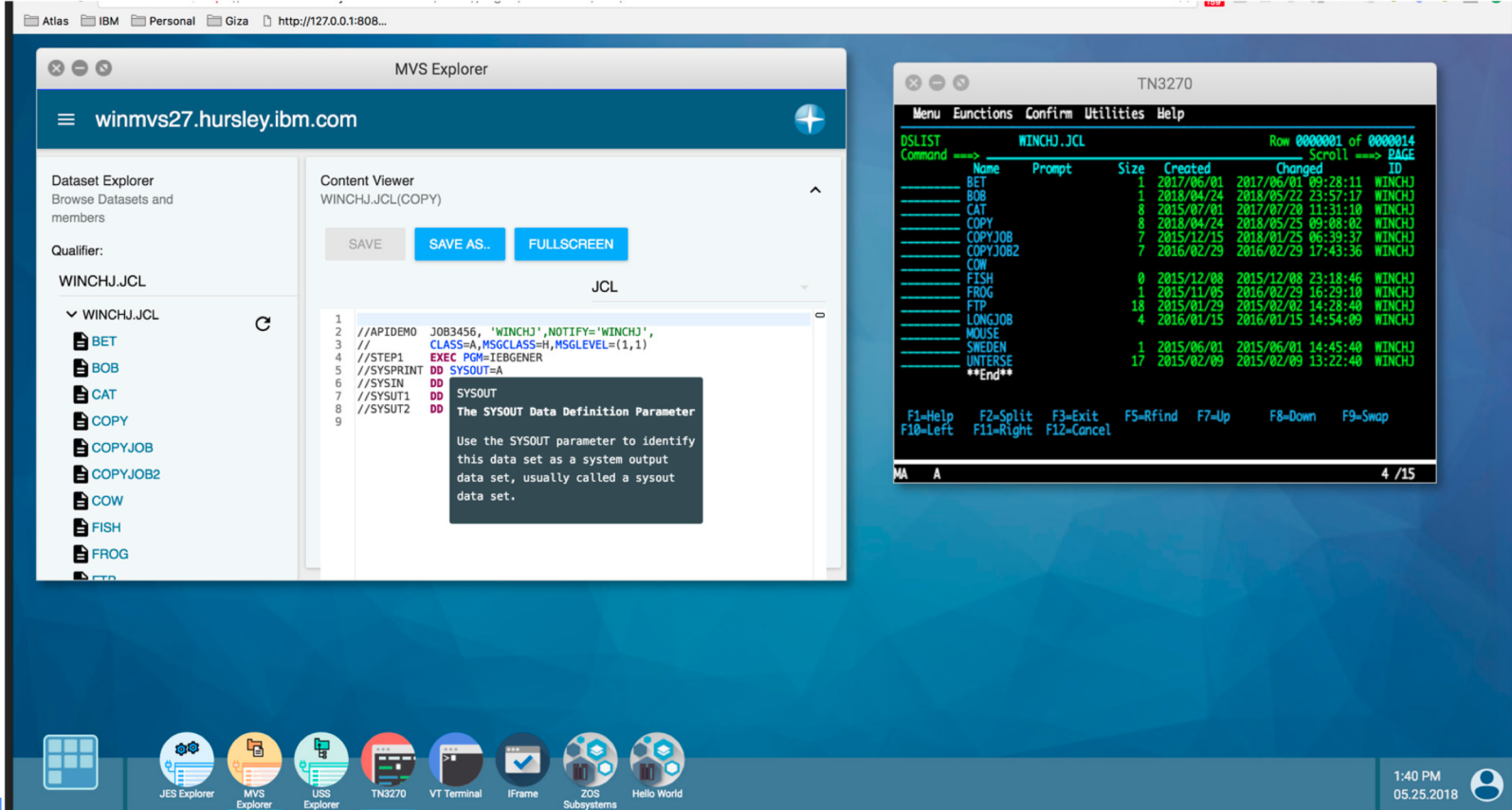
API Mediation Layer

Enables a **single point of access** to multiple mainframe service APIs and offers **enterprise cloud-like features** such as high-availability, scalability, dynamic API discovery, consistent security and documentation



“A modern, hosted, extensible, and user-friendly web-based desktop skinned GUI for the mainframe platform.”

Old and New Experience in your browser



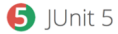
The screenshot displays the Zowe web interface with two main windows:

- MVS Explorer:** Shows a dataset explorer on the left with a tree view for 'WINCHJ.JCL'. The main content area displays the JCL code for 'WINCHJ.JCL(COPY)'. A tooltip is visible over the 'SYSOUT' DD statement, explaining that the SYSOUT parameter is used to identify data sets as system output data sets.
- TN3270:** A terminal window showing the output of the 'DLSLIST' command. The output is a table listing dataset details.

Command	Name	Prompt	Size	Created	Changed	Row	Scroll	Page
DLSLIST	WINCHJ.JCL					0000001	of 0000014	
BET	BET			2017/06/01	2017/06/01 09:28:11	1		WINCHJ
BOB	BOB			2018/04/24	2018/05/22 23:57:17	1		WINCHJ
CAT	CAT			2015/07/01	2017/07/20 11:31:10	8		WINCHJ
COPY	COPY			2018/04/24	2018/05/25 09:08:02	8		WINCHJ
COPYJOB	COPYJOB			2015/12/15	2018/01/25 06:39:37	7		WINCHJ
COPYJOB2	COPYJOB2			2016/02/29	2016/02/29 17:43:36	7		WINCHJ
COW	COW							
FISH	FISH			2015/12/08	2015/12/08 23:18:46	0		WINCHJ
FROG	FROG			2015/11/05	2016/02/29 16:29:10	1		WINCHJ
FTP	FTP			2015/01/29	2015/02/02 14:28:40	18		WINCHJ
LONGJOB	LONGJOB			2016/01/15	2016/01/15 14:54:09	4		WINCHJ
MOUSE	MOUSE							
SWEDEN	SWEDEN			2015/06/01	2015/06/01 14:45:40	1		WINCHJ
UNTERSE	UNTERSE			2015/02/09	2015/02/09 13:22:40	17		WINCHJ
	End							

“A robust, extensible, cloud-like Command Line Interface
into the mainframe platform.”

Challenge



Michelle

AWS CLI, Azure
CLI, ...

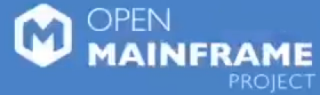
Cloud



Mainframe



Add your favorite tool



Zowe Introduction Demo

Recorded 10/30/2018

Get involved in the Zowe community

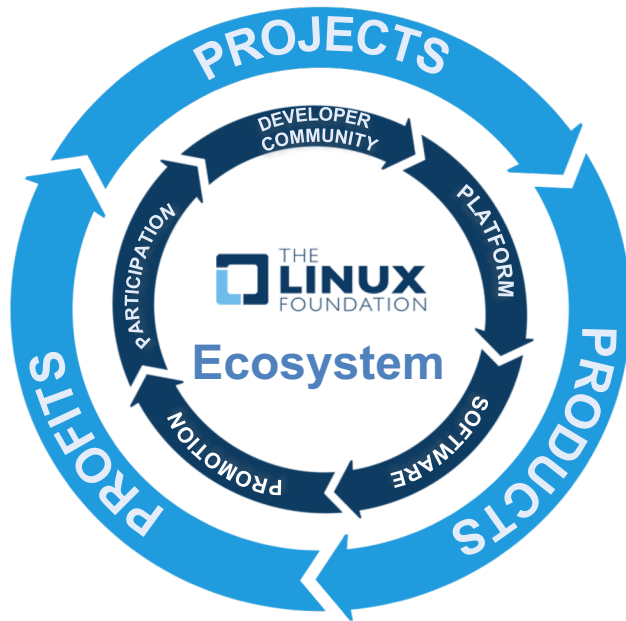


Join the Open Source Community @

<https://www.openmainframeproject.org/projects/zowe>

Participate in and contribute to the Zowe developer community at [zowe.org](https://www.zowe.org)

Learn how your organization can become a steward and supporter of this project with Open Mainframe Project membership at [openmainframeproject.org/about/join](https://www.openmainframeproject.org/about/join)



Zowe sessions at GSE

- PG - Intro to Zowe :
 - Tuesday | 3:45- | 4:45, Hockenheim
- MK – Extending Zowe :
 - Wednesday | 10:45- | 11:45, Monza

Panel Discussion



**Christian
Ziegler**

*University of
Applied Sciences
Coburg*



Herb Daly

*University of
Wolverhampton
@HaloedPayload*



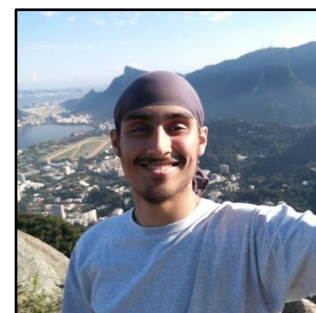
Harriet Davy

*Barclays
@HarrietDavy*



**Sebastian
Wind**

*University of
Leipzig*



Piara Bhamra
*Lloyds Banking
Group*

@iampiara