

Flexible Infrastructure provisioning with IBM Virtual Dev and Test for z/OS (ZVDT)

June 2022



Challenges for z/OS development organizations



Lack of test automation

Manual testing is slow and inefficient and error prone



Defects found late in the test cycle

Cost to fix increases exponentially the later in the test cycle



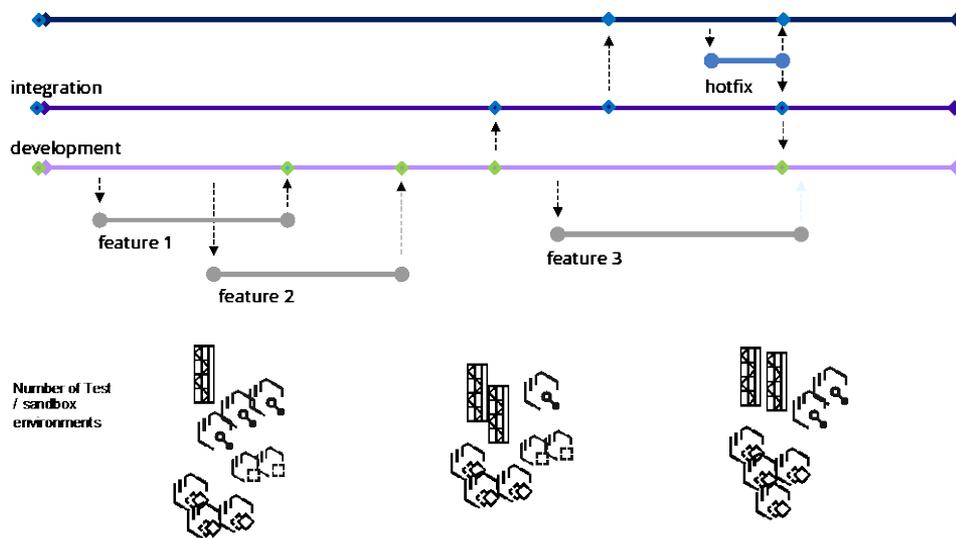
Environment dependency

Shared test environments can cause delays across dev teams as they compete for exclusive access to resources

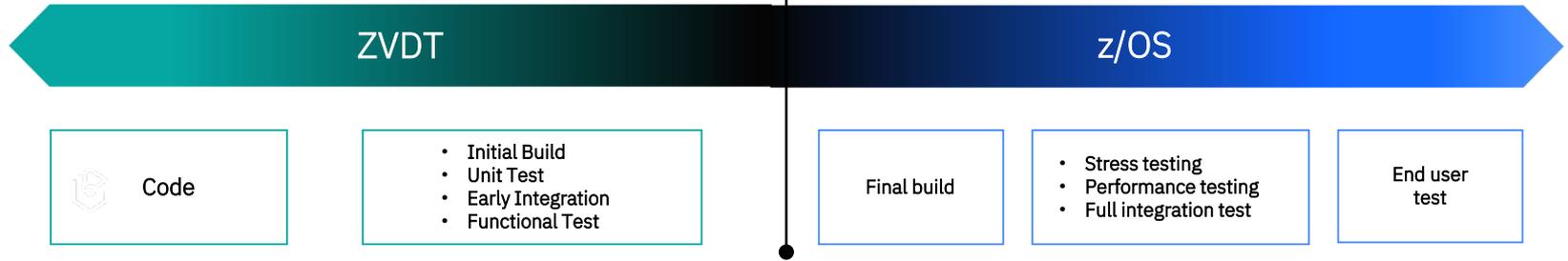
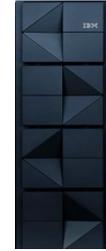


Lack of comprehensive tool to test z/OS® Hybrid Applications

Different tools, disjoint teams to drive complex hybrid tests



Virtual Development and Test Environment for z/OS



33%

of developers see a lack of skills or resource allocation inhibiting their productivity¹

36%

of developers view a lack of collaboration between development and IT operations as inhibiting their productivity³

3rd

year in a row, a majority of Gitlab survey takers resoundingly pointed to testing as the area most likely to cause delays²

IBM Virtual Dev and Test for z/OS (ZVDT) Unique Value

Enterprise requires development and test infrastructure to be **on-premises**

Mainframe team prefers to keep direct control and management of the solution infrastructure on **IBM Z® hardware**

Colocation with Dev LPAR **simplifies** the creation and maintenance of z/OS images

Need of a higher level of **performance** compared with ZD&T solution

Capacity-based perpetual and term licensing

Accelerates Application Development and Test

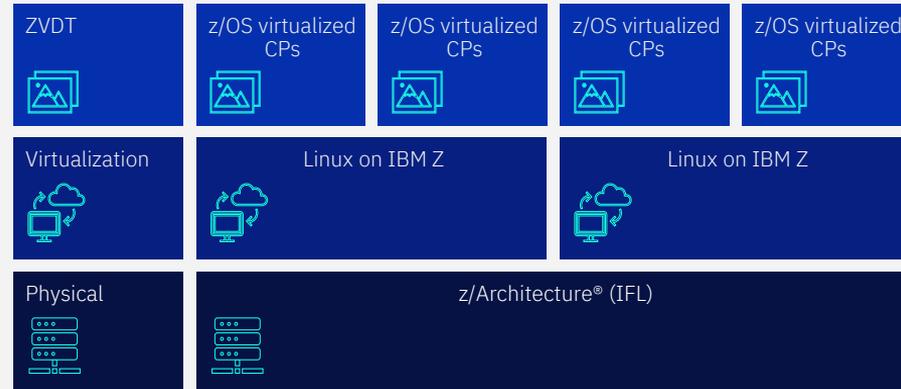
- Work in parallel vs serially
- Each developers can have their own z/OS Dev/Test environment

Better product quality and quicker time to market

- Shift Left testing: Better test coverage earlier in the cycle
- Enable developers to use testing resources on their own schedules

Adapt to changing business requirements

- z/OS on Linux® on IBM Z that can be virtualized and offers to developers a sandbox for prototyping and Version to Version migration
- Internal employee education and training



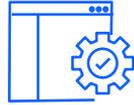


Drive z/OS software to production faster using Linux on IBM Z

Client using either ZD&T or on-premises LPAR for development

Client needs faster environment because of need to use Java components

Developers need to do continuous early testing to improve software quality and discover problems earlier



Client faced with z/OS capacity issues can now use their IFLs to develop and test z/OS applications



Java™ components or applications are required



Client can leverage and control on-premises instances

DevOps Agility, Performance, and Improved Software Quality



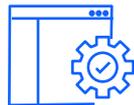
Hybrid z/OS Test Environment

Client needs an on-prem test environment easily provisioned

Environment needs to be isolated and easily spun up/deleted

Client needs a test environment closest to the data

Need an easy way to ensure that current images of software have been tested.



Secure controlled on-premises access



Removes developer barriers to rapid testing



Test Java and COBOL applications in same highly performant environment

DevOps Agility and Improved Software Quality



Education of New z/OS Developers

Employee education in an indestructible, high fidelity, easy to use environment



Sandbox to learn z/OS, middleware and DevOps tools without barriers



Leverage distributed development skills



z/OS software beta or version upgrade testing

DevOps Agility and Talent optimization



Custom Images for ISVs/Solution or Service Providers

Client wants to provide testing or infrastructure services to end users

Client wants to conduct PoCs with licenses they own

Client wants to use environments for testing own services and offerings



Client owns zSW licenses and wants to use ZVDT to augment their development and test capacity



SI building service using our infrastructure and tooling to demo what they have built for their end-user



Client doesn't own any licenses but wants to test their applications with new software levels

DevOps Agility, Security, Ecosystem expansion

Next steps to optimizing your flexible infrastructure



Product Resources

[ZVDT product page](#)

[Tech Docs](#)

Communities

[IBM Z Automated Testing Community](#)

Additional provisioning portfolio

[Z Development and Test Environment](#)

[Wazi Sandbox](#)

[Wazi as a Service](#)

For more information

Contact your IBM sales representative.

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New Orchard Road, Armonk, NY 10504
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