

August 29, 2022 09:01 AM GMT

Software | North America

# Endpoint Security – A Bigger Opportunity Than You Think

Debate regarding durability of growth in Endpoint Security has grown louder in light of slowing macro and PC/server demand. We see multiple tailwinds such as Cloud adoption, large share gain and TAM expansion opportunities driving durable growth for market leaders like CRWD & S.

## Can Growth in Endpoint Security Remain Durable in Slowing Macro? *We think*

**so.** Recently, investor concern has increased regarding the durability of growth for leading Endpoint Security providers like CrowdStrike and SentinelOne since both vendors deploy software on corporate endpoints like PCs and Servers that are levered to headcount growth at their customers. Slower hiring due to an uncertain macro environment and a weaker outlook for Commercial PC demand, further highlighted by [Dell earnings last week](#), have only added to investor concerns. While being mindful of these risks, *we think growth for Endpoint Security will be more durable than appreciated*. For starters, given rising cyber threats and growth in remote devices over the last couple years, the need to modernize and increase investment in endpoint security is still catching up and remains a top spending among CIOs/CSOs ([Exhibit 1](#)). We think this creates a long runway of share gain opportunity for next-gen EDR (endpoint detection & response) providers like CRWD and S. Secondly, the expansion from securing traditional endpoints (PCs, on-prem server) to faster-growing Cloud workloads presents a large under-penetrated \$8-\$10 billion TAM opportunity based on our estimates. Finally, traction into TAM expansion opportunities such as XDR/Security Analytics, Identity Protection, OT Security, etc. should drive more durable growth as well. **Bottom line**, we think both CRWD and S offer compelling opportunities at these levels. With >50% forward revenue growth and 30%+ FCF margin, **CRWD** presents a highly favorable risk-reward given strong FCF generation and current valuation of ~46X EV/CY23 FCF discounts forward growth. However, we think **S** presents the most upside at current levels for longer term investors, given strong secular positioning in Cloud Security & XDR and the stock is now trading at one of the cheapest growth adjusted EV/Sales valuation in software at 0.13X EV/CY23 Sales/Growth, a 50% discount to high-growth SaaS peers at 0.25X and 60% below Security peers at 0.32X ([Exhibit 2](#)). As line of sight into positive FCF becomes clearer, we think the stock has significant re-rating potential to narrow the wide valuation gap vs peers.

- 1. Alignment With Top CIO Spending Priorities.** Given the sensitivity of data stored on network endpoints, coupled with massive expansion in surface areas as modern enterprises adapt to hybrid work, Endpoint Security enjoys dominant mindshare among CIOs in our [2Q22 CIO Survey](#). (see [Exhibit 1](#)).

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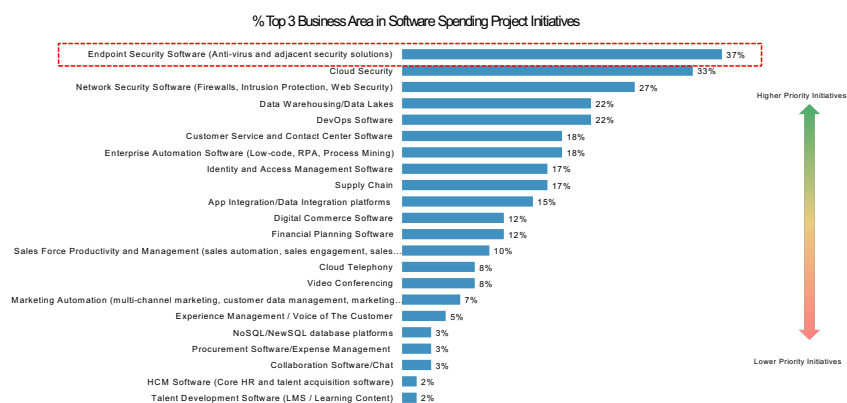
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**2. Large Runway in Core Endpoint Market Given Low EDR Penetration and Legacy Share Gain.** >50% of endpoints worldwide are still running on legacy endpoint protection providers (EPP), based on our checks. This provides a meaningful opportunity for next-gen EDR (endpoint detection & response) vendors like CRWD & S that provide more advanced real-time detection capabilities. Market penetration for EDR is estimated at ~20% of >\$10 billion annual endpoint security spend. Next-gen cloud-based EDR vendors will often replace legacy EPP providers like Symantec & McAfee at a minimum 2-3X ACV uplift given stronger threat hunting/intel capabilities and lower costs associated with managing on-prem infrastructure.

**3. Expanding TAM from Securing Traditional Network Endpoints to Cloud Workloads:** With accelerating Cloud migration over the last couple of years, the attack surface area has meaningfully expanded, along with the need for better visibility into growing cloud workloads. Cloud misconfiguration is now a top 3 most common attack vector, according to IBM Security research. This has driven rapid growth in the Cloud Workload Security, which we estimate is now over \$1 billion in annual spend with a potential TAM between \$8-\$10 billion. Disclosures from CrowdStrike and SentinelOne point to relatively early penetration of this opportunity today: CrowdStrike generated \$106MM in ARR from Falcon Deployments in Public Cloud ending FY22/CY21 (6% of total ending ARR, 8% of FQ4 Net New ARR). Similarly, SentinelOne is nearing 10% of ARR from securing cloud workloads today with triple digit YoY growth.

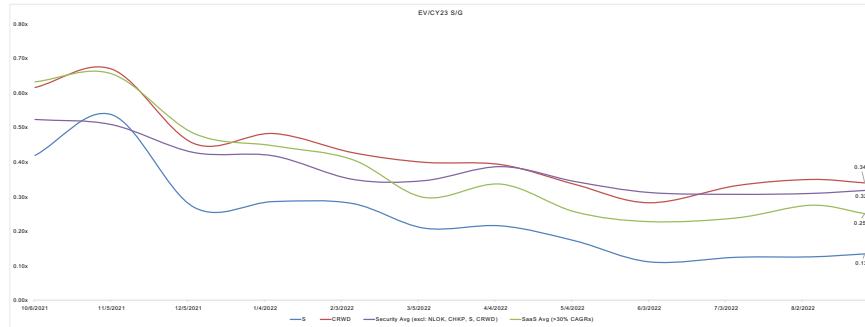
**4. Early Days Into Growing XDR Opportunity.** With ~40% of threat telemetry data coming from corporate endpoints, endpoint security is emerging as a strategic perch within modern IT security stacks. While early days, we see CrowdStrike and SentinelOne making strides in developing the technology advancements and integration partnerships necessary to make the jump to address the long-term opportunity in extended detection and response (XDR) capabilities. The ability to succeed in XDR could open an incremental \$20 billion+ TAM [consolidating spend across Security Analytics and Observability markets.](#)

**Exhibit 1:** Endpoint Security Sits Atop the Software Priority List in our 2Q22 CIO Domain Survey



Source: AlphaWise 2Q22 CIO Domain Survey (N=60), Morgan Stanley Research

**Exhibit 2:** CRWD Trades at A Modest Premium to Security and SaaS Peers at 0.34X EV/S/G Given Well-Above Average 30%+ FCF Margins, while S Trades at a Significant Discount to Security and SaaS Peers at 0.14X Due to Highly Negative Op Margins as They Scale



Source: Company Data, Refinitiv, Morgan Stanley Research



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## Endpoint Security: *A Bigger Opportunity Than You Think*



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## Executive Summary

### How Does Growth in Endpoint Security Fare in Slowing Macro and PC Demand?

*We Expect Growth To Remain Durable Based on the Following:*

- 1. Low Market Penetration of EDR and Legacy Installed Base Opportunity:**
  - Penetration of EDR still fairly low at ~20% of \$10.3B total corporate endpoint market spend in 2021
  - >50% of global endpoint installed base still on legacy EPP providers (e.g. Symantec, McAfee)
  - Next-gen vendors generate 2-3X ACV uplift from converting customers from legacy to EDR offerings with potential for higher upsell
- 2. Growing Opportunity Securing Cloud Workloads:**
  - Growing cloud workloads (VMs, containers, etc.) significantly expand the attack surface
  - Estimate >\$8 Billion TAM in 2021 Opportunity Growing to ~\$17 Billion by 2025
  - Both CRWD and S nearing 10% of ARR generated from Cloud Workload Security
- 3. Expansion Beyond Endpoint Protection and Emerging XDR Opportunity:**
  - With >40% of threat telemetry from endpoints, EDR vendors like CrowdStrike and SentinelOne in strong position to capture share of incremental \$20 billion TAM in XDR

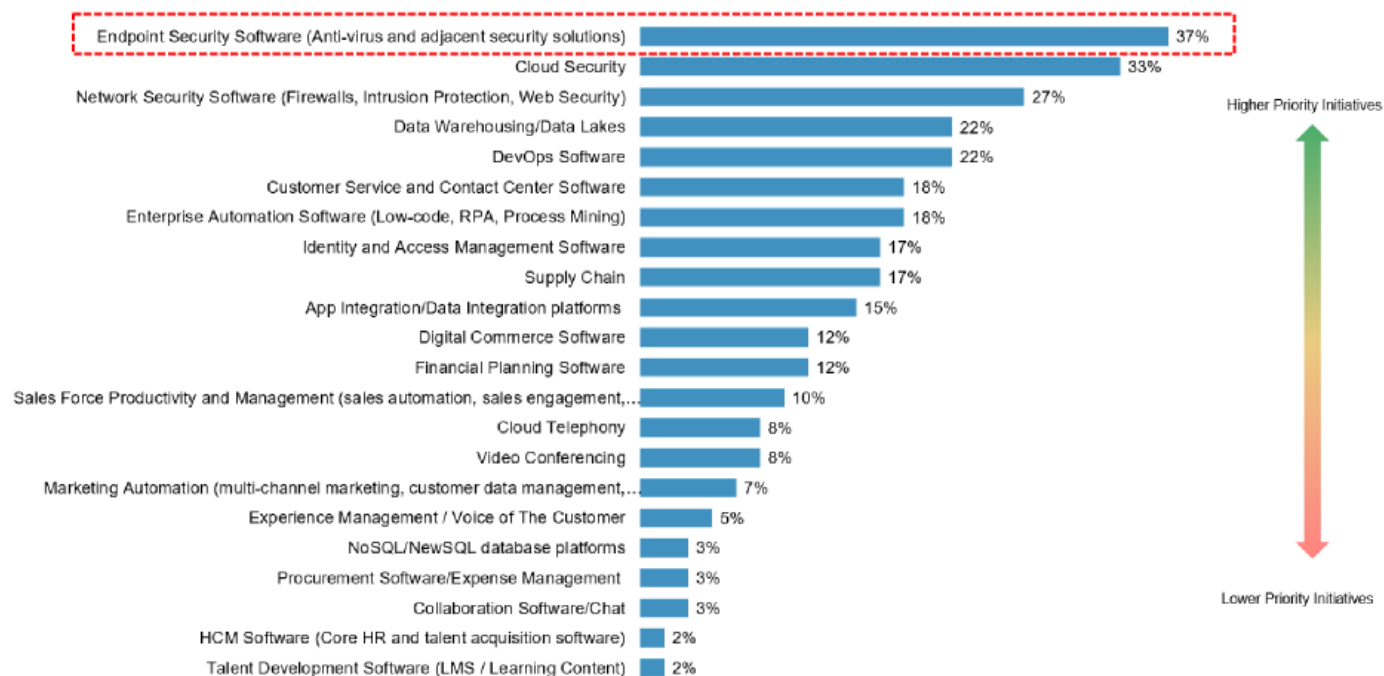
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## Part I

# *Growth in Endpoint Security Market vs PC/Server Demand*

## Endpoint Security Screens as a Top Priority Among CIOs

% Top 3 Business Area in Software Spending Project Initiatives



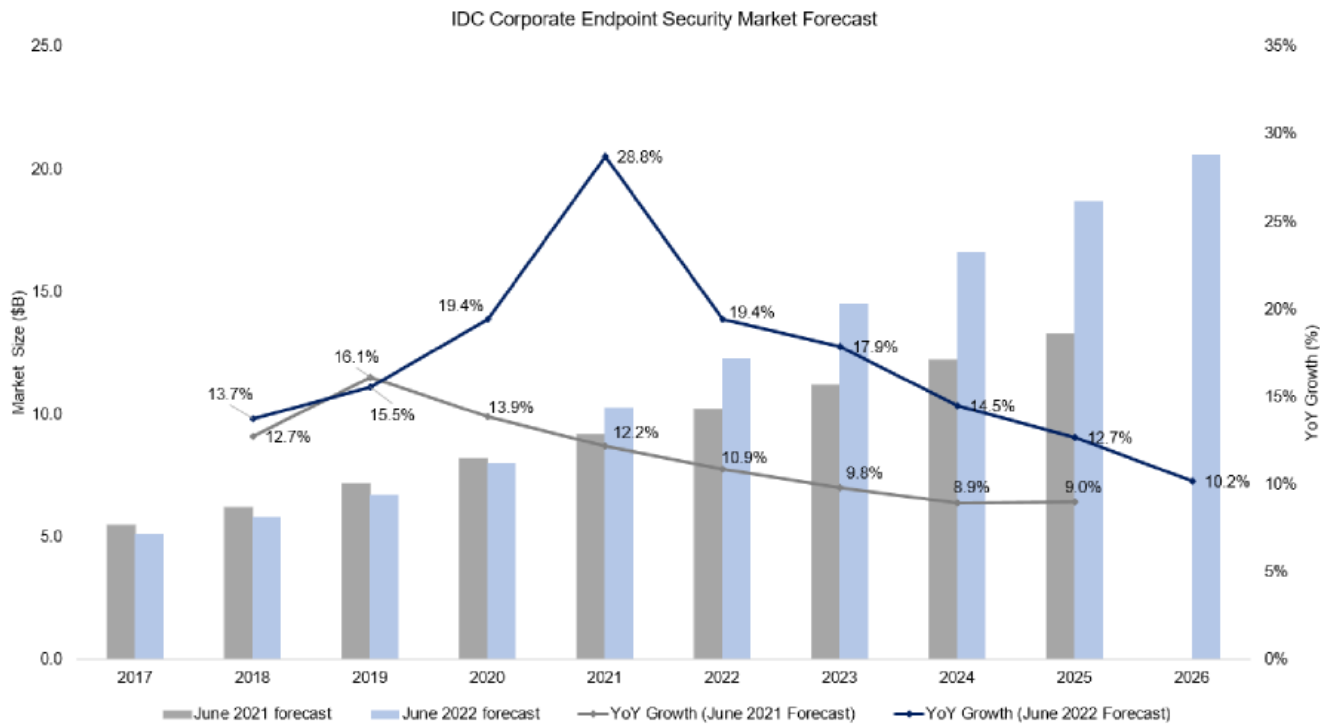
- Network endpoints comprise a key threat vector for modern enterprises (encompassing the security of desktops, laptops, servers, tablets and mobile). As such, Endpoint Security is a highly strategic initiative for modern enterprises
- As remote / hybrid work environments become more prevalent, key decision makers (CIOs/CSOs) face a growing mandate to ensure that endpoints are properly secured

Source: AlphaWise, 2Q22 CIO Domain Survey (n=60), Morgan Stanley Research



## Corporate Endpoint & Workload Security Market Accelerated During 2020/21

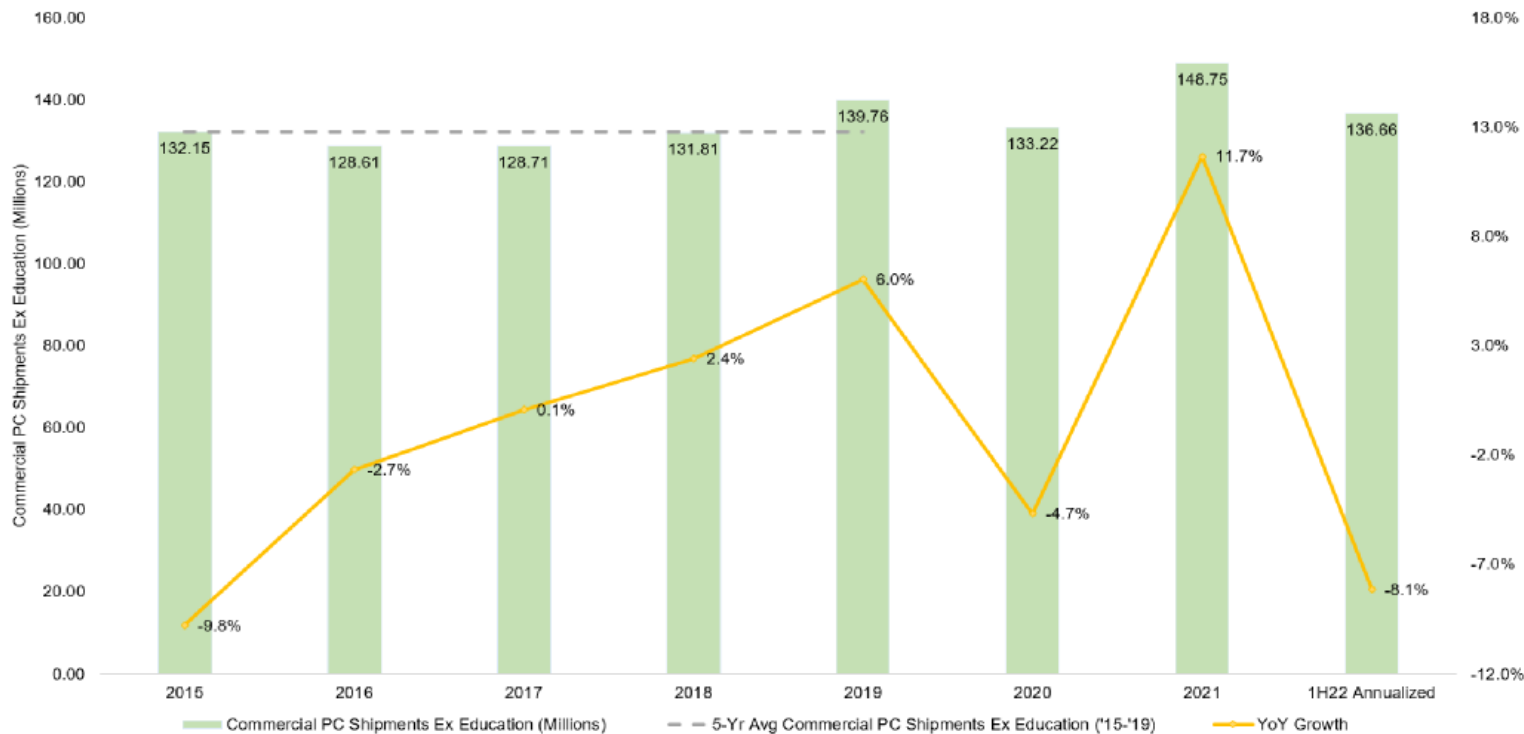
- IDC's Market Forecast expects ~14.9% growth CAGR through 2026 (compared to prior forecast of ~10.2% 5-year CAGR through 2025) and surpass \$20 Billion by 2026
- Higher forecast driven by 1) Growing EDR penetration, 2) Shift from On-Prem to Cloud Workload Security and 3) Growth in Commercial Endpoints (PCs)



Source: IDC Corporate Endpoint Security Forecast (June 2022), Morgan Stanley Research

## Commercial PC Shipments Benefitted in 2021 from Pent-Up WFH Demand

- Sizing The WFH Tailwind to Corporate Endpoint Security – Not As Material as One Might Think:**
  - Average annual PC shipments from 2015-19 at 132.2MM (Pre-Covid)
  - Average annual PC shipments from 2020-21 at 141MM
  - Est. Incremental Shipments of ~8.8MM Due to Covid WFH
  - Avg price of ~\$5/endpoint/month (\$60 annual) \* 8.8MM = **\$520-\$530MM from Incremental WFH Demand, or ~5% of Endpoint Security Market Spend in 2021**

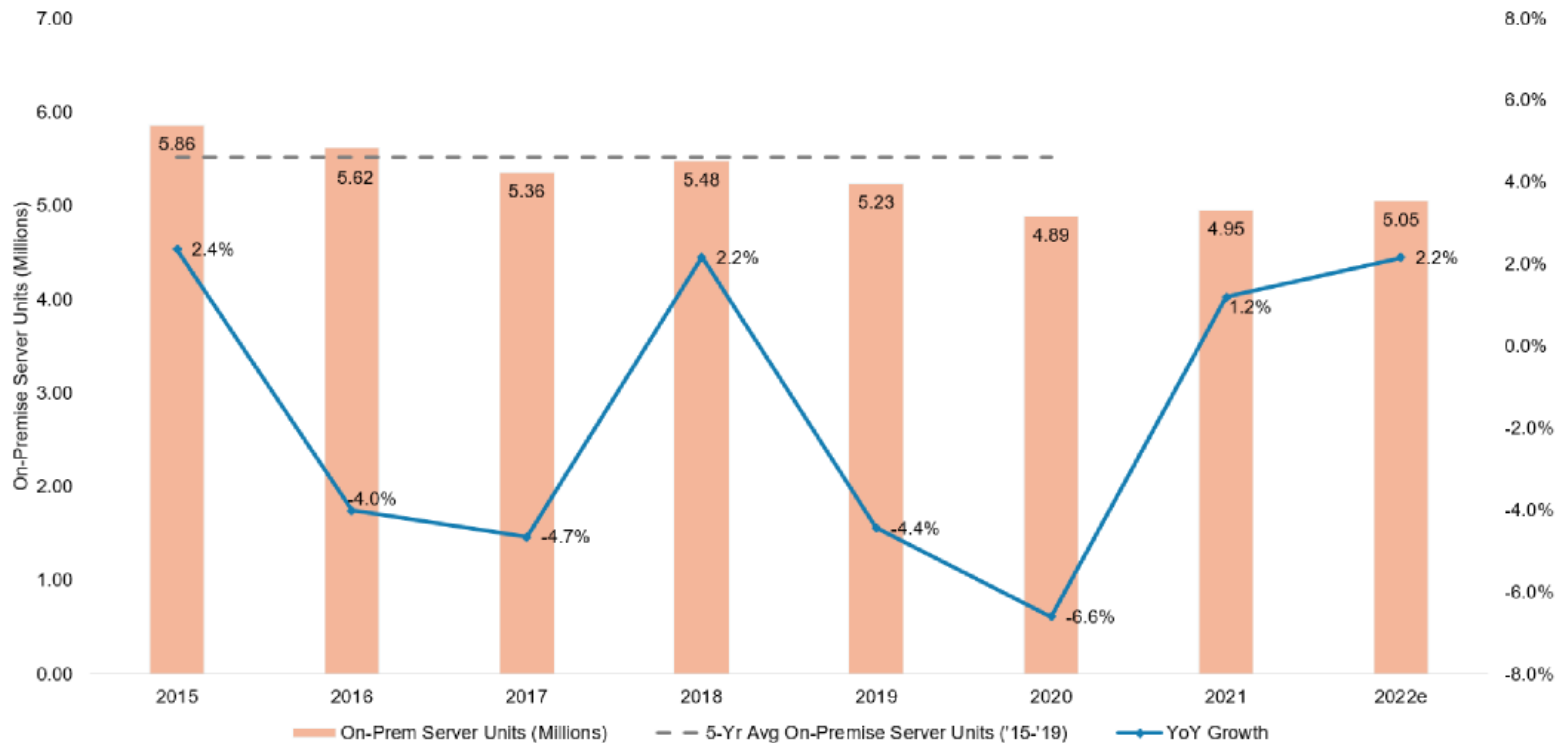


Source: IDC, UN, Company Data, Morgan Stanley Research

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## On-Premise Server Units Hit in 2020 As Companies Paused Hardware Spend, and 2021 & 2022 Demand Recovery Limited by Supply



- On-premise server units had been on a downward trajectory (prior to 2020) as companies moved to the public cloud

Source: IDC, UN, Company Data, Morgan Stanley Research

## No Significant Correlation: YoY Growth in Commercial PC Shipments (excl Education) vs. YoY Growth in Net New ARR for CRWD & S

- Strong share gain and overall market demand for security have predominantly driven growth for CRWD & S

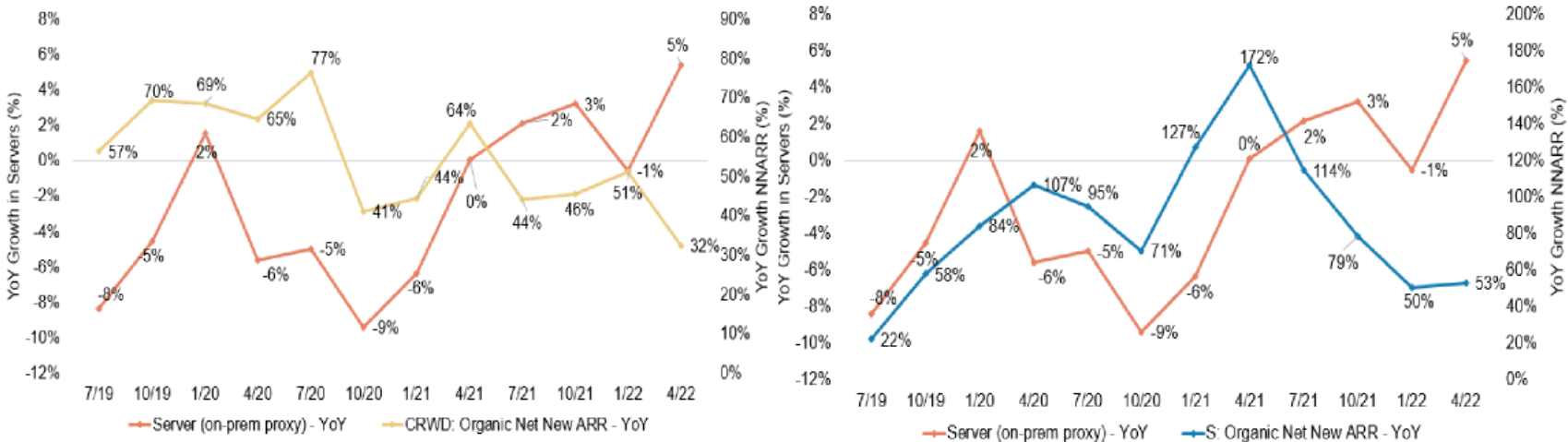


Source: IDC, UN, Company Data, Morgan Stanley Research

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## No Correlation: YoY Growth in On-Premise Servers vs. YoY Growth in NNARR at CRWD/S



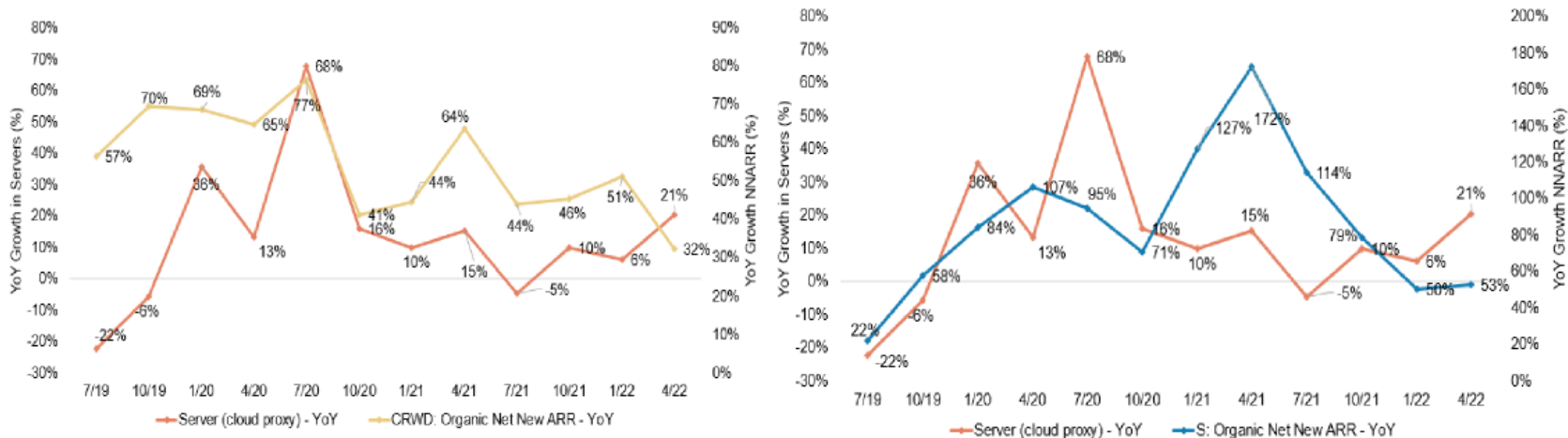
Source: IDC, UN, Company Data, Morgan Stanley Research

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## No Significant Correlation: YoY Growth in Servers (Cloud Proxy) vs. YoY Growth in NNARR at CRWD/S

- Slightly stronger correlation with growth in server shipments for Public Cloud vs On-Prem, but still not significant
- Accelerating market share gains driving majority of growth for CRWD & S



Source: IDC, UN, Company Data, Morgan Stanley Research

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## Part II

# *An Expanding Endpoint Security Market (and Large Share Gain Opportunity)*

## Evolution of Corporate Endpoint Security

- Evolution from legacy AV/EPP to Next-Gen EDR remains a significant opportunity, with only ~20% EDR penetration within a large \$10B+ endpoint security market

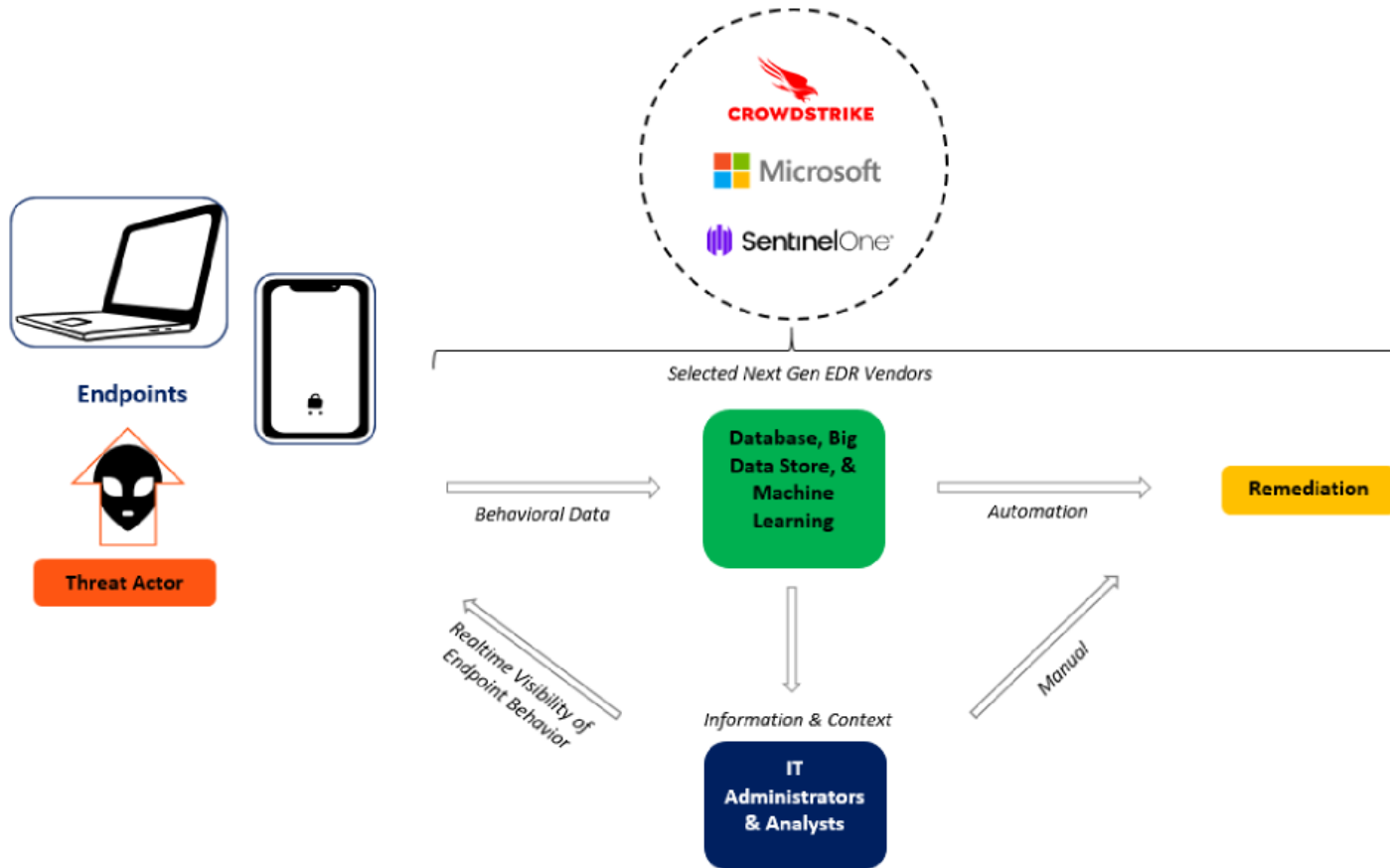
AV <i>Antivirus</i>	NGAV <i>Next-Gen Antivirus</i>	EPP <i>Endpoint Protection</i>	NGEP <i>Next-Gen Endpoint Protection</i>	EDR <i>Endpoint Detection &amp; Reponse</i>
Antivirus software uses a database of known 'signatures' to detect computer viruses	NGAV includes more advanced features - such as no weekly updates - to close the 'gaps' in AV	Endpoint Protection provides holistic protection on any internet-capable device on a network	NGEP combines advanced features including behavior-based detection, machine learning and AI to combat malware. It is a system of security tools always learning	Endpoint Detection & Reponse (EDR) detects and contains security incidents; and remediates endpoints to pre-infection state.



Source: Morgan Stanley Research, Contact

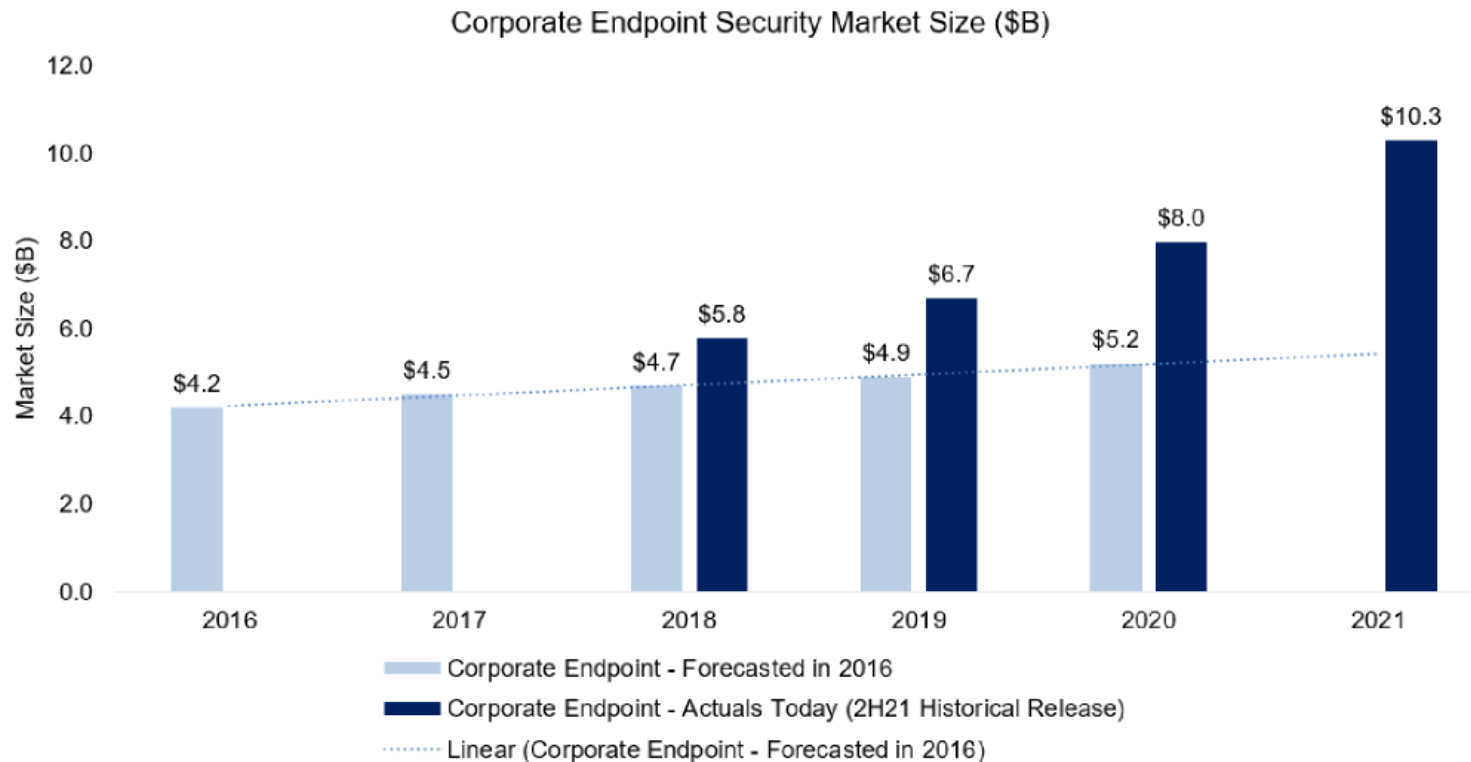


## EDR Capabilities Significantly Expand on Legacy Endpoint Protection



## Higher Cloud/SaaS Adoption and Next-Gen EDR Has Expanded the Market for Corporate Endpoint Security...

- The market for Corporate Endpoint security is ~60% higher in 2020 vs IDC forecast from 2016
- Further growth expected with overall market expected to surpass \$20 billion in 2026



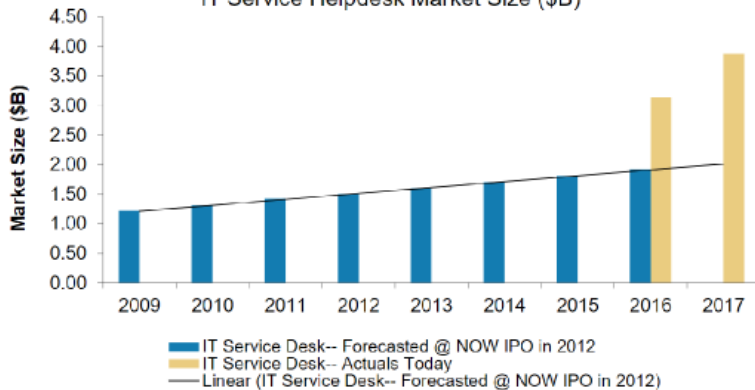
Source: IDC Security Products Tracker, Morgan Stanley Research

## .. This Shift Is Similar to How Other Software Markets Have Expanded From Higher Cloud/SaaS Adoption

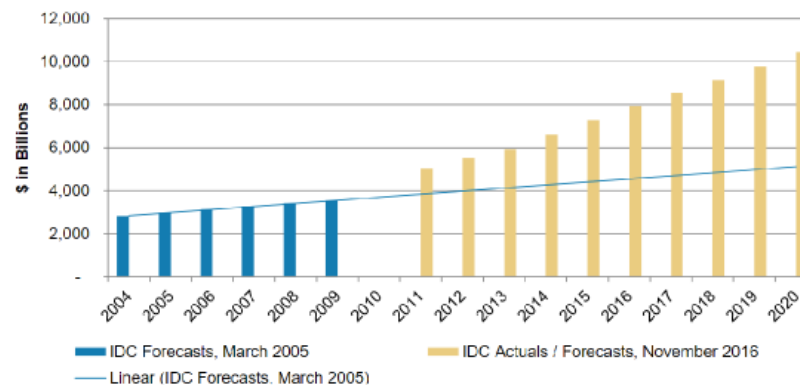
We think the shift to cloud/SaaS-based solutions drives much higher spending over time (as we've seen in other SaaS markets including ITSM and Sales Automation Marketing), driven by:

1. Flexibility of subscription-based pricing opens up a much larger base of customers, particularly in the SMB/midmarket segment
2. Higher ASPs from more functionality delivered to the end customer
3. New greenfield use cases as SaaS vendors innovate and expand into adjacent markets

IT Service Helpdesk Market Size (\$B)



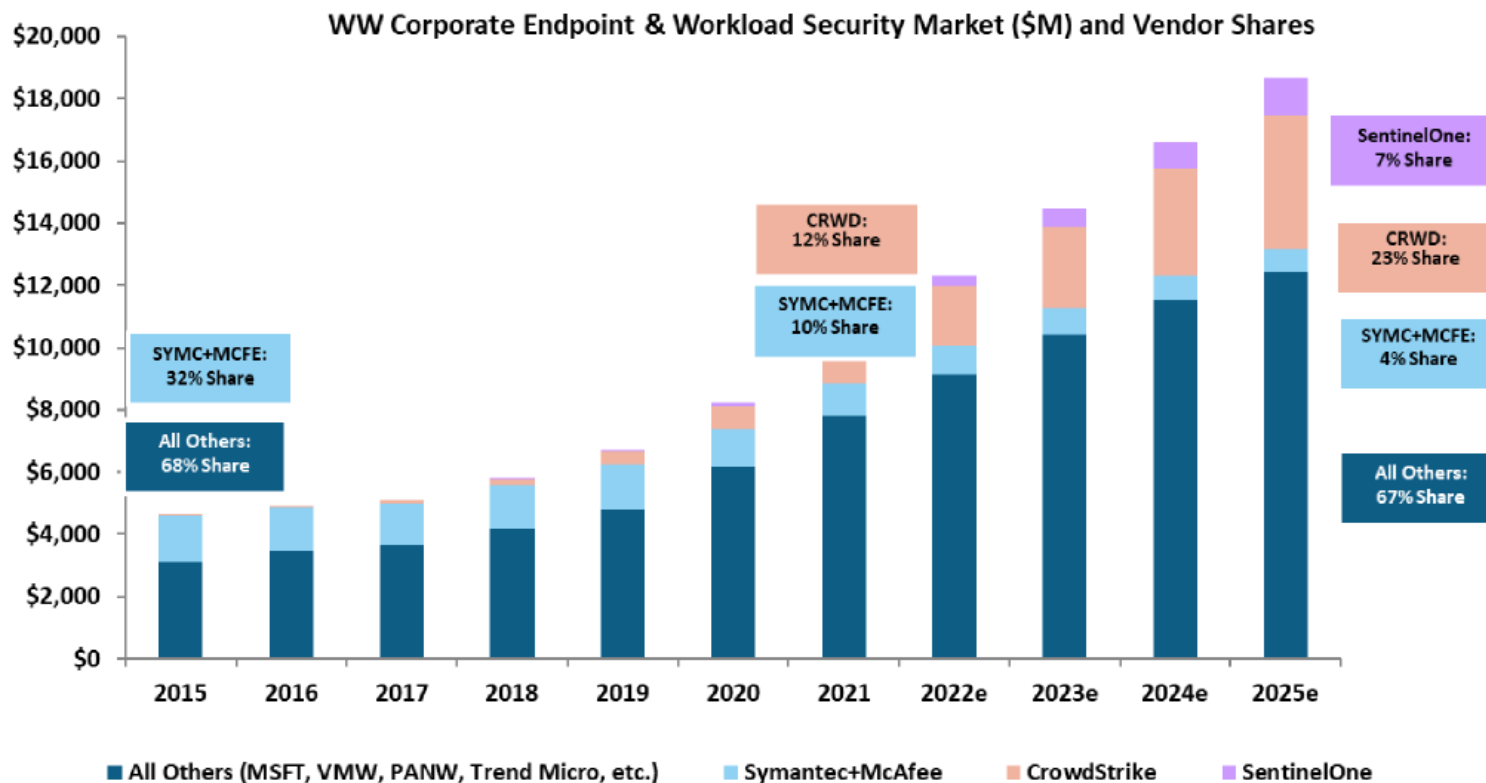
IDC: CRM - Sales Automation Market Forecasts Increase Over Time



Source: IDC, Morgan Stanley Research

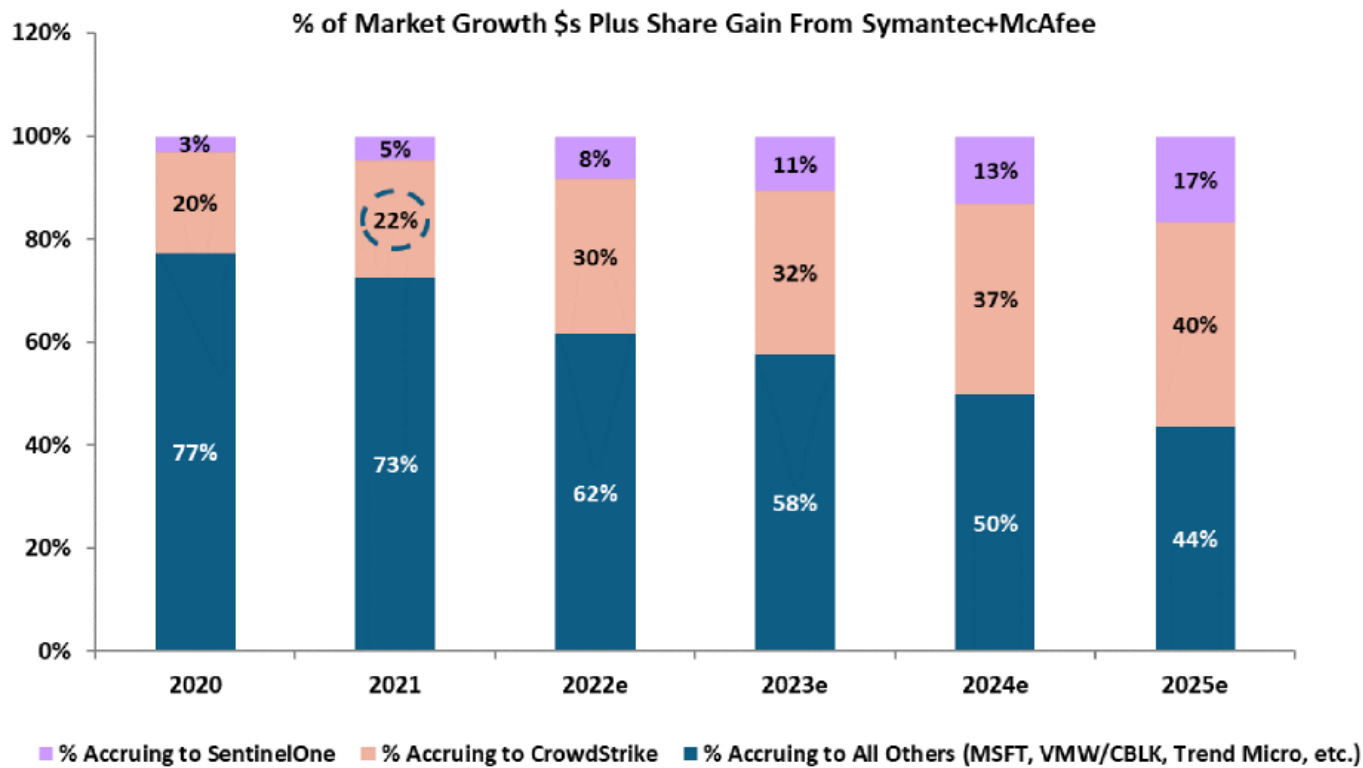
## Overall Market Share Trends in Corporate Endpoint Security

- Symantec & McAfee declining significantly from peak market share of 32% in 2015 to 10% in 2021 (~\$1.1-\$1.2B of est. combined revs)
- Despite declining dollar share, >50% of endpoints (units) worldwide continue to run on legacy EPP vendors (Symantec, McAfee, TrendMicro, etc.)



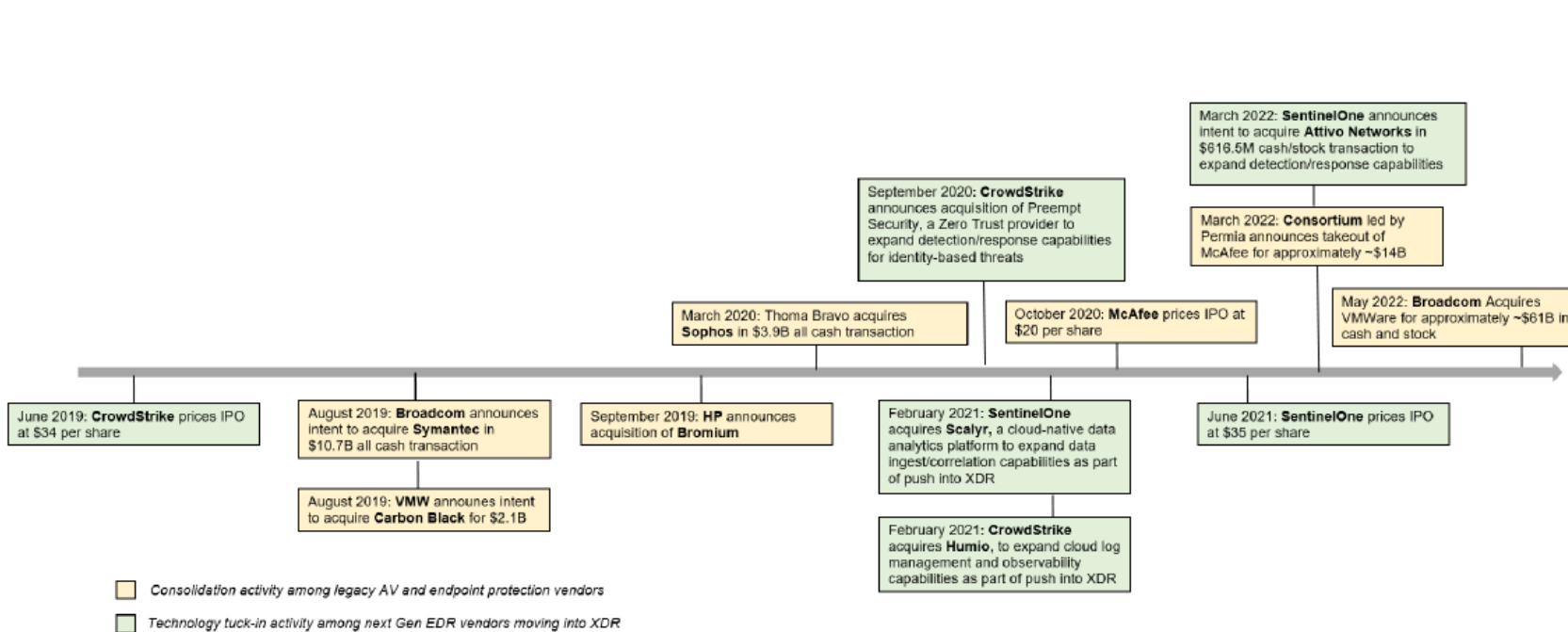
Source: IDC, Morgan Stanley Research

## CRWD & S Accounting for Growing % of Incremental Market Dollars Over Time



Source: IDC, Morgan Stanley Research

## Significant Consolidation & Disruption Among Legacy Vendors Contributed to Rapid Share Shifts Over the Last Three Years



Source: Company Websites.

<https://www.csoonline.com/article/3388638/endpoint-security-is-consolidating-but-what-does-that-mean.html>

<https://www.darkreading.com/endpoint/in-a-crowded-endpoint-security-market-consolidation-is-underway>

<https://ir.mcafee.com/news-releases/news-release-details/investor-group-led-advent-international-and-permira-completes>

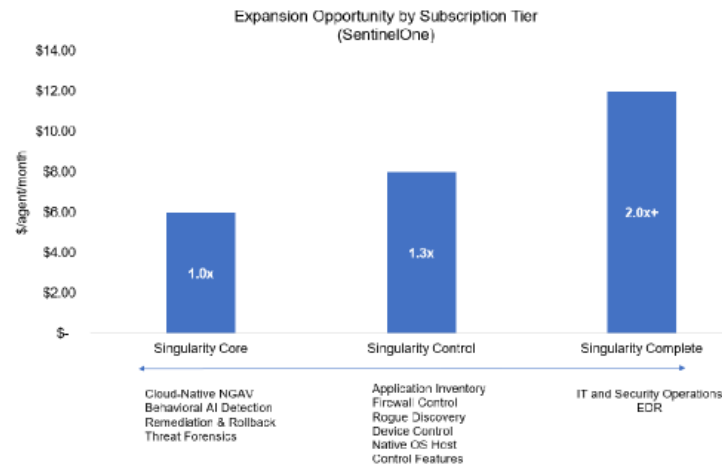
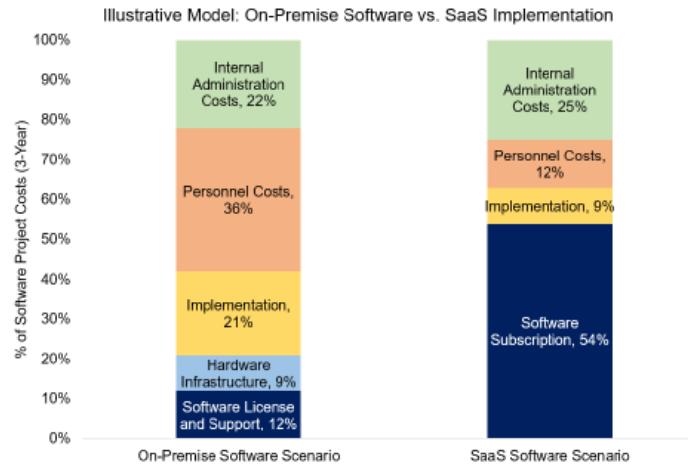
## Still a Long Runway in Replacing Existing Legacy Installed Base

- Legacy vendors still have large install bases to donate share to emerging next-gen vendors**

- Symantec (acq by Broadcom): 350K customers at peak (2017)
  - Symantec+McAfee est. combined revs between \$1.1-\$1.2B
- Trend Micro: 521K customers in FY21
- VMWare/Carbon Black (acq by Broadcom): ~\$500M in annual revenue
- Kaspersky: ~\$300M in annual revenue

- Significant Uplift/Upsell Opportunity from Replacing Legacy Installed Base:**

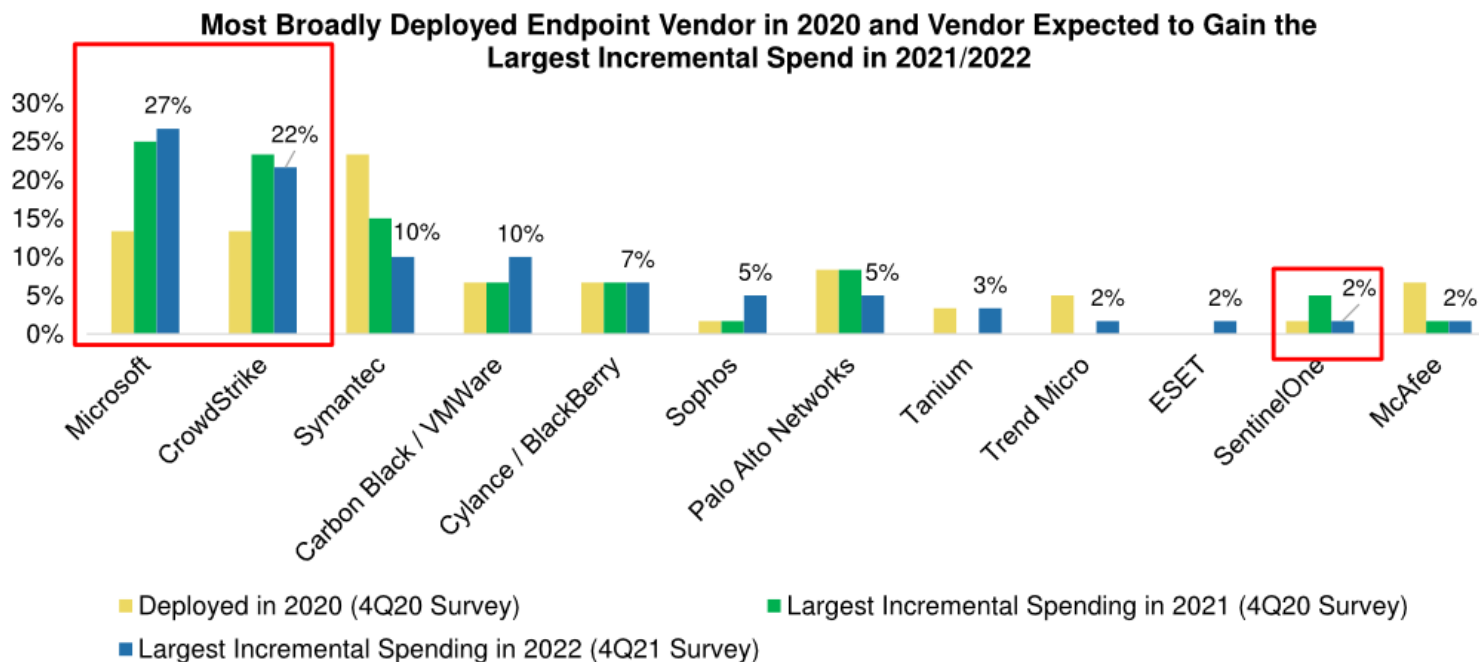
- **1)** ~2-3X uplift from migration from legacy maintenance base to SaaS as hosting costs, infrastructure spend are outsourced to SaaS vendor and incremental EDR functionality drives higher ASP
- **2)** Potential to unlock 5X uplift or higher vs. legacy AV solutions from incremental modules allowing customers to consolidate multiple security capabilities into one platform (VM, Identity, Cloud Workloads)



Source: Forrester, Morgan Stanley Research, SentinelOne Company Website

## Addressing Microsoft’s Growing Relevance in the Endpoint Security Space

- In our 4Q21 CIO Survey, **Microsoft** cited as largest share gainer in Endpoint, followed by **CrowdStrike**
  - Microsoft continuing to gain share as the company embeds more advanced endpoint security features in enterprise bundles
  - At the same time, *we expect Microsoft to play more in the SMB/midmarket area where customers are more price conscious and larger enterprises prefer some separation of “Church & State” between the device OS or Cloud provider and the vendors securing those devices/clouds*



Source: Morgan Stanley Research, AlphaWise 4Q21 Software Domain Survey, N=60



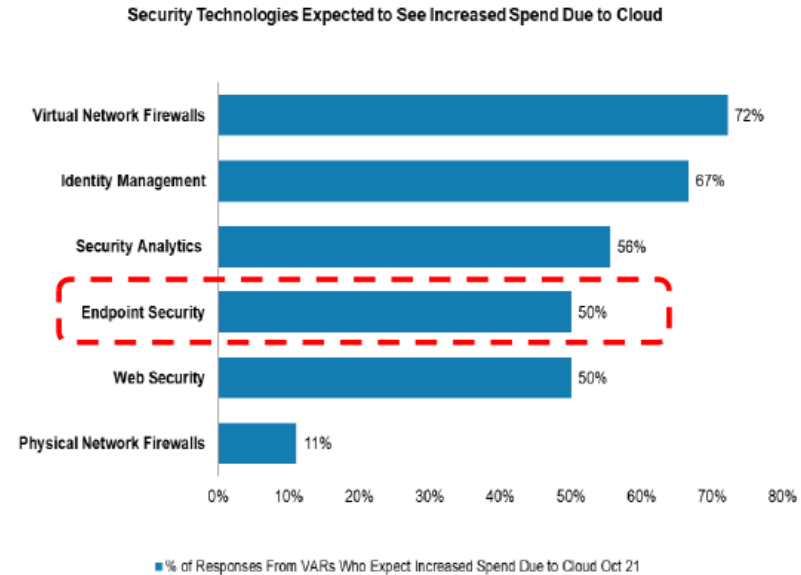
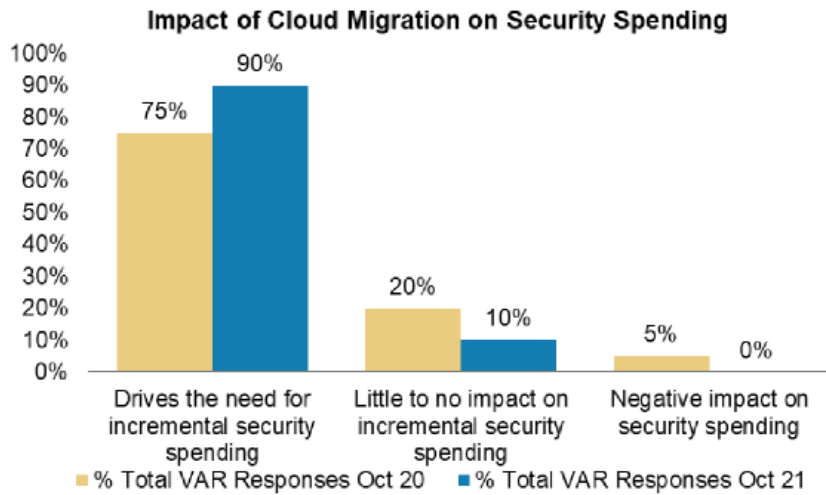
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## Part III

# *Cloud Security Opportunity*

## Public Cloud Becoming a Center of Gravity for Security

### The Move to Cloud is Net Positive for Security Spend

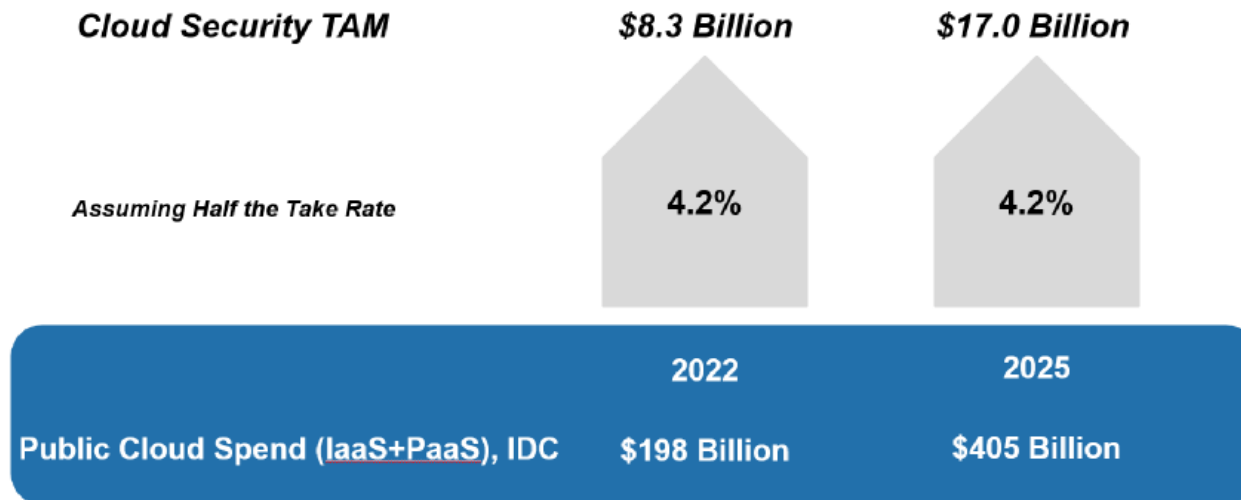


Source: 3Q21 AlphaWise Survey of Value Added Resellers (VARs) (n=20), Morgan Stanley Research

## Cloud Security – An Expanding Market Opportunity

- Cloud misconfiguration/vulnerability is now 3<sup>rd</sup> most common attack vector
- While some coverage gaps may exist, agent-based cloud workload protection platforms (CWPP) like CrowdStrike and SentinelOne are critical in providing in-depth scanning and visibility into cloud workloads/hosts

**“An organization should spend between 7% and 10% of its IT budget on security.” – IDC**

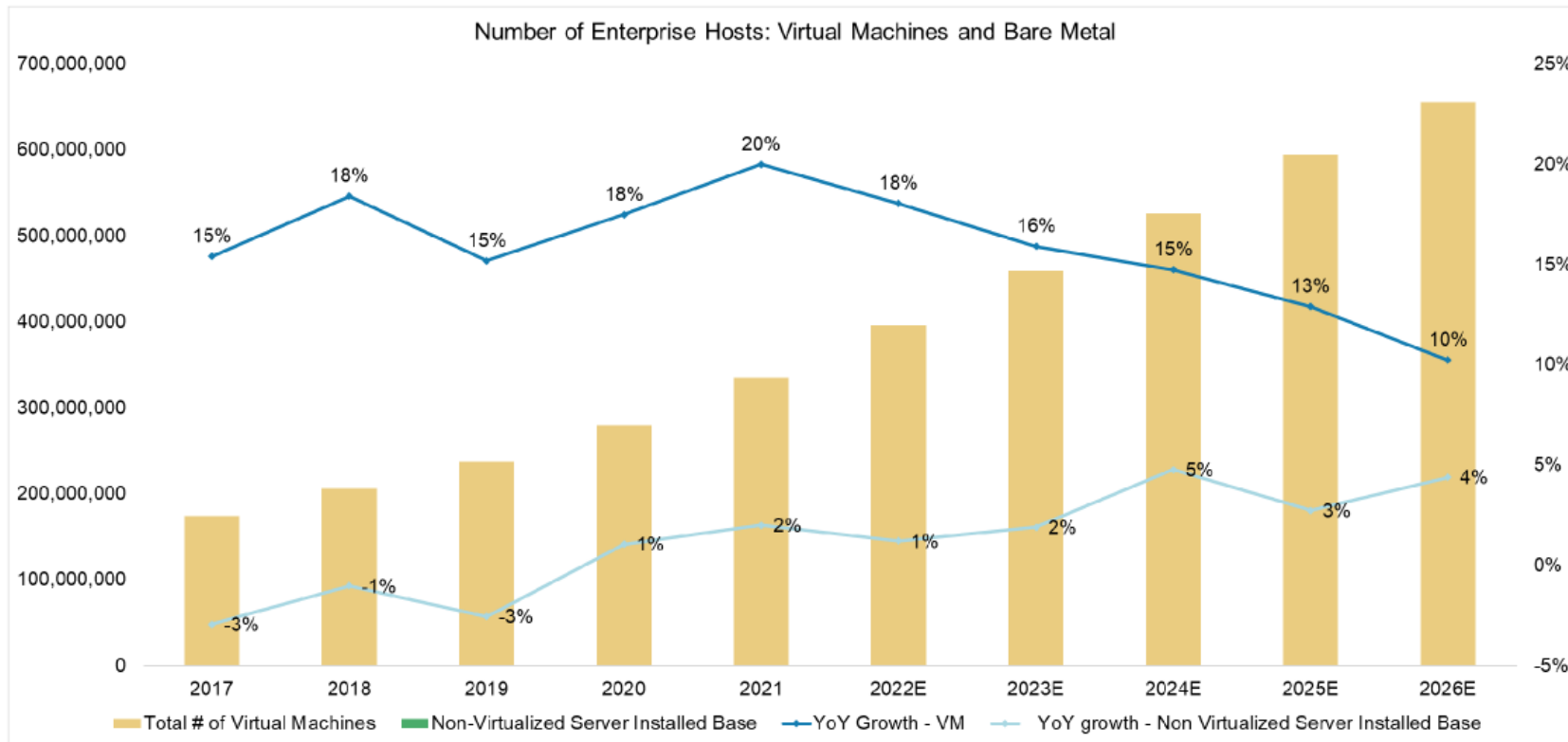


Source: IDC, Morgan Stanley Research Estimates, IBM Security

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## Overall Enterprise Hosts Expected to ~2x from 2021 to 2026, Entirely Driven By Growth in Virtual Machines (VMs)

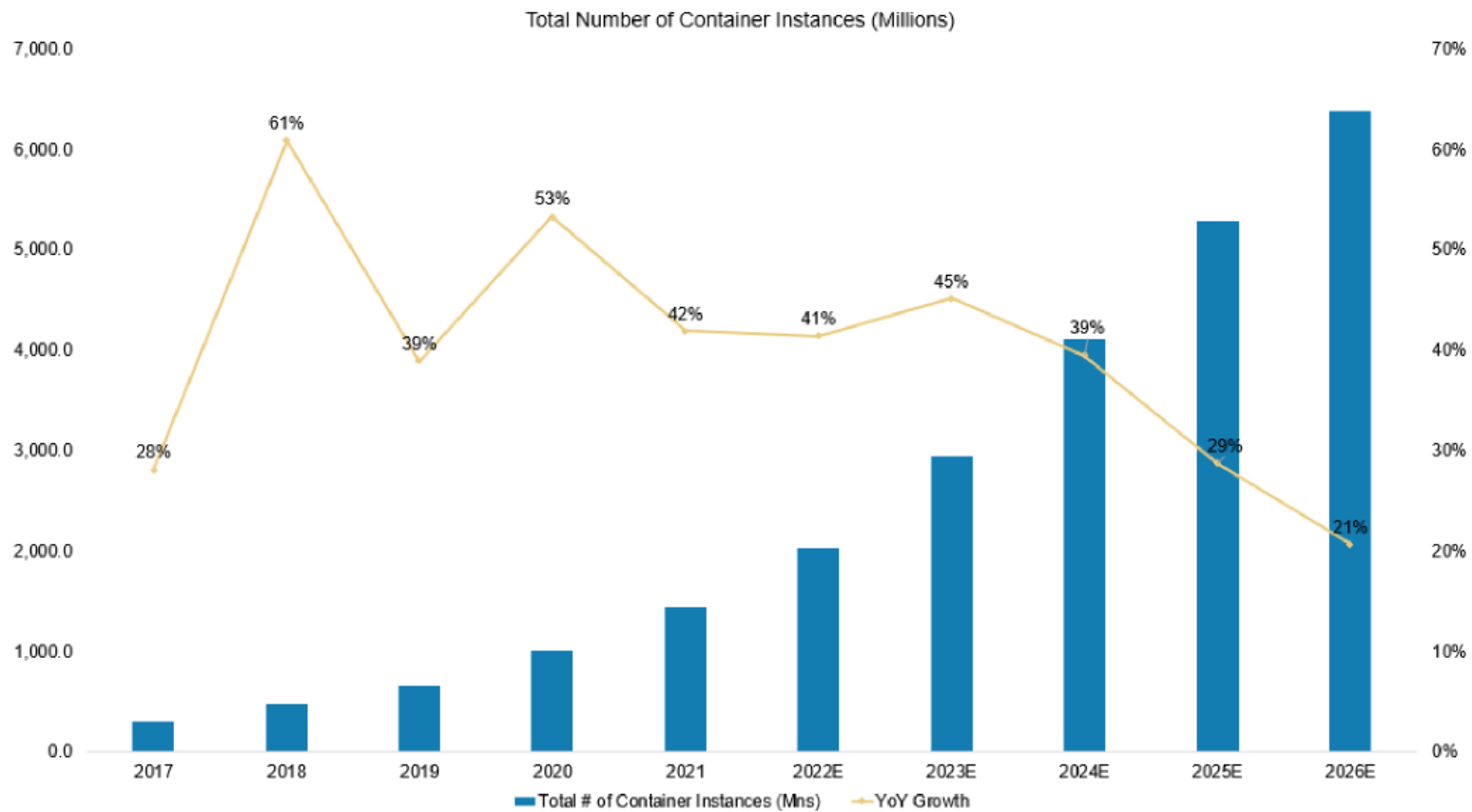


Source: IDC, Morgan Stanley Research

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## Container Instances Expected to ~5X from 2021 to 2026E



Source: IDC, Morgan Stanley Research

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## Next-Gen EDR Vendors Focused on Leveraging Strategic Positioning In the Endpoint to Push into Securing Cloud Environments

**CRWD:** Investor Meeting, October 2021: *“I also want to point out that it really is a greenfield opportunity for us when we think about the traditional legacy AV players they are just not in the cloud. And when we get to the cloud, typically it's just under protected. There's nothing there. So to have a leading technology like ours that can not only protect the endpoints that a company has in their physical servers, but also their cloud workloads, I think is a great opportunity for us. And that's one of the areas where I think it's really a 10x opportunity. And what I mean by that is you might have 100,000 endpoints in a company, but they might have a 1 million cloud workloads” – George Kurtz, CrowdStrike CEO*

**S:** Morgan Stanley Spark Conference, October 2021: *“[Cloud business] is growing very fast, it's growing faster than the overall business, so we're very encouraged by it. I think the one thing to understand about when we say workload protection or when we say cloud security, there's probably three main pillar offerings that are different in this space between Cloud Workload Protection Platforms, Cloud Security Posture Management, and cloud native application-something, so it's CNAPP, CSPM, and CWPP and CIM, right, there's another one. And that is just a very wide gamut of different capabilities and different use cases that different customers wants to solve. Our focus right now is with CWPP, it's the most immediate I think hop from endpoint protection from threat detection to do practically the same thing, but natively on cloud workloads” – Tomer Weingarten, SentinelOne CEO*

### CRWD:

4Q22: Falcon deployment in the public cloud ARR eclipsed the \$100 million milestones grew 20% quarter on quarter

### S:

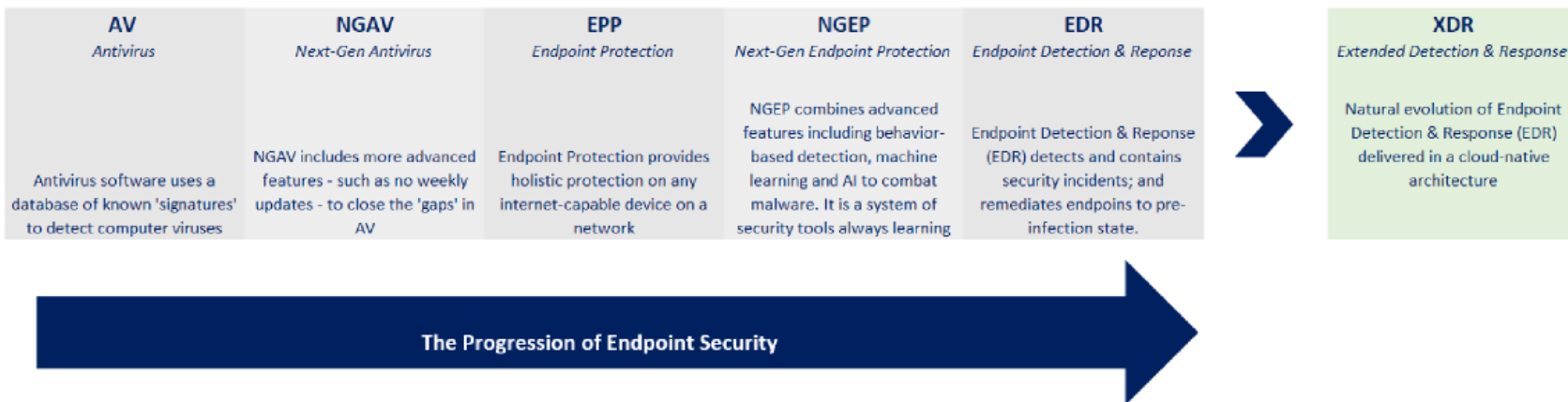
1Q23: ~10% of ACV from securing cloud workloads.

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## Part IV

# *Emerging XDR Opportunity*

**>40% of Threat Telemetry Generated from Endpoints, Giving EDR Incumbents Competitive Advantage in Next Phase of XDR**



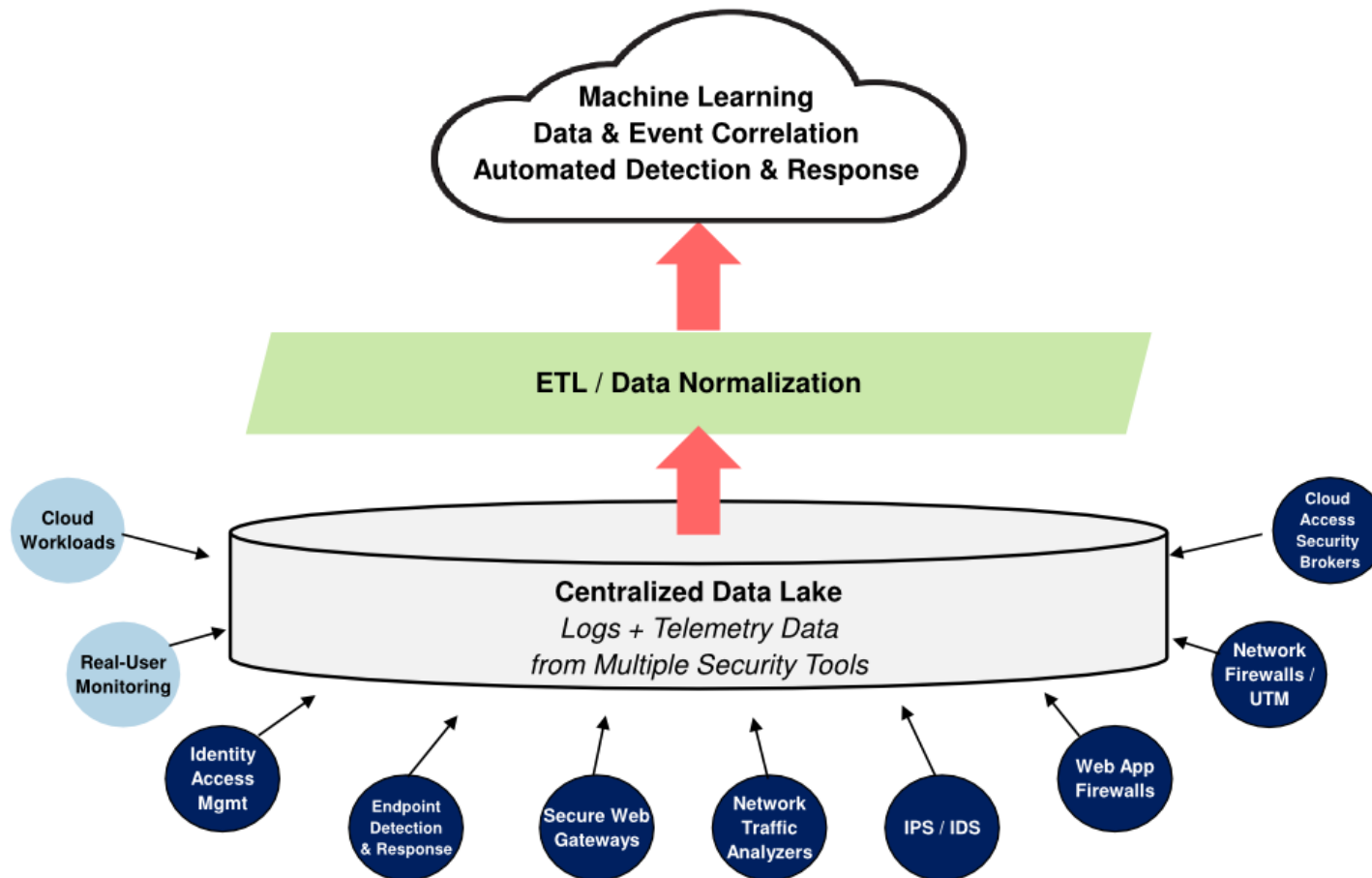
Source: SecureWorks, Morgan Stanley Research



Understanding the Coming Collision Course Between Cybersecurity, Observability & Big Data Analytics

## New Cloud-based Approaches Assume Threat Detection & Response is a Data Problem

### The Extended Detection & Response Framework (XDR)



## Understanding the Coming Collision Course Between Cybersecurity, Observability & Big Data Analytics

### **XDR: A Data-Driven, Cloud-based Approach to Threat Detection & Response**

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#### **What is XDR?**

- Natural evolution of Endpoint Detection & Response (EDR) delivered in a cloud-native architecture
- Key idea: consolidate multiple products into a cohesive incident detection & response platform
- 3 requirements: 1) centralization of normalized data emanating from different security products and services, 2) correlation of data and alerts into incidents; 3) centralized incident response capability
- Focus on protecting users and apps and data they consume

#### **What are the Goals?**

- Improve productivity of the security operations team (SOC)
- Enhance protection, detection & response efficacy by bringing in multiple sources of telemetry

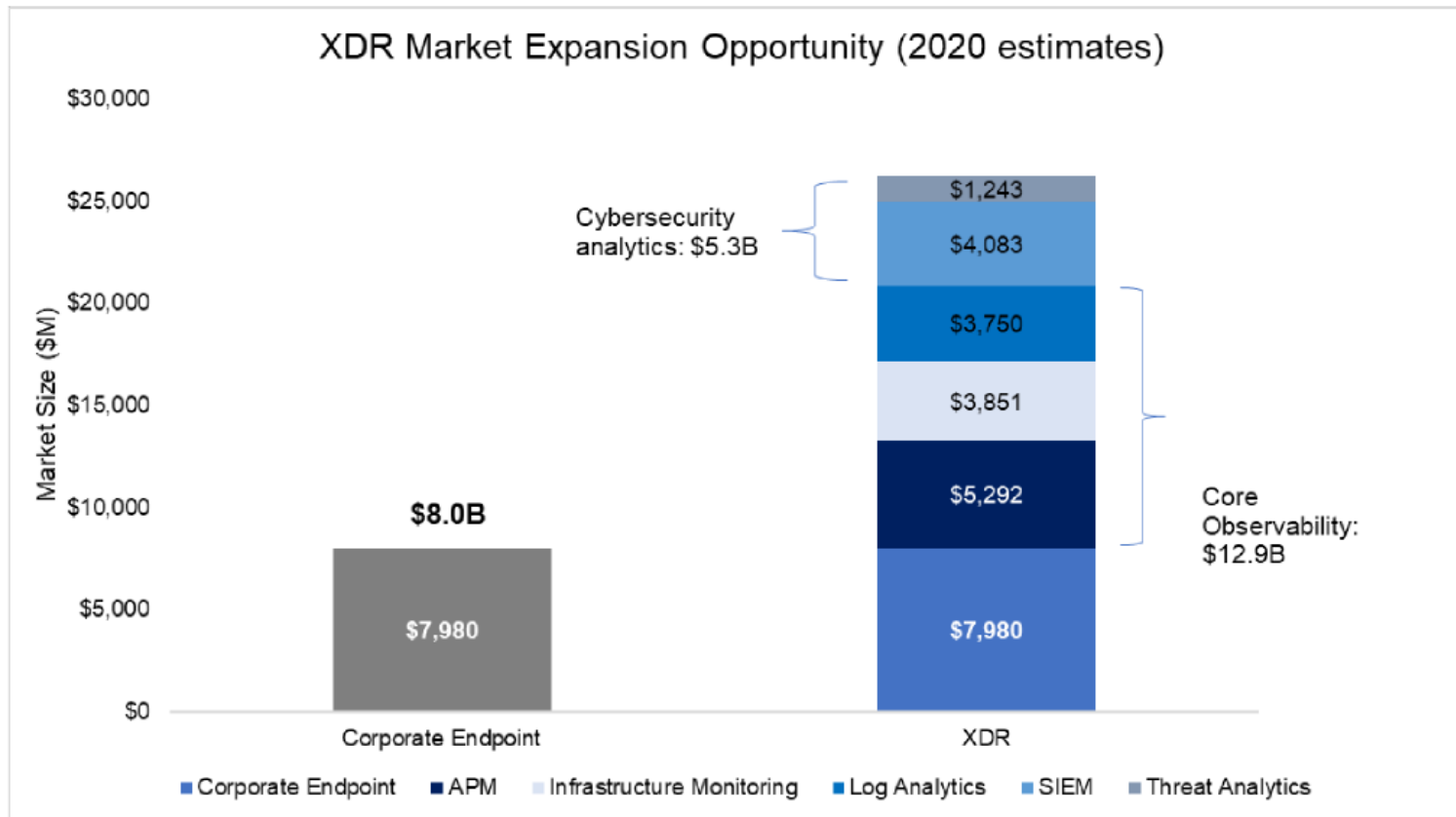
#### **What are the Advantages?**

- Improved detection accuracy with advanced machine learning based alert and data correlation
- Potential to combine weak signals across data sources to surface signs of malicious activity
- Converts large volumes of alerts into a small number of incidents to improve SOC productivity
- Real-time sharing of threat intelligence across all security services
- Provide integrated response playbooks that have context from all relevant security data sources
- Faster time-to-value and faster time to remediation

#### **What Are Tech Requirements to Make the XDR Vision a Reality?**

- Strong capabilities in large scale data processing, machine learning, intelligent automation and alerting
- Significant knowledge of the inter-relationships among different types of data across security domains
- Hyper scalable database technology – fast index or index free searches
- Graph capabilities that connect events emanating from different data sources
- Data integration and data normalization capabilities to support advanced analytics

## XDR TAM Expansion Opportunity – Incremental ~\$20B Across Security Analytics & Observability



Source: IDC, Gartner, Morgan Stanley Research

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MS View

## Relative Positioning of CRWD vs. S in XDR

### CRWD

- **Acquired Humio in Feb '21 for log mgmt/data analytics, primarily leveraged Splunk for longer term data retention & analytics previously**
- **Large and growing XDR partner ecosystem**
- *We look for signs that customers are migrating towards Humio to assess CRWD's progress in XDR over time*

### S

- **Acquired Scalyr (now DataSet) in Feb '21 for data analytics, customers on proprietary data engine prior to that**
- **Customers largely migrated to DataSet back-end as of 2QFY23**
- **Large and growing XDR partner ecosystem**
- *We look for higher attach rate of DataSet within the installed base driving gross margin improvement.*

### Growing XDR Partner Ecosystems

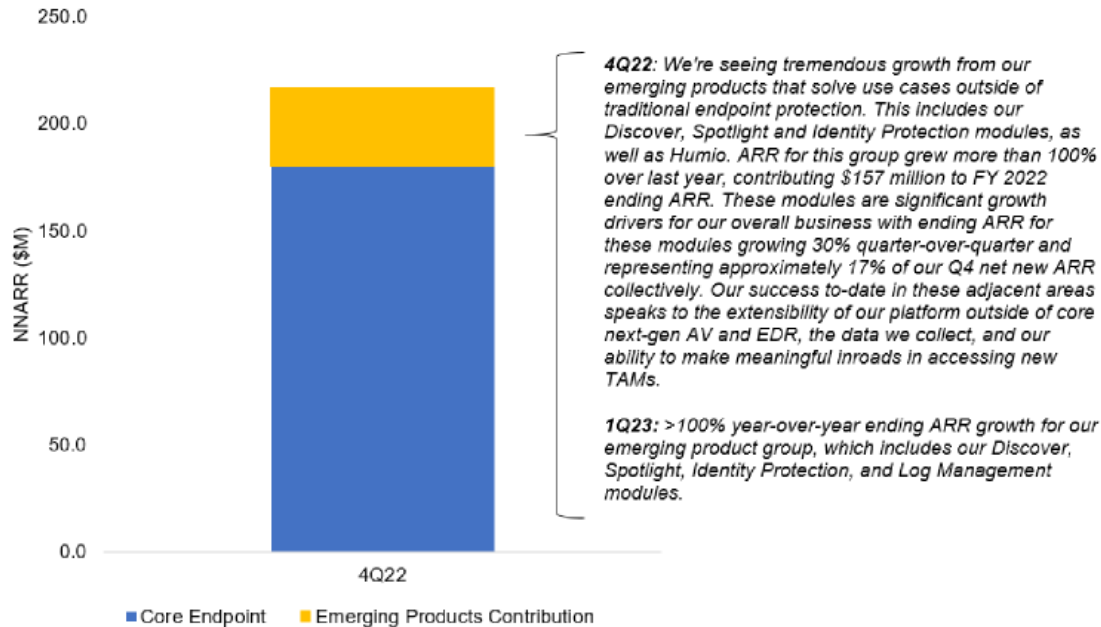
	CrowdStrike XDR Alliance*	SentinelOne XDR Partners*
Asset Management	 	 
Email Security	 	 
Identity/Access Management	   	  
Network Security	  	 
IT Operations		
Threat Intel		
Web Security		

Source: Company Websites. \*Not an exhaustive list of partner integrations for either vendor. Partners appear in no particular order.

## CRWD ARR Contribution from Non-Core Endpoint

- \$157MM in ARR, ~9% of CRWD's FY22 ending ARR derived from emerging product group (Spotlight, Discover, Identity and Log Management)
- As of 1Q23 emerging product group was growing >100% YoY, well ahead of overall ARR growth of 61% YoY
- \$106MM in ARR from securing public cloud workloads (6% of FY22 ARR)
- ***In total, ~15% of ARR generated from cloud security and emerging products outside of core endpoint protection***

CRWD: 4Q22 NNARR Breakdown

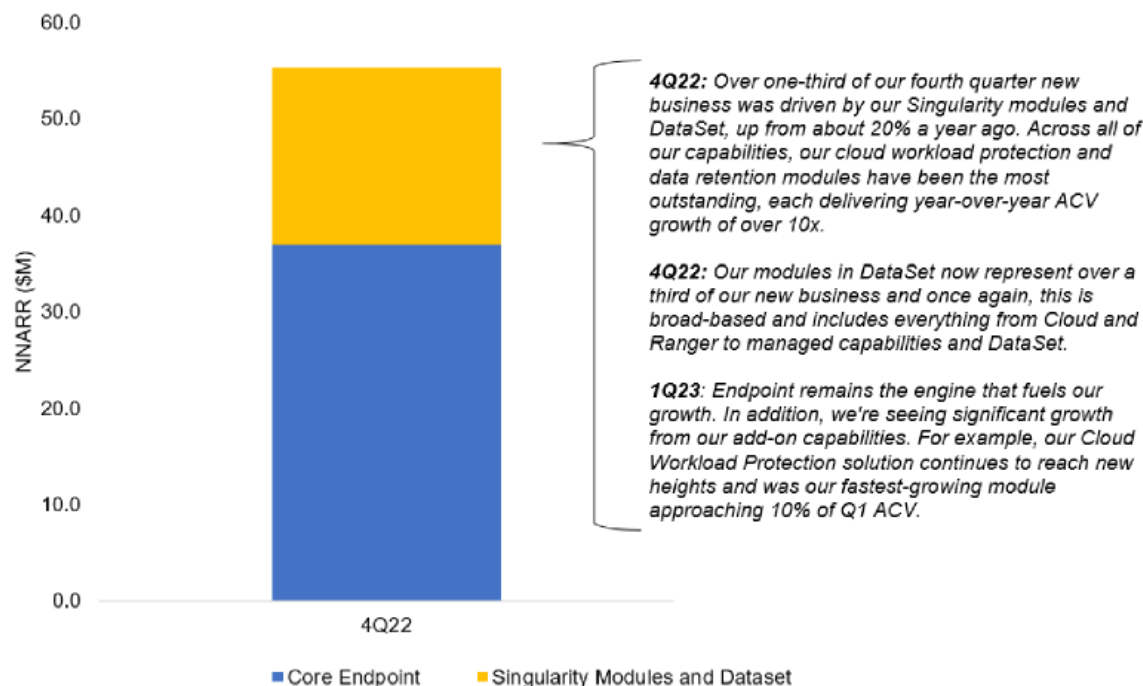


Source: Company Data, Morgan Stanley Research

## S ARR Contribution from Non-Core Endpoint

- As of 1Q23 emerging modules, cloud workload security approaching 10% of ACV (ARR)
- Emerging modules (DataSet, Identity Protection/Attivo) represent ~15% of total ARR
- ***In total, ~25% of ARR generated from cloud security and emerging products outside of core endpoint protection***

S: 4Q22 NNARR Breakdown



Source: Company Data, Morgan Stanley Research





## Valuation Methodology and Risks

### **CrowdStrike Holdings Inc (CRWD.O)**

Our \$215 PT is based on 30x CY27e FCF of \$2.7B (1.2x growth-adjusted), discounted back at 10.5% WACC. On a 1-year forward basis, this implies 50X EV/CY23 FCF or 1X EV/FCF/Growth, below large cap software peers at ~1.2X.

#### **Risks to Upside**

- Stronger than expected endpoint security demand remains elevated due to rising cyber threats
- TAM expansion opportunities (XDR, Cloud Workload Protection) materialize faster than expected
- Strong large deal pipeline from Federal Govt vertical

#### **Risks to Downside**

- Increased competition makes new customer acquisition more difficult
- Lower cost alternatives make it difficult for CRWD to sustain its premium pricing

### **SentinelOne, Inc. (S.N)**

1.0x EV/CY32e FCF/Growth or 21x EV/CY32e FCF of \$1.9B, Discounted at 10.8% WACC. \$40 PT implies EV/S/G multiple of 0.21x, discount with security peers given lower profitability today.

#### **Risks to Upside**

- Stronger adoption of newer add-on modules.
- Faster than expected traction into large enterprise segment.
- Faster than expected ramp to positive profitability.

#### **Risks to Downside**

- Increased competitive pressure, particularly from CrowdStrike.
- Difficulty moving up market.

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(as of July 31, 2022)

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STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
<b>Overweight/Buy</b>	<b>1366</b>	<b>39%</b>	<b>318</b>	<b>42%</b>	<b>23%</b>	<b>593</b>	<b>39%</b>
<b>Equal-weight/Hold</b>	<b>1559</b>	<b>44%</b>	<b>357</b>	<b>47%</b>	<b>23%</b>	<b>708</b>	<b>46%</b>
<b>Not-Rated/Hold</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
<b>Underweight/Sell</b>	<b>613</b>	<b>17%</b>	<b>91</b>	<b>12%</b>	<b>15%</b>	<b>226</b>	<b>15%</b>
<b>TOTAL</b>	<b>3,538</b>		<b>766</b>			<b>1527</b>	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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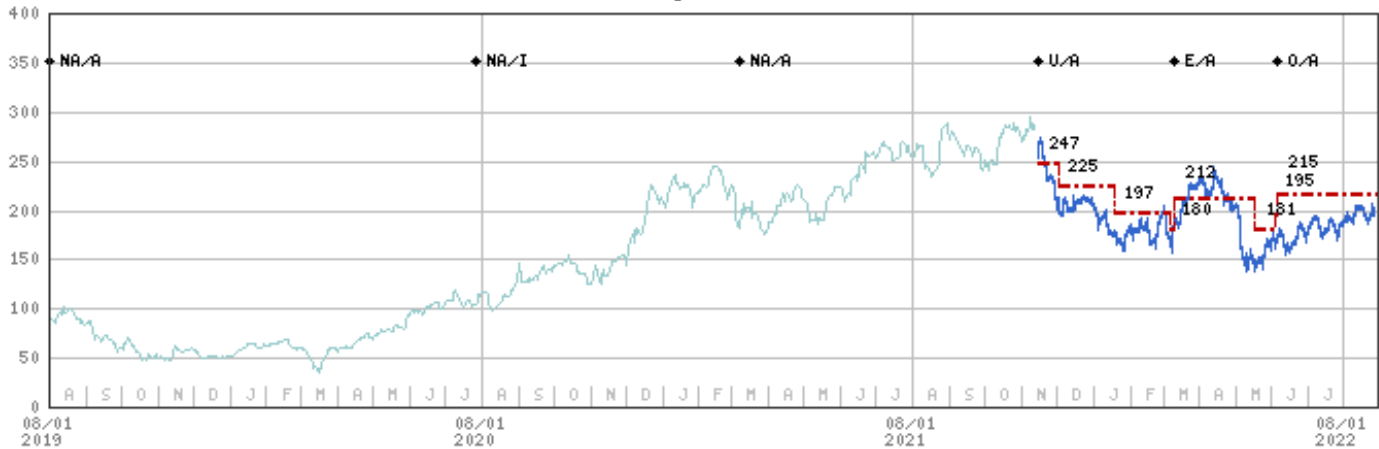
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MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

**Stock Price, Price Target and Rating History (See Rating Definitions)**

CrowdStrike Holdings Inc (CRWD.O) - As of 8/28/22 in USD  
Industry : Software

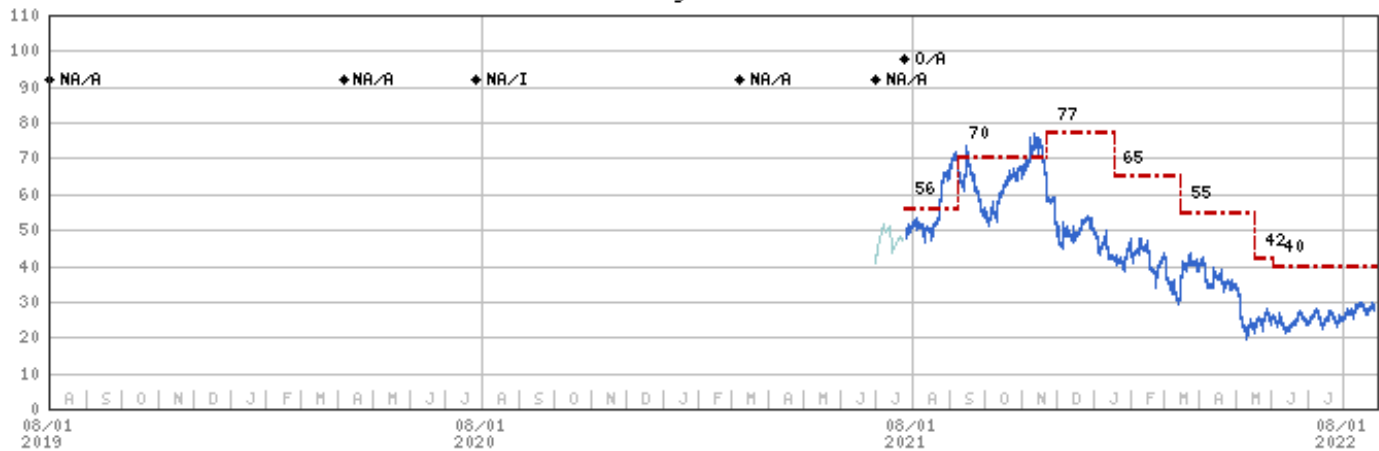


Stock Rating History: 8/1/17 : NA/A; 7/27/20 : NA/I; 3/8/21 : NA/A; 11/15/21 : U/A; 3/10/22 : E/A; 6/6/22 : O/A  
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SentinelOne, Inc. (S.N) - As of 8/28/22 in USD  
Industry : Software



Stock Rating History: 8/1/17 : U/A; 4/29/18 : NA/A; 4/6/20 : NA/A; 7/27/20 : NA/I; 3/8/21 : NA/A; 7/1/21 : NA/A; 7/25/21 : O/A  
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Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

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**INDUSTRY COVERAGE: Software**

COMPANY (TICKER)	RATING (AS OF)	PRICE* (08/26/2022)
<b>Elizabeth Porter, CFA</b>		
Amplitude Inc. (AMPL.O)	E (10/25/2021)	\$15.67
GoDaddy Inc (GDDY.N)	E (07/19/2021)	\$77.73
LegalZoom.com Inc (LZ.O)	U (07/28/2022)	\$10.24
Liveramp Holdings Inc (RAMP.N)	O (07/15/2019)	\$20.67
Matterport Inc (MTR.O)	E (04/19/2022)	\$4.62
Semrush Holdings Inc -A (SEMR.N)	E (06/06/2022)	\$12.29
Sprinklr Inc (CXMN)	E (07/19/2021)	\$11.71
Sprout Social Inc (SPT.O)	E (11/17/2020)	\$59.99
UserTesting Inc. (USER.N)	O (12/13/2021)	\$4.44
Wix.Com Ltd (WIXO)	E (05/19/2022)	\$64.09
Zendesk, Inc (ZEN.N)	++	\$76.53
Zeta Global Holdings Corp (ZETAN)	E (07/06/2021)	\$6.48

**Hamza Fodderwala**

Check Point Software Technologies Ltd. (CHKP.O)	U (01/13/2020)	\$121.68
CrowdStrike Holdings Inc (CRWD.O)	O (06/06/2022)	\$194.56
CyberArk Software Ltd (CYBR.O)	O (10/01/2020)	\$148.25
ForgeRock Inc (FORG.N)	E (10/11/2021)	\$18.18
Fortinet Inc. (FTNT.O)	E (04/10/2018)	\$49.57
KnowBe4 (KNBE.O)	E (05/17/2021)	\$19.62
Mandiant Inc (MNDT.O)	E (10/28/2020)	\$22.86
NortonLifeLock Inc (NLOK.O)	E (03/29/2022)	\$22.70
Okta, Inc. (OKTA.O)	O (09/28/2021)	\$93.48
Palo Alto Networks Inc (PANW.O)	O (10/10/2017)	\$560.69
Qualys Inc (QLYS.O)	U (02/09/2021)	\$154.06
Rapid7 Inc (RPD.O)	E (08/11/2015)	\$60.96
Secureworks Corp (SCWX.O)	E (09/09/2020)	\$11.17
SentinelOne, Inc. (S.N)	O (07/25/2021)	\$27.76
Tenable Holdings Inc (TENB.O)	O (01/15/2019)	\$40.72
Varonis Systems, Inc. (VRNS.O)	E (06/27/2022)	\$28.25
Zscaler Inc (ZS.O)	O (01/18/2022)	\$161.19

**Josh Baer, CFA**

2u Inc (TWOU.O)	E (11/24/2020)	\$7.36
Box Inc (BOX.N)	E (10/07/2021)	\$27.21
Chegg Inc (CHGG.N)	E (11/02/2021)	\$19.34
Coursera, Inc. (COUR.N)	O (04/26/2021)	\$11.87
Cvent (CVT.O)	E (06/17/2022)	\$5.39
DigitalOcean Holdings Inc (DOCN.N)	U (07/11/2022)	\$44.31
Docebo Inc. (DCBO.O)	E (04/26/2022)	\$29.39
Instructure Holdings Inc (INST.N)	O (12/09/2021)	\$23.33
Lightspeed POS Inc. (LSPD.N)	E (02/18/2021)	\$19.42
Sabre Corp (SABR.O)	E (03/16/2021)	\$7.31
Toast, Inc. (TOST.N)	O (12/16/2021)	\$18.72
Udemy Inc (UDMY.O)	E (11/23/2021)	\$14.66
WalkMe Ltd (WKME.O)	E (06/07/2022)	\$11.68

**Keith Weiss, CFA**

Adobe Inc. (ADBE.O)	E (06/21/2022)	\$381.02
Akamai Technologies, Inc. (AKAM.O)	E (04/29/2020)	\$92.04
Asana Inc (ASAN.N)	E (10/26/2020)	\$19.76
Atlassian Corporation PLC (TEAM.O)	O (01/13/2020)	\$257.05
Autodesk (ADSK.O)	E (08/19/2021)	\$207.77
Avalara, Inc. (AVLR.N)	E (08/16/2022)	\$91.82
BigCommerce Holdings, Inc. (BIGC.O)	E (05/11/2021)	\$17.32
Cloudflare Inc (NET.N)	E (06/18/2020)	\$64.39
Coupa Software Inc (COUP.O)	O (04/14/2020)	\$58.65
DocuSign Inc (DOCU.O)	E (12/16/2021)	\$58.02
Freshworks Inc (FRSH.O)	E (10/18/2021)	\$13.99
HubSpot, Inc. (HUBS.N)	O (03/25/2020)	\$335.33
Intuit (INTU.O)	O (10/05/2020)	\$448.46
Microsoft (MSFT.O)	O (01/13/2016)	\$268.09
Oracle Corporation (ORCL.N)	E (01/15/2019)	\$74.65
Palantir Technologies Inc. (PLTR.N)	E (03/07/2022)	\$7.94
Qualtrics (XMO)	O (12/16/2021)	\$12.12
Salesforce.com (CRMN)	O (05/19/2021)	\$165.23
Samsara Inc (IOT.N)	O (01/10/2022)	\$15.35
ServiceNow Inc (NOW.N)	O (11/12/2020)	\$444.69
Shopify Inc (SHOP.N)	E (06/24/2022)	\$32.42
Smartsheet Inc (SMAR.N)	O (05/22/2018)	\$33.97
Snowflake Inc. (SNOW.N)	O (02/07/2022)	\$197.71
Splunk Inc (SPLK.O)	E (04/27/2021)	\$94.42
UiPath Inc (PATH.N)	O (12/03/2021)	\$16.95
Veeva Systems Inc (VEEV.N)	E (12/16/2021)	\$206.49
Vertex Inc. (VERX.O)	U (04/07/2021)	\$13.82
VMware Inc (VMW.N)	++	\$118.71
Workday Inc (WDAY.O)	O (04/14/2020)	\$166.46
ZoomInfo Technologies Inc (ZI.O)	O (11/18/2020)	\$46.10

**Meta A Marshall**

8x8 Inc (EGHT.N)	E (01/13/2020)	\$4.82
Five9 Inc (FIVN.O)	O (10/18/2021)	\$100.35
NICE Ltd. (NICE.O)	E (12/16/2021)	\$213.12
RingCentral Inc (RNG.N)	E (12/16/2021)	\$42.42
Twilio Inc (TWLO.N)	O (09/19/2019)	\$72.34
Zoom Video Communications Inc (ZM.O)	O (08/26/2021)	\$81.41

**Roy D Campbell**

Karooooo Ltd (KARO.O)	O (04/27/2021)	\$25.76
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**Sanjit K Singh**

Alteryx Inc (AYX.N)	E (04/01/2021)	\$64.87
Appian Corp (APPN.O)	E (12/03/2021)	\$47.53
C3.ai (AI.N)	U (01/04/2021)	\$18.82
Citrix Systems Inc (CTXS.O)	U (11/05/2021)	\$102.45
Confluent, Inc. (CFLT.O)	E (07/19/2021)	\$28.35
Couchbase, Inc. (BASE.O)	E (08/16/2021)	\$16.42
Datadog, Inc. (DDOG.O)	O (05/21/2021)	\$106.73
Domo Inc (DOMO.O)	O (12/17/2020)	\$20.69
Fastly Inc. (FSLY.N)	U (07/11/2022)	\$9.27
HashiCorp (HCP.O)	E (01/03/2022)	\$37.96
JFrog Ltd. (FROG.O)	E (10/12/2020)	\$22.07
MongoDB Inc (MDB.O)	O (12/17/2020)	\$353.57
New Relic Inc (NEWR.N)	E (07/11/2022)	\$63.07
PagerDuty, Inc. (PD.N)	E (05/06/2019)	\$25.89
Solarwinds Corp (SWM.N)	E (11/13/2018)	\$9.35
Sumo Logic Inc (SUMO.O)	E (10/12/2020)	\$8.79

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