IBM Resiliency Services

Always there, in an always on world

In today's *always on* world, no business can **tolerate downtime.**

Emerging client demands and increasing regulatory requirements have created an *always on* economy.

Your customers expect services that are **constantly ready and available.** With an explosion of options at their fingertips, even the slightest disruption to the end-user experience can cause customers to take their business elsewhere.

At the same time, **regulatory requirements are steadily increasing.** In nearly every industry, regulatory agencies are raising the bar to ensure the integrity of business processes and the protection of sensitive customer data against data breaches and other cyber threats.

In response, innovative businesses are now searching for a **more strategic and proactive approach to resiliency** to reduce the catastrophic losses that can result from circumstances beyond their control.

The average size of a data breach increased 1.8 percent to 24,089 records **at a cost of USD 3.62 million.**

Ponemon Institute:
2017 Cost of Data Breach Global Analysis
Read the Ponemon Report ▷

Did you know?

The installed base of Internet of Things (IoT) endpoints will grow from **14.9 billion at the end of 2016 to more than 82 billion** in 2025.[1]

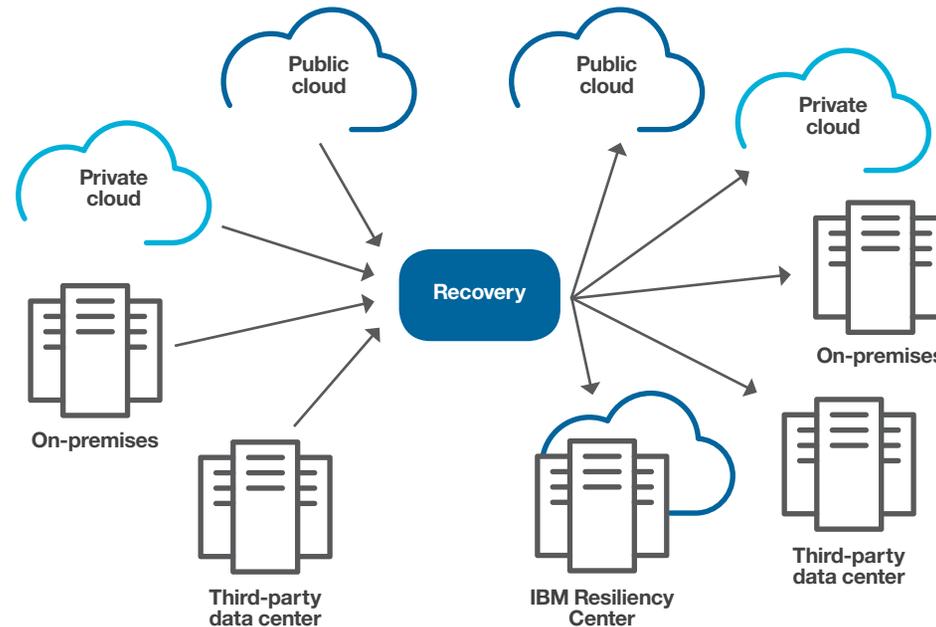**Resiliency** is the ability of an enterprise to rapidly adapt and respond to risks and opportunities.

The resiliency challenge of **hybrid.**

To provide a customer experience that is fast, flexible and cost effective, many enterprises are adopting **hybrid IT infrastructures to meet the changing requirements of today's business.**

These infrastructures are designed to improve the customer experience, but **hybrid deployments also increase the complexity of an IT environment,** particularly in managing backup and resiliency for data that is stored in multiple places. These deployments create dependencies that stretch across on-premises data centers and cloud environments, making a cohesive resiliency strategy more challenging.

Public cloud
Public cloud
Private cloud
Private cloud

Recovery

On-premises
On-premises

Third-party data center
IBM Resiliency Center
Third-party data center

Hybrid IT environments can include any mix of public cloud, private cloud, and traditional data centers.

Forbes Insight Report: The need to bring a paradigm shift in Business Resiliency. **Read the report.** ▷

IBM Resiliency Services combines **proven business continuity and disaster recovery methodologies** with cloud-based technologies.

This approach helps deliver **end-to-end enterprise resiliency across hybrid, multiplatform IT environments**

In today's market, **business resiliency is a competitive advantage**. The benefits of resiliency as a service can help you:

Manage risk: Improved visibility, accuracy and flexibility to test and recover critical applications and business processes to help support *always on* availability.

Protect brand and revenue: Proactively address impending failures, potential impact and tolerance for risk.

Reduce complexity: Manage disaster recovery across hybrid IT environments and protect end-to-end process dependencies across applications, data and infrastructure components.
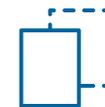
Manage regulatory requirements: Mandates that help with long-term protection of data.

Improve service: Tiered recovery and backups help meet recovery time and point objectives to maintain service level agreements.

Increase confidence: A fully-implemented and validated resiliency program helps you respond more rapidly in times of need.

Drive additional value: Advanced analytics from trend reports against replicated data drive business value in non-emergency situations.

IBM Resiliency Services 7-Layer Framework can help you achieve *always on* availability.

Facilitating *always on* data, applications, IT systems and facilities can be a challenge that reaches across your entire business, **not just the IT environment.**

Risk concerns should be addressed not only by IT personnel, but in every department throughout the company. A vulnerability in any area of your business can potentially disrupt the operations of the entire enterprise.

To help drive *always on* resiliency, IBM specialists analyze the business processes and dependencies across the physical and virtual **layers of your enterprise.** This analysis yields a robust understanding of interdependencies and their effects on the overall business.

Strategy and vision

Organization

Processes

Applications

Data

IT infrastructure

Facilities and data centers

The IBM Resiliency Services 7-Layer Framework methodology examines resiliency operations across the physical and virtual layers of an organization to help identify risks and vulnerabilities.

IBM Resiliency Services can help your business identify risks. **Watch now.** ▷
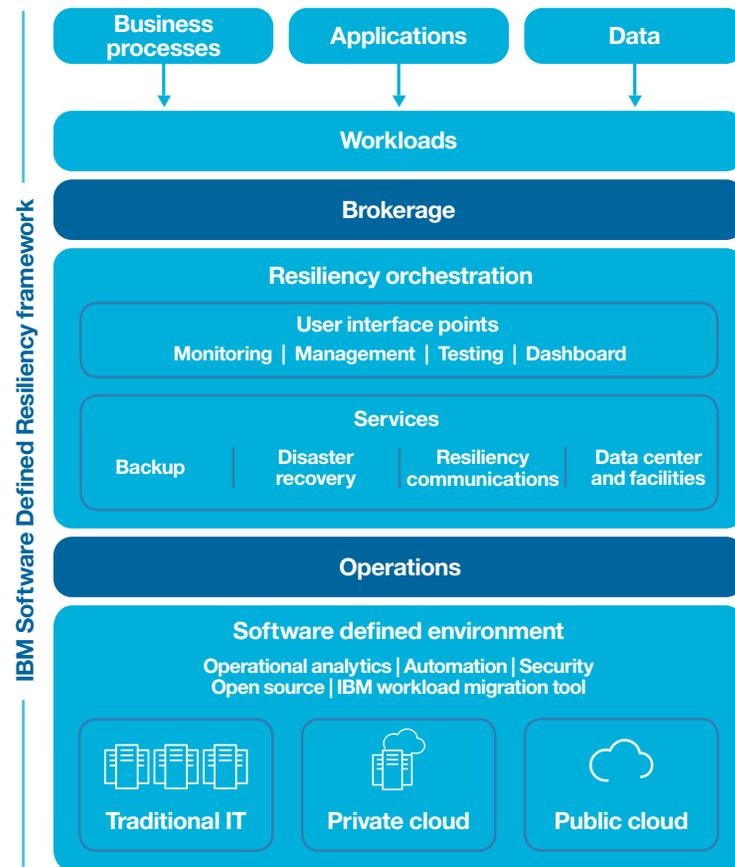
IBM's Software Defined Resiliency approach combines IBM's technology, best practices, insight and experience to help create a **cohesive resiliency program across hybrid environments.**

IBM consulting methodologies are combined with **automation, orchestration, cognitive computing and analytical technologies** to determine which processes, applications, components, data and environments are necessary for optimal resiliency.

This helps companies **better maintain operations and understand how long downtime can be tolerated** without significantly damaging the business.

The result is a **faster, more cost-effective resiliency solution for hybrid IT** that also supports the transformation of your digital models.

IBM Software Defined Resiliency is a cloud-enabled resiliency as a service approach that is customized for the unique needs of your business, addressing your uptime requirements for applications, data and systems.

IBM Software Defined Resiliency framework

Business processes	Applications	Data

Workloads

Brokerage

Resiliency orchestration

User interface points
Monitoring | Management | Testing | Dashboard

Services

Backup	Disaster recovery	Resiliency communications	Data center and facilities

Operations

Software defined environment
Operational analytics | Automation | Security
Open source | IBM workload migration tool

Traditional IT	Private cloud	Public cloud

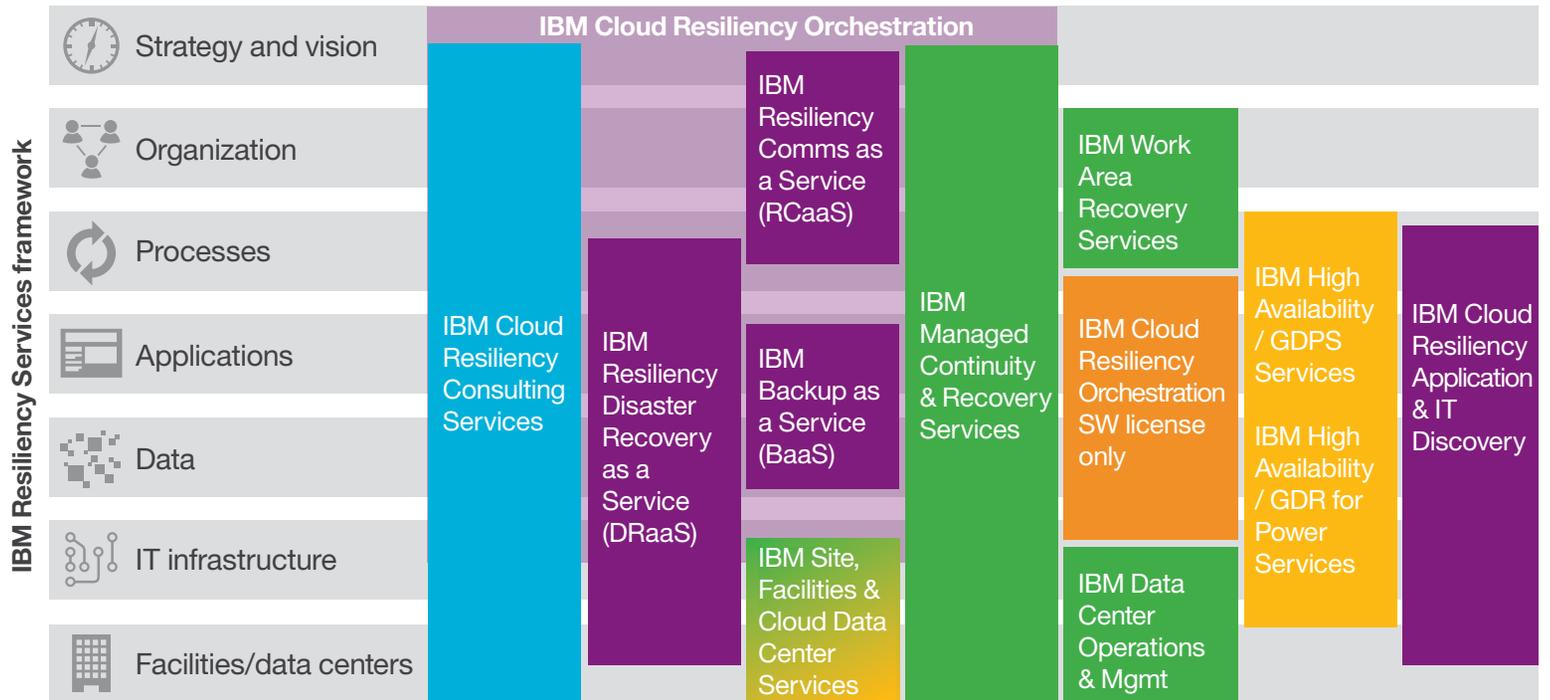The IBM Software Defined Resiliency model is supported by IBM's broad suite of offerings and resiliency services roadmap.

Resiliency by **design.**

Our portfolio addresses the client's business needs to **provide fully integrated resiliency that is built-in, not bolted on.**

IBM Cloud Resiliency Orchestration

IBM Resiliency Services framework

| Strategy and vision |
| Organization |
| Processes |
| Applications |
| Data |
| IT infrastructure |
| Facilities/data centers |

IBM Cloud Resiliency Consulting Services

IBM Resiliency Disaster Recovery as a Service (DRaaS)

IBM Resiliency Comms as a Service (RCaaS)

IBM Backup as a Service (BaaS)

IBM Site, Facilities & Cloud Data Center Services

IBM Managed Continuity & Recovery Services

IBM Work Area Recovery Services

IBM Cloud Resiliency Orchestration SW license only

IBM Data Center Operations & Mgmt

IBM High Availability / GDPS Services

IBM High Availability / GDR for Power Services

IBM Cloud Resiliency Application & IT Discovery

Consulting services (cloud, traditional, hybrid)

Project-based services

Cloud project-based services

Cloud-managed services

Managed or hosted services

SW license only

Create a more robust resiliency strategy
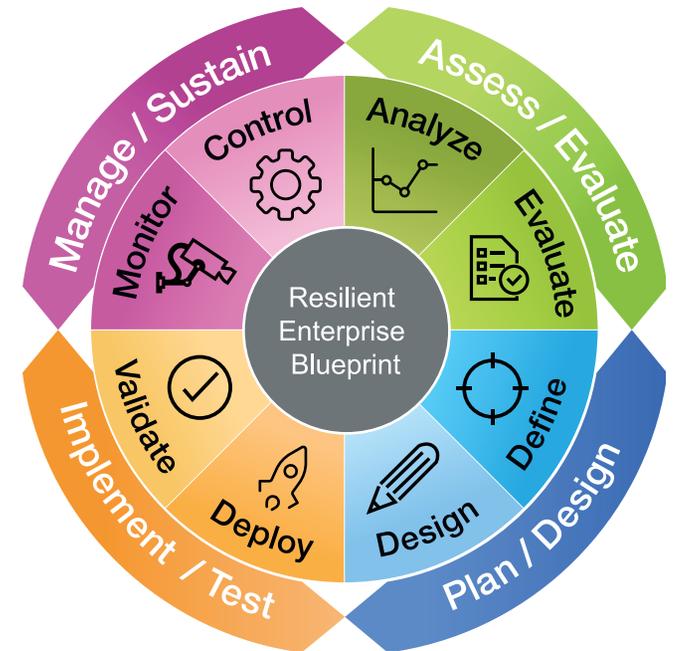## with IBM Cloud Resiliency Consulting Services.

New technologies and business models are making the world more interconnected, therefore creating more complexity and more risk than ever before. Cyber attacks, weather or even human error can lead to **expensive downtime** issues such as lost revenue opportunities or damage to your brand.

IBM Cloud Resiliency Consulting Services helps manage risk and compliance **across all layers of the enterprise** to achieve end-to-end resiliency while optimizing costs.

Using IBM's proven[4] **IBM Resiliency Services 7-Layer Framework**, IBM can examine your business strategy, vision, organization, processes, applications, data, technology and facilities against business-driven, data-driven and event-driven threats. Insight from this examination is applied to develop and **implement effective solutions that address your specific resiliency needs.**

Request an IBM Resiliency Assessment

The IBM Resilient Enterprise Blueprint helps you design and implement a robust, customized resiliency strategy for your business.

Paradise Group teamed with IBM to create a robust and integrated data infrastructure to deliver a **superior guest experience** with world-class security and reduced downtime.

Learn more ▷

Orchestrate your disaster recovery through intelligent workflow automation across your hybrid cloud and traditional IT environment.

Protect your end-to-end business process dependencies across applications, data and IT infrastructure components with IBM Cloud Resiliency Orchestration, a unified disaster recovery management solution that helps deliver **disaster recovery readiness, validation and recovery.** This IBM managed service allows you to monitor, test and failover your environments from a central dashboard at any time.

Fast, reliable recovery with disaster recovery exercise automation to enable predictable recovery to meet business-set recovery service level agreements.

Reduced complexity and risk using a single management console to provision, monitor, validate, test and report.

Manage audit and compliance requirements with recovery across multiple enterprise applications.

Simplify disaster recovery using pre-packaged patterns and intelligent workflow automation.

Introducing IBM Cloud Resiliency Orchestration.

Watch now ▷

IBM Marketplace
IBM Cloud Resiliency Orchestration.

Learn more ▷

HDFC Bank implemented IBM disaster recovery technology and has since **reduced application failover time by 85 percent** with no additional staff.

Learn more ▷

◁ **9** ▷

Keep your business running with IBM Disaster Recovery as a Service.

IBM Disaster Recovery as a Service helps **improve recovery objectives, protect critical data and support operational efficiency.**

This **fast, flexible solution helps you better respond to the unpredictable nature of disasters,** supporting higher availability levels with near-continuous backup of critical applications, infrastructure, data and systems to the cloud.

Near-continuous replication of physical and virtual servers using your choice of private, public or hybrid clouds to keep your business *always on*.

Disaster recovery orchestration for faster, cost-effective disaster recovery workflow automation with real-time readiness validation and a better awareness of the entire process.

Reduce costs by eliminating the need for redundant in-house recovery servers.

Create a data-driven ecosystem turning "dark data" into new business value.

Gartner has named IBM as a leader in their Magic Quadrant for Disaster Recovery as a Service for the third year in a row.[2]

Read more ▷

IBM Marketplace
IBM Cloud Resiliency Disaster Recovery as a Service.

Learn more ▷

Redefine disaster recovery and turn your dark data into new business value with **IBM Analytics**.

UmbraGroup deployed an IBM Disaster Recovery as a Service solution that **boosts availability and accelerates recovery** without the expenses associated with an on-premises disaster recovery infrastructure.

Learn more ▷

IBM Resiliency Services

Connect to your critical response teams more quickly with IBM Resiliency Communications as a Service.

Automate your incident response and crisis communications workflow to help you deliver faster, more effective responses.

With Resiliency Communications as a Service, incident reports from field staff are **automatically routed to the correct incident response team** that can evaluate the incident and respond accordingly. The solution tracks all reports to **provide a full view of the incident** through a variety of simple interfaces. Data can also be used to trigger other communications workflows such as employee alerts and press releases.

The service integrates high resolution automated weather alerts from **The Weather Company** so you can quickly and proactively respond to potential disruption from natural events.

Integrate weather alerts into incident management to provide more accurate[3] early warning of developing weather events and enable proactive response.

Streamline response activities and communications using interactive workflows and automation, interacting across multiple channels simultaneously.

Improve effectiveness of information and response in the first critical hour via real-time situational awareness.

Learn how IBM Resiliency Communications as a Service helps you engage the right people at the right time.

Watch now ▷

IBM Marketplace
IBM Resiliency Communications as a Service.

Learn more ▷

Integrate weather data to influence critical business decisions through **The Weather Company**.

IBM Resiliency Backup as a Service helps provide **scalable, security-rich cloud backup to protect your critical data.**

Help ensure your critical business data is **protected and available when you need it** according to some of the highest standards of reliability.

With around-the-clock access to your data and IBM support teams, IBM Resiliency Backup as a Service provides **onsite, offsite and hybrid data protection solutions** for clients seeking to achieve resiliency and operational protection across enterprise data assets.

Customize your backup solution based on your business needs today and tomorrow.

Monitor your data environment with robust, customizable reporting and notification capabilities.

Flexible, cloud-based backup accommodates almost any mix of public, private or hybrid cloud delivery models with flexible, cloud-based backup.

Learn how IBM Resiliency Backup as a Service allows you to manage and optimize your backups.

Watch now ▷

IBM Marketplace
IBM Resiliency Backup as a Service.

Learn more ▷

Your data is valuable and can unlock new business opportunities. Is it protected and available when you need it? Find out with IBM Backup as a Service Evaluation Tool

Learn more ▷

Maintain near-continuous uptime with IBM High Availability Services.

These fully automated and customizable IBM High Availability Geographically Dispersed Parallel Sysplex® (GDPS) and Geographically Dispersed Recovery for Power Systems solutions can **help you reduce downtime to minutes or seconds, even when your key IT staff are unavailable.**

IBM Implementation Services for GDPS help you manage planned and unplanned outages through automation software and tailored workflows in a more streamlined, secure and cost-effective manner. GDPS is a family of eight solutions to meet your specific requirements that are designed to drive near-continuous availability of your mainframe systems and storage. This is achieved through autonomic reaction to incidents to avoid impact on your workloads or when not possible, GDPS managed workflows can be used to enable timely recovery after major outages.

IBM Geographically Dispersed Resiliency for Power Systems solution, like GDPS, uses automation software, installation services and remote-based support to help you streamline disaster recovery and testing. Built-in functionality and IBM support can decrease the need for expert-level skills and shorten your recovery time objective, improve your recovery point objective, optimize backups and better manage growing data volumes.

IBM Marketplace
IBM Implementation Services for GDPS.

Learn more ▷

IBM Marketplace
IBM Geographically Dispersed Resiliency for Power Systems.

Learn more ▷

Challenges

IBM Resiliency Services

Solution

Why IBM

IBM Managed Continuity and Recovery helps you **respond to disruptions more effectively.**

IBM offers a wide range of proactive and event-driven managed business continuity and disaster recovery services designed **to reduce risks and improve availability while helping you control operational expenses.**

IBM Managed Continuity and Recovery Services facilitate enhanced recovery and availability for systems, data and applications to help you respond to disruption more rapidly and cost effectively.

Available services include:

IT recovery
Recovery services at specialized IBM facilities or customized, vendor-neutral solutions combine hardware, software and services to help reduce the loss of business-critical data, shorten the recovery process, reduce operational risks and better manage compliance.

Work area recovery services
Dedicated, shared and mobile seats support a more flexible and extensible workforce continuity plan. This helps ensure that your employees can continue to perform their jobs in the event of specific disruptions.

IBM Marketplace
IBM IT Infrastructure
Recovery Services.

Learn more ▷

IBM Marketplace
IBM Work Area
Recovery Services.

Learn more ▷

IBM Resiliency Services

Achieve a more resilient and flexible infrastructure to bolster growth with IBM Site, Facilities and Cloud Data Center Services.

IBM's robust portfolio of services helps you **handle your hybrid enterprise workloads, improve your resiliency posture and align your business and operating objectives.**

Available features include:

> Data center strategy to help your organization rationalize its data center portfolio and address business requirements around cloud, availability, adaptability and efficiency.

> Data center consolidation and relocation to migrate applications to public or private clouds and IT equipment while helping reduce your risk of unplanned outages.

> Cabling and connectivity services provide robust turnkey cabling services to enable scalable, flexible cabling solutions that can increase data center efficiency and reduce costs.

> Data center design and construction to align capacity, resiliency and efficiency to the unique requirements of your data center. You can also explore IBM Cloud Modular Data Center solutions, including Cloud Prefabricated Modular Data Centers, Cloud Scalable Modular Data Centers and Enterprise Modular Data Centers.

> Data center operations and management to bring together the people, processes, technology and physical space required to manage your hybrid cloud and/or traditional IT data center environment.

Data center consolidation and migration can be far more than a cost reduction or facilities exercise. It can transform the business value of IT across your enterprise.

Learn more ▷

Develop even more proactive resiliency programs with **IBM Watson® technology**.

Lefdal Mine, together with IBM, created one of the **largest, greenest and most resilient data centers** in Europe with its structure located under more than 100 meters of rock.

Learn more ▷

IBM Resiliency Services

Automate the discovery of IT assets and interdependencies with IBM Cloud Resiliency Application and IT Discovery.

This solution uses a patented set of tools that automates asset discovery across your hybrid infrastructure for a **reduced-risk approach to migrating applications, data and IT equipment within and between data centers.**

IBM Cloud Resiliency Application Dependency Mapping offers advanced learning algorithms and state-of-the-art analytic capabilities to quickly and unobtrusively discover your IT environment and business applications, producing the data and analysis required for IT project planning and data center migration. This includes cloud migration enablement.

Plan and migrate applications, data, IT and infrastructure equipment within data centers or from one data center to another.

Apply advanced analytics to help discover and remediate risks before migration.

Discover off-the-shelf software running on individual servers.

In combination with clustering, **identify** groups of servers supporting the same business application and business-critical application dependencies.

IBM's experience suggests that while client inventories are generally 70 – 90 percent accurate, planning a major data center migration requires airtight inventory management.[4]

IBM Marketplace
IBM Cloud Resiliency Application Dependency Mapping.

Learn more ▷

Business never stops. Can your company meet the demands of your customers to stay always on?

IBM Resiliency Services has a long history of helping clients avoid disruption to the IT environment. IBM is the market leader in disaster recovery and our as-a-service solutions help make recovering from a disaster fast and seamless. We help businesses ensure that their systems are secure, accessible, and always available – no matter where their workload is located (private/public/traditional IT) – while ensuring full compliance with federal and local data residency regulations. IBM was named as a leader in the Gartner Magic Quadrant for Data Center outsourcing and infrastructure utility services in **Europe**[5] and **North America**[6] for the fourth consecutive year and in **Asia/Pacific**[7] for the third consecutive year. Gartner has named IBM as a leader in their Magic Quadrant for Disaster Recovery as a Service for the third year in a row.[2] IBM has also been positioned as a leader in the IDC MarketScape: North America Disaster Recovery-as-a-Service Provider 2015 Vendor Assessment[8].

IBM can deliver a broad scope of business continuity and disaster recovery services from assessment, consulting and

100 percent[4] success in meeting commitments to clients who have declared a disaster.

Over **50** years[4] of business continuity and disaster recovery experience

More than **4000** resiliency professionals[4], backed by over 400,000 IBM employees and IBM Business Partners

More than **300** resiliency centers in 68 countries[4]

IBM Resiliency Services help you detect, react and recover from disruptions.

Watch now ▷

Learn more about
IBM Resiliency Services.

Talk with us.

IBM Resiliency Services specialists can assist you in building a business case for resiliency including identifying return on investment targets and risk reduction goals.

Call **1-877-426-3287** to speak with an **IBM Resiliency Services representative**.

Visit IBM's website

LinkedIn

Read new blog posts

@IBMServices on Twitter

YouTube

IBM

[1] IDC. Worldwide Internet of Things Installed Base by Connective Forecast, 2017-2021, Doc #US42331917, Mar 2017.

[2] Gartner Magic Quadrant for Disaster Recovery as a Service, Ron Blair, Mark Thomas Jaggers, 19 June 2017. https://www-935.ibm.com/services/us/en/it-services/business-continuity/gartner-magic-quadrant-report/.

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

[3] ForecastWatch.com, a Service of Intellovations, LLC. Three Region Accuracy Overview 2010 through June 2016. December 2016. http://forecastwatch.com/static/Three_Region_Overview_2010_201606.pdf.

[4] Based on IBM client engagement internal data. Individual results may vary.

[5] Magic Quadrant for Data Center Outsourcing and Infrastructure Utility Services, Europe, 06 June 2017, ID: G00313346, Analysts: Claudio Da Rold, et al

[6] Magic Quadrant for Data Center Outsourcing and Infrastructure Utility Services, North America, 22 June 2017, ID: G00313892, Analysts: William Mauer, et al

[7] Magic Quadrant for Data Center Outsourcing and Infrastructure Utility Services, Asia/Pacific 16 August 2016, ID: G00292087, Analysts: DD Mishra, Fred Ng, Arup Roy.l

[8] IDC MarketScape: North America Disaster Recovery-as-a-Service Provider 2015 Vendor Assessment, November 2015.

BUM12345-USEN-05