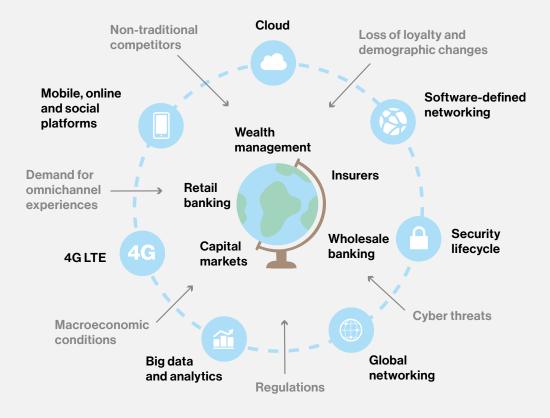
Secure your data and your reputation.

Intelligence-driven data security for financial services.

verizon /



The finance industry ecosystem



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Increase confidence in your brand.

Better manage your data security risks, and make regulatory compliance quicker and simpler.

Financial services companies trade on reliability and trust. But every time a major bank suffers a data breach – or its website goes down thanks to a denial-of-service (DoS) attack – consumer confidence takes a knock. With cyber attacks becoming more frequent and more complex, you can't afford to be the next financial services provider to make the news for the wrong reasons.

The growing burden of regulatory compliance means that financial services companies' security and data protection practices are facing more scrutiny than ever. This means you need to constantly evaluate your risk exposure. With the financial risks that come with data breaches – and hefty potential fines from regulators for non-compliance – risk management success or failure has significant implications for your balance sheet.

How can we help?

Verizon helps financial services providers across EMEA to prepare for cyber attacks, to detect them rapidly when they do occur, and to mitigate their potential damage to your business and reputation. We processed over 61 billion security events in 2015 and led more than 500 forensic investigations of data breaches. 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 Services 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 you face.

Uncovering your biggest risks

Our cyber risk programs use data modelling to uncover your biggest risks and build your security strategy. Our experts can help you create a plan that prioritizes your problem areas and helps you get the most from your security budget.

Defend against potential threats

Our Rapid Response Retainer program can help you plan and defend against possible threats – and take fast action to identify and contain incidents when they take place. This helps you secure your customers' and partners' sensitive data, and maintain their business and trust.

Application Vulnerability Scanning

Our Application Vulnerability Scanning services enable you to identify vulnerabilities in your applications before they're exploited.

Key drivers for data security management and compliance.

Forward-thinking financial services providers are looking to improve their risk management, data security and regulatory compliance in the following ways:

- By ensuring they remain compliant with continually-evolving regulations applicable to the payment card industry.
- By proactively investigating data breaches to restore their customers' trust as rapidly as possible.
- By looking to protect their mobile-banking applications and online customer portals from DoS attacks.
- By effectively policing their digital perimeter from an ever-expanding range of cyber threats.
- By enhancing existing security management with advanced threat detection and insights gained from cybersecurity best practices.

Safeguard cardholder data.

Payment security and compliance are more important than ever. Verizon can help keep your reputation secure.

Your customers put their trust in you every time they make a purchase. They trust that not only will you process their payments promptly, but also that you'll keep their details safe. But every new media report about a data breach makes them a little more concerned about their personal information being compromised.

Payment card data is an attractive target for criminals because it's easy to convert into cash. That's why financial services providers are under constant assault. Being compliant with the Payment Card Industry Data Security Standard (PCI DSS) provides a solid baseline for securing card data and helps protect your brand.

How can we help?

Our comprehensive suite of PCI-related solutions and services helps you to assess the security of your cardholder data management systems. We have one of the largest and most geographically distributed teams of PCI Qualified Security Assessors (QSAs) in the world. Since 2009 we've conducted more than 5,000 assessments, mostly for Fortune 500 companies and large multinationals. But our payment card security expertise goes back further than that. We've provided cardholder data security services since 2003. Our PCI Security Practice has been approved by the PCI SSC as QSA, PA-QSA, QSA (P2PE), and PA-QSA (P2PE).

On top of all this experience, we've invested in extensive research programs. We publish several of the industry's pre-eminent ongoing research reports, and we've made targeted acquisitions of leading security companies, such as Cybertrust. This means we can give you unrivalled insight into how you can meet industry standards and achieve compliance.

Our solutions

We can put our experience and expertise to work for you in four main areas:

Advisory consulting

As a world leader in payment security and PCI DSS compliance, Verizon's security consultants can help you to solve your most complex information security and compliance challenges.

Assessment and maintenance services

As well as reviewing and validating PCI DSS compliance, we help companies maintain security and compliance through our compliance maintenance program, data discovery, and vulnerability scanning and penetration testing services.

Remediation services

We offer a range of targeted remediated solutions leveraging our broad portfolio of security products and services.

Outsourcing

Our hosting, cloud and managed security services can reduce the burden of running and securing key IT services, making it easier for you to achieve and maintain security compliance.

Making PCI compliance simpler and more cost-effective.

Our partnership with one of the world's largest banks enabled it to fill its gaps in PCI compliance and better manage its payment card security risk.

Customer challenge

Our client wanted to carry out an enterprise-wide assessment of where it was failing to meet its PCI DSS compliance obligations, and how much it would cost to become fully compliant. It also wanted to develop a cost-effective approach to remediation and compliance across its business applications and processes.

How Verizon helped

We applied our expertise and experience in both PCI compliance and the financial services sector to help our client meet its PCI goals at the lowest possible cost.

- We completed an enterprise-wide PCI compliance gap assessment to work out where the client needed to take action to become compliant.
- We carried out a strategic scoping and discovery analysis throughout the enterprise. This identified which processes and applications would best help the client to achieve full compliance in the shortest time.
- We helped the client to deliver its PCI program using a combination of onsite and remote consulting, control verification reviews and senior leadership interviews.

Our client has not only filled all its PCI compliance gaps—it now exceeds its compliance obligations.

Business outcomes

As a result of our help, the client has been able to costefficiently improve its payment card data security and better manage its risk. It has not only become fully PCI compliant, but now exceeds its compliance obligations.,

Company profile

The client is a US-based, top 10 global bank that provides banking, insurance, investments, mortgages, and consumer and commercial credit. The bank has over \$1.5 trillion in assets.

Strengthen your defenses against data breaches.

Cyber attacks are on the increase and the attackers are getting smarter. We can help you strengthen your incident response plan and mitigate the impact of any data breaches.

Cybercriminals are continuously changing the tactics they use to target and break into your networks, devices and mission-critical systems. However good you are at protecting yourself, even the most security-savvy companies are likely to be breached at some point. And cyber threats can prove disastrous if they aren't handled quickly and capably. Hackers can invade your infrastructure, steal your data and destroy your reputation.

How can we help?

Our experience investigating incidents, managing evidence, and strategically applying collective intelligence can help you improve your security practices and safeguard your organization from future threats. With a strong background in digital forensics, analysis and fraud investigation, our Research, Investigations, Solutions, Knowledge (RISK) team can help you respond rapidly and effectively to security breaches and, ultimately, to lessen the impact of breaches when they do occur.

We bring together dedicated security experts, state-of-the-art technology and analytics tools with fast, efficient attack-detection processes.

Our solution

Verizon's Rapid Response Retainer program can help you plan and defend against possible threats. You gain a wealth of 24x7 security support and benefits, including:

- A cyber incident capability assessment. Choose from a range of services to help identify how prepared you really are.
- Access to Verizon RISK intelligence. Reports, analysis, advice on key risk categories, high-profile security issues, early-warning intelligence and actionable guidance on how to counter threats

 all at your fingertips.
- Your own designated expert. You'll be partnered with an experienced investigative liaison from the Verizon RISK team. They will familiarize themselves with your organization and your incident response processes, provide security response training, and lead response efforts if you suffer a security incident.
- Response times backed by SLAs. Should a security issue occur, you'll have the peace of mind of knowing we will deliver on your Rapid Response Retainer service-level agreement (SLA), ensuring prompt service when you need it.

Global risk management for an expanding company.

Our partnership with a major US-based, post-trade services provider helped it to keep its reputation secure as it expanded into new markets.

Customer challenge

Our client wanted to develop a best-of-breed forensic investigative practice for its entire security ecosystem. This was crucial to safeguard its business operations and mission-critical data from risk, and to support its expansion into the EMEA and APAC markets.



Our client needed to secure the integrity of its processes and infrastructure.

How Verizon helped

We applied our Global Investigative Forensics Response Retainer, including global service level agreements covering the US, EMEA and APAC regions. With our extensive experience of security and risk management, we were able to offer expert advice on how to mitigate the client's risk exposure quickly and cost effectively.

Business outcomes

The client is now able to carry out timely and actionable forensic investigations to help it detect cyber attacks at the early stages, better prepare for those attacks, and improve its ability to stop them before sensitive information is compromised. This means the client's data is now more secure from emerging threats – and that helps protect customer confidence and brand value. The client also benefits from the efficiencies of having one global service-level agreement that covers all three of the regions it serves.

Company profile

The client is a US-based provider of post-trade clearing, settlement and information services to global financial markets. The company operates in more than 20 countries and processes transactions worth in excess of a quadrillion dollars every year.

Protect your enterprise from DoS attacks.

DoS attacks are now the second biggest threat to data security for financial services providers. Verizon can help you strengthen your defenses.

Data breaches aren't the only cyber security threat that financial services companies face. DoS attacks now account for 34% of all data security incidents in financial services, behind only web app attacks¹. DoS attacks are a malicious form of disruption that use botnets – a "zombie" army of computers, typically taken over without the owner's permission – to overwhelm networks with sheer volumes of traffic, bringing organizations to a complete standstill and forcing key services offline.

These attacks continue to grow in size, frequency and complexity, with bandwidth peaking in the tens of gigabits per second – enough to cripple even the most robust infrastructure and bring down critical systems such as online banking, quoting, policy management and trading platforms.

How can we help?

Our DDoS (distributed denial of service) Defense service offers cloud-based protection that gives financial services providers the ability to discover and divert potentially malicious DDoS traffic away from their networks. This helps you keep your internet resources available to legitimate users and your website open for business.

Our solutions

We deploy performance management and protection tools that monitor, control and improve the functioning of your network, devices and applications – and increase your resilience to a DDoS attack.

DDoS protection

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. And our DDoS Shield is vendor agnostic, so it can work with any carrier or existing partner.

Managed WAN solutions

The faster and more resilient your connections, the better your ability to respond to a DDoS attack. 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. And we can also provide fully managed services.

Verizon 2016 Data Breach Investigations Report

Keeping web portals open for business.

Our partnership with a leading Spanish bank helps to protect its online banking platform from disruption caused by DDoS attacks.

Customer challenge

Our client wanted to protect its operations and strong reputation for customer service, responsiveness and data security by keeping its online banking platform secure from DDoS attacks. To do this, it needed to protect the data center that runs its e-business. That meant monitoring of anomalous network traffic to identify potential DDoS attacks early and respond accordingly.

How Verizon helped

We provided the client with a comprehensive detection mitigation solution for high-volume DDoS attacks. We also provided access to experienced key operation engineers to review events and support mitigation efforts following attacks. As part of our global managed network services, we also provided the client with:

- · Software-defined wide area networking (SD-WAN).
- · Wireless 4G LTE infrastructure.
- Multiprotocol label switching (MPLS) to improve efficiency.

And we helped the client with our professional services expertise to help it transition its existing infrastructure into an SD-WAN environment.

Business outcomes

With advanced warning of potential DDoS attacks, the client's customer portals and other revenue-generating digital platforms are protected from outages, and the company's reputation for responsiveness and customer service is secure.

Company profile

The client is one of the largest banks in the eurozone by market capitalization, with branches across Europe and North Africa. It offers a range of retail and corporate banking and insurance services.

Secure your assets wherever they are.

Your critical infrastructure and applications could be located anywhere in the world. Verizon can help you keep your digital assets secure no matter where they are.

With financial services companies increasingly relying on a combination of mobile applications, public cloud and colocation, securing your critical resources is no longer a case of protecting everything with a single perimeter – it's now much more complex.



You need a way to protect your data wherever its stored.

How can we help?

We can help keep your distributed IT networks safe from a range of cyber attacks – including credential theft, server exploitation, and man-in-the-middle, DoS, and lateral movement attacks. We are leaders in new approaches to enterprise security, such as software-defined perimeters (SDP). These isolate your systems so that attackers can't use outlying parts of your network as stepping stones to more sensitive parts of your infrastructure.

Our solution

Our SDP solution provides secure user access to your applications and stops cyber attacks at their early stages by:

- Shrinking your perimeter and creating a new layer of defense around individual applications.
- Using our unique trust-before-connect architecture to keep unauthorized users and devices outside the new perimeter, and even hiding application servers from them.
- Only allowing verified users to connect to your applications, reducing your attack surface to near zero.
- Providing built-in, multi-factor authentication for every user and connection to defeat credential theft, server exploitation and man-in-the-middle, DoS and lateral movement attacks.

We also provide our SDP as a service, which helps you realize significant operational efficiencies, and accelerate the agility of your cloud, bring your own device (BYOD) and collaboration applications.

Protecting a complex, distributed network.

Our partnership with one of the world's largest fast moving consumer goods (FMCG) companies helped increase the security of its network perimeter.

Customer challenge

The client wanted to eliminate the security risks to its network perimeter, to protect its corporate intellectual property and to protect its brand from the possible reputational damage of a data breach. It also wanted to provide unprecedented business agility, redefine the connected experience for its users, and produce trusted, real-time actionable knowledge to deal more effectively with potential cyber attacks.

How Verizon helped

We deployed our high-performing private IP network, using our Secure Cloud Interconnect platform to provide secure, reliable connections for any mobile device over any network protocol. We also deployed our managed certificate services, offering cloud-based identity management to help the client manage user and device identities across multiple systems and identities.

Verizon's solutions allow the client to make its business more responsive and agile, while also protecting the network from cyber attacks.

Business outcomes

As a result of our support, the client is now better able to manage user and device identities across multiple systems, with secure interactions between devices and the network. Its line of business operations and employees are able to connect to the network from more places. And the client is now also able to increase network availability and reduce operating costs.

Company profile

The client is one of the world's largest FMCG firms, with strong global brand recognition and product sales in more than 200 countries.

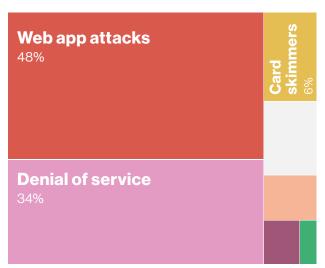
Understand the threats you face.

To stay secure, you need to enhance your security management with intelligence on the latest cyber threats. We can give you early warning of new attack patterns.

Cybercriminals are getting faster and better at what they do, and it can be difficult for large, complex financial services organizations to keep pace. This means that collecting and analyzing threat information from across your infrastructure and beyond has never been more important.

How can we help?

Our experience monitoring traffic on our global IP network enables us to spot attacks and attack patterns as they begin to take shape. We constantly monitor, analyze and react to the cyber threat landscape with enhanced intelligence, proactive prevention, early threat recognition and rapid response. This means you stay ahead of the fast-evolving threats you face and can stop attacks before they cause harm.



Top 3 incident attack patterns in financial services. Source: Verizon 2016 Data Breach Investigations Report.

Our solutions

Verizon's Managed Security Services can help you better meet the challenge of the modern cyber-threat environment.

Managed Security Services – Analytics

Our analytics service provides you with comprehensive and detailed threat intelligence and analysis capabilities to help you quickly identify threats to your network. You benefit from:

- Extensive security operations and management experience.
- Our deep insight into information security threats and activity, with advanced threat detection.
- The ability to take data from an IP-enabled device or any data source that produces logs.
- A dashboard with comprehensive details about the status of your security environment, as well as easy access to risk briefings.

Managed Security Services – Premises

Our team of security experts is available around the clock to support your in-house IT resources. We're a vendor-neutral service provider, so you can select world-class products while protecting past technology investments and avoiding vendor lock-ins. We have access to leading security vendors such as Check Point Software Technologies, Cisco, IBM Internet Security Systems, Juniper Networks, Nokia, EMC RSA, Sun Microsystems, Arbor Networks, and more.

Enhancing security reporting at a global firm.

Our partnership with a diversified, global chemical manufacturer helped it enhance its existing security reporting and make it more compliant.

Customer challenge

Our client needed more detailed reporting from its existing managed security services. This would help the organization to better address the security compliance requirements for its industry. In particular, the company wanted to find a way to integrate new reports, features and functions into existing services.

How Verizon helped

We provided the client with a tailored solution to enhance the features and functions of the company's existing managed security services reporting. We also added our customer portal to provide state-of-the-art security management and reporting.

Business outcomes

As a result of our support, the client now has a cuttingedge management portal, which enables the company to gather more detailed reports on demand, 24x7.

Company profile

The client is one of the world's largest chemical manufacturers, with a long history of innovation. It serves customers in a range of industries, from agriculture to electronics, and has state-of-theart manufacturing and research facilities located across the globe.

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, IoT 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. And 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 you face.

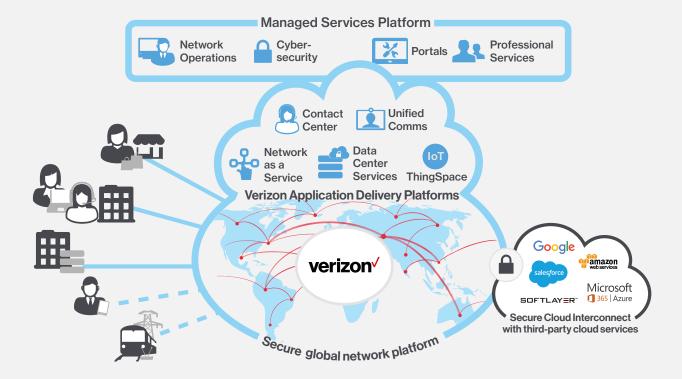
Experience

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

85% of the world's largest financial institutions trust us to enable their digital banking transformation, enhance their customer experience and make a sustainable shift to mobile. With this proven track record, we understand financial markets and how to address the key challenges that they present. That's why banks can rely on our services and solutions to 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.

