



# Infrastructure and Cybersecurity Software Update

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Harris Williams | Q1 2023


# Infrastructure and Cybersecurity Software Observations and Key Trends

Persistent macrorends in automation, remote accessibility, and digitization continue to drive investor interest in infrastructure and cybersecurity software.




# Infrastructure and Cybersecurity Software Market Landscape

SOFTWARE DEVELOPMENT / DEVOPS



Solutions that enable the software development life cycle, including planning, creating, testing, and deploying software applications and systems



Application Life Cycle Management

Continuous Integration / Continuous Delivery

Version Management

Test Management

Select Market Participants

ATLASSIAN

BROADCOM

digital.ai

IBM

IDEA

MICRO FOCUS


Microsoft

ORACLE


PERFORCE

software

IT OPERATIONS MANAGEMENT



Solutions that help to manage the provisioning, capacity, performance, and availability of an organization's IT infrastructure



Infrastructure / App / Database Performance Monitoring

IT GRC and Asset Management

Service and Support Management

Operations Analytics

Select Market Participants

bmc

BROADCOM

CISCO

DATADOG

FORTRA

IBM

ivanti

MICRO FOCUS

servicenow

solarwinds

splunk

SECURITY



Solutions that protect software and systems against malicious attacks, unauthorized access and resource use, and other external and internal risks



Identity and Access Management

Network / App / Data Security

Advanced Threat Protection

SIEM / Security Analysis

Select Market Participants

CHECK POINT

CISCO

okta

paloalto

Qualys

SailPoint

Secureworks


Symantec

tenable


zendesk

zscaler

DATA MANAGEMENT



Solutions that integrate, cleanse, migrate, and manage data across platforms to produce accurate and consistent information



Data Integration

Data Quality and Governance

Database Management

Data Analytics

Select Market Participants

alteryx

hadoop

Microsoft

precisely

Rocket software

SAP


software

splunk


tableau

talend

CLOUD MANAGED SERVICES



Solutions that manage cloud security, computing, storage, network operations, and application stacks to automate and enhance business operations



PaaS / aPaaS / iPaaS

Managed Hosting and Applications

Managed Security

Backup and Disaster Recovery

Select Market Participants

a

DELL technologies

Google

Microsoft

MuleSoft

salesforce

rackspace

Red Hat

IBM

SAP

Secureworks

vmware

COLLABORATION / COMMUNICATION



Solutions that enable groups and teams to communicate, share, coordinate, cooperate, and solve problems for the purpose of completing a task



Project Portfolio Management

Business Process Management

Communications PaaS

Agile Project Management

Select Market Participants

Adobe

ATLASSIAN

CISCO

Google

Microsoft

ORACLE

salesforce

smartsheet

twilio

workday

# What We're Reading

## Forbes: DevOps 2022 Trends and Themes in Review

### DevOps News

“Business and customer-facing application teams have been successfully using agile and DevOps for many years. The infrastructure world (traditional infrastructure and operations) has lagged, however, and this trend is changing. Traditional infrastructure groups are under increasing pressure to become customer-focused and more responsive — the customer, in this case, is the application teams requiring their services.”

Read the full article [here](#).

## McKinsey: Five Learnings from CTOs and Tech Leaders on Their Cloud Strategies

### Cloud Managed Services News

“Once companies exit their data centers, most of them tend to focus on remediation, containerization, and rewriting applications using cloud-native tools to unlock business value. A key theme for companies to monitor going forward is how they quantify business value in the cloud. Factors such as developer productivity, process redesign, and reduced IT spend make rewriting using cloud-native tools a more appealing approach than lift and shift.”

Read the full article [here](#).

## VentureBeat: 14 Data Predictions for Enterprise Growth in 2023

### Data Management News

“For a company to truly move forward with digital transformation, they need to combine data science and data analytics and draw from a single source of truth. We'll see more CIOs cutting back on vendor spending to simplify their data architecture. Companies that implement an architecture that combines hindsight and predictive analytics to deliver efficient and intelligent solutions will win in the end.”

Read the full article [here](#).

## Contrary Research: Unlocking the Cybersecurity Landscape

### Cybersecurity News

“A core reason for the continued velocity of funding in cybersecurity is how quickly the threat landscape is changing. Hackers are constantly developing more sophisticated ways to threaten companies. This situation is exacerbated by the significant lack of skilled security talent available to companies. As long as cyberattacks remain prominent, and CTOs continue to prioritize solutions to protect their enterprise, companies will continue to get built in the space to meet that demand. This dynamic has led the number of public cybersecurity companies to grow by over 280% between 2011 and 2022.”

Read the full article [here](#).

## Recent HW Infrastructure and Cybersecurity Software Content

- Observations on the Managed Security Sector



[Link to Read](#)

- Observations on the Technology Services Sector



[Link to Read](#)

# Select Q4 2022 Infrastructure and Cybersecurity Software Transactions

## Palo Alto Network's Acquisition of Cider Security



**December 20, 2022**  
EV: \$250M  
EV / LTM Revenue: NA  
EV / EBITDA: NA

- Cider Security is a security platform provider that allows development teams to build application security programs providing protection for coding through deployment stages.
- Palo Alto's acquisition of Cider Security will bolster their customers' ability to build secure applications and improve security posture.

## Diversis Capital's Acquisition of Tempo



**October 24, 2022**  
EV: \$600M  
EV / LTM Revenue: NA  
EV / EBITDA: NA

- Tempo is a provider of cloud-based, workflow management software intended to help large-scale enterprises plan and schedule resources.
- With this investment, Tempo will plan to expand through international growth, continued investment in R&D, improved customer service, and additional product diversification.

## Proofpoint's Pending Acquisition of Illusive Networks



**Announced December 12, 2022**  
EV: NA  
EV / LTM Revenue: NA  
EV / EBITDA: NA

- Illusive Networks is a provider of deception-based cybersecurity solutions. The company offers compliance support solutions, insider threat defense, wire fraud prevention solutions, and cloud security services.
- Post-transaction, Proofpoint will enhance its market-leading threat and information protection platforms by adding proactive identity risk discovery and remediation as well as a strong post-breach defense capability.

## Thoma Bravo's Pending Acquisition of ForgeRock



**Announced October 11, 2022**  
EV: \$2.3B  
EV / LTM Revenue: 11.4x  
EV / EBITDA: NA

- ForgeRock is a provider of a digital identity platform that secures, manages, and governs the identities of customers, employees, partners, APIs, microservices, devices, and IoT.
- Upon completion of the acquisition, Thoma Bravo's software expertise, capital support, and operational capabilities will support ForgeRock's focus on driving consistent innovation on a path for long-term growth.

## Thoma Bravo and Sunstone Partners' Pending Acquisition of UserTesting



**Announced October 26, 2022**  
EV: \$1.3B  
EV / LTM Revenue: 6.0x  
EV / EBITDA: NA

- UserTesting is a provider of a video software-as-a-service platform that enables organizations to see and hear the experiences of real people as they engage with products, designs, apps, processes, concepts, or brands.
- Upon completion of the acquisition, Thoma Bravo and Sunstone Partners intend to combine UserTesting and UserZoom. The combined company will benefit from their operating capabilities and industry expertise.

## KKR Growth's Pending Acquisition of NetSPI

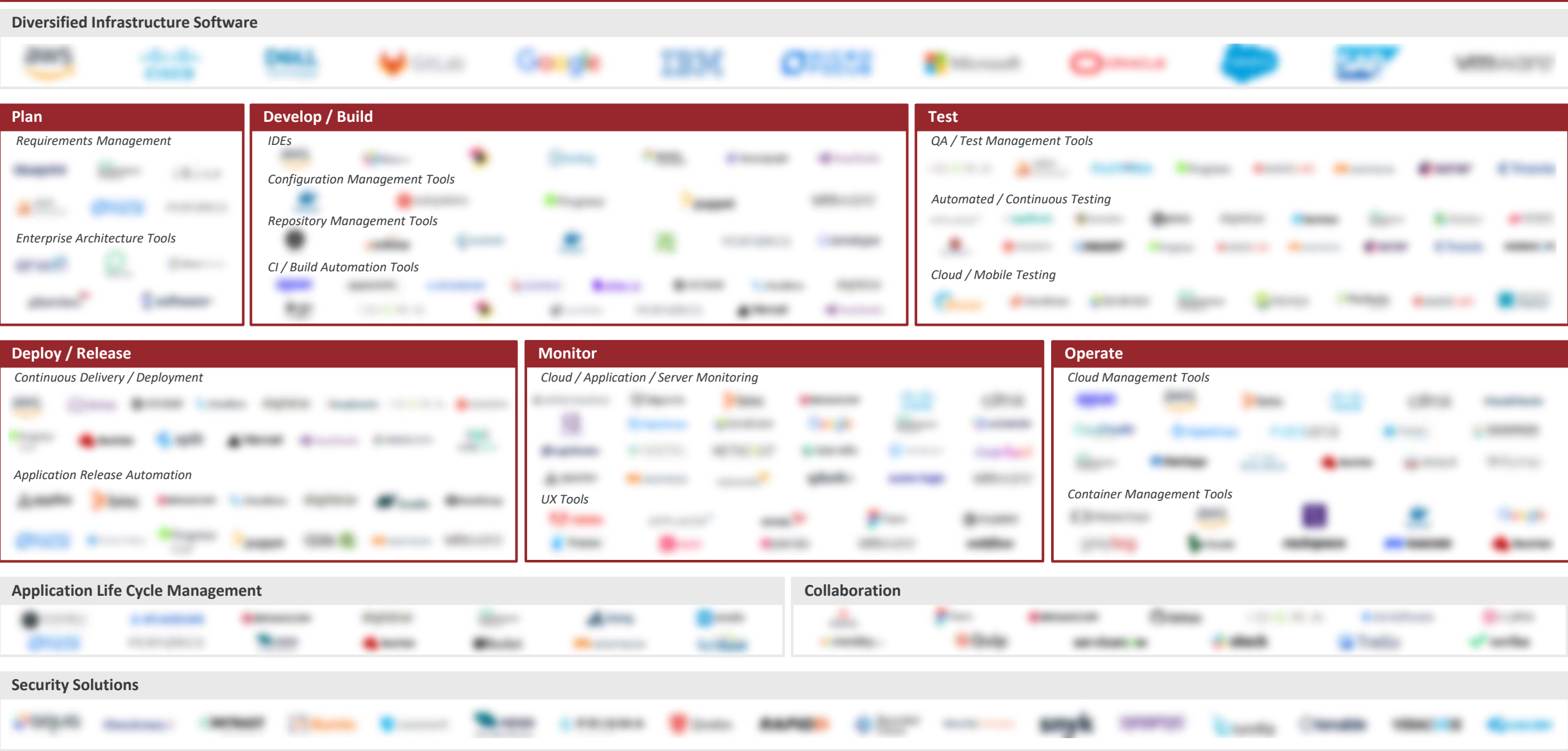


**Announced October 5, 2022**  
EV: \$410M  
EV / LTM Revenue: NA  
EV / EBITDA: NA

- NetSPI is a provider of penetration testing software for the cybersecurity testing industry with tech-enabled services and prevention-based cybersecurity techniques.
- KKR Growth's investment will help NetSPI become a differentiated leader in offensive cybersecurity and expand its solutions on a global scale.

# Infrastructure Software – DevOps Market Ecosystem

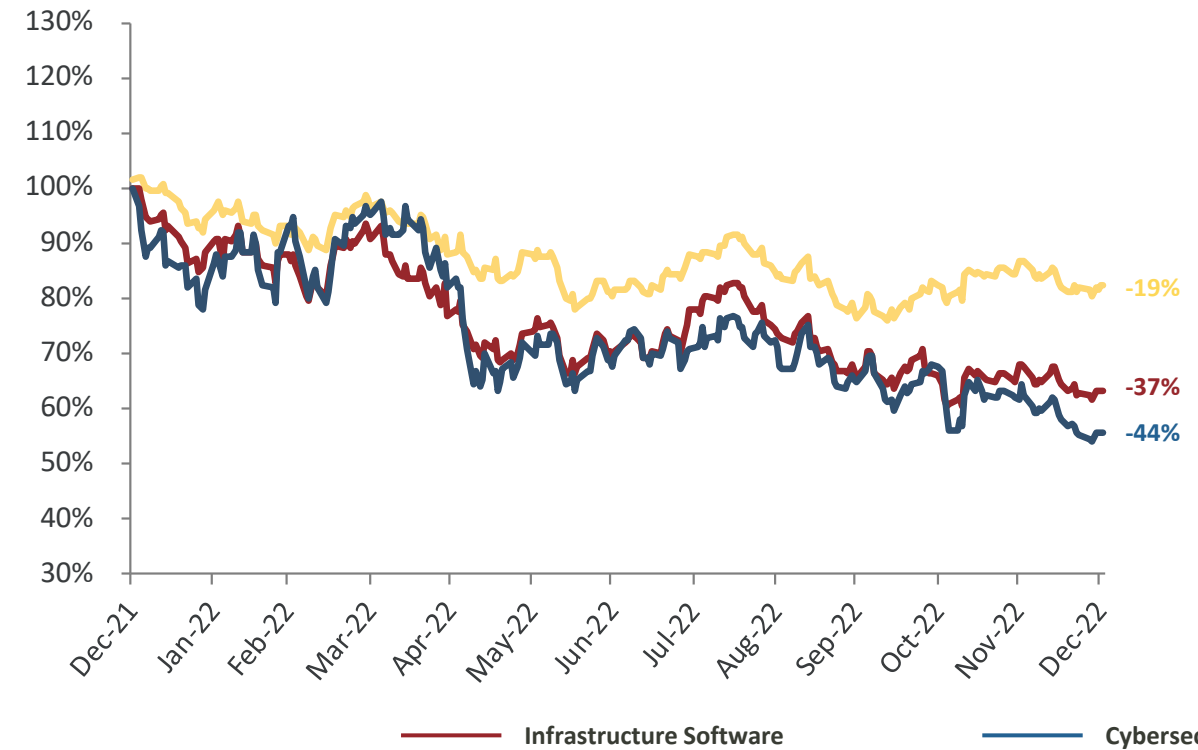
To view the full market map, please contact:  
[technologyinsights@harriswilliams.com](mailto:technologyinsights@harriswilliams.com)



# Infrastructure and Cybersecurity Software Public Company Trended Stock Performance

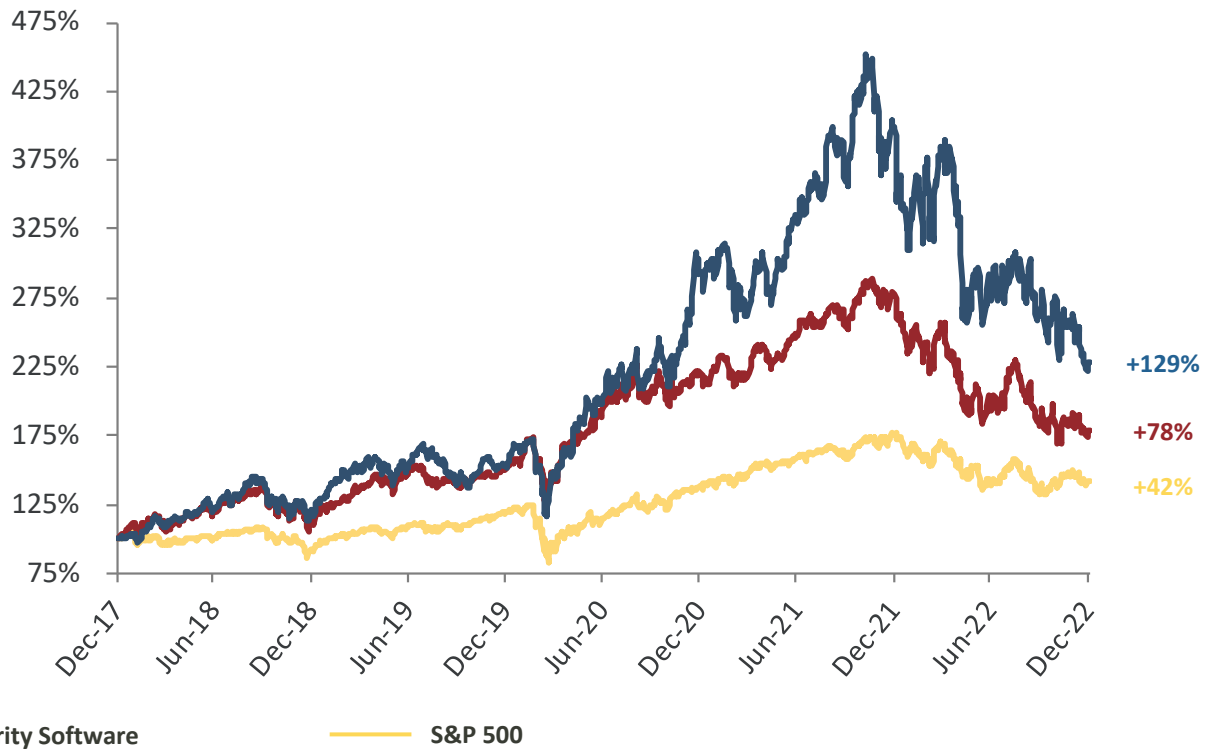
Public Company Stock Performance – Last 12 Months

Indexed Stock Price Performance for the Period December 2021 – December 2022



Public Company Stock Performance – 5 Years

Indexed Stock Price Performance for the Period December 2017 – December 2022



**Infrastructure Software**

Akamai, alteryx, Amazon, Amplitude, appian, asana, ATlassian, BACKBLAZE, GIGamon, CISCO, citrix, CLOUDFLARE, Couchbase, DigitalOcean, DOMO, Dropbox, dynatrace, elastic, endava, epam, GitLab, Globant, HashiCorp, informatica, IBM, jamf, Jfrog, Microsoft, MongoDB, new relic, NUTANIX, okta, ORACLE, PagerDuty, Palantir, PEGA, Progress, Qualys, rackspace, salesforce, SAP, servicenow, smartsheet, snowflake, software, solarwinds, splunk, sumologic, thoughtworks, twilio, vmware

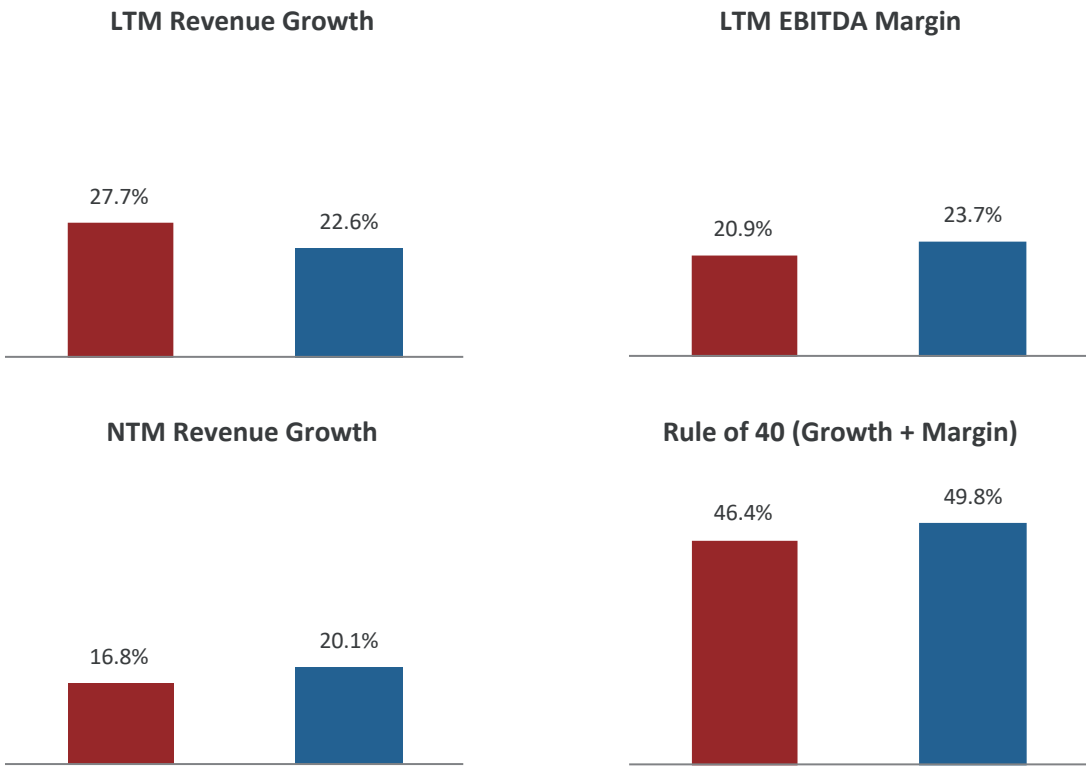
**Cybersecurity Software**

Akamai, CHECKPOINT, CLOUDFLARE, CROWDSTRIKE, CYBERARK, FORTINET, okta, paloalto, Qualys, RAPID7, Secureworks, SentinelOne, tenable, TREND MICRO, zscaler

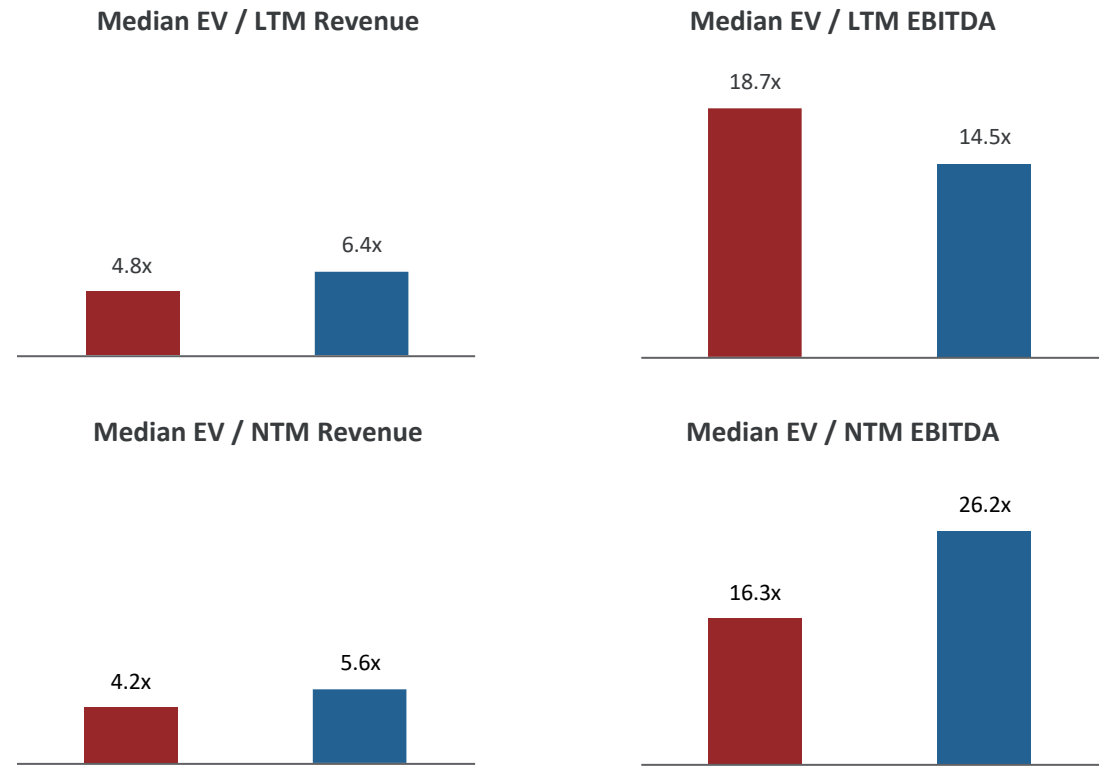


# Infrastructure and Cybersecurity Software Public Company Operating and Valuation Metrics

## Public Company Stock Performance – Operating Metrics



## Public Company – Valuation Metrics



Infrastructure Software

Cybersecurity Software



# Harris Williams: At a Glance



- **30 years** and thousands of deals closed
- **70%** of revenue from repeat clients
- **100%** of revenue is from M&A advisory
- **8** offices across the U.S. and Europe
- **8** industry groups with deep sector expertise

## The Harris Williams Technology Group

### Technology Coverage Areas

- Application Software
- **Infrastructure & Cybersecurity Software**
- IT & Managed Services

### Sector Coverage Areas

- Architecture, Engineering & Construction
- Education
- Human Capital Management
- Pharma
- Compliance
- Government & Public Sector
- Industrial
- Legal
- Real Estate & Property Tech
- eCommerce & Retail
- Healthcare
- Office of the CFO
- Supply Chain & Logistics

### Thematic Focus Areas

- AI / Machine Learning
- Data / Analytics
- Digital Transformation
- Integrated Payments
- SaaS / Cloud

### Harris Williams Contacts



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# Harris Williams Infrastructure and Cybersecurity Software and Services Experience

## Selected Infrastructure and Cybersecurity Software Experience

 a portfolio company of RLH Equity Partners has been acquired by 	 a portfolio company of RLH Equity Partners has been acquired by 	 a portfolio company of TAILWIND CAPITAL has been acquired by 	 has recapitalized  LYNIATE
 has acquired   a portfolio company of LEEDS Equity Partners 	 has acquired  	 has acquired  	 has received an investment from  
 has been acquired by  	 has acquired  	 has acquired  	 has acquired  PERFORCE
 a portfolio company of SUMMIT PARTNERS and Anshel Group has been acquired by  	 has been acquired by  	 has been acquired by  	 a wholly-owned affiliate of  has been acquired by  inspirata

## Harris Williams Client Engagement



a portfolio company of

RLH Equity Partners

has been acquired by



### Company Background

Utegration is a full-service consulting and solutions provider specializing in analytics, SAP technology, and SAP-certified products for the utilities and energy sectors. Utegration builds and optimizes new technology for finance, regulatory, customer management, and asset operations to maximize clients' return on investment, while minimizing risk and complexity. Their industry experts have earned the trust of energy and water providers across North America with outcome-driven road maps and a track record of successful implementations.

### Successful Outcome

The transaction delivered a successful outcome for Utegration and Cognizant. The acquisition will extend Cognizant's SAP capabilities for energy and utilities clients, allowing the partnership to deliver a strong new set of capabilities designed to address the market's critical transformation needs.

Harris Williams served as financial advisor to Utegration in this transaction.

## Harris Williams Client Engagement



a portfolio company of

RLH Equity Partners

has been acquired by



### Company Background

Inspirage delivers end-to-end transformational initiatives solving the most critical supply chain challenges for product-based companies. The company provides deep industry expertise and unparalleled knowledge of Oracle's cloud-based applications to deliver consulting, IP, and implementation solutions spanning product life cycle management, supply chain management, logistics, ERP (enterprise resource planning), finance, enterprise performance management, and digital transformation. Inspirage partners with its customers to break down information silos and optimize performance to accelerate innovation, fuel growth, and achieve operational excellence.

### Successful Outcome









The transaction delivered a successful outcome for Inspirage and Accenture. The acquisition will further enhance Accenture's Oracle Cloud capabilities, helping the combined partnership accelerate innovation for clients through emerging technologies.

Harris Williams served as financial advisor to Inspirage in this transaction.

# Harris Williams Capabilities and Locations



Harris Williams has a broad range of industry expertise, which creates powerful opportunities. Our clients benefit from our deep sector experience, integrated industry intelligence and collaboration across the firm, and our commitment to learning what makes them unique. For more information, visit our website at [www.harriswilliams.com](http://www.harriswilliams.com).

	Aerospace, Defense & Government Services		Business Services		Consumer		Energy, Power & Infrastructure
	Healthcare & Life Sciences		Industrials		Technology		Transportation & Logistics

## Office Locations

### United States

#### Boston

One International Place  
Suite 2620  
Boston, Massachusetts 02110  
Phone: +1 (617) 482-7501

#### Cleveland

1900 East 9th Street  
25th Floor  
Cleveland, Ohio 44114  
Phone: +1 (216) 689-2400

#### Minneapolis

222 South 9th Street  
Suite 3350  
Minneapolis, Minnesota 55402  
Phone: +1 (612) 359-2700

#### Richmond

1001 Haxall Point  
9th Floor  
Richmond, Virginia 23219  
Phone: +1 (804) 648-0072

#### San Francisco

One Market Plaza, Steuart Tower  
11th Floor  
San Francisco, California 94105  
Phone: +1 (415) 288-4260

#### Washington, D.C.

800 17th Street NW  
2nd Floor  
Washington, DC 20006  
Phone: +1 (202) 207-2300

### Europe

#### Frankfurt

Bockenheimer Landstrasse 33-35  
60325 Frankfurt  
Germany  
Phone: +49 069 3650638 00

#### London

25 Savile Row  
4th Floor  
London, England W1S 2ER  
Phone: +44 020 7518 8900

# Sources and Disclosures

## Sources

1. S&P Capital IQ

## Disclosures and Disclaimers

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## Appendix

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# Infrastructure Software Public Market Operational and Valuation Metrics

As of December 31, 2022

\$ in millions

\$ in millions				Revenue Growth			Enterprise Value / Revenue		Enterprise Value / EBITDA	
Company	Enterprise Value	Market Capitalization	% of 52 Week High	LTM	NTM	LTM EBITDA Margin	LTM	NTM	LTM	NTM
Diversified Infrastructure Software										
Microsoft	\$1,758,110	\$1,788,218	71.0%	15.2%	7.6%	48.7%	8.7x	8.0x	17.8x	16.7x
Oracle	304,431	220,392	91.2%	11.3%	12.5%	39.9%	6.6x	5.9x	16.6x	13.0x
Cisco Systems	185,828	195,710	75.2%	3.0%	5.1%	30.3%	3.6x	3.4x	11.7x	9.4x
IBM	171,710	127,382	92.0%	42.2%	(0.5%)	19.8%	2.8x	2.9x	14.3x	11.0x
SAP	124,095	119,992	82.1%	(6.1%)	17.8%	20.9%	4.2x	3.5x	19.9x	11.3x
Software AG	2,130	1,915	73.3%	(10.2%)	22.7%	17.0%	2.4x	2.0x	14.4x	9.9x
Median	\$178,769	\$161,546	78.7%	7.1%	10.0%	25.6%	3.9x	3.5x	15.5x	11.1x
Cloud / SaaS Infrastructure Software										
ServiceNow	\$74,933	\$78,281	59.6%	25.1%	20.9%	9.8%	10.8x	9.0x	NM	28.1x
Atlassian	32,648	32,880	33.8%	33.5%	22.2%	NM	10.9x	8.9x	NM	52.7x
MongoDB	13,086	13,638	37.9%	52.8%	24.6%	NM	11.0x	8.8x	NM	NM
Okta	10,852	10,945	30.2%	50.3%	19.6%	NM	6.3x	5.2x	NM	NM
Nutanix	6,056	5,994	77.2%	12.0%	11.5%	NM	3.7x	3.3x	NM	33.5x
Smartsheet	4,805	5,169	50.6%	41.5%	27.9%	NM	6.7x	5.3x	NM	NM
Qualys	3,847	4,263	69.1%	18.3%	16.8%	35.0%	8.2x	7.0x	23.5x	17.1x
New Relic	3,596	3,858	50.9%	19.2%	15.4%	NM	4.2x	3.7x	NM	34.9x
Median	\$8,454	\$8,470	50.7%	29.3%	20.2%	22.4%	7.5x	6.2x	23.5x	33.5x
Median	\$22,867	\$23,259	70.0%	18.8%	17.3%	25.6%	6.4x	5.3x	16.6x	16.7x

# Infrastructure Software Public Market Operational and Valuation Metrics by Sector

As of December 31, 2022

\$ in millions

\$ in millions				Revenue Growth			Enterprise Value / Revenue		Enterprise Value / EBITDA	
Company	Enterprise Value	Market Capitalization	% of 52 Week High	LTM	NTM	LTM EBITDA Margin	LTM	NTM	LTM	NTM
Service Support Management										
ServiceNow	\$74,933	\$78,281	59.6%	25.1%	20.9%	9.8%	10.8x	9.0x	NM	28.1x
PagerDuty	\$2,235	\$2,390	68.5%	32.9%	23.9%	NM	6.4x	5.2x	NM	NM
IT Operations Management										
SolarWinds	\$2,682	\$1,513	63.5%	0.2%	1.3%	23.0%	3.7x	3.7x	16.2x	9.5x
Sumo Logic	\$633	\$972	58.0%	25.6%	16.2%	NM	2.2x	1.9x	NM	NM
Remote Connectivity and Collaboration										
Atlassian	\$32,648	\$32,880	33.8%	33.5%	22.2%	NM	10.9x	8.9x	NM	52.7x
Twilio	\$6,070	\$9,025	18.4%	43.1%	16.5%	NM	1.7x	1.4x	NM	18.2x
Dropbox	\$8,704	\$7,878	86.7%	9.3%	5.7%	22.6%	3.8x	3.6x	16.8x	9.9x
Smartsheet	\$4,805	\$5,169	50.6%	41.5%	27.9%	NM	6.7x	5.3x	NM	NM
Asana	\$2,643	\$2,930	17.9%	52.0%	22.2%	NM	5.2x	4.2x	NM	NM
Virtualizaton / Client Computing										
VMware	\$59,970	\$52,225	89.7%	4.4%	5.5%	20.8%	4.6x	4.3x	21.9x	11.9x
Nutanix	\$6,056	\$5,994	77.2%	12.0%	11.5%	NM	3.7x	3.3x	NM	33.5x
Mobile Device Management										
Jamf	\$2,752	\$2,586	53.8%	33.5%	21.8%	NM	6.1x	5.0x	NM	NM
Application Performance Management										
Datadog	\$22,411	\$23,341	39.8%	74.1%	34.0%	0.6%	14.6x	10.9x	NM	62.3x
Dynatrace	\$10,743	\$11,025	62.6%	27.5%	16.8%	11.3%	10.3x	8.8x	91.3x	32.7x
New Relic	\$3,596	\$3,858	50.9%	19.2%	15.4%	NM	4.2x	3.7x	NM	34.9x



# Infrastructure Software Public Market Operational and Valuation Metrics by Sector (cont.)

As of December 31, 2022

\$ in millions

\$ in millions				Revenue Growth			Enterprise Value / Revenue		Enterprise Value / EBITDA	
Company	Enterprise Value	Market Capitalization	% of 52 Week High	LTM	NTM	LTM EBITDA Margin	LTM	NTM	LTM	NTM
Business Process Management										
Pegasystems	\$3,220	\$2,814	30.6%	3.6%	9.2%	NM	2.6x	2.4x	NM	29.8x
Appian	\$2,330	\$2,362	48.7%	29.3%	16.0%	NM	5.2x	4.5x	NM	NM
Rapid Application Development										
DigitalOcean	\$3,097	\$2,453	31.3%	34.5%	31.0%	12.3%	5.8x	4.4x	47.1x	13.6x
Appian	\$2,330	\$2,362	48.7%	29.3%	16.0%	NM	5.2x	4.5x	NM	NM
Progress Software	\$2,591	\$2,169	93.0%	13.3%	3.7%	33.9%	4.3x	4.2x	12.7x	11.9x
C3 AI	\$407	\$1,234	34.6%	27.2%	5.2%	NM	1.5x	1.4x	NM	NM
Data Management										
Snowflake	\$41,543	\$46,162	41.7%	81.3%	45.7%	NM	22.3x	15.3x	NM	NM
Splunk	\$16,407	\$14,093	57.1%	31.2%	16.8%	NM	5.0x	4.3x	NM	23.5x
Palantir	\$11,131	\$13,355	34.1%	27.9%	17.7%	NM	6.1x	5.2x	NM	23.0x
Informatica	\$5,867	\$4,611	43.1%	7.0%	6.8%	11.7%	3.9x	3.6x	33.2x	15.2x
Alteryx	\$4,084	\$3,501	66.4%	39.3%	27.7%	NM	5.6x	4.4x	NM	82.1x
Domo	\$548	\$492	24.8%	22.1%	9.0%	NM	1.8x	1.7x	NM	97.8x
Enterprise Data Search										
Elastic	\$4,666	\$4,924	41.4%	33.2%	21.6%	NM	4.8x	3.9x	NM	57.5x
Database Systems										
MongoDB	\$13,086	\$13,638	37.9%	52.8%	24.6%	NM	11.0x	8.8x	NM	NM
Couchbase	\$429	\$599	51.9%	25.7%	13.0%	NM	2.9x	2.6x	NM	NM

# Infrastructure Software Public Market Operational and Valuation Metrics by Sector (cont.)

As of December 31, 2022

\$ in millions

\$ in millions				Revenue Growth		Enterprise Value / Revenue		Enterprise Value / EBITDA		
Company	Enterprise Value	Market Capitalization	% of 52 Week High	LTM	NTM	LTM EBITDA Margin	LTM	NTM	LTM	NTM
Application Lifecycle Management / Collaboration										
Atlassian	\$32,648	\$32,880	33.8%	33.5%	22.2%	NM	10.9x	8.9x	NM	52.7x
GitLab	\$5,924	\$6,800	51.5%	71.6%	43.6%	NM	15.6x	10.9x	NM	NM
IFrog	\$1,728	\$2,139	67.8%	38.2%	28.7%	NM	6.6x	5.1x	NM	NM
PaaS										
Salesforce.com	\$134,123	\$131,397	51.6%	21.3%	9.7%	8.5%	4.4x	4.0x	52.4x	16.3x
IaaS										
Amazon	\$962,611	\$856,939	49.0%	9.7%	8.5%	10.3%	1.9x	1.8x	18.7x	12.5x
HashiCorp	\$3,880	\$5,139	29.5%	52.6%	26.3%	NM	8.9x	7.0x	NM	NM
Digital / Cloud / Agile Services										
EPAM Systems	\$17,500	\$18,849	48.5%	39.3%	13.4%	16.4%	3.7x	3.3x	22.6x	17.6x
Globant	\$6,801	\$7,025	52.7%	45.2%	19.9%	18.5%	4.1x	3.4x	22.0x	15.9x
Endava	\$4,216	\$4,348	45.5%	16.4%	36.7%	16.7%	5.4x	3.9x	32.3x	14.8x
Thoughtworks	\$3,465	\$3,208	36.5%	28.6%	10.7%	NM	2.7x	2.5x	NM	13.8x
Rackspace	\$4,306	\$623	21.1%	5.6%	(1.2%)	17.8%	1.4x	1.4x	7.8x	9.0x
Edge Computing / Web Performance										
Cloudflare	\$14,788	\$14,857	34.1%	51.9%	37.0%	NM	16.5x	12.1x	NM	86.3x
Akamai	\$15,056	\$13,256	68.4%	5.6%	2.7%	32.7%	4.2x	4.1x	12.8x	9.8x

# Infrastructure Software Public Market Operational and Valuation Metrics by Sector (cont.)

As of December 31, 2022

\$ in millions

\$ in millions				Revenue Growth		LTM EBITDA Margin	Enterprise Value / Revenue		Enterprise Value / EBITDA	
Company	Enterprise Value	Market Capitalization	% of 52 Week High	LTM	NTM		LTM	NTM	LTM	NTM
Data Protection and Backup										
Backblaze	\$167	\$201	33.9%	27.7%	18.9%	NM	2.1x	1.7x	NM	NM
User Experience / Product Management										
Amplitude	\$1,072	\$1,367	22.5%	50.2%	25.8%	NM	4.8x	3.8x	NM	NM
Median	\$4,666	\$4,924	48.7%	28.6%	16.8%	16.6%	4.8x	4.1x	22.0x	17.9x

# Cybersecurity Software Public Market Operational and Valuation Metrics by Sector

As of December 31, 2022

\$ in millions

\$ in millions

Company	Enterprise Value	Market Capitalization	% of 52 Week High	Revenue Growth		LTM EBITDA Margin	Enterprise Value / Revenue		Enterprise Value / EBITDA	
				LTM	NTM		LTM	NTM	LTM	NTM
Endpoint Protection / Anti-Virus										
CrowdStrike	\$23,005	\$24,679	43.5%	58.3%	36.5%	NM	11.3x	8.3x	NM	43.6x
Check Point Software	\$12,275	\$15,822	84.3%	7.5%	5.4%	39.3%	5.4x	5.1x	13.6x	11.3x
Trend Micro	\$4,601	\$6,477	0.5%	(11.7%)	22.8%	27.9%	3.1x	2.5x	11.2x	10.0x
SentinelOne	\$3,451	\$4,124	27.9%	114.0%	63.0%	NM	9.5x	5.9x	NM	NM
Enterprise Network Firewall										
Palo Alto Networks	\$42,349	\$42,191	65.3%	27.6%	24.7%	2.3%	7.3x	5.8x	NM	23.4x
Fortinet	\$37,466	\$38,195	67.5%	31.1%	25.4%	22.6%	9.1x	7.3x	40.5x	25.0x
Check Point Software	\$12,275	\$15,822	84.3%	7.5%	5.4%	39.3%	5.4x	5.1x	13.6x	11.3x
Web Security / Secure Web Gateway										
Zscaler	\$15,532	\$16,137	34.6%	59.8%	34.1%	NM	12.8x	9.5x	NM	60.5x
Identity and Access Management										
Okta	\$10,852	\$10,945	30.2%	50.3%	19.6%	NM	6.3x	5.2x	NM	NM
CyberArk Software	\$4,661	\$5,279	72.0%	15.7%	21.3%	NM	8.1x	6.7x	NM	NM
Privileged Access Management										
CyberArk Software	\$4,661	\$5,279	72.0%	15.7%	21.3%	NM	8.1x	6.7x	NM	NM
Vulnerability Management										
Tenable	\$4,169	\$4,292	60.0%	26.9%	20.6%	NM	6.4x	5.3x	NM	41.4x
Qualys	\$3,847	\$4,263	69.1%	18.3%	16.8%	35.0%	8.2x	7.0x	23.5x	17.1x
Rapid7	\$2,678	\$2,013	28.7%	31.3%	17.1%	NM	4.1x	3.5x	NM	34.9x
Managed Security Services										
SecureWorks	\$415	\$541	37.2%	(13.0%)	(7.7%)	NM	0.9x	0.9x	NM	NM

# Cybersecurity Software Public Market Operational and Valuation Metrics by Sector (cont.)

As of December 31, 2022

\$ in millions

\$ in millions				Revenue Growth		Enterprise Value / Revenue		Enterprise Value / EBITDA		
Company	Enterprise Value	Market Capitalization	% of 52 Week High	LTM	NTM	LTM EBITDA Margin	LTM	NTM	LTM	NTM
Unified Threat Management / SMB										
Fortinet	\$37,466	\$38,195	67.5%	31.1%	25.4%	22.6%	9.1x	7.3x	40.5x	25.0x
Web Application Firewall										
Cloudflare	\$14,788	\$14,857	34.1%	51.9%	37.0%	NM	16.5x	12.1x	NM	86.3x
Akamai	\$15,056	\$13,256	68.4%	5.6%	2.7%	32.7%	4.2x	4.1x	12.8x	9.8x
Median	\$10,852	\$10,945	43.5%	27.6%	21.3%	30.3%	7.3x	5.8x	13.6x	25.0x

# Recent Sector Transactions Detail

Closed Date	Target	Acquirer	Business Description	Enterprise Value (\$M)	Implied EV / Revenue	Implied EV / EBITDA
Pending	CYRES Consulting Services	Var Group	Provider of a network system intended to help establish automotive cybersecurity.	*	*	*
Pending	G7 CR Technologies	Softline	Provider of information technology, consulting, cloud, and Microsoft Azure services.	*	*	*
Pending	Illusive Networks	Proofpoint	Provider of deception-based cybersecurity solutions.	*	*	*
Pending	Octo Consulting Group	IBM	Provider of information technology services intended for the federal government.	*	*	*
Pending	UserTesting	Thoma Bravo; Sunstone Partners	Provider of a video, SaaS platform that captures customer perspectives.	\$1,300	6.0x	*
Pending	ForgeRock	Thoma Bravo	Provider of a digital identity platform to secure, manage, and govern the identities of customers.	\$2,300	11.4x	*
Pending	Era Software	ServiceNow	Provider of a time-series database designed for machine learning and anomaly detection.	*	*	*
Pending	NetSPI	KKR Growth	Provider of penetration testing software intended for transforming the cybersecurity testing industry.	\$410	*	*
12/30/22	Lobster	FSN Capital	Provider of software intended for data integration and process automation.	*	*	*
12/27/22	Remediant	Netwrix Corporation	Provider of a privileged access management platform intended to protect organizations from data theft.	*	*	*
12/27/22	DKS Systems	Build Labs	Provider of web design services catering to businesses.	*	*	*
12/23/22	Sonar Software	Blue Star Innovation Partners	Provider of cloud-based software designed for internet service providers.	*	*	*
12/20/22	Eficode	Investcorp	Provider of development and operations consultancy services.	*	*	*
12/20/22	Cider Security	Palo Alto Networks	Provider of a security platform designed for engineers and security personnel for data protection.	\$250	*	*
12/16/22	Volteo Edge	Mastek	Provider of IT consulting services intended to facilitate digital transformation of non-IT companies.	*	*	*
12/15/22	FormSwift	Dropbox	Provider of software that enables businesses to streamline their documents electronically.	\$95	*	*
12/15/22	Fortified Health Security	Silversmith Capital Partners	Provider of cyber privacy and security software intended to protect patient data and reduce risk throughout the healthcare ecosystem.	*	*	*
12/14/22	ButterCMS	Tiugo Technologies	Provider of an API-based content management software.	*	*	*
12/14/22	Nerdio	Updata Partners	Provider of cloud-based information technology services intended to deploy, manage, and optimize virtual desktops in Microsoft Azure.	*	*	*
12/14/22	AppOmni	The Syndicate Group	Provider of a data security platform intended to help companies scan, secure, and monitor their SaaS applications.	*	*	*
12/14/22	Helm Partners	Bluewave Technology Group	Provider of IT consulting services intended to help businesses throughout their digital transformation journey.	*	*	*

# Recent Sector Transactions Detail (cont.)

Closed Date	Target	Acquirer	Business Description	Enterprise Value (\$M)	Implied EV / Revenue	Implied EV / EBITDA
12/12/22	Snyk Limited	Sands Capital; Tiger Global	Provider of security analysis tools designed to identify open-source vulnerabilities.	*	*	*
12/12/22	Dataiku	Wellington Management Group	Provider of a centralized data platform designed to help businesses in their data journey from analytics at scale to enterprise AI.	*	*	*
12/08/22	Grove Resource Solutions	DLH Holdings	Provider of information technology solutions to federal, military, and commercial clients.	\$184	*	*
12/08/22	Managed Threat Services of Booz Allen Hamilton	Security On-Demand	Provider of managed threat services.	*	*	*
12/07/22	Drata	Iconiq Growth; GGV Capital	Provider of a security and compliance automation platform that monitors and collects evidence of a company's security controls.	*	*	*
12/06/22	Prevasio	AlgoSec	Provider of a cloud-native application protection platform that enables cloud operations and security management.	*	*	*
12/06/22	Proven Optics	Silversmith Capital Partners	Provider of a financial management application built on the ServiceNow platform that offers tailored solutions for customers.	*	*	*
12/05/22	Makros	Deloitte	Provider of cybersecurity services intended to provide solutions that identify, protect, detect, respond, and recover IT assets.	*	*	*
11/29/22	Tiberium	Open Systems	Provider of automation-based cybersecurity services focused on cyber threats.	*	*	*
11/28/22	Sensato Cybersecurity	Park Place International	Provider of a managed cybersecurity services platform focused on protecting healthcare providers from cybercriminals.	*	*	*
11/11/22	Custard Technical Services	Thrive Operations	Provider of information technology management and consulting services.	*	*	*
11/10/22	Cerberus Security Laboratories	Codasip	Provider of secure IoT products and security analysis, assessment, implementation, and testing services.	*	*	*
11/09/22	Homefield IT	Acrisure	Provider of managed information technology services.	*	*	*
11/08/22	SCRT Information Security	Orange Cyberdefense	Provider of information network security services intended to limit the risks induced by the use of new technologies.	*	*	*
11/08/22	Elevate Security	Cisco Investments	Provider of a security risk management platform intended to help enterprise security leaders prevent ransomware.	*	*	*
11/02/22	Binary Defense	Invictus Growth Management	Provider of cybersecurity software designed to help shield businesses from cyberattacks.	*	*	*
11/02/22	SpiderFoot	Intel 471	Provider of a reconnaissance tool designed to gather information about a user's targets.	*	*	*
11/01/22	Reboot Corporation	Dataprise	Provider of information technology consulting and managed services.	*	*	*
10/31/22	Passage Identity	AgileBits	Provider of a user authentication platform designed to help clients keep friction low and conversion rates high.	*	*	*
10/27/22	Knowledge Based Systems	MediQuant	Provider of dynamic engineering and systems analysis, consulting, and systems development solutions.	*	*	*
10/27/22	Versa Networks	BlackRock	Provider of a software-defined networking platform designed to provide integrated cloud, networking, and security services.	*	*	*
10/26/22	Valence Security	Akamai Technologies	Provider of a security platform designed to secure connections and manage the risks associated with third-party integrations.	*	*	*



# Recent Sector Transactions Detail (cont.)

Closed Date	Target	Acquirer	Business Description	Enterprise Value (\$M)	Implied EV / Revenue	Implied EV / EBITDA
10/24/22	Tempo	Diversis Capital	Provider of cloud-based, workflow management software intended to help large-scale enterprises plan and schedule resources.	\$600	*	*
10/24/22	Merge API	Accel Partners	Provider of APIs and integration tools intended to transform how companies realize customer-facing integrations.	*	*	*
10/12/22	Saaslio	Auvik Networks	Provider of data insight software designed to manage SaaS platforms.	*	*	*
10/12/22	DataGrail	Third Point Ventures	Provider of a personal data privacy platform designed to be used for personal data management across third-party systems.	*	*	*
10/11/22	Zebrium	ScienceLogic	Provider of log management and monitoring software designed to automatically detect software problems.	*	*	*
10/10/22	CSIS Security Group	Allurity	Provider of IT consulting and cybersecurity services.	*	*	*
10/06/22	Arctic Wolf Networks	Owl Rock Capital Partners	Provider of a cybersecurity platform designed to keep valuable business data safe.	*	*	*
10/04/22	Blue Hexagon	Qualys	Provider of an enterprise automated network threat defense platform designed to prevent cyber threats in real time.	*	*	*
10/04/22	Kapstone	iC Consult	Provider of identity and advanced cybersecurity, end-to-end security consulting, implementation, and training services.	*	*	*