



Infrastructure and Cybersecurity Software Update

Harris Williams | Q3 2022

Infrastructure and Cybersecurity Software Observations and Key Trends



Infrastructure and Cybersecurity Software Market Landscape

SOFTWARE DEVELOPMENT / DEVOPS



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



Application Lifecycle 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

helpsystems

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

hedera

Microsoft

precisely

Rocket

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

amazon

DELL Technologies

Google

Microsoft

MuleSoft

salesforce

rackspace technology

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: Cybersecurity and Data Privacy: 7 Challenges for CFOs to Address

Cybersecurity News

“Over the past few years, many CISOs were happy to encounter less difficulty having their budgeting requests fulfilled as overall corporate spending increased. That may change in 2023, as macroeconomic pressures and other external volatility may spur more organizations to tighten their belts. If and when that occurs, the CFO, CISO and data privacy officer will need to collaborate even more effectively to ensure that data security and privacy priorities are funded and executed, even in the fortunate absence of a major security breach.”

Read the full article [here](#).

Gartner: Security Operations Primer for 2022

Cloud Security News

“In the short term, SecOps must adapt to the pace of change by using “as a service” technologies, mirroring the expansion and growth seen in cloud transformation through the use of SaaS and cloud infrastructure and platform services. This expansion has come at a cost — a wider, more complex attack surface has emerged, leaving SRM leaders the task of managing more risk, more exposure and a greater variety of threats.”

Read the full article [here](#).

BCG: The Growing Influence of Developers in Enterprise Tech Sales

DevOps News

“To reach—and win over—this key audience, B2B enterprise tech companies need a deeper, more nuanced understanding of how developers work and what they want to see, from both a product and its vendor. These insights can shape and propel marketing, outreach, and support strategies. And they can help spark growth. Developers are no longer just users, but decision-makers who can seal—or kill—the deal.”

Read the full article [here](#).

Venture Beat: Organizations Ramp Up DevSecOps Tools for Optimum Security

DevSecOps News

“Data security has always been crucial for dev teams to be vigilant about, but recently it has grown to be even more vital. As a result, DevSecOps acceptance is increasing, though it’s still gaining traction as a best practice for developing safe, high-quality code. According to GitLab’s 2021 Global DevSecOps Survey, 36% of respondents develop software using DevSecOps, up from 27% in 2020.”

Read the full article [here](#).

Recent HW Infrastructure and Cybersecurity Software Content

- Observations on the Compliance Technology Sector



[Link to Read](#)

Select Q2 2022 Infrastructure and Cybersecurity Software Transactions

Synopsys' Acquisition of WhiteHat Security



Target



Buyer

June 22, 2022

EV: \$330M
EV / LTM Revenue: NA
EV / EBITDA: NA

- WhiteHat Security is a leading SaaS application security platform that uses proprietary scanning technology to provide insights into application infrastructure, risk assessment, and security breach protection.
- Post transaction, WhiteHat will complement Synopsys' portfolio by delivering SaaS security solutions integrated into the software development lifecycle.

Clearlake and TA Associates' Pending Acquisition of Kofax



Target



ASSOCIATES

Buyer

Announced April 26, 2022

EV: NA
EV / LTM Revenue: NA
EV / EBITDA: NA

- Kofax is a provider of intelligent automation software that facilitates digital workflow transformations for document-intensive workflows.
- Clearlake and TA Associates' experience in scaling enterprise software companies will help Kofax expand its integrated platform of solutions to its customers globally to promote strategic growth and innovation.

Broadcom's Pending Acquisition of VMware



Target



Buyer

Announced May 26, 2022

EV: \$69B
EV / LTM Revenue: 5.3x
EV / EBITDA: 22.3x

- VMware is a leading provider of IT infrastructure that offers multi-cloud services including application modernization, cloud management, cloud infrastructure, networking, security, and anywhere workspaces.
- The combined company will operate as VMware, providing enterprise customers with an expanded platform of infrastructure and security software technologies that can address the most complex IT infrastructure challenges.

KKR's Pending Acquisition of Barracuda Networks



Target



Buyer

Announced April 12, 2022

EV: NA
EV / LTM Revenue: NA
EV / EBITDA: NA

- Barracuda Networks is a leading provider of cloud-first security solutions helping small and medium-sized enterprises around the world protect their data and address critical security challenges.
- Post transaction, KKR will help accelerate expansion into managed detection and response, extended detection and response, and secure access service edge technology.

Perforce's Acquisition of Puppet



Target



Buyer

May 18, 2022

EV: NA
EV / LTM Revenue: NA
EV / EBITDA: NA

- Puppet is a provider of an infrastructure automation software platform that enables users to deliver, update, monitor, and secure software across physical and virtual machines.
- Puppet builds on Perforce's existing DevOps portfolio and will help Perforce solve the most difficult automation challenges in the world's largest enterprises whose combined customer base includes 40 of the Fortune 50.

Thoma Bravo's Pending Acquisition of SailPoint



Target



Buyer

Announced April 11, 2022

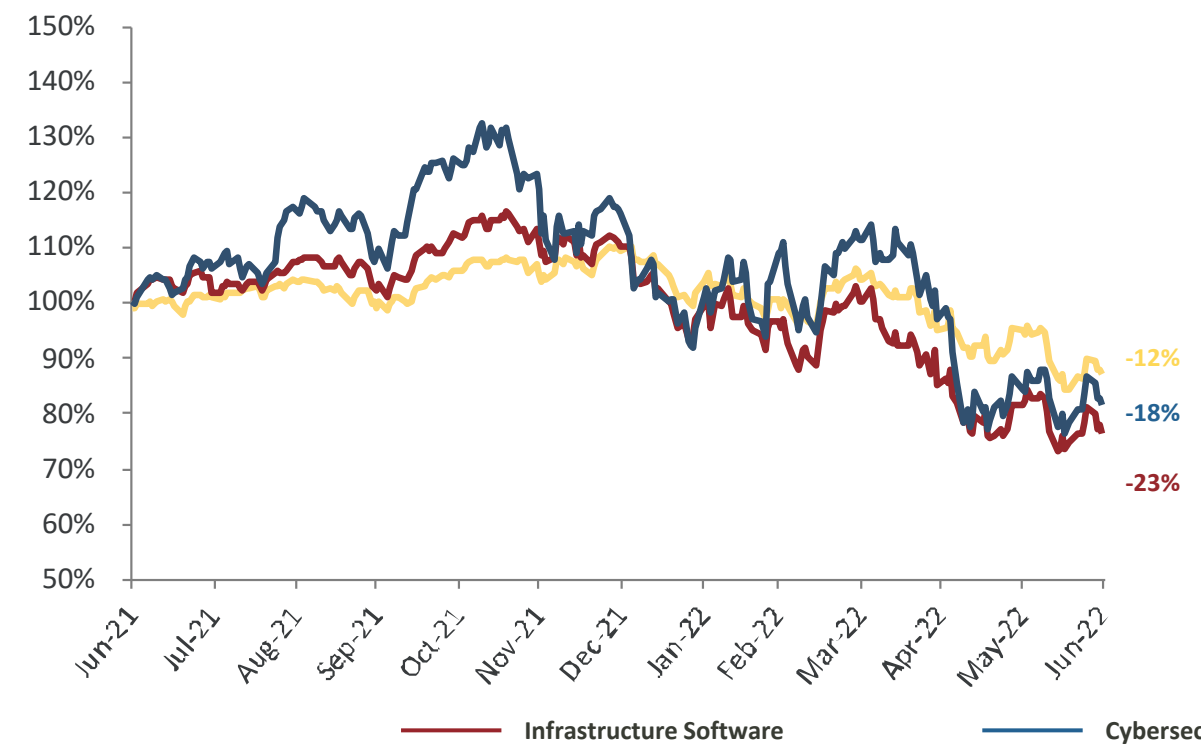
EV: \$7B
EV / LTM Revenue: 15.2x
EV / EBITDA: NA

- SailPoint is a provider of enterprise identity governance solutions that offers on-premises software and cloud-based solutions that provide and govern users' access to applications and data.
- Post transaction, Thoma Bravo's deep software expertise, capital support, and operational capabilities will support SailPoint's focus on driving consistent innovation on a path for long-term growth.

Infrastructure and Cybersecurity Software Public Company Trended Stock Performance

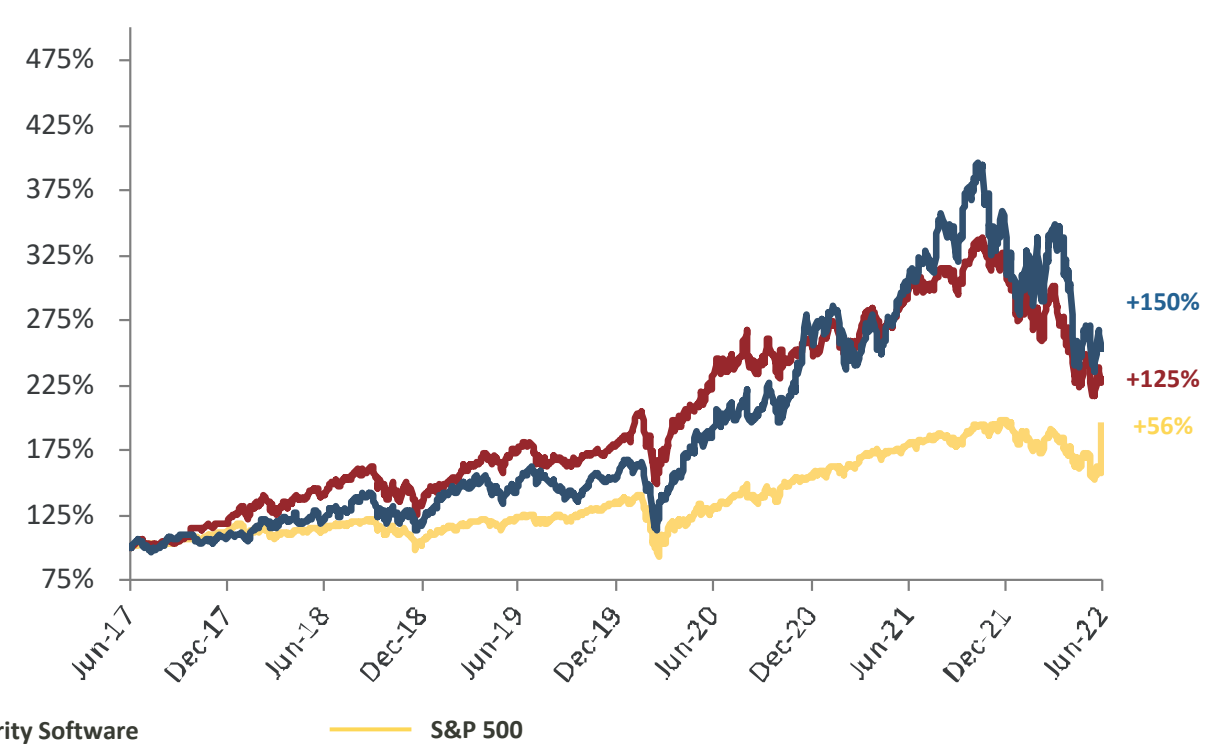
Public Company Stock Performance – Last 12 Months

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



Public Company Stock Performance – 5 Years

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



Infrastructure Software

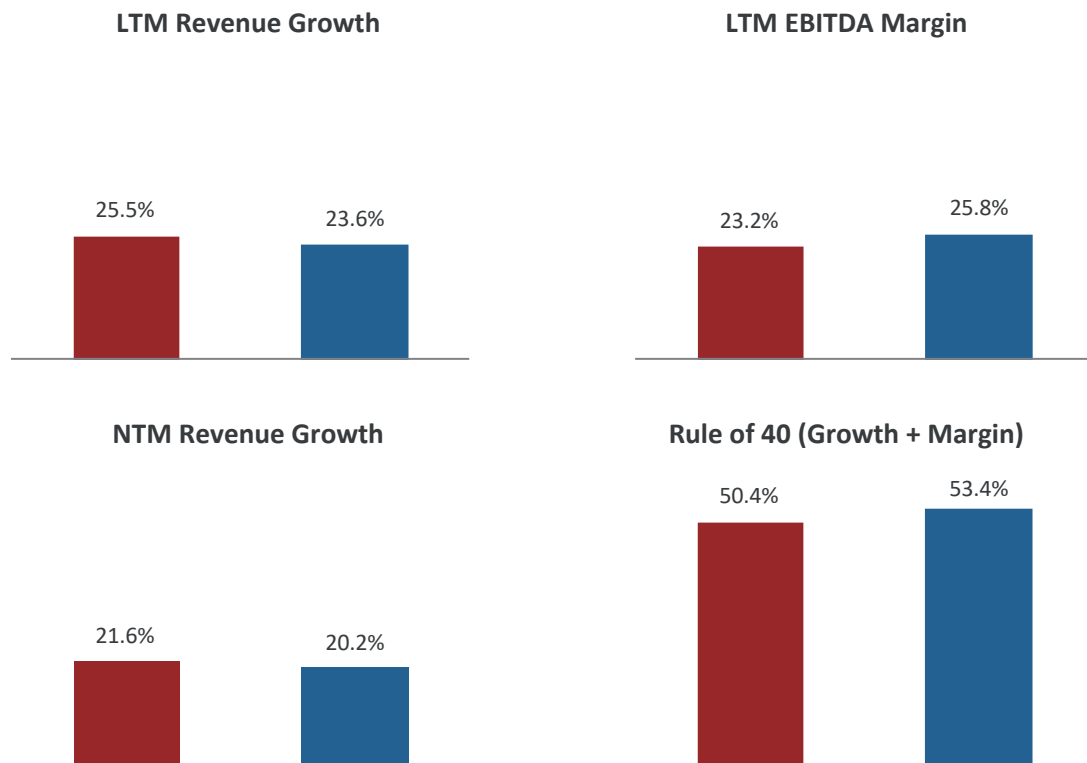
Logos of Infrastructure Software companies: Akamai, Alteryx, Amazon, Amplitude, API Corporation, Appian, Asana, Atlassian, Backblaze, Cal.ai, Cisco, Citrix, Cloudflare, Couchbase, DataDog, DigitalOcean, Domino, Dropbox, Dynatrace, Elastic, Endava, Epam, GitLab, Globant, HashiCorp, Informatica, IBM, Jamf, Jfrog, Micro Focus, Microsoft, MongoDB, New Relic, Nutanix, Okta, Oracle, Orix, PagerDuty, Palantir, Pega, Progress, Qualys, Rackspace, SAP, ServiceNow, SmartSheet, Snowflake, Software, SolarWinds, Splunk, Sumo Logic, Thoughtworks, Twilio, UserTesting, VMware, Zendesk.

Cybersecurity Software

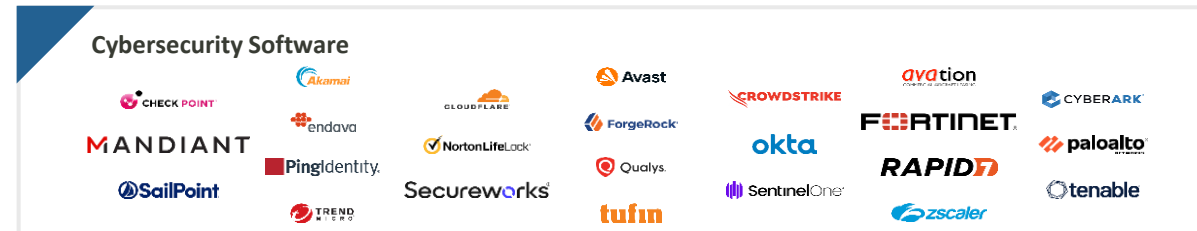
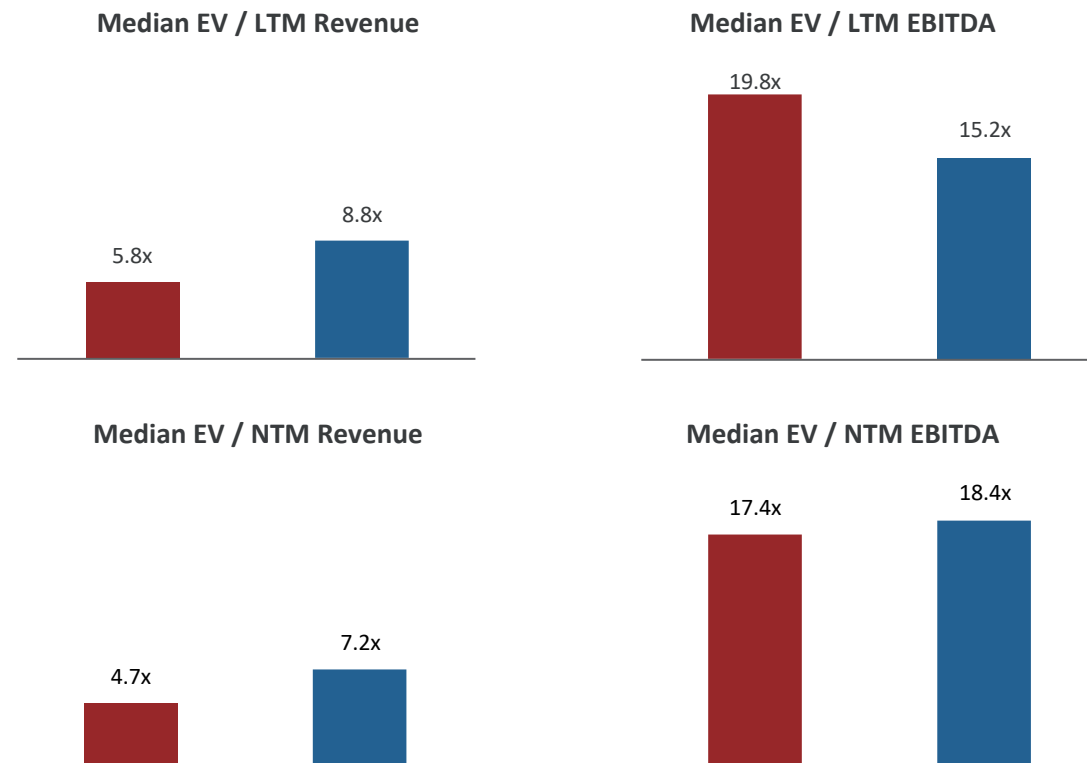
Logos of Cybersecurity Software companies: Check Point, Akamai, Cloudflare, Avast, CrowdStrike, Avastion, CyberArk, Mandiant, Endava, ForgeRock, Fortinet, Palo Alto Networks, SailPoint, PingIdentity, NortonLifeLock, Okta, Rapid7, SentinelOne, Tenable, Trend Micro, Secureworks, Qualys, Tufin, Zscaler.

Infrastructure and Cybersecurity Software Public Company Operating and Valuation Metrics

Public Company – Operating Metrics



Public Company – Valuation Metrics



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
- **10** 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

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

Harris Williams Contacts

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Harris Williams Infrastructure and Cybersecurity Software Experience

Selected Infrastructure and Cybersecurity Software Transaction Experience

 a portfolio company of  has been acquired by 	 has recapitalized 	 has acquired  a portfolio company of  	 has acquired 
 has acquired 	 has received an investment from 	 has been acquired by 	 has acquired 
 has acquired 	 has acquired 	 a portfolio company of  and  has been acquired by 	 has been acquired by 
 has been acquired by 	 a wholly-owned affiliate of  has been acquired by 	 has been acquired by 	 a portfolio company of  has been acquired by  a portfolio company of 

Harris Williams Transaction Spotlight


a portfolio company of


has been acquired by


Company Background

AST is a leading full-service enterprise systems integrator that serves over 200 public sector and commercial customers around the world. Clients rely on AST to lead and assist in systems integration, business process redesign, project management, systems administration, and training. AST's services span enterprise resource planning, business intelligence, enterprise performance management, customer experience, and middleware through on-premise and cloud technology.

Successful Outcome

The transaction delivered a successful outcome for AST and Recognize. The partnership between AST and Recognize will accelerate efforts to create a more differentiated, purposeful digital transformation services provider through the enhancement of its global delivery footprint and expansion of solution offerings.

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

Harris Williams Transaction Spotlight


has acquired

Company Background

Cleo provides SaaS-based B2B, application-to-application, cloud integration, and big data integration software solutions. The company's solutions empower teams to drive business agility, accelerate onboarding, facilitate modernization of key business processes, and capture new revenue streams by reimagining and remastering their digital ecosystem through robust application, B2B, and data integration technologies.

Successful Outcome

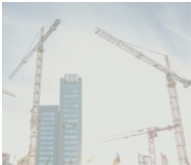
The transaction delivered a successful outcome for Cleo and Alpine Investors. H.I.G. will provide investment for its next phase of growth and accelerate Cleo's ecosystem integration category leadership and growth strategy.

Harris Williams served as financial advisor to H.I.G. Capital 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.

	Aerospace, Defense & Government Services		Business Services		Building Products & Materials		Consumer		Energy, Power & Infrastructure
	Healthcare & Life Sciences		Industrials		Specialty Distribution		Technology		Transportation & Logistics

Office Locations

United States

Boston

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

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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

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

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11th Floor
San Francisco, California 94105
Phone: +1 (415) 288-4260

Washington, D.C.

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2nd Floor
Washington, D.C. 20006
Phone: +1 (202) 207-2300

Europe

Frankfurt

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60325 Frankfurt
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Phone: +49 069 3650638 00

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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

Infrastructure Software Public Market Operational and Valuation Metrics

As of June 30, 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
Diversified Infrastructure Software										
Microsoft	\$1,894,161	\$1,920,840	73.4%	20.4%	13.7%	49.3%	9.8x	8.7x	19.9x	17.4x
Oracle	244,234	186,198	65.7%	4.8%	17.8%	43.6%	5.8x	4.9x	13.2x	10.5x
Cisco Systems	166,960	176,571	66.3%	5.6%	0.8%	31.2%	3.2x	3.2x	10.4x	8.8x
IBM	174,116	126,991	95.7%	27.3%	3.2%	20.3%	2.9x	2.8x	14.4x	10.6x
SAP	115,251	106,371	70.0%	(0.5%)	1.4%	22.5%	3.6x	3.6x	16.1x	11.0x
Software AG	2,062	2,445	75.1%	(0.0%)	8.0%	19.2%	2.2x	2.0x	11.3x	9.9x
Micro Focus	4,696	1,142	61.4%	(8.1%)	(6.9%)	21.8%	1.7x	1.8x	7.8x	5.2x
Median	\$166,960	\$126,991	70.0%	4.8%	3.2%	22.5%	3.2x	3.2x	13.2x	10.5x
Cloud / SaaS Infrastructure Software										
ServiceNow	\$93,516	\$95,323	67.2%	29.5%	25.7%	11.4%	14.9x	11.9x	NM	38.2x
Atlassian	47,641	47,641	38.8%	32.8%	25.7%	NM	18.3x	14.6x	NM	79.6x
MongoDB	17,087	17,676	44.0%	52.3%	29.3%	NM	17.5x	13.5x	NM	NM
Okta	14,163	14,263	32.7%	62.0%	32.7%	NM	9.7x	7.3x	NM	NM
Zendesk	8,905	9,131	48.3%	31.1%	25.8%	NM	6.2x	5.0x	NM	41.8x
Qualys	4,404	4,899	84.0%	14.6%	18.2%	37.3%	10.3x	8.7x	27.6x	22.5x
Smartsheet	3,698	4,069	36.7%	44.3%	35.3%	NM	6.1x	4.5x	NM	NM
New Relic	3,101	3,349	38.6%	17.7%	17.6%	NM	3.9x	3.4x	NM	29.3x
Nutanix	3,382	3,281	32.9%	19.1%	(1.8%)	NM	2.1x	2.2x	NM	NM
Median	\$8,905	\$9,131	38.8%	31.1%	25.7%	24.4%	9.7x	7.3x	27.6x	38.2x
Median	\$15,625	\$15,970	63.6%	19.7%	17.7%	22.5%	5.9x	4.7x	13.8x	14.2x

Infrastructure Software Public Market Operational and Valuation Metrics by Sector

As of June 30, 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	\$93,516	\$95,323	67.2%	29.5%	25.7%	11.4%	14.9x	11.9x	NM	38.2x
Zendesk	\$8,905	\$9,131	48.3%	31.1%	25.8%	NM	6.2x	5.0x	NM	41.8x
PagerDuty	\$2,016	\$2,177	49.2%	33.3%	28.1%	NM	6.6x	5.2x	NM	NM
IT Operations Management										
SolarWinds	\$2,868	\$1,645	29.1%	12.1%	4.4%	14.0%	4.0x	3.8x	28.4x	9.4x
Sumo Logic	\$514	\$867	31.9%	22.0%	19.3%	NM	2.0x	1.7x	NM	NM
Remote Connectivity and Collaboration										
Atlassian	\$47,641	\$47,641	38.8%	32.8%	25.7%	NM	18.3x	14.6x	NM	79.6x
Twilio	\$11,278	\$15,227	20.3%	57.4%	32.0%	NM	3.6x	2.7x	NM	46.3x
Dropbox	\$8,691	\$7,825	63.6%	12.1%	7.2%	22.3%	3.9x	3.7x	17.7x	10.1x
Smartsheet	\$3,698	\$4,069	36.7%	44.3%	35.3%	NM	6.1x	4.5x	NM	NM
Asana	\$3,318	\$3,345	12.1%	65.0%	37.1%	NM	7.9x	5.7x	NM	NM
Virtualizaton / Client Computing										
VMware	\$57,363	\$48,036	67.9%	7.6%	7.0%	22.3%	4.4x	4.1x	19.8x	11.5x
Citrix Systems	\$15,040	\$12,300	81.6%	3.7%	0.8%	18.3%	4.6x	4.6x	25.1x	13.4x
Nutanix	\$3,382	\$3,281	32.9%	19.1%	(1.8%)	NM	2.1x	2.2x	NM	NM
Mobile Device Management										
Jamf	\$3,198	\$2,968	50.3%	35.9%	27.3%	NM	8.1x	6.4x	NM	NM

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

As of June 30, 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
Application Performance Management										
Datadog	\$29,140	\$30,002	47.7%	77.9%	47.6%	2.2%	24.4x	16.5x	NM	NM
Dynatrace	\$11,189	\$11,313	49.2%	32.1%	23.8%	13.1%	12.0x	9.7x	91.6x	40.5x
New Relic	\$3,101	\$3,349	38.6%	17.7%	17.6%	NM	3.9x	3.4x	NM	29.3x
Business Process Management										
Pegasystems	\$4,269	\$3,914	33.6%	19.6%	17.3%	NM	3.3x	2.9x	NM	34.8x
Appian	\$3,322	\$3,426	33.7%	25.5%	19.9%	NM	8.4x	7.0x	NM	NM
Rapid Application Development										
DigitalOcean	\$4,132	\$4,223	31.0%	36.3%	32.1%	11.1%	8.9x	6.8x	80.5x	20.4x
Appian	\$3,322	\$3,426	33.7%	25.5%	19.9%	NM	8.4x	7.0x	NM	NM
Progress Software	\$2,404	\$1,983	83.9%	22.1%	6.2%	35.0%	4.1x	3.9x	11.8x	11.0x
C3 AI	\$978	\$1,940	28.3%	38.0%	23.2%	NM	3.9x	3.1x	NM	NM
Data Management										
Snowflake	\$39,412	\$44,233	34.3%	98.4%	59.5%	NM	27.9x	17.5x	NM	NM
Palantir	\$16,308	\$18,563	31.0%	36.7%	28.6%	NM	9.9x	7.7x	NM	27.2x
Splunk	\$16,869	\$14,236	50.1%	23.9%	22.6%	NM	5.9x	4.8x	NM	92.8x
Informatica	\$7,163	\$5,816	51.8%	9.3%	11.7%	16.3%	4.9x	4.4x	29.8x	18.8x
Alteryx	\$3,814	\$3,302	55.7%	13.9%	33.7%	NM	6.6x	5.0x	NM	NM
Domo	\$979	\$938	28.3%	22.9%	21.6%	NM	3.6x	3.0x	NM	NM
Enterprise Data Search										
Elastic	\$6,152	\$6,419	35.6%	41.7%	26.0%	NM	7.1x	5.7x	NM	NM

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

As of June 30, 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
Database System										
MongoDB	\$17,087	\$17,676	44.0%	52.3%	29.3%	NM	17.5x	13.5x	NM	NM
Couchbase	\$539	\$732	31.4%	20.6%	18.6%	NM	4.1x	3.5x	NM	NM
Application Lifecycle Management / Collaboration										
Atlassian	\$47,641	\$47,641	38.8%	32.8%	25.7%	NM	18.3x	14.6x	NM	79.6x
GitLab	\$6,950	\$7,849	38.8%	70.5%	52.8%	NM	24.0x	15.7x	NM	NM
IFrog	\$1,679	\$2,082	43.4%	38.1%	31.4%	NM	7.5x	5.7x	NM	94.7x
PaaS										
Salesforce.com	\$165,087	\$164,215	52.9%	25.0%	18.4%	9.6%	5.9x	5.0x	61.7x	17.8x
IaaS										
Amazon	\$1,161,506	\$1,080,624	56.3%	14.0%	13.6%	11.7%	2.4x	2.1x	20.9x	15.0x
HashiCorp	\$4,091	\$5,428	28.6%	53.3%	28.2%	NM	11.5x	9.0x	NM	NM
Digital / Cloud / Agile Services										
EPAM Systems	\$15,800	\$16,847	40.6%	48.8%	19.3%	17.1%	3.8x	3.2x	22.3x	20.7x
Globant	\$7,060	\$7,269	49.1%	60.0%	31.6%	16.8%	4.9x	3.8x	29.5x	18.4x
Endava	\$4,827	\$4,912	51.2%	43.9%	18.1%	17.9%	6.0x	5.1x	33.7x	21.0x
Thoughtworks	\$4,584	\$4,379	41.0%	39.6%	24.5%	NM	4.0x	3.2x	NM	17.3x
Rackspace	\$5,300	\$1,512	35.3%	10.0%	7.1%	20.7%	1.7x	1.6x	8.4x	7.8x

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

As of June 30, 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
Edge Computing / Web Performance										
Akamai	\$16,591	\$14,641	74.1%	7.5%	5.9%	34.3%	4.7x	4.4x	13.7x	10.4x
Cloudflare	\$14,122	\$14,273	19.7%	52.9%	42.2%	NM	19.3x	13.6x	NM	NM
Data Protection and Backup										
Backblaze	\$101	\$161	14.3%	27.0%	23.5%	NM	1.4x	1.1x	NM	NM
User Experience / Product Management										
Amplitude	\$1,307	\$1,594	16.2%	66.3%	33.2%	NM	7.0x	5.2x	NM	NM
UserTesting	\$571	\$717	31.4%	47.1%	30.2%	NM	3.5x	2.7x	NM	NM
Median	\$5,063	\$5,170	38.8%	32.4%	24.1%	16.8%	5.9x	4.7x	25.1x	20.4x

Cybersecurity Software Public Market Operational and Valuation Metrics by Sector

As of June 30, 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
Endpoint Protection / Anti-Virus										
Crowdstrike	\$37,752	\$39,118	56.5%	63.8%	46.2%	NM	23.1x	15.8x	NM	91.5x
Check Point Software	\$11,830	\$15,602	81.4%	5.6%	5.8%	41.6%	5.4x	5.1x	12.9x	11.3x
NortonLifeLock	\$14,485	\$12,547	71.0%	9.6%	4.8%	47.3%	5.2x	4.9x	11.0x	9.3x
Trend Micro	\$4,915	\$6,807	0.6%	1.2%	(0.6%)	32.8%	3.0x	3.1x	9.3x	10.7x
Avast	\$6,910	\$6,542	96.9%	5.4%	3.1%	46.5%	7.3x	7.1x	15.8x	13.9x
SentinelOne	\$4,921	\$6,508	29.7%	118.4%	89.4%	NM	20.0x	10.6x	NM	NM
Mandiant (fomerly FireEye)	\$4,506	\$5,067	93.5%	18.2%	19.2%	NM	9.0x	7.6x	NM	NM
Enterprise Network Firewall										
Palo Alto Networks	\$49,291	\$49,214	77.1%	29.7%	23.7%	NM	9.5x	7.7x	NM	32.4x
Fortinet	\$44,276	\$45,413	76.1%	31.5%	28.4%	21.4%	12.3x	9.6x	57.7x	34.5x
Check Point Software	\$11,830	\$15,602	81.4%	5.6%	5.8%	41.6%	5.4x	5.1x	12.9x	11.3x
Web Security / Secure Web Gateway										
Zscaler	\$20,557	\$21,210	39.8%	61.1%	41.4%	NM	21.2x	15.0x	NM	NM
Identity and Access Management										
Okta	\$14,163	\$14,263	32.7%	62.0%	32.7%	NM	9.7x	7.3x	NM	NM
SailPoint Technologies	\$5,919	\$5,913	97.2%	21.8%	17.6%	NM	12.8x	10.9x	NM	NM
CyberArk Software	\$4,473	\$5,129	63.4%	10.1%	21.2%	NM	8.6x	7.1x	NM	NM
ForgeRock	\$1,492	\$1,805	43.8%	30.8%	23.1%	NM	8.1x	6.6x	NM	NM
Ping	\$1,644	\$1,547	59.7%	25.5%	11.9%	NM	5.2x	4.7x	NM	NM
Privileged Access Management										
CyberArk Software	\$4,473	\$5,129	63.4%	10.1%	21.2%	NM	8.6x	7.1x	NM	NM

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

As of June 30, 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
Vulnerability Management										
Tenable	\$4,919	\$5,022	71.4%	25.3%	22.8%	NM	8.5x	6.9x	NM	70.7x
Qualys	\$4,404	\$4,899	84.0%	14.6%	18.2%	37.3%	10.3x	8.7x	27.6x	22.5x
Rapid7	\$4,576	\$3,892	46.1%	32.4%	26.1%	NM	8.0x	6.3x	NM	NM
Managed Security Services										
SecureWorks	\$757	\$922	40.4%	(7.6%)	(6.4%)	NM	1.5x	1.6x	NM	NM
Unified Threat Management / SMB										
Fortinet	\$44,276	\$45,413	76.1%	31.5%	28.4%	21.4%	12.3x	9.6x	57.7x	34.5x
Tufin	\$410	\$484	93.0%	14.6%	10.9%	NM	3.5x	3.2x	NM	NM
Web Application Firewall										
Akamai	\$16,591	\$14,641	74.1%	7.5%	5.9%	34.3%	4.7x	4.4x	13.7x	10.4x
Cloudflare	\$14,122	\$14,273	19.7%	52.9%	42.2%	NM	19.3x	13.6x	NM	NM
Median	\$5,420	\$6,525	67.2%	23.6%	20.2%	37.3%	8.6x	7.1x	13.7x	18.2x

Recent Sector Transactions Detail

Closed Date	Target	Acquirer	Business Description	Enterprise Value (\$M)	Implied EV / Revenue	Implied EV / EBITDA
08/03/22	Digital Shadows Ltd.	ReliaQuest, LLC	Provider of protection from data loss and targeted cyberattack.	\$160	*	*
Pending	VMware, Inc.	Broadcom Inc.	Providers of diversified infrastructure platform.	\$69,248	5.3x	22.3x
Pending	Hdiv Security SL	Datadog, Inc.	Provider of protection against security bugs and design flaws.	*	*	*
Pending	Barracuda Networks, Inc.	KKR & Co. Inc.	Provider of security and data protection solutions.	*	*	*
07/25/22	Kofax Limited	TA Associates Management, L.P.; Clearlake Capital Group, L.P.	Provider of capture and business process management (BPM) software and related maintenance and professional services.	*	*	*
Pending	SailPoint Technologies Holdings, Inc.	Thoma Bravo, L.P.; Thoma Bravo Fund XV, L.P.	Provider of enterprise identity security solutions.	\$7,051	15.2x	-171.3x
07/12/22	Cysiv, Inc.	Forescout Technologies, Inc.	Provider of cloud security solutions.	*	*	*
07/05/22	Tasktop Technologies Incorporated	Planview, Inc.	Provider of automated deployed integration technologies.	*	*	*
06/23/22	Datto Holding Corp.	Kaseya Limited	Provider of cloud-based solutions for the managed service provider channel.	\$6,028	9.4x	48.1x
06/22/22	WhiteHat Security	Synopsys, Inc.	Provider of enterprise identity security solutions.	\$330	*	*
06/22/22	Appsmith	Accel Partners	Provider of open-source platform to build internal tools.	*	*	*
06/22/22	Gearset Ltd.	Silversmith Management, L.P.	Provider of release, deployment, and collaboration software.	*	*	*
06/22/22	Enrich Consulting Inc.	Planview, Inc.	Provider of real-time resource allocation software.	*	*	*
06/21/22	Dozen Software, LLC	Mission, Inc	Provider of design, building, deployment, and maintenance software platform.	*	*	*
06/21/22	LogRocket, Inc.	Battery Ventures; Delta-V Capital, LLC	Provider of application performance management platform.	*	*	*
06/16/22	ShiftLeft, Inc.	Wipro Ventures Ltd	Provider of cloud security solution.	*	*	*
06/09/22	DNS Made Easy	DigiCert, Inc.	Provider of domain name system performance and security services.	*	*	*
06/09/22	BetterCloud, Inc.	Vista Equity Partners Management, LLC	Provider of SaaS management platform for centralized administration of all SaaS applications.	*	*	*
06/08/22	LibLab Inc.	Insight Venture Management, LLC	Provider of software development kits for engineering teams.	*	*	*
06/07/22	EnterpriseDB Corporation	Bain Capital Private Equity, LP	Provider of enterprise-class products and services based on PostgreSQL.	*	*	*

Recent Sector Transactions Detail (cont.)

Closed Date	Target	Acquirer	Business Description	Enterprise Value (\$M)	Implied EV / Revenue	Implied EV / EBITDA
06/02/22	Devo, Inc.	Deer Management Company, LLC	Provider of cloud-native platform for centralized log management.	*	*	*
06/01/22	Tentacle LLC	PSG Equity L.L.C.	Provider of platform that offers information security management software.	*	*	*
06/01/22	WootCloud Inc.	Netskope, Inc.	Provider of Internet of Things (IoT) security solution.	*	*	*
06/01/22	Ordr, Inc.	Battery Ventures; Kaiser Permanente Ventures	Provider of a cybersecurity platform for Internet of things devices.	*	*	*
06/01/22	Coralogix Ltd.	Advent International Corporation; StageOne Ventures	Provider of a centralized stateful streaming data platform.	*	*	*
05/24/22	SEMPERIS INC.	Insight Venture Management, LLC; KKR & Co. Inc	Provider of an enterprise identity protection suite.	*	*	*
05/19/22	PANISERO SAS	User Zoom, Inc.	Provider of UX insights platform.	*	*	*
05/18/22	Puppet Labs, Inc.	Perforce Software, Inc.	Provider of automated configuration and management software.	*	*	*
05/17/22	Pathlock	Vertica Capital Management LLC	Provider of platform to manage all aspects of access governance.	*	*	*
05/17/22	Imply Data, Inc.	Deer Management Company, LLC	Provider of analytic software solutions for modern analytics applications.	*	*	*
05/04/22	Flywheel Technologies Inc.	The Jordan Company, L.P.	Provider of a data activation platform to activate customer data in the cloud data warehouse.	*	*	*
05/03/22	ShiftLeft, Inc.	SYN Ventures; Blackstone Innovations L.L.C.	Provider of cloud security solution.	*	*	*
04/29/22	Intland Software GmbH	PTC Inc.	Provider of management platform for collaboration, traceability, security, and process management.	\$280	*	*
04/21/22	AppHub LLC	Silversmith Management, L.P.	Provider of an integrated suite of complementary applications for eCommerce merchants.	*	*	*
04/13/22	Salsify Inc.	Permira Advisers Ltd.; TPG Capital, L.P.	Provider of SaaS-based content management platform.	*	*	*
04/12/22	Critical Start, Inc.	Vista Equity Partners Management, LLC	Provider of managed detection and response services.	*	*	*
04/11/22	MetaGeek, LLC	Auvik Networks Inc.	Provider of packet analysis tools for Wi-Fi.	*	*	*
04/08/22	Terranova Worldwide Corporation	HelpSystems, LLC	Provider of information technology supported security awareness services.	*	*	*
04/07/22	Gamma Soft Informatique SARL	Talend S.A.	Provider of data synchronization and transformation solutions.	*	*	*
04/04/22	Comala Technology Solutions, Inc.	Appfire Technologies, LLC	Provider of developer collaboration tools and solutions.	*	*	*