

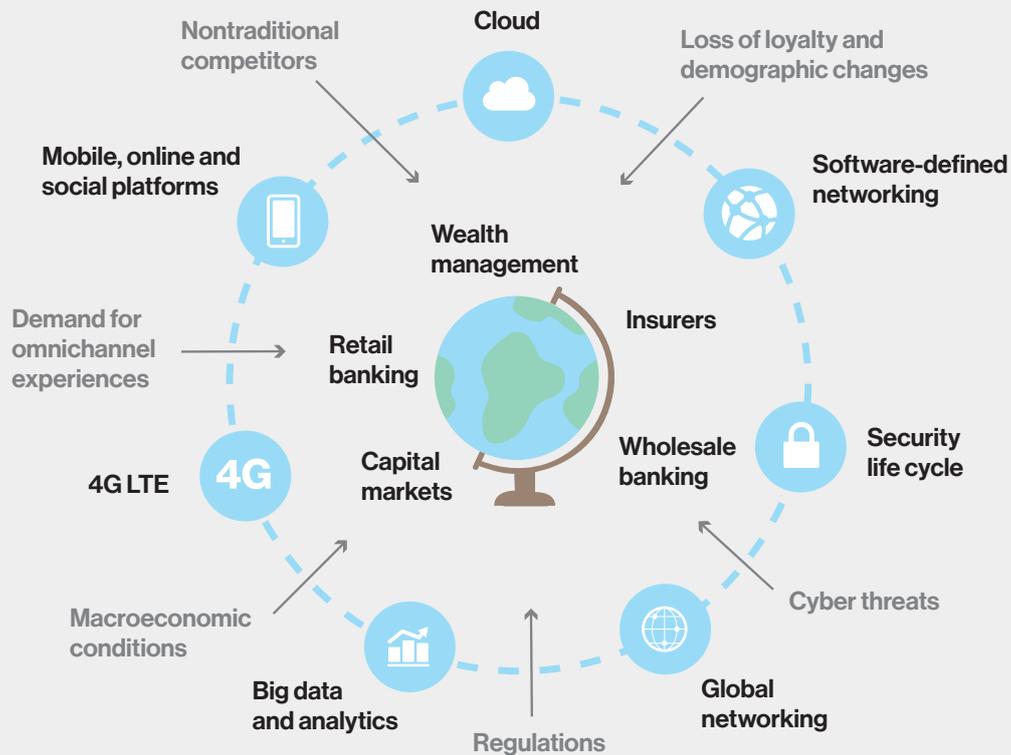
Refresh your IT infrastructure.

Optimizing performance
in financial services.

verizon[✓]



The finance industry ecosystem



Contents

Embedding flexibility in financial services.....	3
Getting more for your money.....	4
Case study: Driving growth and business performance.....	5
The velocity and agility to respond to a fast-moving market.....	6
Case study: Enabling digital transformation at a major regional bank.....	7
Driving great customer experience with an always-on network.....	8
Case study: Improving customer experience at a large bank.....	9
Reducing operational risk with a resilient infrastructure.....	10
Case study: Managing operational risk after Hurricane Sandy.....	11
Strengthening your green credentials and brand reputation.....	12
Case study: Improving workforce collaboration and productivity.....	13
Why Verizon?	14

Embedding flexibility in financial services.

Join the API economy and improve your digital customer experience while reducing IT complexity and cost.

Anytime, anywhere digital access is no longer a unique competitive advantage for financial services enterprises – it's a necessity.

Customers expect to access banking services via mobiles, while client interfaces are becoming richer and more content-heavy. This – combined with the digitization of banking operations, the virtualization of servers and applications, and the rapid adoption of SaaS applications – is putting pressure on IT.

The performance, resiliency, latency and agility of your IT infrastructure are more crucial than ever before. At the same time, the knowledge base needed to operate existing infrastructure is shrinking. In response, many financial services organizations are upgrading and expanding their infrastructure to include:

- Local data centers
- Local area networks (LAN)
- Wide area networks (WAN)
- Internet gateways
- Security monitoring tools
- Cloud environments
- Voice and collaboration tools

Delivering a more flexible infrastructure means developing the API capability you need to connect with third-party service providers, such as fintechs.

How can we help?

Verizon helps financial services enterprises across the globe to improve their operations and deliver an infrastructure solution with true 24x7 availability.

We offer infrastructure monitoring and measurement tools to help optimize your performance. And we can offer advice and support on critical infrastructure upgrades and maintenance, based on our experience of working with some of the world's leading financial services organizations.

That means you get the high-performance, always-on infrastructure you need to enable 24x7 access to your applications and third-party service providers. And you have better data to help you understand and anticipate the needs of your retail, corporate and private clients.



We can provide you with the APIs you need to connect with all your partners and service providers.

Our solutions help you standardize and simplify your IT infrastructure, while providing more customized products and services. They enable your employees to collaborate, share data, run processes and make timely decisions. They free up your talent and resources to help drive innovation. And they reduce your capital and operational expenditure, cut your time to market and mean you can compete more effectively.

We can deliver our solutions locally or globally to suit your needs – offering you greater flexibility, more streamlined operations, and happier customers, partners and employees.

Five key drivers for infrastructure optimization

Forward-thinking CIOs in financial services are looking to optimize their IT infrastructure for five main reasons:

- To reduce costs and boost ROI.
- To increase velocity and agility in fast-moving financial services markets.
- To improve customer experience.
- To reduce and manage operational risk.
- To strengthen environmental credentials and enhance brand reputation.

Getting more for your money.

IT cost reduction is a KPI for many financial institutions. Verizon can help you hit your targets.

With rapid digitization of operations, the demands on financial IT departments are greater than ever. But at the same time, budgets are flat or under pressure and you're expected to do more with fewer resources.

What can you do to contain operational IT costs while also delivering the always-on performance that your business users and customers demand?

How can we help?

Our managed services free up your talent and resources to focus on activities that will add more value to the business. You'll also benefit from our global economies of scale that allow us to operate your infrastructure at a far lower cost than you could on your own. And we continuously invest in new technologies, keeping you up to date with the latest innovations without incurring development costs.

Our solutions

We have a global portfolio of enterprise products and services, including:

Managed WAN

Your wide area network (WAN) is a critical component of your IT and business operations. It takes dedicated resources, hardware, software and the latest applications to properly manage it. Verizon Managed WAN services range from simple monitoring and reporting to complete outsourcing of your corporate network and data center. And our software-defined WAN uses the optimum route and bandwidth for greater reliability.

Managed DC & Office LAN/WLAN

You can get fast, reliable access to top-tier carriers, networks and service providers with Verizon Managed Network & Connectivity Services. Our scalable data center connectivity solutions help you to meet your operational and performance demands, control your costs and improve your flexibility.



Verizon Enterprise Solutions was positioned as a leader in the 2015 Gartner Magic Quadrant for Global Managed Network Provider.

Enterprise Voice services

Our Voice over IP (VoIP) solutions deliver scalable, cost-efficient and secure technology and collaboration tools fit for a global and highly mobile workforce. We've been recognized as a market leader for SIP Trunking for seven consecutive years. That means we're able to simplify your transition from legacy systems to integrated voice and data for fixed and mobile environments.

UCCaaS

Our Unified Communications and Collaboration as a Solution (UCCaaS) portfolio enables customers of all sizes to transform their business by providing consistent, secure and cost-efficient collaboration tools. Our solution has extensive global availability and built-in redundancy, and is backed by stringent uptime service-level agreements (SLAs).

Case study:

Driving growth and business performance.

Our global partnership with a leading financial services client helped them to expand and innovate while reducing their infrastructure costs.

Customer challenge

The client's challenge was to maintain its reputation as a technology innovator in capital markets, and grow the competitiveness of its technology in the dynamic and demanding world of capital-markets infrastructure services, while managing costs.

To do this, the company wanted to increase its focus on its core businesses:

- Trading technology
- Market technology
- Listing services

The client also wanted to exit its IT infrastructure business to provide economies of scale. That way, the company could spend more time innovating in its core businesses, driving growth and business performance, expanding and innovating, and delivering new and better applications to its clients.



Verizon is a trusted partner that understands our business and has the global capabilities and expertise to support us as we continue to grow.

Senior Vice President, financial services partner

How Verizon helped

We provided the client with a global colocation solution and consultancy to give it all the storage capacity it needed. We also provided the company with a trading connectivity solution and outsourced enterprise backbone solution to support it with a fully-outsourced infrastructure service.

Business outcomes

As a result of Verizon's IT infrastructure support, the client has doubled revenue from one of its key services. And that's despite an industry downturn and increasing downward pressure on prices.

Company profile

The client offers capital-markets infrastructure services, with a focus on the core services of financial trading, market technology, capital market insight, and listing services.

The velocity and agility to respond to a fast-moving market.

Changing customer expectations and new market entrants are forcing financial services organizations to up their game. Verizon can help you become more agile and responsive.

Financial services consumers increasingly demand ease of access and 24x7 service. At the same time, new market entrants and emerging fintech companies are causing disruption with new digital solutions and technologies. Both of these are challenging the way you do business, changing your “line of business” requirements and forcing you to become more agile in response.

How can we help?

We can provide you with an IT infrastructure that can be adjusted on demand to meet the changing expectations of your business and your customers. This allows you to respond directly and rapidly to market conditions, shorten your delivery lead times and meet your line of business requirements.

Our solutions

Verizon works with 98% of companies on the Fortune 500, and has a presence in more than 150 countries. We have a global portfolio of services that enable customers to increase their agility and velocity in delivering IT services to their customers, including:

On-demand network bandwidth

It's never been more important to be able to connect seamlessly with third-party service providers. Software-defined wide-area networking (SD-WAN) can deliver the more flexible and scalable networks you need to improve performance and maintain business continuity.

SD-WAN moves control and monitoring from routers and firewalls to an intelligent software overlay that routes workloads across public and private networks. The intelligence within the SD-WAN solution chooses the best network path for a particular workload. This increases flexibility by automating and prioritizing traffic based on network types, managing the workload more efficiently. You can deliver products and services to your customers the way they prefer – without fear of network restrictions.



Ready to join the API economy? SD-WAN offers the flexibility you need to connect with all your partners and third-party providers.

Cloud-based service delivery

Our enterprise cloud platform can handle whatever you throw at it. We've worked with thousands of enterprises around the world to deliver cloud strategies that help them move faster and drive their business forward, through our Secure Cloud Interconnect. And when you use our cloud, you also get our in-depth security expertise to help you understand and guard against the security risks you face.

Global presence and partnerships

Our global fiber optic network spans six continents, and we've installed 280,000 private IP connections globally. Whatever you need to increase the agility of your network, we have the experience and expertise to help.

Case study:

Enabling digital transformation at a major regional bank.

Our strategic partnership with a major regional bank helped it to develop its API infrastructure and enabled digital transformation of its branch banking experience.

Customer challenge

Our partner was delaying branch openings because it had insufficient network bandwidth to support in-branch online access to the media-rich applications expected by today's consumers. The client also needed to develop the technical capability to quickly deploy new apps and services, and to connect with third-party service providers such as fintechs.

How Verizon helped

We provided the client with Verizon Private IP, a managed network service offering increased network availability, high security and reduced costs. We installed Viptela SD-WAN edge routers and cloud-hosted controllers to connect branches to the network.

We also provided the client with Verizon Secure Cloud Interconnect. This uses the the high-performing connections of our private IP network to securely link each branch to a broad ecosystem of third-party cloud service providers. We installed multiprotocol label switching (MPLS) to increase the performance of the telecommunications network at all branches – plus LTE wireless backup.

Business outcomes

As a result of Verizon's managed SD-WAN, hosting services and backup solution, the client is able to connect with third-party service providers and offer a range of content-rich digital services and interfaces in-branch – including digital signage, video conferencing and secure 4G LTE wireless. The client can deploy new digital services and leverage new apps much faster, while reducing IT infrastructure complexity and significantly decreasing time to react.

Company profile

Our client is one of the largest banks in the United States. The bank offers retail and business banking, residential mortgage banking, specialized services for large corporations and government agencies – including corporate banking, real estate finance and asset-based lending – and a range of asset management services.

Driving great customer experience with an always-on network.

Your customers expect secure access to your websites and applications — anytime, anywhere and from any device. Verizon can help you optimize your customer experience.

Customer experience matters. Whether you're in private, retail or corporate banking, you need to be alert to customers switching for a more efficient, personalized service. Your customers – and your employees – expect to be able to access the applications they need with no interruptions.

How can we help?

We can provide you with the always-on network you need to meet the demands of consumers and business users. We enable secure access to websites, applications and databases – at any time and regardless of where your customer or employee is based. This can help you improve customer service, increase engagement and build stronger ongoing relationships with your customers.

Our solutions

Verizon deploys performance management tools that monitor, control and improve the functioning of your network, devices and applications. All our tools are vendor agnostic, so we can work with any carrier or other partner you're already working with.

DDoS protection

A distributed denial of service (DDoS) attack can overwhelm your systems with malicious traffic, bringing normal operations to a halt. Our DDoS Shield solution can identify and handle large amounts of traffic trying to harm your business. It can quickly scale to control even large DDoS attacks, no matter which carrier or internet service provider you use. It handles attacks against virtually any internet-connected service – web, email, FTP and more.

Content delivery network services

Our Edgecast content delivery network (CDN) is a distributed global network of thousands of servers built for speed, security and scalability. This enables you to distribute content faster and provides greater scalability and availability for your applications.

WAN acceleration services

Today's always-on financial services businesses need fast, resilient connections to remain competitive. Our managed WAN solutions are a cost-effective way of maintaining network availability. You get proactive monitoring and notification services to isolate faults and recommend corrective actions – all the way up to fully managed services.

Managed Contact Center Services

Our customer contact solutions – cloud contact center, global transport and routing services, and contact center managed services – can help you plan, build and deliver exceptional personalized customer services. We can help you differentiate your customer experience while also improving productivity and reducing operating costs.

Case study:

Improving customer experience at a large bank.

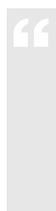
Our partnership with one of the largest regional banks in the US enabled it to deliver an innovative customer experience while improving operational efficiency.

Customer challenge

The client wanted to improve the competitiveness of its online retail banking services while also reducing operating costs. To achieve this, the bank established Innovation Branches where it could test a range of digital propositions. These include:

- ATMs that can initiate video calls with remote tellers.
- a “tablet bar” with guest WiFi so customers can test the bank’s mobile apps.
- an interactive 80-inch touchscreen to provide information about the bank’s services.
- an automated safety deposit box system using debit cards and hand scans for secure access.

To support these pilot branches, the company needed to refresh and upgrade its IT infrastructure.



We upgraded the IT infrastructure at 59 pilot branches to support high-performing digital services at a reduced cost.

How Verizon helped

We upgraded the IT infrastructure at 59 pilot branches to support high-performing digital services at a lower cost. This included providing 1,500 machine-to-machine (M2M) connections for branch backup, a VoIP hardware and network solution, and an Ethernet connection pilot involving over 3 million ports.

Business outcomes

As a result of partnering with Verizon, the client has improved operational efficiency while delivering a better omnichannel digital strategy, improving the interactivity of its customer experience and deepening customer relationships. The bank has improved the competitiveness of its digital services while also optimizing its infrastructure performance.

Company profile

The client provides a range of banking services to consumers, businesses and institutions in more than 12 states across the US. The company operates almost 1,500 retail branches and thousands of ATMs, while also offering online and telephone banking services.

Reducing operational risk with a resilient infrastructure.

In today's 24x7 world, your customers expect always-on services. Any disruption can affect your reputation—and your credit rating. That's why you need a reliable, agile infrastructure. Verizon can help.

Operational risk management is critical to lowering your risk-adjusted capital ratio and improving your credit rating. In today's hyper-connected world, loss of connectivity is increasingly becoming a key operational risk—one that you can't afford to ignore. In addition to your own proprietary infrastructure, you need a reliable back up solution. And you should be considering how third-party cloud environments and data centers, and the latest networking solutions, can improve your resilience.

How we can help

We offer specialized connectivity services to keep your network running securely. Our contingency services include disaster recovery planning and solutions to mitigate the impact on your business if the worst should happen.

Our solutions

We have a broad portfolio of solutions that support financial services enterprises to better manage their operational risk profile and to reduce associated risks, including:

Secure Cloud Interconnect

Our Secure Cloud Interconnect uses our high-performing private IP network to link your business securely to a broad ecosystem of cloud service providers. These include Salesforce, Google, Microsoft 365, Amazon Web Services, Softlayer and more. Our platform provides secure, reliable connections over any network protocol, and offers the diversity you need to re-route traffic to help avoid any service issues. Secure Cloud Interconnect enables anyone to connect to cloud service providers, whether application, infrastructure, or data-center.

Disaster Recovery Planning and Solutions

Our virtual disaster recovery solution saves you the cost and complexity of setting up and managing your own secondary data center. You can replicate data, applications and operating systems from a production environment into a secure, fully managed cloud computing environment hosted in a Verizon facility.

Case study:

Managing operational risk after Hurricane Sandy.

When Hurricane Sandy caused our client bank's communications network to collapse, we helped it restore key business operations by migrating its voice communications services to SIP Trunking.

Customer challenge

When Hurricane Sandy caused the client's banking communications network to collapse, it needed fast support to get back up and running in the shortest possible time. But the client also needed a solution that would help protect it against disruptions in the future, since maintaining critical access for employees and customers is vital to customer satisfaction and healthy revenues in the longer term.

How Verizon helped



We ported 10,000 direct inward dial connections in under two weeks.

We migrated the client's phone lines from time-divisional multiplexing (TDM) to SIP Trunking – a VoIP and streaming media service that provides telephone and unified communications. This migration increased capacity to over 1,000 concurrent calls. We migrated 10,000 direct inward dial (DID) connections to IP in under two weeks.

Business outcomes

As a result of our support, the client was able to restore business operations at its key location in New York. This allowed the firm to respond immediately to the needs of its employees and customers, which demonstrated operational resilience to shareholders and customers. The client strengthened its brand reputation and now has upgraded technology, giving it a greatly expanded capacity to help avoid any service disruptions in future.

Company profile

The client has one of the largest retail bank branch networks in the US, and prides itself on providing the highest level of uninterrupted service to customers and clients.

Strengthening your green credentials and brand reputation.

Reducing your carbon footprint isn't just good for the environment—it's also good for business and attracting top talent. Verizon can help you.

More and more organizations are taking CO2 reduction seriously. Being green comes with a range of benefits. It's good for your brand reputation, which can make you more attractive to clients, consumers and skilled employees. But it can also help you to become more efficient and save you money.

How can we help?

We offer a variety of connected services that can help your organization work smarter. With these, you can train your employees using webinars instead of requiring them to travel long distances to attend a seminar in person. Audio and video conferencing, hosted management and our smart building solutions can also reduce your costs and your carbon footprint.

Our solutions

We have a broad portfolio of solutions and services to support smarter, greener and more efficient working practices, including:

Audio and video conferencing

Our UCCaaS portfolio enables you to transform your business to accommodate the evolving needs of the remote worker and the extended enterprise. It does that by providing consistent, secure and cost-efficient collaboration tools, including WebEx services, so your employees don't have to travel for training or to attend conferences.

Smart buildings

Our enterprise Internet of Things (IoT) solution gives you quick and easy access to important data from embedded machines to help you manage your buildings more efficiently and cut your energy usage.

Hosted management solutions

With our hosted management solutions, you get full infrastructure control, support and security without the high costs and high energy usage of running the hardware and systems on-site yourself. Our economies of scale allow us to run these centers efficiently, so you can rest assured that this is one of the greenest options for your data management.

Case study:

Improving workforce collaboration and productivity.

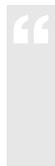
We helped a leading intelligent information provider to launch its new data and trading solutions platform successfully in a competitive market—while also improving workforce collaboration and productivity.

Customer challenge

The client wanted to expand its market presence as an intelligent information services provider, and to become more competitive. To achieve these goals, the company needed the ability to offer tiered services and ensure that customers could seamlessly connect with its applications and services. It also wanted to improve workforce productivity and collaboration across all lines of business.

How Verizon helped

We began by actively working with the client to plan and design the infrastructure for a new data and trading platform. We provided an application delivery solution as well as wireless workforce productivity solutions. And we underpinned the new service with an enterprise backbone solution, including private IP, internet connectivity, hosting services and more.



Service providers need comprehensive application delivery solutions with a global reach.

Business outcomes

As a result of our support, the client was able to develop and launch its new data and trading solutions platform. The company was also able to migrate customers to this new platform from previous legacy platforms simply and seamlessly. At the same time, the company boosted the productivity of its workforce by increasing collaboration across its lines of business.

Company profile

The client offers a range of business intelligence and technology services in over 100 countries, covering finance, accounting and tax, risk management, intellectual property, science, media and the legal profession.

Why Verizon?

Ranked 15th in the Fortune 500 with \$131.6 billion in annual revenue, we serve 96% of the Fortune 1000.

We cater to large businesses and government agencies, delivering complete communication, IT, cloud, security and network solutions around the world. We have reached our premier status by combining expertise, global reach and solutions with the right technologies to deliver what customers need. We're continually being recognized as a leader by numerous analysts and reports, including Gartner, IDC and Forrester.

Expertise

Powered by investments in networking, cloud, mobility, M2M and security, our technology solutions comfortably meet the digital challenges shaping business today. They help our customers drive results, reach more customers and increase revenue.

Our private IP service securely connects more than 150 countries, 2,700 cities and 300,000 customer sites. We have more than 50 data centers in 20 countries. We're the leading global provider of WAN and fixed telephony services.

Drive

We believe that businesses and individuals empowered by technology can change the world. We create solutions with that belief in mind. We perpetually challenge ourselves to enable, advance and pave the way for new possibilities across a variety of industries. And we believe that, through the unique combination of our abilities, expertise and assets, there's no industry we can't help transform and no possibility we can't help realize – for our customers and our world.

Security

Our managed security services (MSS) platform processed over 61 billion security events in 2015. We operate nine security operations centers on four continents. And we were positioned as a leader in the 2015 Gartner Magic Quadrant for Managed Security Service, Worldwide.

We put our unique security insight to work every day in the solutions we provide. Our products and services can help you guard against any data security threats your face.

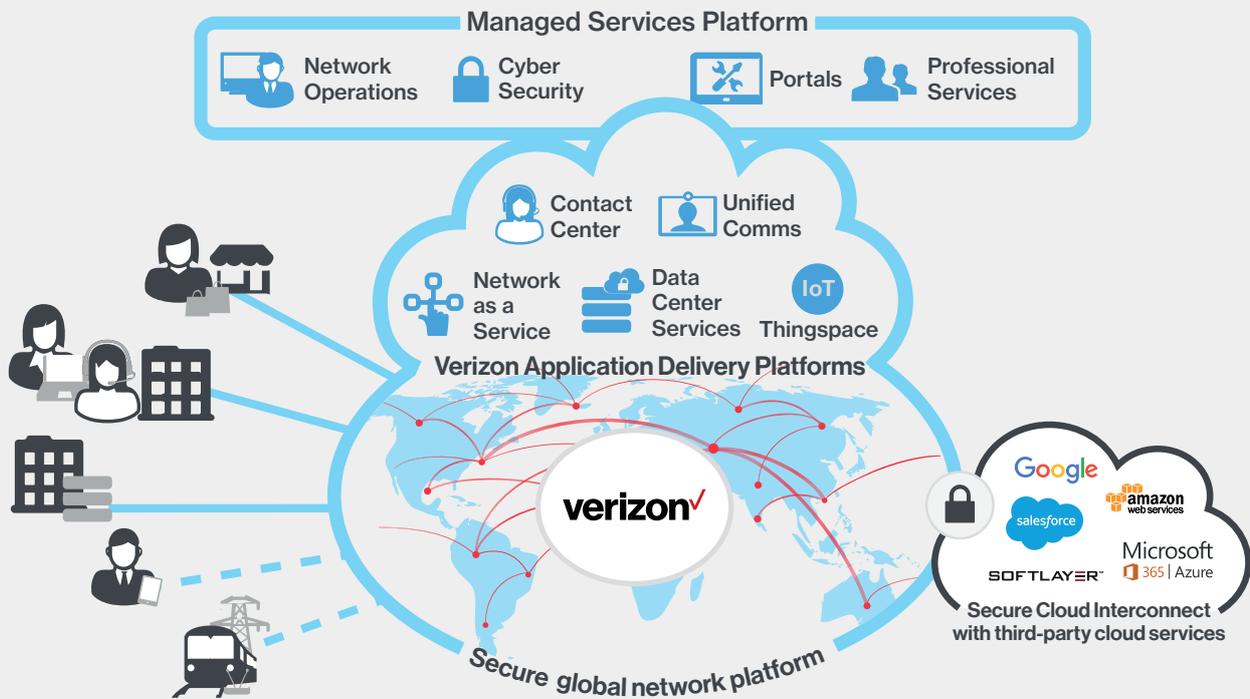
Experience

Verizon Communications Inc., headquartered in New York, is a global leader in delivering broadband and other wireless and wireline communications services to mass market business, government and wholesale customers. In today's rapidly transforming environment, we design, build and operate the networks, information systems and mobile technologies that help businesses and governments around the globe expand reach, increase agility and maintain longevity.

Trust

Many of the leading financial services companies in EMEA trust us to enable their digital banking transformation, enhance their customer experience and make a sustainable shift to mobile. With our services and solutions, banks can optimize their IT infrastructure, strengthen data security and strip out unnecessary costs and complexity.

Our integrated portfolio delivers the connected world.



Connecting people, places and things. Simply. Reliably.

VerizonEnterprise.com

© 2016 Verizon. All Rights Reserved. The Verizon name and logo and all other names, logos, and slogans identifying Verizon's products and services are trademarks and service marks or registered trademarks and service marks of Verizon Trademark Services LLC or its affiliates in the United States and/or other countries. All other trademarks and service marks are the property of their respective owners. 06/16