

z Systems Sandbox in the cloud

A New Way to Learn

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Why z Systems are Amazing



92

of the top 100
worldwide banks



10

out of 10 of the world's
largest insurers



23

of the top 25
US retailers



23

out of 25 of the world's
largest airlines

Processing the world's transactions & data

30 billion

business transactions processed
on the mainframe per day

91 percent

of surveyed CIOs said that new customer-
facing applications are accessing the
mainframe

80 percent

of the world's corporate data resides or
originates on mainframes

55 percent

of all enterprise applications need
the mainframe to complete
transactions

Continued aggressive investment/
innovation

IBM

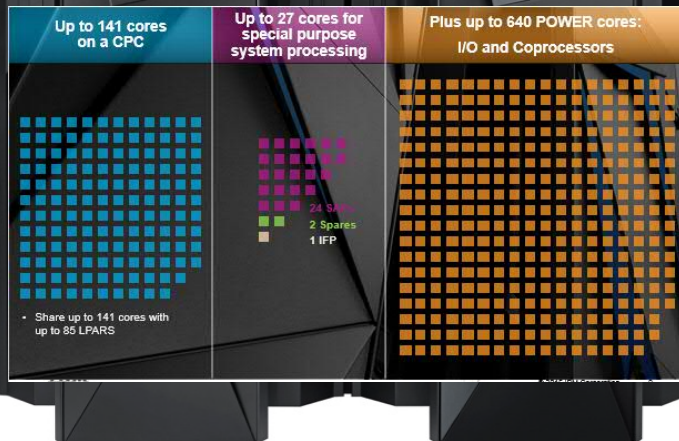
Largest caches in the industry (960M L4)

Leading Single-thread perf (5GHz)

Un-matched hot-swap tech. for HA (6x9s)

Crypto acceleration/bandwidth (130k sign/sec)

Massive IO processing b/w (640 co-proc)



Why it *was* hard to learn about z Systems



But then IBM Created zPDT



With Great Power Comes Great Responsibility

zPDT is Powerful, but it is Complex

zPDT provides the full system to you

- That's Great! I can do *ANYTHING*

zPDT provides the full system to you

- That Sucks! I am not a systems programmer

zPDT gives you the full machine

- for better and worse

The screenshot shows the zPDT interface with a menu bar (Display, Filter, View, Print, Options, Search, Help) and a status bar (mvs099). The main window displays 'SDSF STATUS DISPLAY ALL CLASSES' with a table of jobs. Below the table is a command input panel with a menu (Menu, RefList, RgfMode, Utilities, Workstation, Help) and a command line. The command line contains 'ISPF Library:' and a list of options: Project (RCZ), Group (SAMPLE), Type (ALIAS), and Member (Blank or pattern for member selection list). The status bar at the bottom shows 'Wed 22 Jan 09:52 15'.

JobID	Owner	Prio	Queue	C	Pos	SAff	ASys	Status	PrtDest	SecLabel	TGN	TCG	OrigN
FULT0003	FULT000	10	EXECUTION	D				NO99	LOCAL		2	0.02	LOCAL
FULT0004	FULT000	15	EXECUTION					NO99	LOCAL		1	0.01	LOCAL
FULT0005	FULT000	1	PRINT	A	47				LOCAL		1	0.01	LOCAL
FULT0006	FULT000	1	PRINT	A	48				LOCAL		1	0.01	LOCAL
FULT0007	FULT000	1	PRINT	D	49				LOCAL		3	0.04	LOCAL
FULT0008	FULT000	1	PRINT	A	50				LOCAL		1	0.01	LOCAL

The following content is a *proposal (experiment)*

- IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal without notice at IBM's sole discretion.
- Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.
- The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract.
- The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.
- Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will vary depending upon many factors, including considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve results similar to those stated here.

An Experiment: RITz

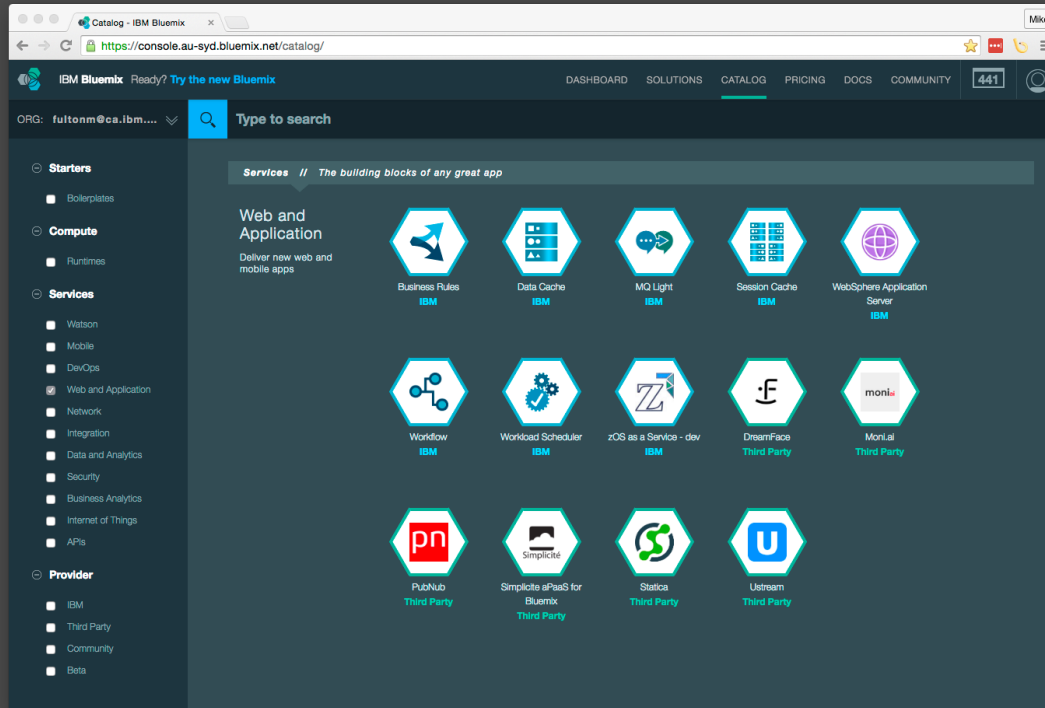
Rapid Intelligent Testing for System z (RITz)

- is under Development

With RITz, you:

- Go to [Bluemix](#) (IBM's Cloud Dev Environment)
- request a preconfigured z System (pay as you go)
- in seconds, you have your own system
- log in to your system with your userid/password and start learning
- use a modern Web UI to access the system
- No need for a fancy laptop - you just need a web browser

Log in to Bluemix



Create your own RITz Sandbox

The screenshot displays the IBM Bluemix console interface for the 'zOS as a Service' page. The browser address bar shows the URL: `https://console.au-syd.ibm.com/catalog/services/zos-as-a-service---dev/`. The top navigation bar includes links for DASHBOARD, SOLUTIONS, CATALOG, PRICING, DOCS, and COMMUNITY, along with a user profile icon labeled 'Mike' and a notification badge showing '441'.

Service Details:

- Service Name:** zOS as a Service - dev
- Published Date:** 04/27/2016
- Type:** Service
- VIEW DOCS** button

Service Description:

This service gives you the zOS experience in Bluemix.

- z/OS Experience**
Get full access to z/OS in the cloud, reuse your existing skills.
- Customize just what you need**
We've got a standard zOS stack with CICS and Liberty installed, pick the collection of subsystems you want during provisioning.
- Shell and Admin UI Management**
Use our new test workflow web UI to manage your testing giving you increased productivity.
- Use, Abuse, Repeat.**
It's a cloud service after all. Use it for an hour. Drive it hard. Delete it. Grab a new one when you need it; it's up to you.

Plan Selection:

Pick a plan. Monthly prices shown are for country or region: [Canada](#)

Plan	Features
✓ zOS Core Plan	zOS Core. Free

Additional Information:

- Info Icon:** This plan provisions a pre-configured zOS stack.
- TERMS** button

Add Service Panel:

- Space:** Australia
- Service name:** zOS as a Service - dev-61
- Selected Plan:** zOS Core Plan
- CREATE** button

Log in to your z/OS System

Service Details - IBM Bluemix X

https://new-console.au-syd.bluemix.net/services/80e79eef-7d11-40cc-bc07-0f201ee1c8c3?ace_config=%7B*orgGuid...

IBM Bluemix Application Services Go to Classic Experience Docs

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← App Services

zOS as a Service-n4

Manage Connections

zOS as a Service

168.1.41.180

Plan Name : zOS Core Plan

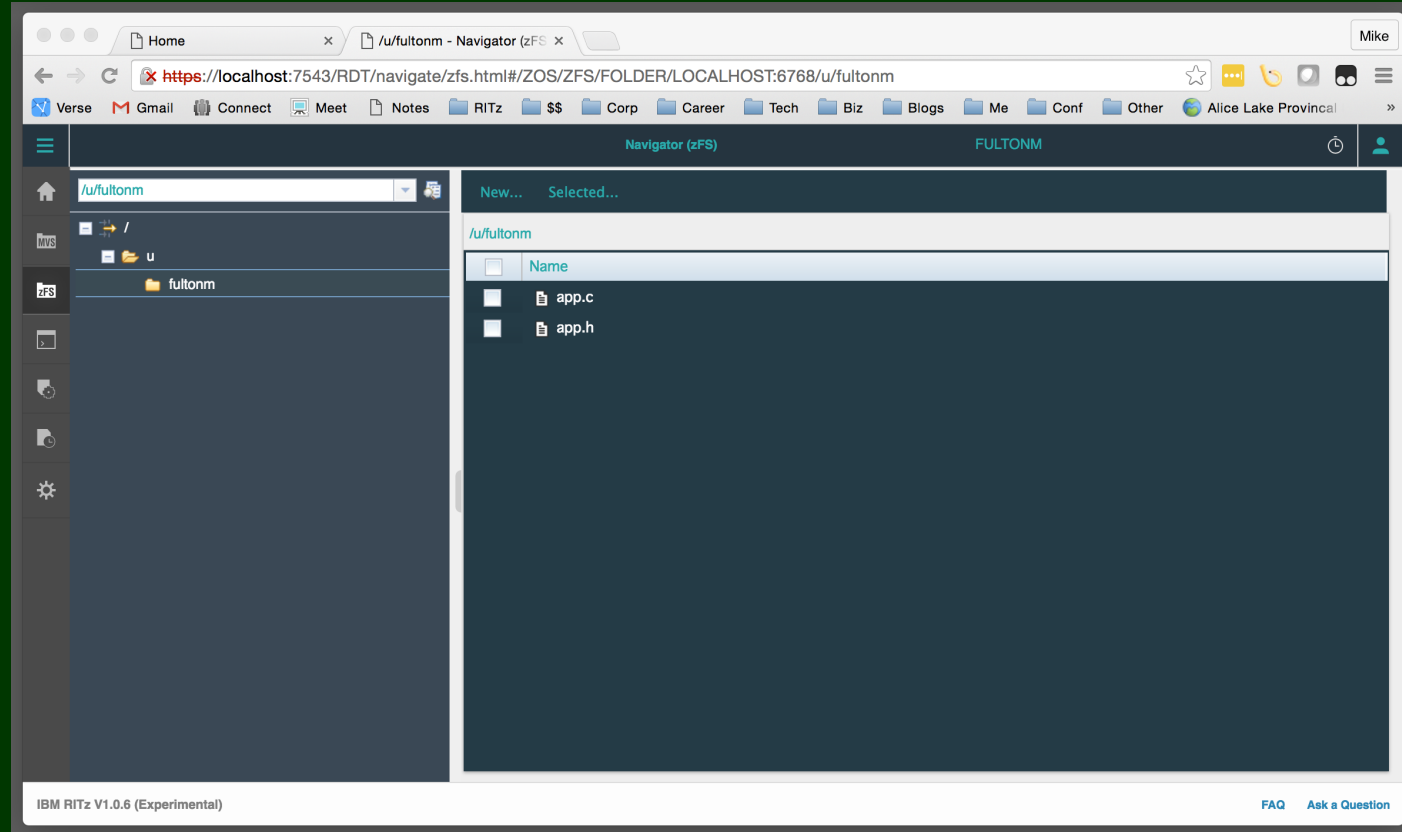
[Download Certificate](#) [Download User Certificate](#)

Web UI for z/OS
[Click Here to Open](#)

Advanced Settings
[Click Here to Open](#)

Admin Username:	Admin Password:	UserID	User Password
IBMUUSER	Show Initial Password	TSTR001	Show Initial Password

Work with a Modern Web UI



Next Steps

Imagine:

- Enabling people to save their environment, then share it with others

For Example:

- Developing a COBOL or Java z/OS 101 Course (code, data, videos, ...)
- Saving the course as an *image* or *template*
- Students then create their own RITz environment, using your *image*
- Every student gets their own independent, isolated z/OS system
- When you are done the course, throw away the system
- Share this *image* with other educators using RITz around the world

Or:

- Creating a demo image of your z/OS software and sharing it
- Creating an app image for risk-free experimentation

Sponsor Users

We are looking for a small number of sponsor users

- To try out our experiment
- To give us feedback on the current tech
 - ✧ z/OS pre-configured system on SoftLayer
- To work with us on where we might go next
 - ✧ Software management services
 - ✧ Other operating systems