

Message From the General Manager, IBM Z

As the world continues to face new challenges, the ability to rapidly adapt and respond is vital to ensure businesses can thrive under ever changing conditions. IBM Z has been at the heart of our client's mission-critical applications and infrastructure for generations, driving 67% of the Fortune 100 and used by 44 of the top 50 banks, and continues to play a fundamental role in industries around the globe and supporting the world economy.

The digital transformation of our clients has never been more important, and as enterprises continue to embrace a hybrid architecture, IBM Z has a fundamental role to play in helping our clients gain the flexibility and agility they need, while continuing to experience the scale, security, and resilience that IBM Z is renowned for. It is with that goal in mind that we are proud to have brought to market IBM z15—delivering the cloud you want, with the privacy and security you need.

The new IBM z15 is a transformational system for our clients and is the culmination of 4 years of development with over 3,000 patents issued or in process. The development of IBM z15 involved deep collaboration with more than 100 client companies, leading to innovation and partnership at every level of this new system, from the modular design and installation in the data center, to delivering a cloud native experience for application developers. With IBM z15, there are three key aspects I would like to highlight.

- 1) *Cloud native*: With z15's cloud native capabilities, developers can easily modernize apps in place, build new cloud native apps, and securely integrate mission critical workloads across the hybrid cloud, utilizing technologies such as Red Hat OpenShift, IBM Wazi Red Hat CodeReady Workspaces, and Red Hat Ansible Certified Content for IBM Z.
- 2) *Encryption everywhere*: With this system, we are introducing an innovative new approach to security by providing data encryption everywhere. With IBM Secure Execution for Linux, we help protect from internal and external threats across the hybrid cloud. Fibre Channel Endpoint Security delivers end-to-end authentication and encryption with the new high-end IBM DS8900F Enterprise Storage System.
- 3) *Cyber resilience*: IBM z15 also delivers a new concept called instant recovery, and through a new capability called System Recovery Boost, clients can access additional system capacity for a period of time to accelerate shutdown, restart, and recovery of IBM Z services to get back to their service levels in half the time, all with no increase in IBM software cost.

These capabilities are underpinned by significant innovations in our core system design, with our overall system capacity growing by 25% over z14 and a single z15 system capable of executing up to 1 trillion web transactions per day. We have introduced new on-chip compression acceleration, integrated as standard in our z15 processor design, and all of this is now delivered in a modular and standardized 19-in form factor ready for the cloud data center of today.

As a team, we are delighted to bring this offering to market, and in this issue of the *IBM Journal of Research and Development*, you can discover more about the game-changing technologies we have introduced and the market challenges they solve. These achievements demonstrate what is possible when we bring together the best of IBM across of our functions from engineering and research, to design and offering management, and importantly partner with our clients so we can share in their success as they continue their hybrid cloud journey.

A handwritten signature in black ink, appearing to read "Ross A. Mauri". The signature is fluid and cursive, written in a professional style.

Ross A. Mauri
General Manager, IBM Z and LinuxONE
IBM Systems

