

# IBM Developer for z/OS Enterprise Edition

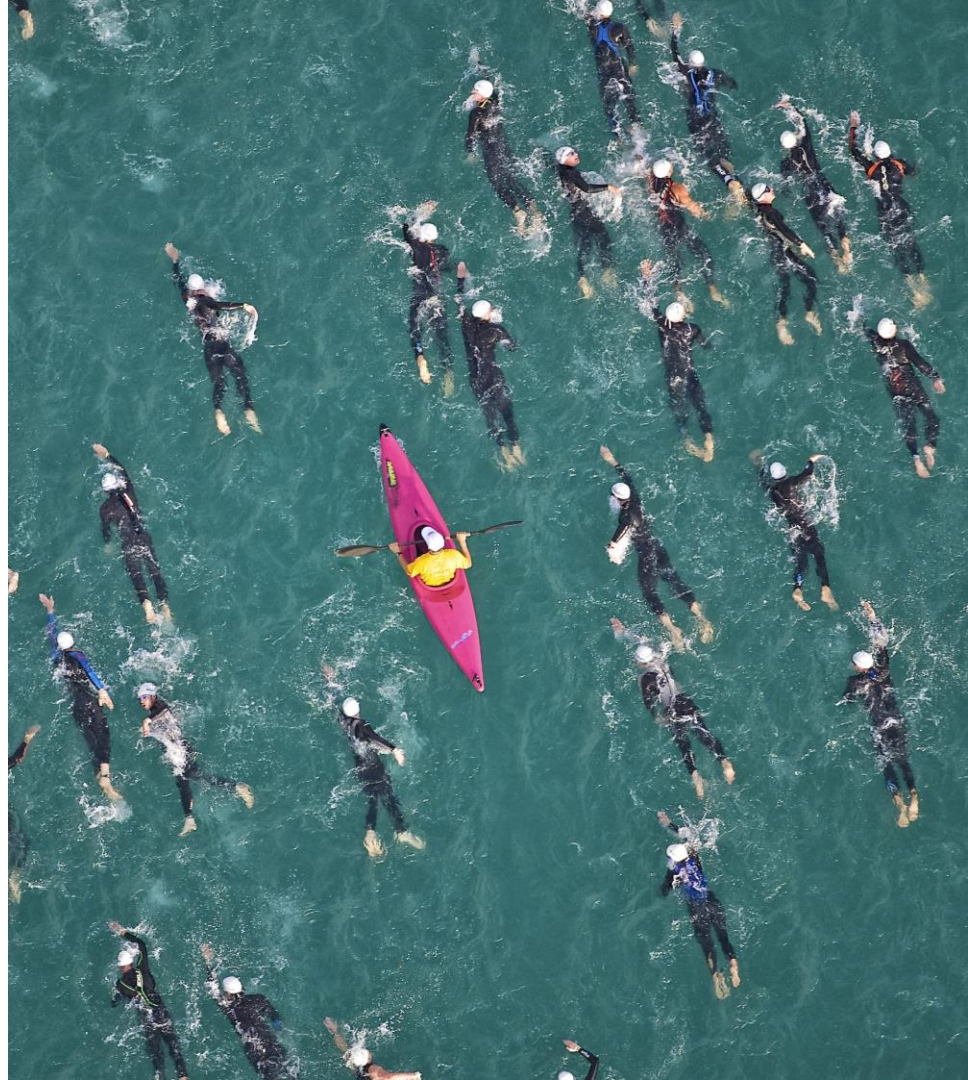
A comprehensive, robust toolset for developing z/OS applications using DevOps software delivery practices

Companies must be agile to respond to market demands. The digital transformation is a continuous process, embracing hybrid cloud and the Application Program Interface (API) economy. To capitalize on opportunities, businesses must modernize existing applications and build new cloud native applications without disrupting services.

This transformation is led by software delivery teams employing DevOps practices that include continuous integration and continuous delivery to a shared pipeline.

For z/OS Developers, this transformation starts with modern tools that empower them to deliver more, faster, with better quality and agility.

**IBM Developer for z/OS Enterprise Edition** is a modern, robust solution that offers the program analysis, edit, user build, debug, and test capabilities z/OS developers need, plus easy integration with the shared pipeline.



# The challenge

IBM z/OS application development and software delivery teams have unique challenges with applications, tools, and skills.

## Adoption of agile practices

- Mainframe applications require frequent updates
- Development teams must adopt DevOps practices to improve their agility and meet business demands

## Staffing and skills shortages

- COBOL programmers are rapidly retiring
- Traditional mainframe skills are diminishing and use of traditional mainframe tools is cumbersome

## Application modernization

- Applications require access to digital services with controlled APIs
- The journey to cloud is driving z/OS application modernization

## Slow software delivery cycles

- Siloed teams with manual practices and scant documentation
- Multi-tier applications require an accelerated pace of change

“DevOps and agile development on the platform have jumped from the early adopter stage in 2016 to becoming common among mainframe businesses”<sup>1</sup>

49% of mainframe technical professionals cite staffing and skills shortages as a leading obstacle<sup>2</sup>

22% of mainframe executives cite development productivity as a top concern<sup>2</sup>



1. [IDC The Business Value of the Transformative Mainframe](#)

2. 2019 [BMC Mainframe Survey Results](#)



# The Solution

A DevOps transformation must empower developers.

**IBM Developer for z/OS Enterprise Edition (IDzEE)** is a robust, modern toolset for developing and maintaining z/OS applications using DevOps software delivery practices. It is a bundle of products in one enterprise license that include:

- **IBM Developer for z/OS (IDz)** as a comprehensive toolbox that enables program analysis, edit, build, debug, modern and legacy source code management integration, automated unit testing and more for z/OS applications in an Eclipse® Integrated Development Environment (IDE)
- **IBM Wazi Developer for VS Code™** to enable edit, build, and debug of z/OS applications in Microsoft VS Code™
- **IBM Wazi Developer for Workspaces** to enable edit, build, and debug for z/OS applications using Red Hat CodeReady Workspaces, an in-browser IDE
- **IBM Dependency Based Build** for user build and automation capabilities
- **IBM Debug for z/OS** for advanced debugging of composite applications

## Improve speed and quality of code deliveries

- Program analysis capabilities improves speed and accuracy
- Productivity gains for typical development tasks
- Developer's choice of an Integrated Development Environment (IDE)
- The ability to standardize processes and common skills across platforms
- Assist developers with auto complete, code rules, visualization, and automation of daily tasks
- Built-in automated unit testing with code coverage



# The value of the IBM solution

## IBM Developer for z/OS Enterprise Edition (IDzEE)

In one enterprise license, the application development team gains a breadth of capabilities:

### Choice of an Integrated Development Environment (IDE)

- The hub for development activities! Providing a choice of traditional environments or modern IDEs such as VS Code™, Eclipse® or Red Hat CodeReady Workspaces to bridge the skills gap and remove barriers.

### Continuous delivery to a shared pipeline

- With Dependency Based Build, developers can converge code on a single Software Configuration Management repository and pipeline with standard tools like Git™ and Jenkins™.

### Built in debugging

- Fully integrated debugging provides developers the ability to test, examine, monitor, and control the execution of programs in context.

### Automate unit testing and code coverage

- Exploit ZUnit to find and fix problems earlier and employ code coverage to determine test effectiveness.



Deliver more,  
faster, to a unified  
pipeline - with better  
quality and agility

Eclipse®

Git™

Jenkins™

Microsoft®

Visual Studio Code™

Red Hat CodeReady  
Workspaces



# Learn more

## IBM Developer for z/OS Enterprise Edition

### Product details

- [IBM Developer for z/OS](#)
- [IBM Debug for z/OS](#)
- [Dependency Base Build \(DBB\)](#)

### Learning opportunities

- [IDz Remote Instructor-Led Training](#)
- [IDz Self-Paced Learning](#)

### Case Studies

- [BNP Paribas](#)
- [State Farm](#)
- [Large North American Bank](#)
- [Danske Bank](#)

### Try it

- [Hands on Trial](#) 3 days at no cost

Visit the [DevOps Solution Community](#) to read blogs, watch videos, join discussions, enroll in events and more

Contact the [DevOps Acceleration Program](#) to partner with IBM for a successful transformation

**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](https://ibm.com/financing).

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