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2018 Global Network Access Control Growth Excellence Leadership Award



2018
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

Network visibility into endpoints is critical. Every device on a network is a potential attack or reconnaissance point that must be discovered and secured. Organizations are faced with an increasing level of malware and cyber-attacks. The enterprise network no longer sits within four secure walls. The network extends to wherever employees and data travel. Mobility, digitization, and the Internet of Things (IoT) are changing the way we live and work. The result is that networks are expanding, resulting in increasing complexity of managing resources and disparate security solutions.

Network access control (NAC) is a foundational network security defense. The premise of network access control is the security principal that end users/endpoints can be provided policy-based access to different parts of a network and blocked, quarantined, or redirected if there is an Indication of Compromise (IOC) or vulnerabilities. However, enterprise networks have expanded beyond the "traditional" endpoints of servers, PCs, and virtual desktops to encompass tablets, smartphones, IoT and OT devices.

The IoT and Bring Your Own Device (BYOD) trends present potential threat vectors that organizations need to manage. According to Frost & Sullivan, there will be 45.4 billion connected devices by 2023. Most of these will be IoT devices. The high growth of IoT poses challenges to enterprise networks since these are mostly non-802.1X compliant. It is not only the volume of devices, but also the diversity of Operating Systems and devices that poses a challenge. Most IoT devices lack the resources for embedding an agent, thus agentless technology is required. As the volume and diversity of devices and OS's increase, the ability of an organization to see and control devices declines.

Organizations need to develop visibility across the enterprise's entire IT footprint: campus, data center, private cloud, public cloud, and Operational Technology (OT) networks. Other protocols in addition to 802.1X need to be supported. Organizations face challenges as IT and OT converge. 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.

Organizations are migrating workloads to the cloud, both public and private. Support is needed for AWS, Azure and other cloud computing platforms. Network administrators must deal with multiple device locations and access points. Networks are a heterogeneous environment with multiple vendors and management is typically decentralized.

While NAC is a powerful security tool, it is a very complex technology that can be difficult to implement. Unlike the earlier generation of NAC, which was intrusive and restrictive, NAC vendors must focus on easing deployment and management, and providing IT complete visibility into every endpoint on their expanding networks.

The complexities of NAC deployment and management are compounded by the severe shortage of skilled professional security experts. IT organizations are in need of better security tools and automated systems to alleviate these limitations. The level of expertise required from a network engineer is very high.

Organizations have invested in many different security technologies. Improved orchestration and integration with other security solutions such as Next Generation Fire Wall (NGFW), Security Information and Event Management (SIEM), and threat intelligence networks will increase NAC efficacy and justify its investment.

NAC is a fast growing market. In 2017, revenues grew 23.7% to \$942.3 million. Frost & Sullivan projects a compound annual growth rate from 2017 to 2022 of 16.9%. The high growth rate and size of the NAC market has attracted more vendors in the last few years. The NAC market has over 12 vendors. Consequently, establishing a leadership position in such a competitive market is challenging both incumbent and new vendors in NAC.

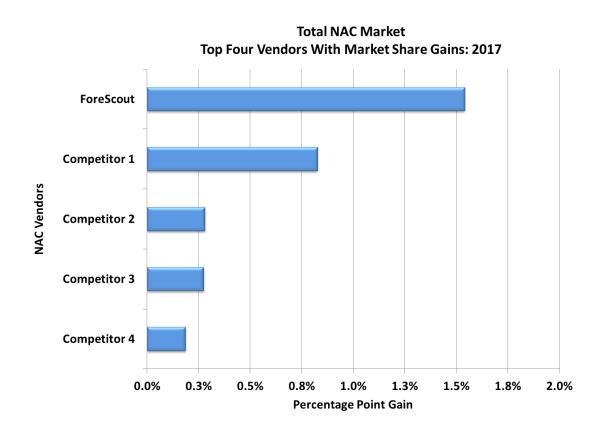
Growth Performance and Customer Impact

ForeScout Technologies provides visibility and control solutions to a broad range of organizations. Its agentless technology provides NAC for traditional, mobile, virtual, and IoT devices. ForeScout's "...technology orchestrates with disparate security tools to help organizations accelerate incident response, break down silos, automate workflows and optimize existing investments." The company started in 2000, and closed its IPO on October 31, 2017.

ForeScout's vision is to provide device visibility across the enterprise: campus, data center, cloud, and OT. The driving factors for the company's growth have been security in IoT, OT, data centers, and cloud. ForeScout sees the convergence of IT and OT as an important trend. Thus, its customer base includes large organizations which are dealing with the growth of device volumes and platform diversity.

ForeScout counts 19% of the Global 2000 among its customer base. ForeScout has a two-tier channel ecosystem comprising distributors and VARs. In its 2017 annual report, the company notes that globally three distributors represented 68% of company revenues in total, compared to 51% in 2016. Since the company's inception, it has sold to over 2,900 end customers. ForeScout has over 56 million devices under management and growing quickly.

Frost & Sullivan has determined that ForeScout had the largest gain in global market share in NAC in 2017. ForeScout has shown strong consistent growth across all geographic regions and vertical markets. The company ranks second overall in NAC revenues globally.



Above-market Growth

ForeScout has consistently shown strong growth in recent years. In 2017, ForeScout's revenues grew 32.4%, almost matching its 2016 growth of 32.5%. The company has outperformed the overall NAC market for several years. In 2017, ForeScout ranked second in the NAC market globally with 23.4% market share. This represented a gain of 1.5 percentage points over 2016.

This growth is the result of ForeScout addressing the dynamic changes facing its NAC customers. Organizations are migrating quickly to the cloud, both public and private. The convergence of IT and OT is accelerating. The growth of IoT and BYOD poses challenges for organizations. ForeScout emphasizes its foundational visibility platform across the customer's extended enterprise-campus, data center, public cloud, private cloud and OT.

Growth Strategy

ForeScout is focused on three growth areas: IoT Security, OT security, and Data Center and Cloud security. The company is addressing the dynamic changes emerging in these areas. It is expanding visibility into OT and IPv6 systems. ForeScout is delivering industry-leading classification for traditional, mobile, virtual, network infrastructure, IoT and OT devices. To achieve this goal, ForeScout offers Device Cloud, a crowd-sourced device repository that helps improve classification efficacy and coverage for new devices.

ForeScout has close partnerships which enable this growth strategy. It has extended visibility into public cloud working with AWS. The company is also extending visibility and control into private cloud working with VMware vSphere and NSX. ForeScout has developed orchestration modules with CyberArk, Carbon Black, Check Point, IBM BigFix, CrowdStrike, FireEye, Palo Alto, Tenable, Splunk, ServiceNow and several other leading security technologies.

ForeScout is defining best practices for IoT and OT. These include classification, assessment of posture of endpoints, segmentation, and behavioral monitoring.

Growth Diversification

ForeScout has continued to develop its CounterACT NAC solution. The company introduced extensive new features and capabilities in CounterACT 8, which was released in April 2018. Among the improvements are extended visibility to OT environments, IPv6 systems and Cisco Meraki managed devices. Other CounterACT 8 improvements include ForeScout Device Cloud, enhanced IoT assessment techniques, web management, increased range of enterprise scalability, and strengthened security orchestration.

ForeScout engages with several key partners for its continued product development and increasing scope of visibility across the extended enterprise.

- July 12, 2018: ForeScout and Carbon Black announced a new integration to fortify endpoint defenses and accelerate threat containment across enterprise networks.
- June 13, 2018: ForeScout partnered with Indegy and SecurityMatters to integrate industrial control system (ICS) technologies into its visibility platform and secure operational technology (OT) and industrial environments.
- December 13, 2017: ForeScout Extended Module for IBM BigFix is added to its suite of integrations with IBM Security solutions.
- October 10, 2017: ForeScout and CrowdStrike announced a strategic alliance that delivers comprehensive visibility, threat detection and security response for joint customers.

- September 27, 2017: ForeScout and CyberArk announced a new partnership and joint solution, the ForeScout Extended Module for CyberArk. This solution will dynamically secure devices across the enterprise to reduce the attack surface.
- June 24, 2017: ForeScout partnered with ServiceNow for improved asset management, compliance, and security Response with the ForeScout Extended Module for ServiceNow.
- February 9, 2017: ForeScout extended visibility and control capabilities to the cloud with Amazon Web Services.

Growth Sustainability

ForeScout has been migrating its business model from delivering physical appliances into the higher growth software solution and virtual appliance market. With its product developments and partnerships the company is targeting the high growth areas of IoT, OT and cloud.

ForeScout has a broad global strategic alliance network. In addition to the previously cited partnerships, ForeScout announced an agreement with KPMG LLP on April 12, 2018. KPMG "...will serve as a certified system integrator of ForeScout's solutions and provide business partners and customers with a secure and seamless experience as they undergo digital transformations." This agreement enables ForeScout to expand its reach into enterprises with complex requirements for visibility and control.

ForeScout has a long term vision to deliver improved IoT assessment techniques, broader and deeper OT visibility and control, and improved network segmentation orchestration. The company sees the convergence of IT and OT as an important growth driver. ForeScout continues to develop classification for vertical markets and behavioral monitoring. The previously cited Device Cloud, is a key element in ForeScout's roadmap.

Brand Equity

As noted previously, ForeScout serves 19% of Global 2000 companies. ForeScout touts that its customers report seeing up to 60% more devices on their network than previously known. This is due to the increasing number of IP-based devices without agents, which ForeScout can discover. In addition, customer benefits include continuous visibility, automated control based on policy, and orchestration of actions between systems.

ForeScout has received recognition by the United States Department of Defense.

- On January 11, 2018 the U.S. Department of Defense (DoD) awarded the company and its federal partners an enterprise-wide blanket purchase agreement (BPA) through the U.S. military's Enterprise Software Initiative (ESI) program. This agreement covers enterprise-wide IoT security.
- On March 12, 2018, the U.S. Department of Defense's (DoD) Defense Information Systems Agency (DISA) added ForeScout CounterACT to its select list of commercial technology products receiving Security Technical Implementation Guides (STIG). ForeScout is able to meet and enforce the Pentagon's rigorous security requirements for military agencies and contractors. It further validates ForeScout for IoT security.
- ForeScout is the chosen provider of HWAM on five out of six task orders on the Department of Homeland Security's Continuous Diagnostics and Mitigation Program (CDM) Phase 1

Conclusion

With its strong overall performance, ForeScout has achieved the fastest growth rate in the Network Access Control (NAC) market and Frost & Sullivan is proud to bestow the 2018 Growth Excellence Leadership Award to ForeScout. This achievement is a result of ForeScout leveraging its brand recognition, channel partnerships, technology partnerships, delivering innovations to customers, and focusing on the needs of the rapidly changing NAC market. ForeScout has focused on high growth solutions for software and virtual appliances. The company is addressing the NAC challenges of IoT, the convergence of IT and OT, and migration to the cloud.

The results for ForeScout are that in 2017 its revenues grew 32.4%, outpacing the overall market. This is an impressive 1.5 percentage point gain in market share, reaching 23.4% share and a solid second place ranking. ForeScout has the highest market share gain. What is notable is that ForeScout continues to grow its market share in a highly competitive market which has attracted more players in recent years. The company continues to add customers and devices under management at a rapid rate. ForeScout has demonstrated sustained and consistent growth. The continued product innovation and focus on IoT and cloud bodes well for ForeScout to sustain its growth path.

Significance of Growth Excellence Leadership

Growth Excellence Leadership is about inspiring customers to purchase from your company, and then to return time and again. In a sense, then, everything is truly about the customer, and making those customers happy is the cornerstone of any long-term successful growth strategy. Companies that excel in driving growth strive to be best-inclass in three key areas: meeting customer demand, fostering brand loyalty, and carving out a unique, 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 two key factors—Growth Performance and Customer Impact—according to the criteria identified below.

Growth Performance

Criterion 1: Growth Strategy

Criterion 2: Above-market Growth

Criterion 3: Share of Wallet

Criterion 4: Growth Diversification Criterion 5: Growth Sustainability

Customer Impact

Criterion 1: Price/Performance Value

Criterion 2: Customer Purchase Experience Criterion 3: Customer Ownership Experience

Criterion 4: Customer Service Experience

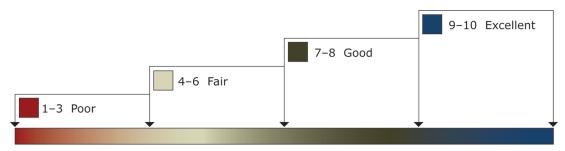
Criterion 5: Brand Equity

Best Practices Award Analysis for ForeScout

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows our research and consulting teams to objectively analyze performance, according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES



The Decision Support Scorecard is organized by Growth Performance and Customer Impact (i.e., These are the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.



The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, we have chosen to refer to the other key participants as Competitor 2 and Competitor 3.

Measurement of 1–10 (1 = poor; 10 = excellent)			
Growth Excellence Leadership	Growth Performance	Customer Impact	Average Rating
ForeScout	9	9	9
Competitor 2	3	6	4.5
Competitor 3	6	6	6.0

Growth Performance

Criterion 1: Growth Strategy

Requirement: Executive team has a shared vision for the organization's future 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) or 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 out opportunities for new 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 most 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.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.



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 practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	ОИТРИТ
1	Monitor, target, and screen	Identify Award recipient candidates from around the globe	 Conduct in-depth industry research Identify emerging sectors Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice 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-practice 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-practice 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-practice positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	Share findingsStrengthen cases for candidate eligibilityPrioritize 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-practice Award recipient	Review analysis with panelBuild consensusSelect recipient	Decision on which company performs best against all best-practice criteria
9	Communicate recognition	Inform Award recipient of Award 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 future 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 our 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, leading to 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 provides methodology an evaluation platform benchmarking industry



participants and for identifying those performing at best-in-class levels.

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to 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 practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit http://www.frost.com.