Modern Technology for the Enterprise

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Discussion points

• The reality of the modern mainframe
• The strategy driven by our clients
• Leading Edge Technologies
• Application Environments
The cloud our clients want, with the privacy and security they need

IBM Z momentum

350% growth in capacity

91 of the top 100 IBM Z enterprises are running Linux on Z *

* as of 4Q19
IBM Z Execution Strategy

Enable higher client business value via cloud and cognitive solutions, consumed as a service, leveraging the IBM Z platform differentiation.

Blockchain

Data Services

IBM Machine Learning for z/OS

Security and Pervasive Encryption

IBM Z Ecosystem investments

Hybrid and Multi Cloud service

Agile Open Dev Ops

IBM Z

Agile Delivery of Operating System and Middleware enhancements

Consumption based charging models

Integrated Foundation

Leading edge functions and Services

Transformation
The cloud you want – with the privacy and security you need

- Encryption Everywhere
- Cloud-Native Development
- Instant Recovery
### IBM z15 – Offering overview

<table>
<thead>
<tr>
<th>Mission Critical Hybrid Multicloud</th>
<th>Data Protection &amp; Privacy</th>
<th>Service Level Excellence</th>
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</thead>
<tbody>
<tr>
<td>Cloud workloads &amp; management</td>
<td></td>
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<tr>
<td>• Red Hat OpenShift enablement makes IBM Z an open deployment platform for mission critical workloads</td>
<td>Enterprise out data protection</td>
<td>Instant Recovery</td>
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<tr>
<td>• z/OS Container Extensions enables the integration of z/OS with cloud, for developer independence</td>
<td>• Data Privacy Passport Technology extends protection and privacy for data at rest, in flight and beyond host boundaries</td>
<td>• Expedite system restart from both planned and unplanned outages and accelerate client workload recovery</td>
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<tr>
<td>• z/OS Cloud Broker delivers self-service access to z/OS services from new cloud native applications</td>
<td>• Fibre Channel Endpoint Security encrypts data in flight to IBM Storage</td>
<td>Embedded Operational AI</td>
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<td></td>
<td>New industry leading security hardware</td>
<td>• Synchronized workload correlation for faster root cause analysis of key issues</td>
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<td></td>
<td>• Beginning the journey against next generation threats, generate quantum safe digital signatures safeguarding critical system data</td>
<td>• Innovative AI based service diagnostics for serviceability protection of key client data</td>
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### Cloud Native Developer Experience
- Project Zowe – Open Source framework that delivers a cloud native experience for developers and operations

### Standardized & Flexible for the Cloud Data Center

<table>
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<tr>
<th>Modular and Scalable</th>
<th>Industry Standard</th>
<th>On-Chip Acceleration</th>
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</thead>
<tbody>
<tr>
<td>1-4 frames depending on capacity requirements</td>
<td>19” Form Factor with choice of power and cooling</td>
<td>Compression accelerator reduces cost of storing, transporting &amp; processing data</td>
</tr>
</tbody>
</table>
Linux your Way: Greater flexibility and choice

- Distributions
- Virtualization
- Languages
- Runtimes
- Management
- Database
- Analytics

Supported Versions

Community Versions

Red Hat
KVM
Ubuntu
LXD (Ubuntu)
openSUSE
Docker
DPM
LPAR
Docker
Scala
Clojure
OpenJDK
OCaml
Java
Apache Tomcat
LVM
Zend Framework (PHP)
RPM
MySQL
vRealize
vSphere
juju
Puppet
MongoDB
Spark
PostgreSQL
Erlang
Redis
IBM Cloudant
Elasticsearch
Apache Solr
MySQL
Oracle
Virtualization
Languages
Runtimes
Management
Database
Analytics
Employ hybrid-cloud strategies to accelerate innovation.

The average enterprise is running five or more clouds, as well as existing IT resources.

**PUBLIC**
- Public and open-by-design

**HYBRID**
- Hybrid-cloud model options

**PRIVATE**
- Management and deployment options

Integration offers protection of existing investments:

Existing Applications often hold a lot of critical and well designed business logic that is a big asset for customers

Existing IT e.g. IBM Z
- Business Critical Assets that offer incredible Value

Make use of the best available Platform:

By integrating existing IT Assets in a cloud like fashion, the emerging hybrid cloud can use existing business functionality and processes e.g. store business critical sensitive data in an encrypted way on IBM Z

**SOURCES:** Forbes, Gartner, IBM
Enterprise Cloud with **IBM Z and LinuxONE**

Open access and extend the platform value with open standards and tooling across all cloud consumption models. Enterprise Cloud when you want, how you want, and wherever you want with ease.

<table>
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<th>Cloud Integration</th>
<th>Cloud native developer experience</th>
<th>Private Cloud</th>
<th>Public Cloud</th>
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<tr>
<td>elastic splunk APP DYNAMICS OPENAPI INITIATIVE</td>
<td>Zowe</td>
<td>Red Hat OpenShift IBM Cloud Paks</td>
<td>Blockchain Hyper protect family</td>
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<td>Zowe Z Open Development z/OS Container Extensions</td>
<td>Jenkins</td>
<td>z/OS Cloud Broker On-Prem Hyper Protect Virtual Servers IBM Blockchain for ICP IBM Cloud Private</td>
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<tr>
<td>docker</td>
<td>kubernetes</td>
<td>OPEN SERVICE BROKER API RED HAT OPENSOLUTIONS HYPERLEDGER</td>
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Vielen Dank