



# Accelerate your digital transformation journey

Build a high-performing, customer-centric digital bank using IBM LinuxONE and Intellect Digital Core.



## Highlights

- Respond to constant market disruptions with an agile, customer-centric and smart digital banking solution
- Accelerate your bank’s digital banking and channel transformation journey with a scalable, proven solution
- Implement an industry-leading solution with the synergistic powerful combination of Intellect and the IBM® LinuxONE server
- Deliver superior resiliency with a service-level agreement of 99.999% availability<sup>1</sup>
- Deploy digital banking and AI solutions with the greatest confidence for data protection and client privacy with the most secure Linux® server in the industry<sup>2</sup>
- Gain the ability to consolidate hundreds, and possibly more than a thousand x86 cores, onto a single IBM LinuxONE platform and reduce costs by up to 40% in three years, versus compared x86 servers<sup>3</sup>

## Smarter digital banking amidst global disruptions

Banks are no strangers to disruptions. Over the past decade, they have faced the fallout from the global financial crisis, evolving regulatory reforms, the birth of new competitors and, most recently, a global COVID-19 pandemic. To weather the current storm and build greater resilience for the future, they must become even more agile. The banks’ ability to respond, innovate and evolve quickly is essential, not just for success, but for survival.

The new normal is the disruptive environment that now compels banks to embrace continual reinvention of their business models and solutions. Simultaneously, customers are demanding greater digital access than ever before. Now is the time for banks to radically rethink their business model and accelerate the digitization process.

To meet today’s challenges and prepare for the future, banks need a fully integrated, secure and flexible system that caters to all of their banking segments.

Intellect Design Arena has approved the use of its flagship offering, Intellect Digital Core (Intellect), on IBM LinuxONE, the industry’s leading server built for Linux® enterprise applications. Intellect is a contextual banking solution that’s built on a cloud-native and microservices- based architecture.

Under this alliance, when banks choose Intellect on IBM LinuxONE, they can forge ahead knowing that they can be successful in their digital banking initiatives. The Intellect on IBM LinuxONE solution enables banks to be customer-centric, agile and compliant, and allows them to use a technology infrastructure that’s infused with intelligence, protected with advanced security, and future-proofed against the flow of new breakthroughs and risks.

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*“With our reimagined digital blueprint—designed to drive agile innovation—we bring it all together. Customer journeys. Experience. Integration. Cloud.”*

—Rajesh Saxena, CEO, Consumer and Central Banking, Intellect Digital Arena

[Learn more →](#)

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## Contextual banking made for you

Intellect is a comprehensive contextual banking suite for core, lending, treasury, trade finance and cards, with front-to-back digital capabilities. Intellect reimagined the entire digital banking requirements and redesigned its products based on deep customer insights from its banking clients and their customers. This approach enables Intellect to offer a superior customer experience, with relevant and user-friendly features, which allows its clients to stay ahead of the changing digital landscape.

The robust system is designed around the Digital 360 approach, a framework which guides banks with an all-encompassing view of their entire digital journey—providing a delightful customer experience, “digital outside” while achieving operational efficiency, “digital inside”.

### Intellect Digital Core: What sets it apart?

- Offers a formidable solution with Digital 360 approach
- Provides a truly contextual experience by bringing together AI, data analytics, market-relevant features and agile integration on a robust and scalable architecture
- Caters to retail, corporate, and small and medium enterprise banking segments
- Offers a cloud-native, microservices-based architecture with API-ready features
- Helps banks transform fragmented digital activities into a holistic modernization approach

IBM LinuxONE, known for its top-notch capabilities like security, reliability and scalability, helps ensure consistency of digital services across all products and Intellect delivery channels. A typical client of IBM and Intellect can confidently rely on this combined banking solution to accelerate their journey to digital banking and expand their competitive differentiation in the market—now and in the future.

Together, IBM and Intellect deliver.

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*Reimagine your future-ready digital modernization with Intellect Digital Core, powered by the IBM LinuxONE technology infrastructure.*

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## Unparalleled security and data protection with LinuxONE for Intellect Digital Core clients

Security and data privacy are top priorities for any bank in today’s environment, especially when the following market trends are considered:

**27 billion**

records were exposed by data breaches in the first half of 2020<sup>4</sup>

**USD 3.86 million**

is the average total cost of a data breach in 2020<sup>5</sup>

**280 days**

is the average time to identify and contain a data breach<sup>5</sup>

**147.9 million**

consumers were affected by the Equifax Breach in 2017<sup>6</sup>

IBM LinuxONE offers the highest levels of security and privacy in the market.<sup>2</sup> It has security built in at all layers to help deliver end-to-end protection—from the processes through firmware, to the OS, to the management applications sitting on top and everything else in between.

The impressive distinction of IBM LinuxONE in the Linux world as the platform with the highest level of security in the industry helps boost the confidence of Intellect clients. They can effectively secure their data, protect their clients’ privacy and stay compliant to evolving industry regulations.

With IBM LinuxONE, encryption can be everywhere. It’s designed to offer 100% encryption of application, cloud service and database without application changes. Unquestionably, a unique client benefit across the industry. Selective data encryption, the traditional method for protecting data, can be costly and resource intensive. With pervasive encryption on IBM LinuxONE, clients no longer need to choose which data to encrypt. Encryption at the network level helps protect data from potential attacks while in flight. Encryption at the data set level is designed to ward off insider attacks that could compromise unencrypted data.

Pervasive encryption by IBM LinuxONE helps protect data while in flight and at rest.

# Journey to cloud without compromise

As IBM and Intellect clients proceed with their journey to cloud, they need to drive to market faster while avoiding cloud security risks and migration challenges. This requires cloud without compromise. With the new LinuxONE as the foundation of their hybrid cloud infrastructure, banks can transform applications and data with industry-leading data privacy, security and resiliency on an IT infrastructure purpose-built for cloud.

These benefits support, strengthen and integrate effectively with Intellect’s smart digital transformation that includes cloud-

native architecture, modular design and microservices-based architecture. Intellect’s open and flexible architecture allows banking institutions to seamlessly integrate with other systems to offer end-to-end solutions. See Figure 1.

## Intellect Digital Core on LinuxONE: A winning combination

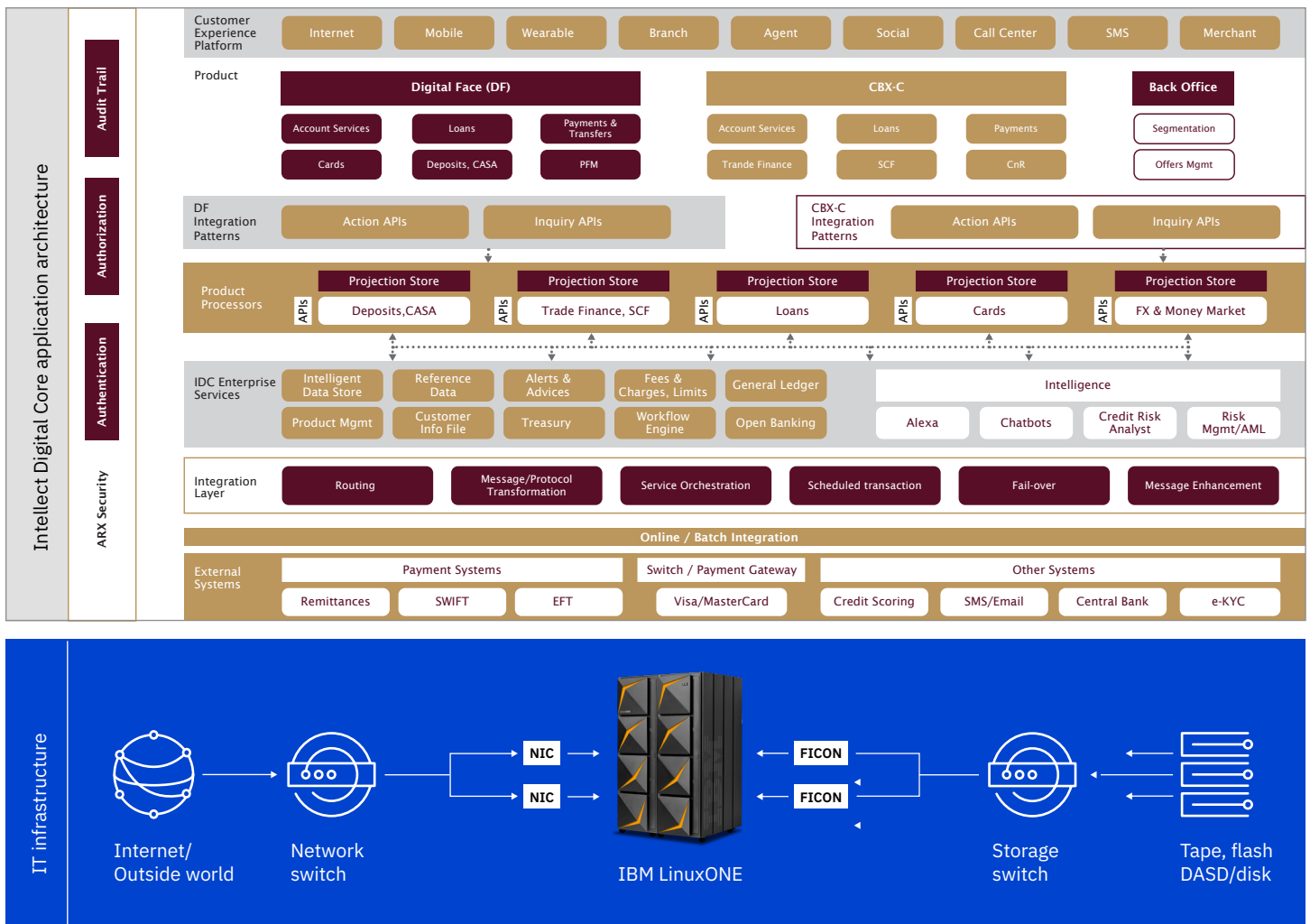


Figure 1: An industry-leading IT infrastructure based on IBM LinuxONE enhances the orchestration of Intellect’s banking services.

With their combined capabilities, IBM LinuxONE and Intellect help accelerate clients' migration to the cloud, while minimizing business disruption.

In addition to pervasive encryption, IBM LinuxONE delivers a unique and differentiated technology called IBM Secure Service Container. The technology can protect organizations' data against both external and insider attacks, whether inadvertent or malicious, in the cloud or on premises.

Furthermore, container resources are protected from all other workloads on the system through a highly stringent electronic isolation that has earned IBM LinuxONE the highest level of certification in the industry, Evaluation Assurance Level 5 (EAL5+).

## IBM LinuxONE, an industry-leading platform for Intellect Digital Core smart banking

Prospective banking clients are looking to replace or modernize their disparate existing systems with an industry-leading IT infrastructure that not only supports but enhances the orchestration of the ensemble of banking services of Intellect. See Figure 1.

Banks need a complementary high-performing IT infrastructure for a modern digital transformation solution like Intellect Digital Core. They need an IT infrastructure that not only offers unwavering security and data protection but can also handle massive data-processing workload.

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*Privacy and data protection are critical in sustaining the trust of Intellect Digital Core clients. The superior security capabilities of IBM LinuxONE are imperative to achieving this goal.*

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They need a platform that offers them the best of both worlds, such as:



Support for private or public cloud



Scalability and flexibility



Reliability and speed

IBM LinuxONE can address these requirements and more.

The LinuxONE platform is engineered as a highly scalable data-serving and transaction-processing platform that's vastly different from a standard x86-based server running Linux. Organizations will be able to consolidate hundreds and possibly more than a thousand x86 cores onto a single IBM LinuxONE platform, and reduce costs by 40% in three years versus compared x86 servers.<sup>3</sup>

In fact, a research study by International Data Corporation (IDC), a premier global provider of market intelligence and advisory services, found that IBM LinuxONE can support up to 8,000 Linux servers in a single footprint.<sup>7</sup>

Banking institutions aim to manage unpredictable market opportunities, customer needs, and external pressure without missing a beat. With IBM LinuxONE and its featured IBM Capacity on Demand (CoD), they can achieve this goal with agility. With CoD, banking institutions can access additional IT hardware and software resources they need, when they need it, without interrupting their existing processes. They incur the additional operating costs only for the duration of the unusually heavy workload.

IBM Capacity Backup (CBU) is a similar feature that allows hardware engines to be used for disaster recovery (DR) without incurring additional software charges, if the production server is temporarily unavailable. In the absence of a DR event, users aren't charged for unused licenses in a nonproduction environment, thus alleviating software costs. These flexibility and cost-saving opportunities aren't available to banking institutions that rely on commodity x86 servers.

The latest IBM LinuxONE family of servers come in two models: Model LT1 and Model LT2. See Figure 2 for comparisons.

# IBM LinuxONE III: Designed for secure data and cloud-serving for banking workloads

## IBM LinuxONE III Model LT2

Performance in a small footprint



- Mono-frame
- Up to 65 cores at 4.5 GHz
- Up to eight SAP cores
- Up to two spare cores
- Up to 16TB memory
- One to two processor drawers
- Up to four I/O drawers
- Up to 40 logical partitions
- One LT2 core ← 11 x86 cores
- Intelligent power distribution unit (iPDU)
- Air-cooled only
- 19-inch industry standard frame

## IBM LinuxONE III Model LT1

Extreme scale



- Multi-frame (up to four)
- Up to 190 cores at 5.2 GHz
- Up to 22 SAP cores
- Up to two spare cores
- Up to 40TB memory
- One to five processor drawers
- Up to 12 I/O drawers
- Up to 85 logical partitions
- One LT1 Core ← 13 x86 cores for traditional workload and 17 cores for Red Hat® Open Shift® containers
- iPDU or bulk power assembly (BPS)
- Air-cooled or water-cooled

Figure 2: The latest models of IBM LinuxONE III

The IBM LinuxONE models are a tried and tested mission-critical hardware platform, based on the IBM Z® platform, with a unique shared memory and vertical scaling architecture, and have the power to grow workloads on the same footprint. They're engineered to handle heavy input and output (I/O) loads without compromising on latency and are designed to service millions of transactions per second with ease. They feature non-degrading performance and scaling capabilities, even at 100% utilization, which reduce the extra cost that many architects assume to be necessary to factor in degrading performance above 50% utilization.<sup>7</sup>

These unique capabilities and benefits of IBM LinuxONE make the platform vastly befitting for running a mission-critical workload like the modernized online digital banking solution of Intellect Digital Core.

## The IBM LinuxONE and Intellect Digital Core synergy

Intellect was recently ranked number one in the world for Best Selling Retail Banking Solution by IBS Intelligence in its IBS Annual Sales League Table 2020.<sup>8</sup> With more than 25 years of domain experience, Intellect Design Arena specializes in providing solutions for the banking, financial services and insurance industries. The company has established presence in 40 countries and serves more than 240 clients worldwide.

For more than a century, IBM has been creating innovations that matter. IBM Systems powers the world's leading industries and builds smarter businesses that support 87% of all credit card transactions, nearly USD 8 trillion in payments a year and USD 29 billion in ATM transactions each year, which are worth nearly USD 5 billion per day.<sup>9</sup>

It's clear why many banks rely on the combined strengths of these industry leaders, IBM LinuxONE and Intellect Digital Core, to help them accelerate their successful journey to a smart digital banking.

## For more information

To learn more about how IBM LinuxONE and Intellect Digital Core can benefit your banking institution, please contact [LPNHelp@us.ibm.com](mailto:LPNHelp@us.ibm.com). You can also contact your IBM sales representative or IBM Business Partner.

To learn about IBM LinuxONE, visit [ibm.com/linuxone](http://ibm.com/linuxone).  
To learn more about Intellect Digital Core, visit [www.igcb.com](http://www.igcb.com).

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition. For more information, visit [ibm.com/financing](http://ibm.com/financing).



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