IBM Wazi Developer for Red Hat CodeReady Workspaces

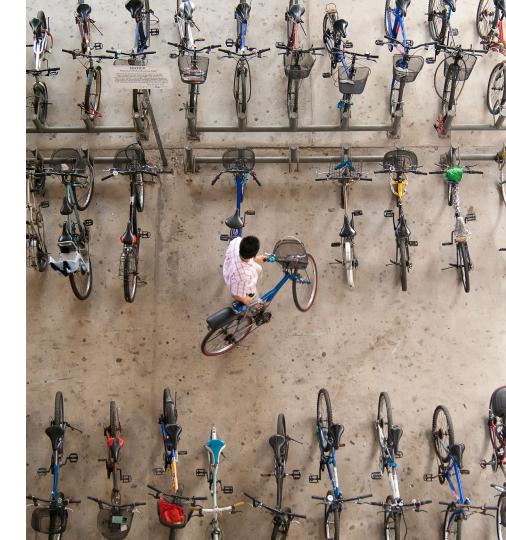
Develop. Innovate. Transform.



Enterprises are looking to modernize applications and transform to a cloud model to drive agility and innovation. This requires the ability to quickly evolve their processing and tooling to address changing customer needs. Development environments that include IBM Z® as part of their hybrid solution face a unique challenge with cross platform consistency in tooling for their application programmers.

<u>Workspaces</u> (IBM Wazi Developer) provides a cloud native development experience for <u>z/OS</u>[®] to build hybrid applications that span IBM Z and multi-cloud platforms. Integration with open, standard <u>DevOps</u> toolsets enable clients to move closer to having a unified development experience across the enterprise.

Developers can use an industry-standard Integrated Development Environment (IDE) of their choice, discover the relationships between their application components, and use a personalized, sandbox environment on Red Hat OpenShift® Container Platform to build and test z/OS application components of hybrid applications.



The challenge

Driving a hybrid cloud strategy that includes z/OS applications brings up some unique factors that need to be addressed.

Cloud transformation and application modernization

 Cloud transformation to drive agility will need to leverage existing investments in mission critical applications

Development skills gap due to legacy mainframe developers retiring

 Legacy mainframe skills require time to master, and new developers are used to a modern development experience

Enterprise-wide, automated DevOps pipeline for better software, faster

 True parallel development for z/OS and the ability to use platform agonistic familiar toolsets are needed to quickly respond to changing customer requirements

- I. IDC The Quantified Business Benefits of Modernizing IBM Z and IBM i to Spur Innovation
- 2020 BMC Mainframe Survey

IDC The Quantified Business Benefits of Modernizing IBM Z and IBM i to Spur Innovatio 2020 Mainframe Market Pulse Survey by Forrester Consulting on behalf of Deloitte

From market studies, customer response indicate:

- 66% are invested in hybrid cloud as critical enabler for all other initiatives ¹
- 54% are integrating data on the mainframe with new cloud native services as part of application modernization ²
- 79% cited their top mainframe-related challenge is acquiring the right resources and skills to get work done²
- 78% want to be able to update mainframe applications more frequently than currently possible ³



The solution



IBM Wazi Developer

Developers can analyze, develop, and test IBM z/OS application components in a containerized, virtual IBM Z environment on Red Hat OpenShift Container Platform. The components of the solution include:



Wazi Code

Essential developer capabilities that include edit, build, and debug through a choice in Integrated Development Environment (IDE)



Wazi Analyze

A containerized analysis tool with a graphical, web-based user interface to discover and analyze relationships between z/OS application components



Wazi Sandbox

A containerized, personal sandbox environment running on Red Hat OpenShift that runs on x86 hardware Build hybrid cloud applications with a cloud native development experience for z/OS

- Reduce the need for specialized skills and improve productivity with a modern, development experience
- Increase speed and agility with a self-service, containerized, sandbox environment
- Reduce risk with visual insights on application interdependencies to assess the impact of code changes
- Improve efficiency and reduce costs with an enterprise-wide, standard toolchain
- Flexibly rebalance entitlement based on business needs



Value of the solution

IBM Wazi Developer

IBM Wazi Developer enables true parallel development for z/OS so customers can quickly build or enhance hybrid applications with z/OS components.

Rapid analysis of application components and dependencies

Graphical visualization of COBOL application artifact dependencies in a web user interface helps analyze impact of potential changes.

Bring your own Integrated Development Environment to build z/OS applications

A choice between a desktop IDE VS Code[™] extensions, in-browser OpenShift-native IDE, or an Eclipse-based allows developers to use tools they are familiar with. They can also access z/OS resources via Zowe[™] and the Remote System Explorer (RSE) API.

Support for COBOL, Assembler, REXX™ and PL/I

Modern features like code completion, real-time syntax checking, and copybook navigation helps to improve code quality.

Containerized, personal z/OS sandbox running on Red Hat OpenShift on x86

Develop and test z/OS application components without requiring IBM Z hardware, then deploy the code to either the sandbox testing stage or IBM Z for production.

Integration with standard and open DevOps tooling

Integration with modern Source Code Managers (SCM) like Git[®], an enterprise-wide pipeline with GitLab, Jenkins[™], and UrbanCode[™] Deploy helps accelerate hybrid application development.

IBM Wazi Developer



A cloud native development experience for z/OS

Eclipse®

Microsoft[®] Visual Studio Code[™]

Red Hat® CodeReady Workspaces

Red Hat OpenShift®

Git™

Jenkins™



Learn more

Try the 3 day no-charge trial for BYO-IDE (Bring Your Own Integrated Development Environment): here

Develop hybrid applications for IBM Z and multicloud platforms using a standard DevOps toolchain: Watch the demo

For more information on IBM Wazi Developer: www.ibm.com/products/wazi-developer

Browse the portfolio: IBM Z Enterprise DevOps

Technical resources for the developer experience for hybrid cloud: here

Explore a rich community of technical expert blogs and forums:

<u>Join the IBM Wazi Developer Community</u>

Join the DevOps Solution Community

Get information about how to maintain and use the product: IBM Knowledge Center

Contact the <u>DevOps Acceleration Program</u> to partner with IBM for a successful transformation

To learn more, contact your IBM representative or IBM Business Partner.

Financing Available: IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. For more information, visit: ibm.com/financing.

© Copyright IBM. Corporation 2021

[Business Unit Name], New Orchard Road Armonk, NY 10504. Produced in the United States of America. March 2021.

IBM, the IBM logo, ibm.com, IBM Z, REXX UrbanCode and z/OS are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml. This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates. The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions.

Red Hat®, JBoss®, OpenShift®, Fedora®, Hibernate®, Ansible®, CloudForms®, RHCA®, RHCE®, RHCSA®, Ceph®, and Gluster® are trademarks or registered trademarks of Red Hat, Inc. or its subsidiaries in the United States and other countries.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

IBM products are warranted according to the terms and conditions of the agreements under which they are provided. The client is responsible for ensuring compliance with laws and regulations applicable to it. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the client is in compliance with any law or regulation. Statements regarding IBM's future direction and intent are subject to change or withdrawal without notice and represent goals and objectives only.

