



IBM LinuxONE – Linux without Limits

Open Technology driving Business Innovation

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Europe

A large colony of King penguins is the background of the image. The penguins are densely packed, with their characteristic grey-blue backs and yellow-orange chests. In the bottom right corner, there is a network diagram overlay consisting of several interconnected hexagonal nodes in shades of blue, yellow, and orange, with thin white lines connecting them.

Linux is

EVERYWHERE

Driving an

OPEN REVOLUTION

A hand is shown touching a futuristic digital interface. The interface features a line graph with multiple data series in various colors (blue, red, green, orange) and several hexagonal shapes of different sizes and colors (blue, grey, yellow, orange) scattered across the bottom right. The background is dark with blue and purple bokeh lights.

The mobile economy is a

GLOBAL DISRUPTIVE FORCE

Time for the next

OPEN BREAKTHROUGH

The best of
Linux and open

+

The best of
Enterprise computing





IBM **LinuxONE**

A portfolio of hardware, software
and services for business critical
business applications



Meet the

IBM LinuxONE Systems

The most trusted, efficient and high performance
enterprise-grade Linux platform



IBM **LinuxONE**
Emperor™

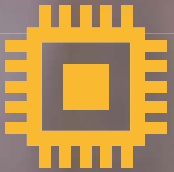


IBM **LinuxONE**
Rockhopper™

IBM LinuxONE Emperor



The world's
fastest processor



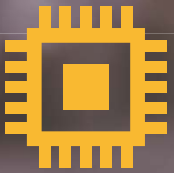
Massive I/O
throughput



Large memory pools with
4 levels of Cache



IT analytics
to avoid future outages



Dedicated cryptographic
processors

6 to 141 LinuxONE Cores

350 to 8,000 Virtual Machines



IBM LinuxONE Rockhopper

Entry point into LinuxONE family

All the same great capabilities in
a **smaller package**

2 to 13 LinuxONE Cores

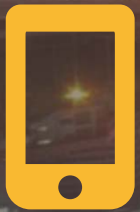
40 to 600 Virtual Machines



Designed for the

DIGITAL ECONOMY

IBM LinuxONE SOLUTIONS



Mobile



Analytics



Cloud



DevOps

NEW IBM LinuxONE ELASTIC PRICING



All IBM
Linux Software



LinuxONE HW with
no up front payment

IBM LinuxONE

Linux
**YOUR
WAY**

Linux
**WITHOUT
LIMITS**

Linux
**WITHOUT
RISK**

LINUX YOUR WAY

Distributions



Hypervisors



LPAR

Languages



Runtimes



OpenJDK



Management

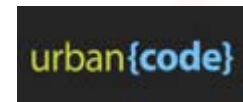


CHEF



vmware
vRealize

Cloud Manager



Database



ORACLE Diamond
Partner

DB2

Analytics



ISV Ecosystem is talking LinuxONE

2nd Quadrant is excited by combining the world's most advanced open source database, PostgreSQL, with the world's most efficient, trusted and secure server, the IBM z13. The results of up to 2x throughput performance far exceed our goal.

-- Simon Riggs, Founder, PostgreSQL at 2ndQuadrant

Puppet, the leader in automation for DevOps, is collaborating with IBM to enable integration between the Chef 12 Client & Chef 12 Server and IBM's enterprise Linux offering. We're experiencing rapid and widespread adoption of Chef within the enterprise, making integration with IBM z Systems an important feature for our platform.

-- Matt Ray, Director of Partner Integration, Chef.

MongoDB is committed to make MongoDB available on all major LinuxONE forms and are excited to add support for IBM LinuxONE z13 form. This is a leap forward for customers who want to deploy modern, mission-critical applications built with MongoDB and take advantage of the performance, scalability and security of IBM's mainframe hardware products."

--- Eliot Horowitz CTO & Founder, MongoDB

Docker is very pleased to be working with IBM to enable the Docker container capability for LinuxONE and IBM z Systems.

-- Ben Golub, CEO of Docker

IBM's z Systems power some of the most mission critical services available. ... Having Puppet run on z Systems not only helps realize these benefits in a mainframe environment, but also speaks to the ubiquitous and flexible nature of open source Puppet.

-- Nigel Kersten, CIO of Puppet

"As the ONE default database platform for leading Linux distributors, ..., MariaDB is excited to support IBM LinuxONE. I've stated Patrik Sallner, CEO of MariaDB. "With Linux on IBM z growing at twice the rate of the Linux market overall, there is clear customer demand for open source solutions on IBM's highly scalable and secure platform

--Patrik Sallner, CEO, MariaDB Corporation

"It's exciting to see the investment IBM is making into our open source technologies — Elasticsearch, Logstash and Kibana —with Linux on z Systems. This further expands the reach of our technologies in enterprises with mission critical deployments on mainframe systems."

-- Shay Banon, CTO & co-founder of Elastic

LINUX WITHOUT LIMITS



Scale Out

100 Virtual servers and thousands of containers



Scale Up

Largest single instance database with single digit millisecond response time



Built for Speed

2x better performance for open SQL/NoSQL databases

LinuxONE with Awesome Results

MongoDB, MariaDB, Postgres **2x faster**

Compression Spark RDD **4.9x faster**
Docker Persistence **4x faster**

Encryption **28x faster**

Node.js up to
2x faster

Spark Analytics up to **3x faster**

*“LinuxONE system using Node.js and MongoDB can handle over **30Billion** web events*

*LinuxONE DB node with **1TB, 2Billion+** documents, **460,000 reads/writes/second**. No Sharding required with sustained throughput and response time.*

LINUX WITHOUT RISK



Unmatched Security

28x improved performance
over standard secure-key
technology



Highest Availability

Designed to provide
100% uptime for decades



The world is changing,
SO ARE WE





OPEN
MAINFRAME
PROJECT



THE
LINUX
FOUNDATION



MARIST



University of
Bedfordshire



Open Access

IBM LinuxONE COMMUNITY CLOUD



ISV



**Developers
Students**



Clients

The background of the slide features a blurred, high-angle view of a modern office interior. In the foreground, several silhouettes of business professionals are visible, some standing and talking, others walking. The office has large glass windows that offer a view of a city skyline with various skyscrapers under a hazy sky. The lighting is soft, suggesting an early morning or late afternoon setting. The overall aesthetic is professional and tech-oriented.

COMMUNITY CONTRIBUTIONS

IT Predictive Analytics

A decorative graphic in the bottom right corner consists of several interconnected hexagons. Some hexagons are solid colors (yellow, orange, blue, grey), while others are hollow outlines. They are arranged in a network-like pattern, with some connected by thin lines, symbolizing data connectivity or a network structure.



IBM Research enabling **THE FUTURE NOW**

Global Health Challenge



DREAM ALS Stratification
Prize4Life Challenge

DREAM CHALLENGES powered by Sage BioNetworks | **Sage** | **PRIZE4LIFE** | **ORIGENT** DATA SCIENCE | **DEPARTMENT OF INFORMATION ENGINEERING** UNIVERSITY OF PADOVA | **IBM** | **PRO-ACT** | **Biogen** | **Lilly**

Helmholtz Zentrum münchen
Deutsches Forschungszentrum für Gesundheit und Umwelt

Analytic models run **2 - 7x** faster
with Docker on IBM LinuxONE



IBM **LinuxONE**

Unleash the full
potential of Linux

