MARKET SHARE

Worldwide Security and Vulnerability Management Market Shares, 2015: Top Vendors Acquire and Integrate to Deliver Powerful, Flexible Platforms

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IN THIS EXCERPT

The content for this excerpt was taken directly from Worldwide Security and Vulnerability Management Market Shares, 2015: Top Vendors Acquire and Integrate to Deliver Powerful, Flexible Platforms (Doc# US42068716). All or parts of the following sections are included in this excerpt: Executive Summary, Advice for Technology Suppliers, Market Share, Who Shaped the Year, Market Context, Methodology, Market Definition, and Related Research sections that relate specifically to Qualys, and any figures and or tables relevant to Qualys.

IDC MARKET SHARE FIGURE

FIGURE 1

Worldwide Security and Vulnerability Management 2015 Share Snapshot
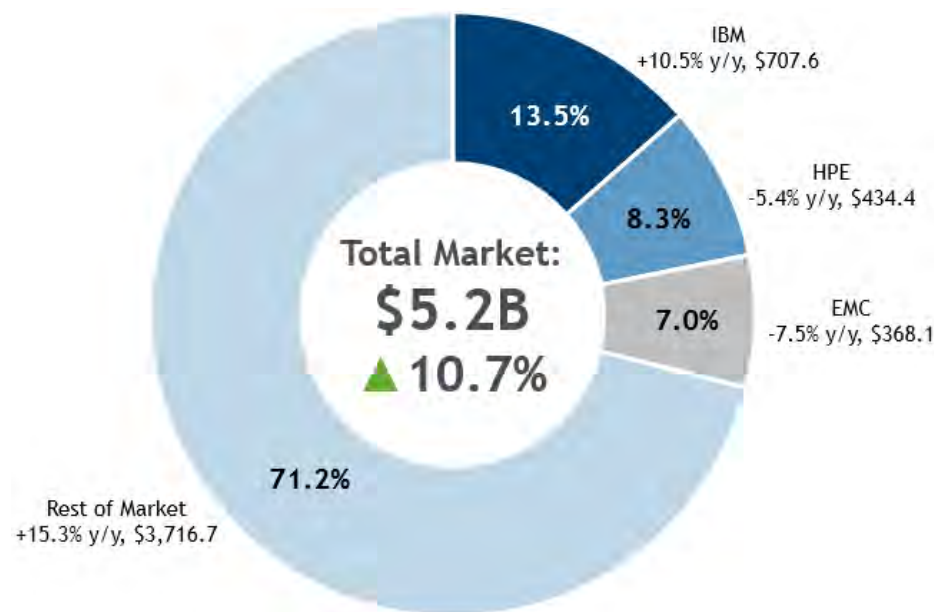
Note: 2015 Share (%), Growth (%), and Revenue ($M)

Source: IDC, 2016

EXECUTIVE SUMMARY

IT security has become a concern for all organizations regardless of size and industry. As customers create dedicated budgets for security programs, those same customers demand security management that is well integrated with the IT infrastructure and that is effective, usable, and affordable. Security and vulnerability management (SVM) is very important to meeting risk management goals because it provides policy and compliance context, vulnerability information and, ultimately, a comprehensive view of enterprise risk management. It offers organizations better ways to cost effectively provide risk management. SVM solutions can simplify the complexity associated with managing multiple security solutions while increasing the automation, effectiveness, and proactive nature of security. Vendors are growing the capabilities to provide comprehensive coverage within their security management offerings. The key to success in this space will be the ability to provide proactive security protection and the knowledge and intelligence to provide comprehensive security assessment data.

IDC believes vendors should develop tools that bring together event records, efficiently prioritize incidents, separate real security violations from false alarms, and aggregate security events from different locations, devices, and manufacturers. Moreover, vulnerabilities must be viewed as part of an overall security management infrastructure that takes into account security policy, compliance, and risk management. SVM solutions should tell the enterprise why the vulnerability is a concern and its risk ranking as well as how to remediate. SVM offerings must be able to provide a more aggressive, positive security model and not just respond to events in a chaotic manner.

For the SVM market to maintain its strong growth rates, vendors must continue to make security smart. One area where SVM makes security smart is in the security intelligence and event management (SIEM) market, where an ever-growing set of security data has to be processed to find the critical information among a huge set of data and to put that intelligence into its proper context. The SIEM market is important for providing audit information and ensuring proper utilization of security technologies. IDC also believes that vulnerability scanning — whether it's device or application based, white box or black box, or credential or hacker view — provides critical information that allows organizations to adjust their security position to meet real security threats. IDC believes that products that can do real-time penetration testing will see considerable success over the next few years because they can pinpoint specific security gaps.

This IDC study examines the market share of security and vulnerability management vendors in 2015 as well as the market forces that influenced their performances and the adoption of security and vulnerability management products.

"The effectiveness of ransomware and the increased need for a structured process around security and device management continue to drive the SVM market," says Rob Ayoub, research director for Security Products and Solutions at IDC. "Organizations are demanding better tools to allow for the prevention, discovery, and remediation of attacks. As vendors have significantly improved security and vulnerability management products over the past few years, these tools are becoming an invaluable component in prioritization of threats and discovery of attacks."

ADVICE FOR TECHNOLOGY SUPPLIERS

The SVM market continues to gain traction among enterprise customers for a variety of reasons. While the overall threat landscape continues to be a constant driver, ever-expanding compliance initiatives, an increased interest in forensics, and more rapid application development cycles are driving even midsize enterprises to adopt tools that were once exclusively the domain of the largest organizations.

CISOs are finding themselves under a deluge of information. Beyond just being prepared for an incident, there is an expectation that organizations can provide answers around how attackers penetrated existing defenses and exactly what data was compromised. SVM products can help manage the end-to-end processes required to lower risk and manage an incident.

SVM technology suppliers should focus on the key areas of improvement that are described in the sections that follow.

Usability Improvements

Historically, SVM products were targeted at large enterprises that had the personnel and expertise necessary to manage the output. Given the current lack of information security professionals, it is imperative that complex products like SVM provide outputs that are actionable and usable by a less technically savvy end user.

Higher Accuracy and Reduction of False Positives

False positives and alert overload have contributed to at least one highly publicized data security breach and continue to be a key concern industrywide. While false positives have historically been a challenge in markets such as SIEM, the increasing amount of correlation between network activity and threat intelligence allows even more opportunity for false positives to be introduced into tools.

Widespread Integration Across Multiple Ecosystems

Security can no longer simply be focused on a single gateway, or a single set of machines, but revolves around anywhere that users or data may be. For organizations deploying products or services, security is becoming a constant, inherent process, not simply an afterthought or addition of a single process. SVM products must be able to provide correlation and context across an even wider variety of vendors and environments than ever before. SVM products will continue to be under pressure to bridge the gap between development and incident response (IR).

MARKET SHARE

Table 1 provides worldwide SVM revenue and market shares for 2014 and 2015.

TABLE 1

Worldwide Security and Vulnerability Management Revenue by Vendor, 2014 and 2015

	2014		2015		
	Revenue ($M)	Share (%)	Revenue ($M)	Share (%)	2014–2015 Growth (%)
IBM	640.3	13.6	707.6	13.5	10.5
HPE	459.4	9.7	434.4	8.3	-5.4
EMC	397.9	8.4	368.1	7.0	-7.5
Tripwire	166.9	3.5	167.6	3.2	0.4
Qualys	133.6	2.8	164.3	3.1	23.0
Subtotal	1798.0	38.0	1842.0	35.0	2.4
Other	2923.4	62.0	3384.9	64.9	14.8
Total	4,721.5	100.0	5,226.9	100.0	10.7

Source: IDC, 2016

Table 2 displays worldwide revenue and market shares for the leading vulnerability assessment (VA) vendors.

TABLE 2

### Worldwide Vulnerability Assessment Revenue by Vendor, 2014 and 2015

	2014		2015		
	Revenue ($M)	Share (%)	Revenue ($M)	Share (%)	2014–2015 Growth (%)
Qualys	118.6	8.6	143.9	8.9	21.3
IBM	169.0	12.2	137.7	8.5	-18.5
HPE	141.7	10.3	99.8	6.2	-29.6
Veracode	63.0	4.6	87.7	5.4	39.2
Tenable	87.6	6.3	95.2	5.9	8.7
Subtotal	579.9	42.0	564.3	34.9	-2.7
Other	800.3	58.0	1049.4	65.1	31.1
Total	1,380.2	100.0	1,613.7	100.0	16.9

Source: IDC, 2016

Figures 2 illustrates the market share for the Worldwide Device Vulnerability Assessment submarket.

FIGURE 2

Worldwide Device Vulnerability Assessment Revenue Share by Vendor, 2015

Total = $895.1M
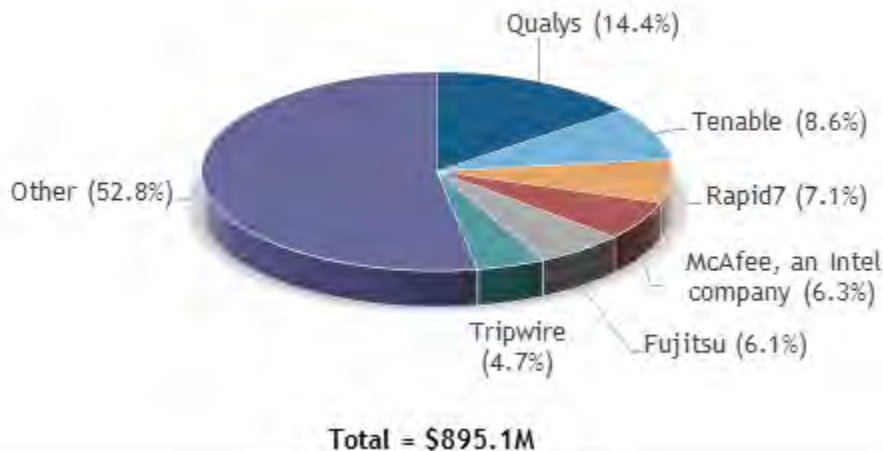
Source: IDC, 2016

Qualys

Qualys continued to drive cloud environment security forward in 2015. The move extends the company's specialization in vulnerability management to one that can provide cloud-based monitoring and threat detection over the entire enterprise – regardless of the type or location of the device. In addition to identifying vulnerabilities and obtaining the available patches for applications running on hosts, initial functionality of continuous monitoring feature includes the ability to identify endpoint devices exposed to the internet, track SSL certificates, detect unusual open ports and protocols being used, and spot the installation or removal of software. These updates put Qualys in the enviable position of providing scanning, compliance reporting, and protection of assets no matter where they are deployed.

MARKET CONTEXT

The worldwide SVM market saw a significant uplift in 2015 as a result of high-profile data breaches in the retail and healthcare industries. Many organizations are finding that as they add more solutions to detect targeted and advanced threats, the ability to prioritize the most critical threats is getting lost in the noise of alerts.

Buyers of SVM products are also growing more concerned about the risks posed by a growing number of internet-enabled devices attempting to connect to the corporate network. IDC expects the worldwide market for IoT solutions to grow at a 20% CAGR from $1.9 trillion in 2013 to $7.1 trillion in 2020. Network security vendors may be in a position to address many of the initial security requirements around access control, device inspection, and monitoring. Over time, security requirements will likely revolve around data protection and access to the back-end systems collecting sensor-based information.

An increased interest in forensics and incident response is driving renewed interest in SIEM and FII products as enterprises are under increased pressure not to just report breaches but to identify how a breach occurred and exactly what data was leaked as a result. Cyberinsurance in particular will continue to drive this requirement forward.

Application security is also an area that is getting increased interest. As organizations look to continuously improve security, the need to tightly integrate the development process into the overall security life cycle is critical.

Significant Market Developments

Ransomware was a key theme in 2015, with firms experiencing an unprecedented level of attacks of malware focused on extortion. These attacks were perpetuated through a variety of vectors including email, social media, and web- and file-based attacks. The FBI expects these attacks to cost over $1 billion by the end of 2016, and many organizations have been forced to simply pay the ransom in order to avoid costly downtime.

Another development has been a greater interest in the handling of PII by end users and a greater interest in businesses taking accountability for PII and its protection. This is different from traditional compliance reporting in the case of a breach. As consumers are more concerned about the security of

their data, there had been a demand for organizations to illustrate what they are doing to protect data and to explain how a breach was executed.

This increased interest in forensics is driving organizations to build their own internal FII capabilities. While an actual breach may require a third party to mitigate, the cost for these services is so high that many organizations see the benefits associated with establishing forensics and IR practices up front. In addition, the increase in the adoption of cyberinsurance forcing many organizations to show exact losses in the case of a data breach. Getting to this level of granularity requires dedicated staff and specialized tools.

The completion of many major firewall upgrade projects has occurred. In many cases, these infrastructure upgrades allowed organizations to gain additional security-related staff and budgets. As infrastructure projects have been completed, SVM is the next step for many organizations looking to build out their security infrastructure.

Finally, the consolidation of many companies that have SVM products offers the potential for significant shifts in the market as new companies may increase/decrease their level of investment in SVM products. Besides the integration efforts and acquisitions we saw in 2015, 2016 saw the acquisition of HPE by Micro Focus and the acquisition of EMC/RSA by Dell, both moves that could strongly disrupt the SVM market.

METHODOLOGY

The purpose of this section is to provide an overview of the methodology employed by IDC's software analysts for collecting, analyzing, and reporting revenue data for the categories defined by the software taxonomy.

IDC's industry analysts have been measuring and forecasting IT markets for more than 40 years. IDC's software industry analysts have been delivering analysis and prognostications for commercial software markets for more than 25 years.

The market forecast and analysis methodology incorporates information from five different but interrelated sources, as follows:

- **Reported and observed trends and financial activity.** This includes reported revenue data for public companies.
- **IDC's software vendor interviews and surveys.** IDC interviews and/or surveys significant market participants to determine product revenue, revenue demographics, pricing, and other relevant information.
- **Product briefings, press releases, and other publicly available information.** IDC's software analysts around the world meet with hundreds of software vendors each year. These briefings provide an opportunity to review current and future business and product strategies, revenue, shipments, customer bases, target markets, and other key product and competitive information.
- **Vendor financial statements and related filings.** Although many software vendors are privately held and choose to limit financial disclosures, information from publicly held companies provides a significant benchmark for assessing informal market estimates from private companies. IDC also builds detailed information related to private companies through in-depth analyst relationships and maintains an extensive library of financial and corporate information

focused on the IT industry. We further maintain detailed revenue by product area model on more than 1,000 worldwide vendors.

- **IDC demand-side research.** This includes interviews with business users of software solutions annually and provides a fifth perspective for assessing competitive performance and market dynamics. Direct conversations with technology buyers provide an invaluable complement to the broader survey-based results.

Ultimately, the data presented in IDC's software studies and pivot tables represents our best estimates based on the previously mentioned data sources as well as reported and observed activity by vendors and further modeling of data that we believe to be true to fill in any information gaps.

Company Revenue Modeling

- Public company revenue models tie to SEC-reported revenue or other legal public agencies outside the United States (at least at the total company level and often at more granular levels when available). Note, however, that companies may report revenue that is allocated differently than the categorization employed in IDC's software revenue models. For example, portions of "services" or "maintenance" revenue reported by companies may be included as commercial software revenue by IDC's definitions.

- Further segmentations such as geographic region and operating environment distribution percentages are generally obtained from companies at a high level (e.g., the primary market level) and are prorated to individual markets. However, for large companies that have wide variations in geographic and/or operating environment allocations across different markets, these allocations are maintained at the secondary or functional market level whenever that level of detail can be obtained.

Revenue Recognition

Software companies and other companies with software revenue vary in the manner in which they recognize revenue from commercial software sales for reporting purposes, although U.S. public companies are constrained by U.S. accounting practice standards. This is important because IDC's revenue information for companies and software markets is based on recognized revenue as defined in U.S. practice rather than on bookings, which is another measure. (In the case of private companies, IDC assumes they are using standards that are similar to public companies for their internal accounting.)

For accounting purposes, what matters is revenue, and this is what IDC uses as its metric for the software industry. One reason is that there is a reasonably consistent set of methodologies for determining what is revenue and what is not. These methodologies hinge on the issue of how bookings become "recognized" as revenue. In general, IDC bases its reporting of, and forecasts for, the software market based on revenue as defined by GAAP (to the extent that this is possible for non-U.S. companies).

The first requirement for the recognition of revenue for accounting purposes is whether the actual payment has been received (either directly from the customer or from a distributor or other agent) or whether a contract has been received that obligates the buyer to future payment. Once the booking has been deemed to be recognizable, the issue becomes one of how much may be recognized immediately and how much must or may be deferred and recognized in future periods. There are three basic methods of recognizing revenue: immediate recognition, deferred recognition, and subscription revenue.

Immediate Recognition

Under immediate recognition method, a company immediately recognizes all the value of a customer's purchase of software. In this case, a booking is turned almost immediately into recognized revenue. If a limited-term license is booked and there are no other contingencies or future deliverables (such as technical support) under the terms, then the total booking may also be recognized immediately.

Deferred Recognition

In practice, it is usual to negotiate mainframe and other large enterprise contracts as limited-term contracts with software "maintenance" and support provisions. Maintenance in the software sense means the right to "bug fixes," minor updates, and functionality improvements (which are called "point releases"). Here, the software company typically records the total value of the booking of a new or renewed long-term software right-to-use contract by amortizing the part associated with software maintenance over the life of the contract and then recognizing the remainder as immediate revenue.

A company may choose to report revenue recognized in the period as a total or may choose to break it out as license revenue versus maintenance revenue. Alternatively, a company may choose to report maintenance revenue together with revenue from other services, such as consulting services and implementation services, as one services figure. IDC attempts to determine in its data collection process the portion for license and software maintenance.

Subscription Revenue

An alternative method of licensing software is via a subscription. In this case, the customer agrees to pay on a month-by-month basis (or some other period plan). Because the cancellation clauses of such contracts typically have a fairly small advance-notice requirement (usually 30–90 days), there is no assurance of future revenue; therefore, revenue may be recognized only as it is billed under the terms of the contract.

There is no attempt to normalize revenue recognition across companies. For example, some companies may recognize revenue from long-term contracts over the life of the contract, others may only defer maintenance revenue, or others may apply some other model for revenue recognition. In all instances, IDC's software research reports revenue as it is recognized by a company regardless of the specific method the company uses for revenue recognition.

Mergers and Acquisitions: "Backstreaming"

To provide a true depiction of market (as opposed to individual vendor) changes over time, we "backstream" revenue when a company is acquired. That is, historical reports show revenue for the combined companies for previous years – independent of when the acquisition actually occurred. The specific rules for backstreaming are as follows:

- Revenue is backstreamed only when an entire company is acquired, not just a product line.
- Backstreaming occurs in the first full period (annual, semiannual, or quarterly) following the completion of a merger or an acquisition depending on the historical data periods included in specific IDC products.
- Backstreaming is performed for all reported periods of history.

Calendar Versus Fiscal Years

All IDC software vendor revenue data is reported for calendar years regardless of the reporting cycles or fiscal years of specific vendors.

Note: All numbers in this document may not be exact due to rounding.

MARKET DEFINITION

The security and vulnerability management market encompasses two separate but symbiotic markets – security management and vulnerability assessment. These two markets can stand alone, but they have considerable overlap. There are six subcategories divided between security management and vulnerability assessment. The markets and submarkets are defined as follows:

- **Security management products.** Security management products consist of products that provide organizations with the ability to create security policy that drives other security initiatives, allows for measurement and reporting of the security posture and, ultimately, provides methods for correcting security shortcomings. The security management market is divided into the following components:

  - **Security intelligence and event management (SIEM) solutions.** SIEM solutions include products designed to aggregate data from multiple sources to identify patterns of events that might signify attacks, intrusions, misuse, or failure. Event correlation simplifies and speeds the monitoring of network events by consolidating alerts and error logs into a short, easy-to-understand package. Many products in this category also consolidate and store the log data, which is processed by the SIEM. This market also includes activities that collect and disseminate threat intelligence, provide early warning threat services, and can provide information on countermeasures. Data from SIEM is provided to policy and compliance solutions for consistent reporting.

  - **Forensics and incident investigation solutions.** Forensics and incident investigation solutions capture and store real-time network and device data and identify how business assets are affected by network exploits, internal data theft, and security or HR policy violations. Products in this category also include those that can do historical recreations to find how an event occurred. The submarket also includes malware forensics tools, used by researchers to deconstruct targeted and stealthy malware. Finally, this category includes products that can be used by law enforcement to gather evidence associated with criminal activity.

  - **Policy and compliance solutions.** Policy and compliance solutions allow organizations to create, measure, and report on security policy and regulatory compliance. This information is used to establish corporatewide policies and distribute them and provide audit information for compliance measurement. Products in this area can be used to establish and measure baseline configurations that devices (desktops, laptops, servers, smartphones, and tablets) should be adhering to. They can monitor and report on when devices fall outside of policy norms. Policy and compliance products do not directly enforce the security policies; that function is handled by endpoint security products.

  - **Security device systems management (SDSM) products.** SDSM products are primarily systems management products that monitor and report on the status of perimeter security products (e.g., firewalls, intrusion detection and prevention, and web security). These products can be used to manage device policy and monitor the health of security systems.

- **Vulnerability assessment (VA) products.** These are batch-level products that scan servers, workstations, other devices, and applications to uncover security vulnerabilities in the form of known security holes (vulnerabilities) or configuration settings that can be exploited. These scans provide a view of the threat status of the device or an application. More sophisticated VA products can test for unknown vulnerabilities by mimicking common attack profiles to see if a device or an application can be penetrated. The use of penetration testing is an advanced capability that allows you to safely exploit vulnerabilities by replicating the kinds of access an intruder could achieve and providing actual paths of attacks that must be eliminated. Vulnerability assessment products are additionally segmented as defined here:

  - **Device vulnerability assessment products.** Device vulnerability assessment products use either network- or host-based scanners to look into a device to determine the security vulnerabilities. These scanners search out and discover devices and try to find known vulnerabilities on target systems. They can have credentialed access (using usernames and passwords) into devices or provide an uncredentialed (a hacker's view) look at a device. Credentialed scanners can do a deep dive into the device to find known vulnerabilities, while the hacker view will simulate attacks to see if a device can actually be exploited. Device VA scanners generally operate anonymously.

  - **Application scanners.** Application scanners are products specifically designed to test the robustness of an application or software to resist attacks – both specific attacks and attacks based on hacking techniques. Application scanners avoid doing general vulnerability checks, such as port scans, or patch checks to concentrate on vulnerabilities associated with direct interaction with applications. Application scanners are primarily focused on finding database or web application vulnerabilities. The application scanner market includes products that look at deployed applications (dynamic testing) and products that review source code (static testing).

Please note that proactive endpoint risk management (PERM) was previously included in the security and vulnerability management market but has now been incorporated in the endpoint security market.

RELATED RESEARCH

- *IDC's Forecast Scenario Assumptions for the ICT Markets and Historical Market Values and Exchange Rates, Version 4, 2016* (IDC #US42202016, December 2016)

- *Worldwide Security and Vulnerability Management Forecast, 2016-2020: Enterprises Continue Focus on Security Operations* (IDC #US41943616, December 2016)

- *Worldwide Threat Intelligence Security Services Forecast, 2016-2020: Strength in Numbers* (IDC #US41053415, March 2016)

- *Worldwide Security and Vulnerability Management Market Shares, 2014: The Need for Improved Incident Response Driving Higher Growth Across the Market* (IDC #259864, November 2015)

About IDC

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