FROST & SULLIVAN

BEST PRACTICES AWARDS

FORTINET®

2020 GLOBAL NETWORK ACCESS CONTROL GROWTH EXCELLENCE LEADERSHIP AWARD

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Background and Company Performance

Industry Challenges

Network access control (NAC) is a fast growing market. A foundational network security defense, NAC has attracted more vendors in the last few years. The challenge for a vendor is to stand out in this market, outpace its competitors and gain market share. While technical innovation and efficacy are important, growth is also the result of marketing and sales strategy. Growth depends on execution of product roadmaps, meeting customer needs and looking ahead what customers will need. In a crowded and competitive market these are the challenges to growth.

Enterprise networks are expanding due to mobility, digitization, and the Internet of Things (IoT). The level of malware and cyber attacks is continuously increasing. No longer sitting within four secure walls, the enterprise network extends to wherever employees and data travel. System administrators must deal with increasing complexity of managing resources and disparate security solutions.

Since every device on a network is a potential attack or reconnaissance point that must be discovered and secured, visibility of endpoints is critical. NAC provides the capabilities for end users/endpoints to be blocked, quarantined, or redirected to different parts of a network if there is an Indication of Compromise (IOC) or vulnerabilities.

The "traditional" endpoints of servers, PC's and virtual desktops now also include tablets, smartphones, and IoT devices. The growing trend of IoT and Bring Your Own Device (BYOD) present potential threat vectors that organizations need to manage. According to Frost & Sullivan, there will be 60 billion connected devices by 2024. Most of these will be IoT devices. Until recently, the majority of NAC deployments use the 802.1X protocol, an IEEE 802.1X open-standard protocol for port-based network access control. Most IoT devices are non-802.1X compliant, thus posing new challenges for network administrators. The diversity of OS's and devices poses a challenge in addition to the volume. Agentless technology is required since most IoT devices lack the resources for an embedded agent. The ability of an organization to see and control devices declines as the volume of devices and OS's and their diversity increases.

The growing trend of IT and OT convergence poses more challenges. OT networks were isolated silos, but are morphing into the Industrial Internet of Things (IIoT). OT networks are no longer physically separated from IT networks. Threats are moving between cyber and physical dimensions. Most OT devices are difficult to patch.

The migration of workloads to the cloud by customers has accelerated in the last year, both public and private clouds. Support is needed for AWS, Azure and other cloud computing platforms. Network administrators must deal with a heterogeneous environment with multiple vendors, multiple device locations and access points. Management is typically decentralized.

In order to grow its business a NAC vendor must be able to provide easy deployment and management to its customers. While it is a power security tool, NAC is a complex

technology. A NAC vendor needs to provide IT complete visibility into every endpoint on their networks. Customers need support with better security tools and automated systems to alleviate the shortage of skilled professional security experts.

The Zero Trust security model has been gaining momentum over the course of the last year. Greater traction in this space will accelerate in the next year. NAC is a critical element in a ZT strategy due to its capability to have visibility and control of devices on a network and NAC's capacity to orchestrate and integrate other security solutions.

NAC is a fast growing market. In 2019, revenues grew 16.1% to $1.35 billion. Frost & Sullivan projects a compound annual growth rate from 2019 to 2024 of 10.4%. The high growth rate and size of the NAC market has attracted more vendors in the last few years. The NAC market has over 13 vendors. Consequently, establishing a growth leadership position in such a competitive market is a challenge.

Growth Performance and Customer Impact

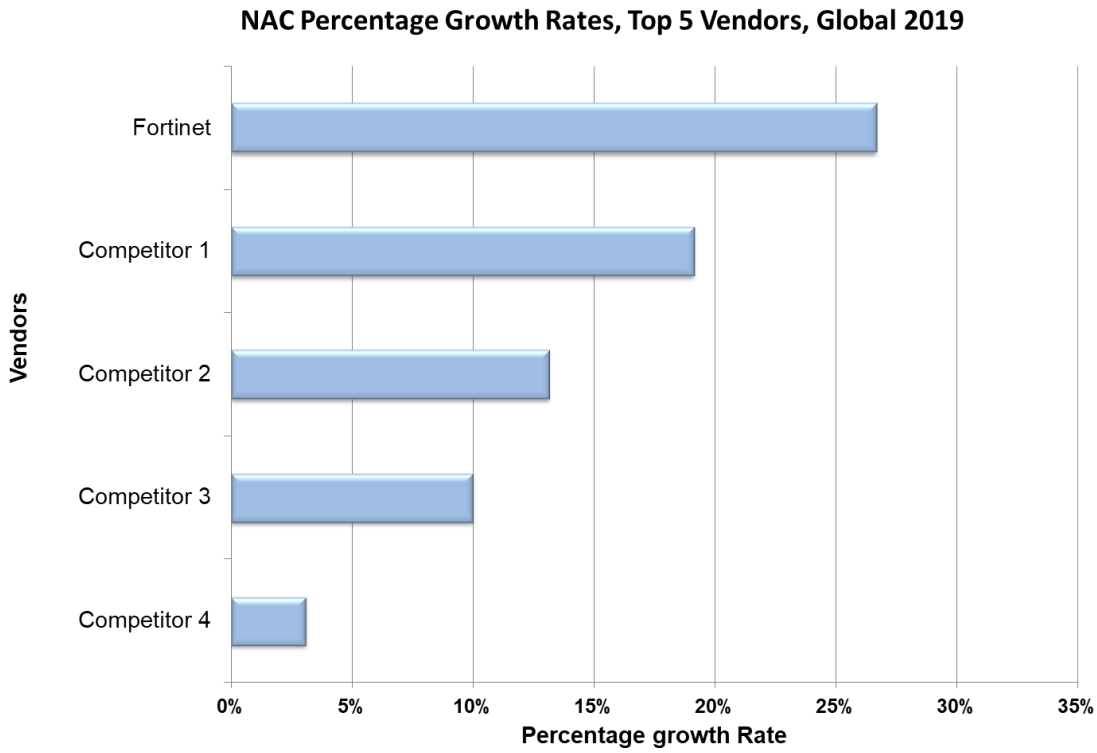
Fortinet is a global leader in broad, automated, and integrated cybersecurity solutions. It provides high- performance cybersecurity solutions to a wide variety of businesses, such as carriers, data centers, enterprises, and distributed offices, including a majority of the Fortune 100 companies. Fortinet has over 450,000 customers worldwide.

FortiNAC comes from the acquisition of Bradford Networks in June 2018. FortiNAC provides the network visibility to see everything connected to the network, as well as the ability to control those devices and users, including dynamic, automated responses. It enables discovery of every endpoint and network infrastructure device, provides contextual awareness for implementing dynamic NAC, and drives the ability to contain a cyber breach through automated threat response. It can be deployed as a physical appliance, a virtual appliance, or as a cloud service

Fortinet's mission is to deliver the most innovative, highest-performing network security fabric to secure and simplify a customer's IT infrastructure. FortiNAC provides automatic discovery, classification, and security of IoT devices as they enter the network. Fortinet developed the Fortinet Security Fabric to provide unified security across the entire digital attack surface, including network core, endpoints, applications, data centers, access, and private and public cloud. FortiNAC is a critical component of the fabric.

Fortinet touts its Security Fabric as the first open architectural approach to security that dynamically adapts to and secures the evolving IT infrastructure. The company is addressing the emergence of cloud, IoT, and mobile. IoT has a high growth rate. FortiNAC provides the network visibility to see everything connected to the network, as well as the ability to control those devices and users, including dynamic, automated responses.

The acquisition of Bradford Networks brought NAC into Fortinet's portfolio. The integration into the Security Fabric strengthened Fortinet's strategy and enhanced FortiNAC. This has resulted in steady double digit revenue growth. In 2019 Fortinet had the highest annual growth rate among the top 5 NAC vendors with 26.7%.



Above-market Growth

For the last four years, both prior to the acquisition of Bradford Networks and following the transition to FortiNAC, the product line has achieved strong double digit growth rates above the overall industry average. It has steadily grown market share in each of those years. In 2019, among the top 5 NAC vendors, Fortinet outperformed all vendors growing 26.7% and gaining 0.46 points in market share.

Almost the entirety of Fortinet's NAC revenue is from enterprise and large enterprise customers. These are the dominant business segments of the NAC market.

Fortinet's growth is the result of the company focusing on Zero Trust Architecture and the convergence of NAC and IoT. FortiNAC provides the visibility that is the basis for ZTA. The company is addressing the emergence of cloud, IoT, and mobile. IoT has a high growth rate.

Growth Strategy

To complement Fortinet's growth strategy of internal development and innovation, Fortinet's recent acquisitions include:

- CyberSponse – (December 2019) – security orchestration, automation and response (SOAR)
- EnSilo (October 2019) - endpoint detection and response (EDR)

  ZoneFox (October 2018) – insider threat/ and user entity behavior analytics (UEBA)
- Bradford Networks (June 2018) – NAC

Fortinet's Zero Trust architecture is focused on network access. The Fortinet Security Fabric provides broad, integrated and automated solutions enabling security driven networking, ZTN access, dynamic cloud security and AI-driven security operations. FortiNAC is a key element in Fortinet's Security Fabric.

Fortinet continues to develop and enhance FortiNAC. The future is still visibility and control, but automated network segmentation is important. FortiNAC release 8.6 (July 2019) increases anomaly detection via traffic scanning by leveraging FortiGate as a sensor, with no additional hardware required at a branch office. Using FortiGate is a recently added feature. In addition, FortiNAC has been providing port-based network access control without 802.1X for 20+ years

Growth Sustainability

Fortinet continues to invest in sales and marketing resources, in particular in the enterprise segment where it sees opportunity for expansion. In its 2019 annual report Fortinet stated, "We intend to continue to make investments in our sales resources and infrastructure and marketing strategy, which are critical to support our growth."

In order to penetrate large business, service providers and government organizations, Fortinet has a development strategy to identify features, products and systems that are expected to be important to its customers. For the last three years Fortinet has invested between 13% and 14% of its revenues in R&D.

Fortinet continues to build out its Security Fabric Platform. According to the company, "The integration of devices using open standards, common operating systems, and unified management platforms enables the sharing and correlation of real-time threat intelligence." The company has focused FortiNAC on IoT devices, a high growth area.

Brand Equity

Fortinet's marketing strategy is focused on building its brand and driving end-customer demand for its security solutions. The company has over 450,000 customers worldwide. It has over 350 Open Fabric Ecosystem Integrations. Fortinet products have numerous third-party certifications from organizations such as NSS Labs, ICSA Labs, Virus Bulletin and others.

Fortinet has a broad portfolio which includes network security and SD-WAN, switching and wireless access, network access control, authentication, public and private cloud security, endpoint security, and AI-driven advanced threat protection solutions for carriers, data centers, enterprises, and distributed offices. The company leverages this reputation to advance FortiNAC.

Customer Purchase Experience

Fortinet mainly sells its security solutions to channel partners, with some sales direct to end-customers. According to Fortinet "…channel partners and end-customers may purchase FortiGuard and other security subscription services to receive threat intelligence updates, FortiCare technical support services across all of the company's products and the support of Technical Account Managers, Resident Engineers and professional service consultants for implementations or training service." FortiGuard security subscription

services are purchased in advance. Terms of service are usually one to five years. The security subscription services are provided 24/7. End customers can quickly receive new threat detection and prevention capabilities via the FortiGuard security subscription services.

In the 2019 Annual Report, Fortinet stated "During 2019, service gross margin benefited from renewals and continued sales of services and subscriptions, growing faster than related expenses."

Conclusion

The results for Fortinet are that in 2019 its FortiNAC solution grew 26.7%, outpacing the overall market and highest among the top 5 NAC vendors. This is an impressive 0.46 percentage point gain in market share, reaching 5.5% share and a solid fourth place ranking. This achievement is a result of Fortinet leveraging its brand recognition, technology partnerships, leveraging its broad and integrated product portfolio, delivering innovations to customers, investing in its marketing strategy, delivering a NAC across all types of deployment, establishing an extensive and aggressive growth strategy, and focusing on the needs of the rapidly changing NAC market. What is notable is that Fortinet continues to grow its market share in a highly competitive and crowded market which has attracted more players in recent years. Fortinet has demonstrated sustained and consistent growth. The company's continuing innovation of its Security Fabric provides a solid platform for FortiNAC growth and development. Fortinet's focus on expanding into the cloud, expanding its partnerships and ecosystem, addressing IoT and Zero Trust Architecture bodes well for Fortinet to sustain its growth path.

With its strong overall performance, Fortinet has earned Frost & Sullivan's 2020 Growth Excellence Leadership Award.

Significance of Growth Excellence Leadership

Growth Excellence Leadership is about inspiring customers to purchase from your company and then return time and again. In a sense, then, everything is truly about the customer. Making customers happy is the cornerstone of any successful, long-term growth strategy. Companies that excel in driving growth strive to be best in class in three key areas: meeting customer demand, fostering brand loyalty, and carving out a unique and sustainable market niche.

Understanding Growth Excellence Leadership

Companies that creatively and profitably deliver value to customers ultimately set up their businesses for long-term, rapid growth. This is what Growth Excellence Leadership is all about: growth through customer focus, fostering a virtuous cycle of improvement and success.

Key Benchmarking Criteria

For the Growth Excellence Leadership Award, Frost & Sullivan analysts independently evaluated Growth Performance and Customer Impact according to the criteria identified below.

Growth Performance

Criterion 1: Growth Strategy

Requirement: Executive team has a shared vision for the organization's growth and has created and implemented a strategy that is consistent with that vision.

Criterion 2: Above-market Growth

Requirement: Company's growth rate exceeds the industry's year-over-year growth rate.

Criterion 3: Share of Wallet

Requirement: Customers allocate a greater percentage of their total spend to purchasing products or services produced by the company.

Criterion 4: Growth Diversification

Requirements: Company is equally able to pursue organic (e.g., distribution channel optimization, new product innovation) and inorganic (e.g., acquisitions, partnerships) growth opportunities consistent with the long-term objectives of the organization.

Criterion 5: Growth Sustainability

Requirement: Company has consistently sought opportunities for growth, enabling the organization to build on its base and sustain growth over the long term.

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience

Requirement: Customers feel they are buying the optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience

Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate award candidates and assess their fit with select best practices criteria. The reputation and integrity of the awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	**Monitor, target, and screen**	Identify award recipient candidates from around the world	• Conduct in-depth industry research • Identify emerging industries • Scan multiple regions	Pipeline of candidates that potentially meet all best practices criteria
2	**Perform 360-degree research**	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best practices criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	**Invite thought leadership in best practices**	Perform in-depth examination of all candidates	• Confirm best practices criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	**Initiate research director review**	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best practices positioning paper
5	**Assemble panel of industry experts**	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized award candidates
6	**Conduct global industry review**	Build consensus on award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible award candidates, representing success stories worldwide
7	**Perform quality check**	Develop official award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	**Reconnect with panel of industry experts**	Finalize the selection of the best practices award recipient	• Review analysis with panel • Build consensus • Select recipient	Decision on which company performs best against all best practices criteria
9	**Communicate recognition**	Inform award recipient of recognition	• Present award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of award and plan for how recipient can use the award to enhance the brand
10	**Take strategic action**	Upon licensing, company is able to share award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess award's role in strategic planning	Widespread awareness of recipient's award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation, and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practices models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com.