

IBM Systems

# Infrastructure designed for cognitive business

How to tune your IT infrastructure  
for cognitive workloads

**IBM**

## What is a cognitive infrastructure?

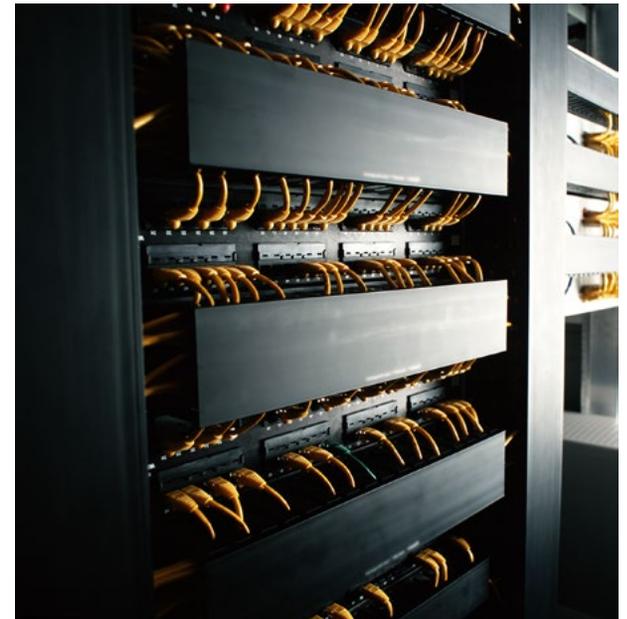
Do you have the right infrastructure to build a cognitive business? A cognitive infrastructure allows you to unlock the potential offered by data, cloud computing, mobile technologies and social applications. Without it, you risk falling behind.

The term infrastructure can include software platforms, unified communications infrastructure, networking equipment, directory services and aspects of the physical plant. More often, we're talking about hardware-defined infrastructure—the compute nodes, storage arrays and switching devices that make a data center tick.

### Why does it matter?

When it comes to infrastructure offerings, many vendors take a race-to-the-bottom approach, relying on commodity hardware to achieve the lowest possible costs. Data centers are expensive to build, scale and run. It's tempting to look for short-term savings on capital expenditures.

Yet an organization's infrastructure choices have a lasting impact on its ability to deliver value, ongoing insights and highly available applications. Finding a company with a portfolio of infrastructure products that is both broad and deep ensures that the most suitable hardware can be rapidly deployed to meet your organization's specific needs.



## Infrastructure for mobile

The waitless world is a mobile world. And enterprise mobile solutions aren't just about a smartphone app. Only a small part of the effort in supporting enterprise mobility is visible on smart devices. The underlying applications and architecture dealing with data synchronization, app management, security, integration, analytics, and other enterprise mobile challenges deliver most of the value. That's why your infrastructure and strategy matter.

### IBM MobileFirst Platform

The IBM® MobileFirst™ platform builds, enhances and continuously delivers mobile apps efficiently and effectively. It extends the development, delivery and management capabilities of IBM MobileFirst Platform Foundation with the addition of scalable data services, code scanning, quality assurance and geo-location support.

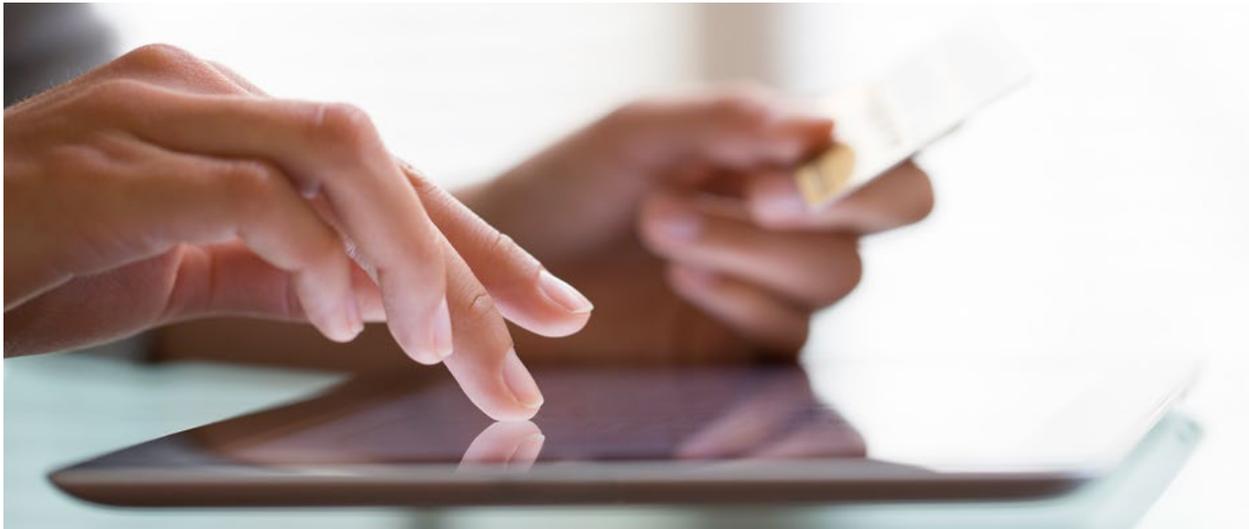
- The IBM MobileFirst Platform Foundation helps enterprises deliver on their mobile strategy with an open, comprehensive platform to develop, test, secure and manage native, hybrid and mobile web apps. It offers reduced development costs, faster time to market and is available on premises, private cloud or public cloud.

- The IBM MobileFirst Platform Cloudant® Data Layer Local Edition addresses the hybrid cloud demands of mobile application data management. It is available on premises, private cloud or public cloud.
- MobileFirst Platform Application Scanning helps reduce risk exposure and lower costs by identifying mobile application source code vulnerabilities early in the software development lifecycle. It is available on premises, private cloud or public cloud.

### IBM MobileFirst Protect

IBM MobileFirst Protect is a cloud-based enterprise mobility management platform that provides complete mobility management and comprehensive security of mobile devices, applications, documents, emails, and access to the web from a single portal.

[Read more >](#)



### **Servers for mobile systems: Designed to be flexible, integrated, secure and stable**

Power Systems™ offer a broad range of mobile solutions that align with your demands. And they deliver those solutions on an application platform that uses your existing investments so that you can extend your enterprise to mobile devices.

Mobile solutions on Power Systems are available across AIX®, IBM i and Linux. Key solutions such as the WebSphere® Application Server and IBM MobileFirst Platform Foundation 6.3.0 are optimized on POWER® and deliver a high quality of service, superior performance and an environment that enables businesses to build an app one time and deploy it across a wide range of mobile technologies.

Power Systems are widely recognized for security and data protection capabilities and can extend to encompass mobile devices and systems of engagement. Power Systems' virtualization capabilities and ability to dynamically respond to shifting mobile workloads make it an ideal platform for this new, dynamic environment of servicing your mobile workforce and customers.

Security is at the top of all of our minds—both users and CIOs. Our security record makes IBM Power Systems the preferred platform for the Mobile Enterprise Application Platform. Power Systems have a history of integration across the enterprise and outstanding application development capabilities, which are critical traits for mobile applications.

[Read more >](#)

### **Differentiate your mobile services with IBM z Systems**

IBM z Systems® provides enterprise mobility solutions, which can scale to handle unpredictable transaction rates and volumes, deliver mobile integration with reliability, availability and security while helping to ensure that customer data is protected. Mobile applications on IBM z Systems offer subsecond response times, near 100 percent uptime and flawless transaction processing.

### **Mobile Solution Kit for IBM z Systems**

Mobile is all about the speed and agility to deploy new applications quickly. The Mobile Solution Kit for z Systems delivers that speed and agility by quickly creating the infrastructure for mobile applications and a head start on building them.

Discover everything to build cost-effective and scalable mobile applications on IBM z13™:

- Applications: pre-built Apple iOS mobile applications that are ready to be customized for the company and integrated into the systems
- Infrastructure: technical information and services to build the mobile infrastructure to support those applications
- Connectivity: technical information and services to connect mobile apps to the existing data and transactions
- Security: technical information to help to create secure mobile applications from the device to z Systems

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## Mobile Solutions for LinuxONE

With the release of IBM LinuxONE™, IBM has redefined the enterprise Linux server as an open, flexible, efficient and trusted Linux platform, built for the demands of today and the new workloads of tomorrow.

LinuxONE delivers an exceptional mobile experience on an open, trusted and scalable platform. As a single portfolio of hardware, software and services, LinuxONE is an ideal platform for delivering an engaging mobile user experience and is uniquely positioned as an open development and delivery platform. It is optimized for performance and security and automatically scales to respond to mobile business growth.

- Built for scale. IBM LinuxONE supports tens of thousands of concurrent users. You can run development, test and production in a single system. Shared resources and shared development environments mean greater productivity.

- Built for speed. IBM LinuxONE has a fast processor, large I/O pipe, 10 TB memory, four levels of cache and much more. All designed to deliver subsecond end-user response time to thousands of concurrent users.
- Built for security. IBM LinuxONE provides isolation for applications, containers, virtual servers, and partitions; full encryption of data; dedicated cryptographic processors; as well as security for data, identity, and access control to protect your clients and the business' reputation.

The platform can help you:

- Rapidly build and deploy engaging mobile apps that integrate with core business capabilities.
- Secure mobile devices, data and enterprise transactions without sacrificing response time.
- Deliver mobile services on an open and highly responsive infrastructure that scales to meet peaks in mobile workloads.
- Accelerate adoption through best practices and services.

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## IBM WebSphere Liberty z/OS® Connect

Enables a secure and simple way to discover and reach applications and data on z/OS from mobile, web and cloud applications. Solution benefits include:

- Improved productivity for mobile app developers
- Basic API management for your z/OS transactions

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