Revitalize your IT infrastructure with
IBM z14™

Reduce TCO, protect customer data and transform your IT infrastructure

Help reduce total cost of ownership

Reduce total cost of ownership by up to 22.5 percent as compared with z12BC[1] while reducing energy use and cooling costs. Plus, save space with an available industry-standard form factor that occupies as few as two data center tiles.

50%

Increase processing capacity by as much as **50 percent**.[2]

35%

Reduce energy consumption by up to **35 percent**[3] and cooling costs by up to **three kilowatts**.[4]

46%

Decrease floor space requirements by as much as **46 percent**[5] per server.

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1 Based on internal data from IBM's Competitive Project Office: "The z12BC has approximately 1,064 MIPS per one CP. The z14 ZR1 has approximately 1,570 MIPS per one CP, 48% more MIPS for a single CP. There is a direct inverse correlation between number of MIPS per CP and number of cores needed—the more MIPS in a CP, the fewer cores (CPs, zIIPs or IFLs) the system needs. The amount of cores and amount of software maintenance are directly correlated as most software is priced by core. Ergo having fewer cores reduces software maintenance by approximately 50% as well as reduces the need for additional licenses for growth. According to internal total cost of ownership studies done by the IBM Competitive Project Office, software accounts for at least 45% of the TCO. Per the earlier calculation, upgrading from z12BC to z14 ZR1 can reduce the software component by approximately 49%, thus driving an overall TCO reduction of about 22.5%."

2 Based on internal data from IBM's Competitive Project Office 2018 IT Economic Studies: "Performance per single engine z13s 1430 versus z14 ZR1 1570 MIPS, z13 1514 versus 1832 MIPS. With additional engines, z13s L20 (20 IFLs) versus z14 zR1 FC 0639 with maximum 30 IFLs for single frame increases overall capacity by over 50%."

3 Internal data from Competitive Project Office: "Compare z14 zR1 with up to 30 IFLs with 3 I/O drawers versus z13s with up to 20 IFLs and 3 I/O drawers. (8.2 KW - 5.29 KW)/8.2 = .354 = 35%."

4 Internal data from Competitive Project Office: "Since fewer CPs, IFLs or specialty engines are needed for equivalent performance 3 KW less."

5 Internal data from Competitive Project Office: "Compare z14 ZR1 with cover footprint as per Installation Manuals for Physical Planning versus z13s with cover footprint. 1166 sq. in vs. 1940.52 sq. in. Total required area with service clearance is 46% less. zSpotlight Randy Rose."

Protect customer data and help simplify your compliance

Simply, cost-effectively encrypt all customer and enterprise data with pervasive encryption on z14.
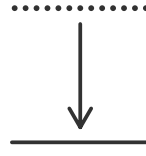
Encrypt all data
Encrypt 100 percent of data-base, application and cloud service data—in flight and at rest—without requiring application changes or impacting SLAs.[6]

Reduce encryption time and cost
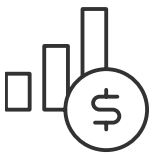Encrypt enterprise data at **5 percent** of the cost of competing solutions, **18.4 times** faster and while requiring **91.7 percent** fewer servers.[7]

Simplify your regulatory journey
As compliance mandates change, so does the data you're required to encrypt. Since pervasive encryption is already encrypting all data, you may not need to modify your encryption strategy in these situations.
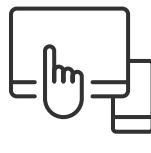
Transform your IT infrastructure with IBM ADDI and z/OS Connect software

Accelerate innovation by efficiently building and transforming applications on your IBM Z.

Reduce costs and increase productivity
with ADDI software that helps you discover and analyze mainframe code and data-base dependencies.[8]

Develop innovative applications
by connect-ing mainframe data and transactions to the cloud via RESTful APIs.

Increase development efficiency
through end-to-end mapping between APIs and core business logic on your z14.

6 IBM Journal of Research & Development R&D, Volume 62, No. 2/3, Paper 2, "Enabling pervasive encryption through IBM Z stack innovations", page 2, URL: https://ieeexplore.ieee.org/document/8270590/

7 Pervasive Encryption: A New Paradigm for Protection, an IBM-sponsored paper by Solitaire Interglobal Ltd, page 23 and 23, URL: https://www-01.ibm.com/common/ssi/cgi-bin/ssialias?htmlfid=ZSL03452USEN&

8 The Total Economic Impact™ of IBM Application Discovery and Delivery Intelligence, a Forrester Consulting research paper commissioned by IBM, February 2017, URL: https://www.ibm.com/account/reg/us-en/signup?formid=urx-33900

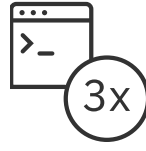# Expand workloads cost-efficiently with value-based pricing

Transparent pricing makes it cost effective to run new and expanded workloads on your revitalized IT infrastructure.

Pay only for workloads you run with transparent container-based pricing.

Pay-as-you-go option for new z/OS® applications.

Designed to increase development and test capacity.

Contact your business partner for more information.