

Magic Quadrant for Network Firewalls

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Strategic Planning Assumptions

By 2025, 30% of new distributed branch office firewall deployments will switch to firewall as a service, up from less than 5% in 2020.

By year-end 2024, 25% of firewall end-user spend will be contained within larger security “platform” deals delivered by enterprise license agreements (ELAs), up from less than 5% today.

Market Definition/Description

Gartner defines the network firewall market as composed primarily of firewalls offering bidirectional controls (both egress and ingress) for securing networks. These networks can be on-premises, hybrid (on-premises and cloud), public cloud or private cloud. The product has the capability to support one or more firewall deployment use cases, such as perimeter, small and midsize businesses (SMBs), data center, cloud, and distributed offices.

This market is no longer restricted to appliance-only vendors. and extends to vendors offering virtual versions and firewall as a service (FWaaS), offered as native firewall controls or dedicated offerings by public and private cloud vendors.

Network firewalls can also offer additional capabilities, such as application awareness and control, intrusion detection and prevention, advanced malware detection, and logging and reporting.

This Magic Quadrant includes the following types of network firewalls:

- Purpose-built physical appliances
- Virtual appliances
- Embedded firewall modules
- Firewall controls delivered from infrastructure as a service (IaaS) platform providers
- Dedicated FWaaS (Note: FWaaS is a service directly hosted and sold by the vendor, and is not a hosted firewall service offered by managed security service providers [MSSPs], telcos or any other partner).

Magic Quadrant

Source: Gartner (November 2020)



Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

No vendors were added to this Magic Quadrant.

Dropped

No vendors were dropped from this Magic Quadrant.

Inclusion and Exclusion Criteria

The inclusion criteria represent the specific attributes that analysts believe are necessary for inclusion in this research.

Vendors that provide network firewall functions that meet the market definition and description were considered for this research under the following conditions:

- Gartner analysts have assessed that the vendor can effectively compete in the network firewall market.
- Gartner has determined that the vendor is a significant player in the market, due to market presence, competitive visibility and/or technology innovation.
- The vendor demonstrates a competitive presence in enterprises and sales for enterprise and/or cloud networks.
- The vendor must meet the firewall revenue criteria of \$30 million in 2019, as applicable to vendors selling firewall hardware appliances/virtual firewalls/FWaaS. In the case of IaaS vendors, at least 50% of the installed base should be using the native firewall controls offered by them.
- The vendor must demonstrate minimum signs of a global presence, including:
 - Gartner received strong evidence that more than 10% of its customer base is outside its home region.
 - It offers 24/7 direct support, including phone support (in some cases, this is an add-on, rather than being included in the base service).
 - The vendor appearing in Gartner client inquiries, its competitive visibility, its client references and its local brand visibility are considered to determine inclusion.

Vendors must provide evidence to support meeting the above inclusion requirements.

Evaluation Criteria

Ability to Execute

Product or Service: This includes service and customer satisfaction in network firewall deployments. Execution considers factors related to getting products sold, installed, supported and in users' hands. Strong execution means that a vendor has demonstrated to Gartner analysts that its products are successfully and continually deployed in enterprises and/or cloud environments, and that the vendor wins a large percentage in competition with other vendors.

Vendors that execute strongly generate pervasive awareness and loyalty among Gartner clients, and also generate a steady stream of inquiries to Gartner analysts. Execution is not primarily about company size or market share, although those factors can affect a vendor's Ability to Execute. While sales are a factor, winning in competitive environments through innovation and quality of product and service are more important than revenue. Key features are weighted heavily, such as foundation firewall functions, console quality, low latency and secondary product capabilities (logging, event management, compliance, rule optimization and workflow). Having a low rate of vulnerabilities in the firewall is important. The logistical capabilities for managing appliance delivery or enabling firewall functions for additional workloads in cloud environments, product service and port density matter. Support is rated on the quality, breadth and value of offerings through the specific lens of enterprise/cloud needs.

Overall Viability: This includes overall financial health, prospects for continuing operations, company history, and demonstrated commitment in the firewall and security markets. Growth of the customer base and revenue derived from sales are also considered. All vendors were required to disclose comparable market data, such as firewall revenue, competitive wins versus key competitors (which are compared with Gartner data on such competitions held by our clients), and devices or instances in deployment. The number of firewalls shipped or the market share is not the key measure of execution. Rather, we consider the use of these firewalls to protect the key business systems of enterprise clients and those being considered on competitive shortlists.

Sales Execution/Pricing: We evaluate the vendor's pricing, deal size, installed base and, in the case of cloud vendors, the number of customers using native firewall controls. This includes the strength of the vendor's sales and distribution operations. Presales and postsales support is evaluated. Pricing is compared in terms of a typical enterprise-class deployment, and includes the cost of all hardware, support, maintenance and installation. Low pricing will not guarantee high execution or client interest. Buyers want good results more than they want bargains, and think in terms of value over sheer low cost.

Market Responsiveness/Record: This evaluates the vendor's ability to respond to changes in the threat environment, and to present solutions that meet customer protection needs rather than packaging up fear, uncertainty and doubt. This criterion also considers the provider's history of responsiveness to changes in demand for new features and form factors in the firewall market, and how enterprises deploy network security. The criterion will also cover the capability of the vendor in securing hybrid networks and/or cloud networks because of rapid adoption of these networks.

Marketing Execution: Competitive visibility is a key factor; it includes which vendors are most commonly considered to have top competitive solutions during the RFP and selection process. In addition to buyer and analyst feedback, this criterion looks at which vendors consider the others to be direct competitive threats, such as by driving the market on innovative features co-packaged within the firewall, or by offering innovative pricing or support offerings. Unacceptable device or software failure rates, vulnerabilities, poor performance and a product's inability to survive to the end of a typical firewall life

span are assessed accordingly. Significant weighting is given to delivering new platforms for scalable performance in order to maintain investment, and to the range of models to support various deployment architectures.

Customer Experience: This criterion evaluates products and services and/or programs that enable customers to achieve anticipated results with the products evaluated. Specifically, this includes quality supplier/buyer interactions technical support or account support. Quality and responsiveness of the escalation process and transparency are important. This may also include ancillary tools, customer support programs, availability of user groups, service-level agreements, etc.

Operations: The ability of the organization to meet goals and commitments. Factors include: quality of the organizational structure, skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently. These also include management experience and track record, and the depth of staff experience – specifically in the security marketplace. Gartner analysts also monitor repeated release delays, frequent changes in strategic directions and how recent organizational changes might influence the effectiveness of the organization.

Table 1: Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
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Product or Service	High
Overall Viability	Medium
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	Medium
Customer Experience	High
Operations	Medium

Source: Gartner (November 2020)

Completeness of Vision

Market Understanding: This criterion looks at the ability to understand customer needs and translate them into products and services. Vendors that show a clear vision of their market listen, understand customer demands, and can shape or enhance market changes with their added vision.

This includes providing a track record of delivering on innovation that precedes customer demand, rather than an “us too” roadmap. We also evaluate the vendor’s overall understanding of and commitment to the security and network security markets. Gartner makes this assessment subjectively by several means, including interaction with vendors in briefings and feedback from Gartner customers on information they receive concerning roadmaps. Incumbent vendor market performance is reviewed year by year against specific recommendations that have been made to each vendor, and against future trends identified in Gartner research.

Vendors cannot merely state aggressive future goals; they must also put plans in place, show that they are following their plans and modify those plans as they forecast how market directions will change. Understanding and delivering on network firewall realities and needs are important, and having a viable and progressive roadmap and continuing delivery of innovative new features are weighted very highly. The new capabilities are expected to be integrated to achieve correlation improvement and functional improvement.

Marketing Strategy: This criterion evaluates whether the vendor has clear, differentiated messaging consistently communicated internally, and externalized through social media, advertising, customer programs and positioning statements.

Sales Strategy: This includes preproduct and postproduct support, value for pricing, and clear explanations and recommendations for detecting events, including zero-day events and other advanced threats. Building loyalty through credibility with a full-time network firewall staff demonstrates the ability to assess the next generation of requirements. Vendors need to address the network security and/or cloud workload buying center correctly, and they must do so in a technically direct manner, rather than just selling fear or next-generation hype. Channel and third-party security product ecosystem strategies matter insofar as they are focused on network security.

Offering (Product) Strategy: This criterion focuses on a vendor’s product roadmap and current features, such as network firewall feature integration and enhancement, virtualization, cloud security services, support for “work from home” environments, and performance. Integration with other security components is also weighted, as well as product integration with other IT systems. Innovation, such as introducing practical new forms of intelligence to which the firewall can apply policy, is highly rated. An articulated, viable strategy for addressing the challenges in software-defined network (SDN) deployments and microsegmentation across hybrid environments is important, as it is evidence of execution within cloud and virtualized environments.

Business Model: This includes the process and success rate for developing new features and innovation. It also includes R&D spending.

Innovation: This includes R&D and quality differentiators, such as:

- Performance, which includes low latency, new firewall mechanisms, and achieving high throughput and low appliance latency.
- Firewall virtualization and securing virtualized environments. This includes public and private cloud environments, and support for work-from-home environments.
- Integration with other security products (native and third party) and microsegmentation capabilities. This also includes features and a roadmap showing strong integration capabilities to offer XDR across hybrid environments.
- Management interface, cloud-based management portal and clarity of reporting — that is, the more a product mirrors the workflow of the enterprise/cloud operation scenario, the better the vision.
- “Giving back time” to firewall administrators by innovating to make complex tasks easier, rather than adding more alerts and complexity.
- Products that are not intuitive in deployment, or operations that are difficult to configure or have limited reporting, are scored accordingly. Solving customer problems is a key element of this criterion. Reducing the rule base, offering interproduct support and leading competitors on features are foremost.

Geographic Strategy: This criterion evaluates the vendor’s strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the “home” or native geography, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market.

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting
	↓ ↓
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium

Evaluation Criteria	Weighting
	↓
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	Not Rated
Innovation	High
Geographic Strategy	Medium

Source: Gartner (November 2020)

Quadrant Descriptions

Leaders

The Leaders quadrant contains vendors that build products that fulfill enterprise requirements around firewalls. These requirements include a wide range of models, support for virtualization and virtual LANs, and a management and reporting capability that is designed for complex and high-volume environments, such as multitier administration and rule/policy minimization. These vendors have led the market with innovation. They are quicker to respond to the end-user market. They meet all the firewall deployment use cases. They have a large market share. Vendors in this quadrant lead the market in offering new features that protect customers from emerging threats; meet the requirement of evolving hybrid networks, including public and private cloud; provide expert capability rather than treat the firewall as a commodity and have a good track record of avoiding vulnerabilities in their security products. Common characteristics include handling the highest throughput with minimal performance loss, offering options for hardware acceleration, support for private and public cloud platforms, and offering form factors that protect enterprises as they move to new infrastructure form factors.

Challengers

The Challengers quadrant contains vendors that have achieved a sound customer base, but they are not consistently leading with differentiated next-generation capabilities. Many Challengers have not fully matured their firewall capability — or they have other security products that are successful in the enterprise and are counting on the relationship, rather than the product, to win deals. Challengers' products are often well-priced and, because of their strength in execution, these vendors can offer economical

security product bundles that others cannot. Many Challengers hold themselves back from becoming Leaders because they choose to place security or firewall products at a lower priority in their overall product sets. Firewall market Challengers will often have significant market share, but trail smaller market share leaders in the release of features.

Visionaries

Visionaries lead in innovation, but are limited to one or two firewall deployment use cases. They have the right designs and features, but lack the sales base, strategy or financial means to compete consistently with Leaders and Challengers. Sometimes, it is a conscious decision of the vendor to only focus on limited firewall use cases rather than all of them. Most Visionaries' products have good NGFW capabilities, but lack in performance capabilities and support networks. The vendors in this quadrant show strong vision and market-leading innovation in use cases such as automated east-west microsegmentation in public cloud and SDN environments, and innovative threat detection automation capabilities.

Niche Players

Most vendors in the Niche Players quadrant have a prime installed base or are prominent in a particular use case, such as data centers or telcos, distributed enterprises, SMBs, and public IaaS. Some of these vendors that offer a firewall as a module with their other services/components consciously focus on a particular use case. Vendors in this quadrant lack in execution because of a limited client base and do not show innovation. Some Niche Players are confined to particular regions and are not present in other regions.

Context

The firewall vendors are expanding their product portfolios to other security product lines, offering an attractive consolidation proposition to enterprises. While consolidation offers pricing simplicity, end users have to be mindful of the feature limitations, integration and centralized management limitations that come with such a consolidation. Firewall vendors are racing to broaden their portfolios. introducing products that are not mature enough to compete with stand-alone products that are also lacking integration and centralized management in their product lines.

Market Overview

In 2019, worldwide market network firewall revenue grew by 11.1%, compared to 15.9% in 2018. As the COVID-19 pandemic has impacted the world and businesses, enterprises faced a major challenge to support work from home for all their full-time office employees, which required some immediate upgrades to infrastructure, which also impacted the firewall market positively. The impact of the shift to work from home on the firewall market, as observed by Gartner based on end-user inquiries from Gartner clients, includes:

- **Hardware upgrades:** The immediate impact on firewalls of employees working from home was the need for hardware upgrades of the existing data center firewalls to meet the sudden spike in inbound traffic through the VPN. This required the firewall vendors to offer high-performing hardware firewalls.
- **Adoption of FWaaS:** There was a growth in adoption of FWaaS, for faster onboarding and setup of work-from-home employees' access. Clients that were in the process of evaluating FWaaS adopted it smoothly. Enterprises that already had a security vendor offering FWaaS in their infrastructure adopted FWaaS or continue to evaluate it.
- **Cloud adoption:** This situation has accelerated adoption of cloud and, as a result, enterprises are seeking cloud security solutions and shortlisting firewall vendors with a strong cloud security focus and that offer cloud security solutions in their portfolio.
- **Move toward zero trust network access (ZTNA):** With remote working and adoption of cloud, enterprises are looking to enable ZTNA for a modern style of remote access. As a result, this consolidation also moves organizations toward network security vendors offering microsegmentation and FWaaS offerings as well.
- **Cost optimization:** As a result of the economic recession, businesses are demanding cost optimization outcomes while still securing their infrastructure, which included them consolidating their branch offices and migration toward cloud for their shared resources. This change in infrastructure requires enterprises to adopt different security architectures and the products that enable them. As a result, vendor consolidation and ELA cost-saving contracts are attractive value propositions for businesses today.

Due to all the above factors, the following firewall vendor characteristics (in no particular order) are desirable for shortlists:

- Vendors having a strong cloud security product strategy
- Vendors offering strong integration and centralized visibility and management between their security product lines for ease of operation across hybrid environments, especially vendors offering mature XDR and integration cloud security management.
- Vendors offering FWaaS
- Vendors leading in price versus performance ratio of hardware firewalls
- Vendors offering cost-effective bundled licensing and technical support to reduce firewall TCO
- Vendors offering cost-effective ELA contracts for enterprises trying to consolidate toward a single vendor for their multiple security products/services

- Vendors offering mature threat correlation and automation actions with actionable recommendations

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.