

Telecom Technology and Services Group

Enterprise-Focused Telecom Technology Quarterly



Investment Banking and Advisory Services

FOCUS Investment Banking LLC is a leading investment bank with specialized telecom technology and services expertise, concentrating on providing highly tailored services to emerging middle market and larger organizations in this sector:

- Mergers & Acquisition Advisory
- Corporate Development Consulting
- Strategic Partnering & Alliances
- Capital Financing, Debt & Equity
- Corporate Valuations

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Enterprise-Focused Telecom Technology Quarterly

By Richard Pierce, FOCUS Managing Director and Telecom Technology and Services Team Leader

FOCUS believes that the Enterprise-Focused Telecom Technology sector is one of the most exciting in Telecom. Businesses today have an unprecedented opportunity to enhance operating efficiency and reduce costs by converging separate voice and data networks, empowering remote and mobile workers, extending communications to harsh outdoor and industrial environments, enhancing customer service and moving applications to a hosted or "cloud" environment. However, to achieve these benefits organizations must overcome a host of non-trivial challenges including bandwidth management, quality of service prioritization and monitoring, device proliferation and network security. While many of the largest players in the communications equipment industry are indeed helping to meet these challenges, we believe there is significant innovation among middle market technology providers and ample opportunities for them to create meaningful value for their shareholders. FOCUS is proud of its commitment to the Enterprise-Focused Telecom Technology sector and we are excited about the prospects for middle market companies in this space.

The FOCUS Telecom Technology and Services group consists of two professionals with a combined 30+ years of transaction experience across a wide variety of telecommunications-related companies. The FOCUS Telecom team is uniquely qualified to help middle market clients reach their strategic objectives because the group:

- Devotes significant senior level resources to executing transactions for lower middle market clients,
- · Has a breadth of knowledge that covers most segments of the telecom industry,

- Has seasoned bankers with decades of telecom industry experience,
- Has a proven transaction methodology for delivering results,
- Is equally comfortable with buy side and sell side M&A,
- Leverages an experienced team of research professionals,
- Has a national presence with coverage of both East and West coasts.

Sub Sector Definitions

Enterprise Networking: Enterprise-grade switches and routers (wireline and wireless), enterprise CPE and application and bandwidth management tools such as WAN optimization and application acceleration

Industrial Networking and M2M: Ruggedized equipment designed for communications in harsh environments as well as equipment utilized for machine-to-machine communications

Network Management: Software used by enterprises to manage and monitor their voice communications and data networks

Network Security: Software applications designed to identify and protect against a wide variety of network security-related threats

Unified Communications and Contact Center: PBXs, videoconferencing-related products and software products designed to enhance the efficiency of contact center networks.



Summary Comments

Public Markets

After dipping slightly in our spring report, the Enterprise-Focused Telecom Technology Index (EFTTI) roared back in our summer period to past a three-month gain of 23.9%. Every single sub sector in the index was in positive territory, and three of the five sub sectors posted double digit gains. The EFTTI's gains compared favorably to both the 12.3% gain in the S&P 500 and the 20.9% gain in the NASDAQ over the corresponding time period. This period's strong performance was also good enough to bring the sector into the black for the full year period with a gain of 10.4%. This is on par with the year-over-year gain in the S&P 500 of 9.8%, but significantly lags the 31.4% gain in the NASDAQ. Sub sector multiples recovered nicely and are now higher than they were this same time last year. The sector revenue multiple increased from 4.8x to 5.3x, while the sector EBITDA multiple inched up from 20.0x to 20.9x.

Enterprise Networking

The Enterprise Networking sub sector had a solid threemonth period with a 10.2% gain. All the stocks in the sub sector with the exception of Citrix and F5 Networks were in positive territory for the period. The strongest performers included CPE vendors D-Link and NetGear as well as A10 Networks and Arista Networks. The sub sector is still trading 10.3% lower than it was at this time last year, primarily due to a 15.0% decline at Cisco. Sub sector multiples are also lower than they were a year ago. The sub sector revenue multiple ended the period at 3.7x (down from 4.2x a year ago) and the sub sector EBITDA multiple was 12.3x (down from 15.0x a year ago).

Industrial and M2M

The Industrial and M2M sub sector did not perform quite as well as some of the other sub sector's in the EFTTI, but still managed to post a respectable gain of 7.7% for the period. Belden was the main drag on the sub sector as it declined 7.6%; the other stocks in the index generally posted strong gains. This included a 41.5% increase at Sierra Wireless and a 20.9% increase at Telit Communications. For the full year, the sub sector is essentially breakeven with a 12-month gain of 0.2%. Belden was once again the worst performer over this period, but this was counterbalanced by a more than doubling at Inseego. Sub sector multiples also ended the period higher. The revenue multiple increased from 1.1x last year to 1.4x currently, while the EBITDA multiple made an even more dramatic increase from 8.7x a year ago to 15.6x currently.

Network Management

As the result of a 3.9% decline at NetScout, the Network Management sub sector was the EFTTI's worst performing sub sector this period. Even so, strong gains at MobileIron and SolarWinds still propelled the sub sector to a three-month gain of 6.2%. The sub sector is up a scant 0.2% for the full year period, with a modest gain at SolarWinds counterbalancing losses at both MobileIron and NetScout. Sub sector multiples are flat to down over the past 12 months. The sub sector revenue multiple held steady at 4.9x, but the EBITDA multiple dropped sharply from 32.4x a year ago to its current value of 26.4x.

Network Security

Once again proving that it is difficult to bet against the long-term trends in cyber security, The Network Security sub sector rebounded from its losses in the spring to increase more than 30% this period. While gains were broad-based (Proofpoint was the only stock in negative territory), CrowdStrike and Zscaler turned in the most impressive performances with three-month gains of 67.3% and 93.6%, respectively. The sub sector is also up 22.7% over the past 12 months. Zscaler was a top performer over this time period as well, but Fortinet, Qualys, Tenable and Trend Micro also turned in impressive performances. Sub sector multiples continued to climb and closed out the period at 8.8x revenue and 55.1x EBITDA. Both of these figures are higher than corresponding multiples for last year of 6.9x revenue and 45.3x EBITDA.

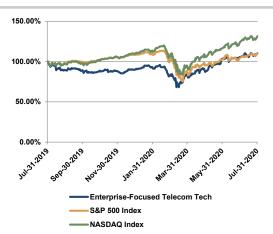
Unified Communications and the Contact Center

Few areas of the economy seem to be benefiting more from the COVID-19 crisis than the Unified Communications and the Contact Center sub sector. Following up on its 40%+ gain in our spring report, the sub sector shot up another 73.7% in the past three months. Not surprisingly, the aptly named Zoom did just that and was up 87.8% for the period. However, performance was strong across the board, and five of the remaining seven companies in the sub sector were also up 25% or higher this period. The situation is similar for the full year as the sub sector has more than doubled in value over the past 12 months. This increase is directly tied to multiple expansion as the sub sector revenue multiple more than doubled over the past year from 7.3x to 15.2x, while the sub sector EBITDA multiple experienced a similar dynamic as it expanded from 53.3x to 113.8x. Clearly investors continue to anticipate significant growth in the sub sector.



Enterprise-Focused Telecom Technology: Public Market Summary

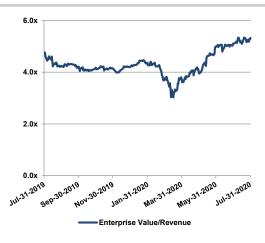
Twelve Month Index Returns



Sector and Sub Sector Returns

	12 Month	3 Month
Enterprise-Focused Telecom Tech	10.4%	23.9%
Enterprise Networking	-10.3%	10.2%
Industrial and M2M	0.2%	7.7%
Network Management	0.2%	6.2%
Network Security	22.7%	30.5%
Unified Comms & Contact Center	129.4%	73.7%
S&P 500	9.8%	12.3%
NASDAQ	31.4%	20.9%

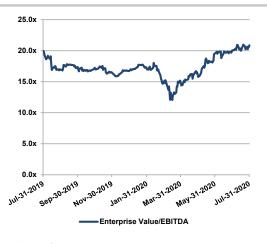
Revenue Multiple Trends



Sector and Sub Sector Revenue Multiples

	7/31/2020	7/31/2019
Enterprise-Focused Telecom Tech	5.3x	4.8x
Enterprise Networking	3.7x	4.2x
Industrial and M2M	1.4x	1.1x
Network Management	4.9x	4.9x
Network Security	8.8x	6.9x
Unified Comms & Contact Center	15.2x	7.3x

EBITDA Multiple Trends



Sector and Sub Sector EBITDA Multiples

	7/31/2020	7/31/2019
Enterprise-Focused Telecom Tech	20.9x	20.0x
Enterprise Networking	12.3x	15.0x
Industrial and M2M	15.6x	8.7x
Network Management	26.4x	32.4x
Network Security	55.1x	45.3x
Unified Comms & Contact Center	113.8x	53.3x



M&A Summary Comments

M&A

The Enterprise-Focused Telecom Technology sector experienced a solid uptick from the 36 transactions in our spring report to 40 transactions for our summer period. For the year we are at 107 announced transactions through July, which means that deal activity is continuing at a level comparable to what we have experienced in recent years. While the number of transactions has been comparable to previous years, announced transaction dollar volume continues to be low. This period saw only \$1.4 billion in total announced transaction dollar volume, and year-to-date the figure stands at \$8.3 billion. This means that the sector is likely to struggle to hit the \$20 billion+ in total transaction dollar volume that it has enjoyed in three of the past four years.

Enterprise Networking

The Enterprise Networking space was dominated this period by acquisitions of SD-WAN related vendors. Three of the four transactions in the sub sector were of SD-WAN companies. This ranged from the period's largest transaction (the \$925 million acquisition of Silver Peak by HP Enterprise) to one of its smallest (the \$4 million acquisition of Ecessa by Communications Systems). In addition, Adaptiv Networks acquired SD-WAN assets from Martello Technologies. In the lone transaction not related to SD-WAN, NVIDIA acquired data center-focused vendor Cumulus Networks.

Industrial and M2M

Activity in the Industrial and M2M sub sector remained light with only a single transaction for the period. This was the acquisition of the cellular IoT connectivity assets of Riot Micro by STMicroelectronics.

Network Management

The Network Management sub sector also had a comparatively light period for M&A with four total transactions. SD-WAN was a factor in the Network Management sub sector as well as Cisco acquired SD-WAN network management company Thousand Eyes. Other targets in the Network Management sub sector this period were The OpenNMS Group (acquired by NantHealth), Infiverve Technologies (acquired by Freshworks) and iQuate (acquired by HyperGrid).

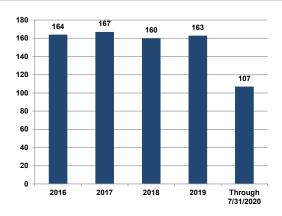
Network Security

Activity in the Network Security sub sector continued along at the accelerated rate that we have noted in our last several reports. The sub sector notched 28 transactions in the past three months, although none of these could be classified as "blockbuster" deals. In fact, the largest announced transaction dollar value was the \$70 million acquisition of IDaptive by CyberArk. Two companies (VMware and Help Systems) both notched multiple transactions in the sub sector over this past three months.

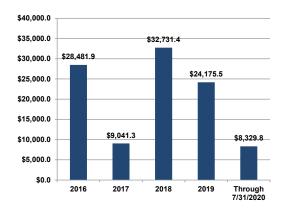
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Enterprise-Focused Telecom Technology: M&A Summary

M&A Activity: Number of Transactions



M&A Activity (\$ Value of Transactions in Millions)





Other notable strategic acquirers included Fortinet, Microsoft, Qualys and Zscaler. Private equity also continued to actively pursue network security opportunities with platform investments by Accendo Capital, Fortress Investment Group, Providence Strategic Growth Capital Partners, Thoma Bravo and Thompson Street Capital Partners.

Unified Communications and the Contact Center

The demand for publicly-traded companies in the Unified Communications and the Contact Center sub sector unfortunately did not translate into the M&A markets this period. We counted only three transaction for the sub sector over this past three months. Two of these were made by Sinch as it acquired ACL Mobile in India as well as the digital interconnect assets of SAP. Finally, Westelcom

acquired TEO Technologies, a provider of unified communications solutions for mid-market enterprises.

Transactions with Announced Multiples

There were four transactions in our summer reporting period that had announced transaction multiples. Three of these were in the Network Security sub sector. The highest announced transaction multiple in the Network Security sub sector (and for the period as a whole) was the acquisition of QinetiQ by Help Systems for 3.3x revenue. The other two acquisitions in the sub sector (Fortress Investment Group's acquisition of Finjan and BIO-key International's acquisition of PistolStar) both tipped the scales at 1.5x revenue. Finally, in the Unified Communications and the Contact Center sub sector, Sinch's acquisition of ACL Mobile was done at 1.1x revenue and 11.1x EBITDA.

M&A Announced Transactions (5/1/20 - 7/31/20)

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
Mimecast	MessageControl	Security	7/30/20	NA	AI-enabled email and messaging security SaaS for businesses that enables universal protection against spy mail.
Qualys	Spell Security	Security	7/29/20	NA	Endpoint security and threat detection and response SaaS and on-premise software for businesses.
Providence Strategic Growth Capital Partners	Hornetsecurity	Security	7/28/20	NA	Cloud-based security solutions for business customers including spam and viruses, advanced threat protection and email encryption.
NantHealth	The OpenNMS Group	Network Management	7/27/20	NA	Open-source, AI-enabled network monitoring SaaS for carriers and enterprises.
Adaptiv Networks	Martello Technologies (Elfiq Business)	Enterprise Networking	7/22/20	NA	SD-WAN solutions to improve network performance and business continuity through link balancing and bandwidth management.
SITS	Applied Security	Security	7/20/20	NA	Encryption and data leakage prevention solutions as well as electronic signature and encryption of forms.
Fortinet	OPAQ Networks	Security	7/20/20	NA	Zero trust network access solution that protects organizations' distributed networks from cyber attacks.
STMicroelectronics	Riot Micro (Cellular IoT Connectivity Assets)	Industrial and M2M	7/16/20	NA	Designs cellular IoT products and solutions.
Acronis	DeviceLock	Security	7/15/20	NA	Endpoint device/port control and data leakage prevention software for the public and private sectors globally.
Westelcom	Teo Technologies	Unified Comms & Contact Center	7/15/20	NA	End-to-end unified communications solution for mid-market enterprise customers.
Hewlett Packard Enterprise	Silver Peak	Enterprise Networking	7/13/20	\$925.0	SD-WAN solution with features for application performance management, WAN edge security and routing and VoIP.
Micro Focus International	ATAR Labs	Security	7/9/20	NA	Cyber security operations center investigation and response management platform.
Freshworks	Infiverve Technologies	Network Management	7/9/20	NA	Service performance, asset and outcome management, network management and operations and predictive analytics SaaS.
The Herjavec Group	Securience	Security	7/9/20	NA	Identity and access management, identity governance, identity data management and multi factor authentication.
Matrix42	FireScope	Security	7/8/20	NA	Web filtering, email anti-spam filtering and email archiving SaaS for businesses and managed service providers.
Aura Company	Pango	Security	7/7/20	NA	Online privacy and security products including a VPN that encrypts personal browsing information and a password manager.



M&A Announced Transactions (5/1/20 – 7/31/20) continued

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
HyperGrid	iQuate	Network Management	7/1/20	NA	Network management software for information technology discovery, inventory and measurement for large enterprises.
OneTrust	Integris Software	Security	6/29/20	NA	Data privacy automation software that helps enterprises to discover, map, monitor and control sensitive data.
Help/Systems	QinetiQ	Security	6/25/20	\$37.5	Data classification and secure messaging software for enterprises, military and government agencies.
Help/Systems	Titu	Security	6/25/20	NA	Data classification security SaaS that enables organizations to classify, share and secure unstructured data.
Microsoft Corporation	CyberX	Security	6/22/20	NA	IoT-focused network security management SaaS for businesses with features for network topology discovery and asset monitoring.
Sinch	ACL Mobile	Unified Comms & Contact Center	6/15/20	\$70.5	Cloud communications SaaS for businesses in India and Southeast Asia.
Livingbridge	TitanHQ	Security	6/11/20	NA	Identity and access control SaaS that enables infrastructure access management, dynamic privilege management and auditing.
Fortress Investment Group	Finjan	Security	6/10/20	\$25.2	Unified threat management that enables proactive threat detection and management by identifying patterns and analyzin behavior.
BIO-key International	PistolStar	Security	6/10/20	\$2.5	Provides authentication security and management software and services.
Vmware	Lastline	Security	6/4/20	NA	AI-based anti-malware software and SaaS that detects and prevents advanced persistent threats.
Accendo Capital	SSH Communications Security	Security	6/3/20	NA	Cybersecurity solutions for financial institutions and other businesses to access, secure and control data and applications.
Thoma Bravo	Exostar	Security	6/2/20	NA	Business collaboration identity access and management SaaS for aerospace and defense, healthcare and life sciences industries.
Zscaler	Edgewise Networks	Security	5/28/20	NA	Zero trust, micro-segmentation premises and cloud network security software to verify the identity of software, services and processes.
Cisco Systems	ThousandEyes	Network Management	5/28/20	NA	Application performance analytics SaaS for the visibility and monitoring of applications over traditional and SD-WAN networks.
EclecticIQ	PolyLogyx	Security	5/27/20	\$3.5	Endpoint visibility and control platform for cloud and managed security service providers.
Communications Systems	Ecessa	Enterprise Networking	5/14/20	\$4.0	Provides SD-WAN traffic optimization systems for businesses.
CyberArk Software	IDaptive	Security	5/13/20	\$70.0	AI-based identity and access management SaaS with features for single sign-on, multi-factor authentication and behavior analytics.
Vmware	Octarine	Security	5/13/20	NA	Cloud security SaaS for Kubernetes-based cloud-native applications in containers, virtual machines and serverless environments.
Thompson Street Capital Partners	PKWARE	Security	5/13/20	NA	Compression, encryption and data security platform solutions for highly regulated enterprises.
SonarSource	RIPS Technologies	Security	5/13/20	NA	Automated security analysis software for web applications that identifies threats, scans codes and tracks security scores.
Zoom Video Communications	Keybase	Security	5/7/20	NA	Open source messaging and file-sharing encryption software for consumers and businesses.
Sinch	SAP (Digital Interconnect Assets)	Unified Comms & Contact Center	5/5/20	\$250.0	Mobile customer engagement SaaS that enables communicatio via SMS, push notifications, email, voice and chat.
O.I.J Orchestra Group	Cronus Cyber Technology	Security	5/4/20	NA	Automatic and continuous penetration testing software solution to identify and eliminate network vulnerabilities.
NVIDIA	Cumulus Networks	Enterprise Networking	5/4/20	NA	Networking automation, switching, analytics and real-time infrastructure management for datacenters and enterprises.



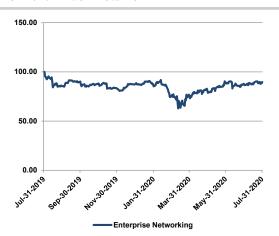
M&A Announced Transactions with Revenue Multiples (8/1/19 - 7/31/20)

Acquiror	Target	Sector	Date Announced	Purchase Price	Revenue Multiple	EBITDA Multiple	Description
Help/Systems	QinetiQ	Security	6/25/20	\$37.5	3.3 x	NA	Data classification and secure messaging software for enterprises, military and government agencies.
Sinch	ACL Mobile	Unified Comms & Contact Center	6/15/20	\$70.5	1.1 x	11.1 x	Cloud communications SaaS for businesses in India and Southeast Asia.
Fortress Investment Group	Finjan	Security	6/10/20	\$25.2	1.5 x	NA	Unified threat management that enables proactive threat detection and management by identifying patterns and analyzing behavior.
BIO-key International	PistolStar	Security	6/10/20	\$2.5	1.5 x	NA	Provides authentication security and management software and services.
Martello Technologies	GSX	Network Management	4/29/20	\$13.3	2.7 x	10.8 x	Provides end-user experience monitoring software for Microsoft Office 365 for businesses.
Shanghai Guao Electronic Technology	Shanghai Qianyun Information Technology	Network Management	4/21/20	\$3.4	4.8 x	NA	Cloud management platforms that help enterprises use and manage cloud-based IT resources.
Sinch	Wavy	Unified Comms & Contact Center	3/26/20	\$116.0	1.3 x	12.4 x	AI-based customer messaging SaaS and APIs for businesses that can be integrated into existing CRM systems.
F5 Networks	Shape Security	Security	12/19/19	\$1,000.0	16.7 x	NA	AI-enabled web and mobile application fraud protection software for banks, airlines, retailers and government agencies.
Beijer Electronics	Virtual Access	Industrial and M2M	10/30/19	\$20.0	1.5 x	NA	Wireless industrial routers and gateways as well as network performance activators for controlled connectivity.
Thoma Bravo	Sophos	Security	10/14/19	\$3,913.5	5.5 x	49.2 x	Provides cloud-enabled end-user and network security solutions including endpoint protection, firewall and cloud security analytics.
Hewlett Packard Enterprise	Bromium	Security	9/19/19	\$30.0	1.5 x	NA	Endpoint security SaaS that isolates browser- based attacks, malicious downloads and attachments and other applications.
VMware	Carbon Black	Security	8/22/19	\$2,139.7	9.3 x	NM	Cloud-native platform that leverages big data and behavioral analytics to provide comprehensive endpoint protection.
Broadcom	Symantec (Enterprise Security Assets)	Security	8/8/19	\$10,700.0	4.6 x	NA	Endpoint and information protection products including endpoint security, advanced threat protection and information protection.

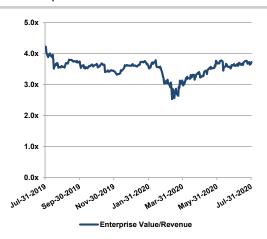


Sub Sector Analysis: Enterprise Networking

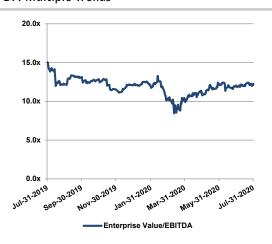
Twelve Month Index Returns



Revenue Multiple Trends



EBITDA Multiple Trends



Source: Capital IQ

Company Returns

	12 Month	3 Month
Enterprise Networking Index	-10.3%	10.2%
A10 Networks	6.6%	18.3%
Accton	81.3%	6.8%
Aerohive Networks	44.2%	27.3%
Arista Networks	-5.0%	18.5%
Cisco	-15.0%	11.1%
Citrix	51.5%	-1.6%
D-Link	40.8%	45.6%
Extreme Networks	-44.1%	33.8%
F5 Networks	-7.4%	-2.4%
NetGear	-9.2%	28.2%
Radware	-3.1%	7.9%
Unizyx Holding (Zyxel)	-28.4%	8.9%

Company Revenue Multiples

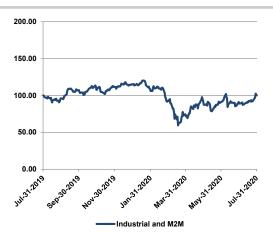
	7/31/2020	7/31/2019
Enterprise Networking Index	3.7x	4.2x
A10 Networks	2.4x	2.1x
Accton	2.2x	1.4x
Aerohive Networks	3.8x	2.6x
Arista Networks	7.5x	8.0x
Cisco	3.7x	4.4x
Citrix	5.8x	4.3x
D-Link	0.6x	0.4x
Extreme Networks	0.9x	1.0x
F5 Networks	3.4x	3.5x
NetGear	0.7x	0.8x
Radware	4.0x	4.1x
Unizyx Holding (Zyxel)	0.3x	0.4x

Company EBITDA Multiples

	7/31/2020	7/31/2019
Enterprise Networking Index	12.3x	15.0x
A10 Networks	29.3x	NM
Accton	18.5x	13.9x
Aerohive Networks	230.2x	NM
Arista Networks	22.2x	23.4x
Cisco	11.6x	14.2x
Citrix	23.3x	16.3x
D-Link	NM	NM
Extreme Networks	29.5x	21.1x
F5 Networks	15.0x	12.3x
NetGear	16.2x	11.9x
Radware	42.9x	37.2x
Unizyx Holding (Zyxel)	26.8x	30.7x

Sub Sector Analysis: Industrial and M2M

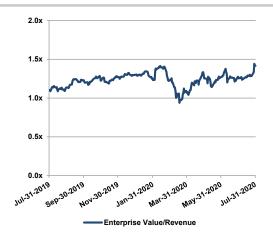
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Industrial and M2M Index	0.2%	7.7%
Belden	-30.5%	-7.6%
CalAmp	-29.4%	17.3%
Digi International	-7.7%	6.8%
Inseego	159.2%	12.8%
Lantronix	16.3%	26.6%
Sierra Wireless	12.3%	41.5%
Telit Communications	-9.5%	20.9%

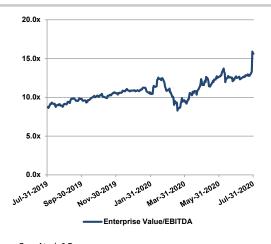
Revenue Multiple Trends



Company Revenue Multiples

	7/31/2020	7/31/2019
Industrial and M2M Index	1.4x	1.1x
Belden	1.3x	1.6x
CalAmp	1.1x	1.4x
Digi International	1.5x	1.2x
Inseego	5.4x	2.5x
Lantronix	2.1x	1.3x
Sierra Wireless	0.7x	0.5x
Telit Communications	0.5x	0.7x

EBITDA Multiple Trends



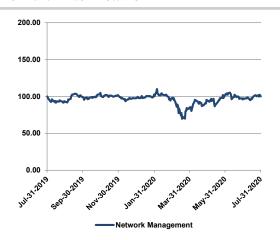
Company EBITDA Multiples

	7/31/2020	7/31/2019
Industrial and M2M Index	15.6x	8.7x
Belden	9.5x	8.6x
CalAmp	35.6x	10.9x
Digi International	13.5x	11.9x
Inseego	NM	102.3x
Lantronix	NM	32.7x
Sierra Wireless	NM	14.9x
Telit Communications	9.5x	27.1x



Sub Sector Analysis: Network Management

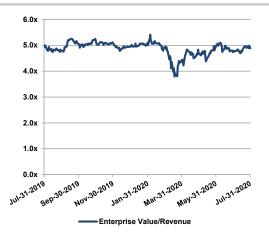
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Network Management Index	0.2%	6.2%
MobileIron	-9.7%	22.4%
NetScout	-2.2%	-3.9%
SolarWinds	2.5%	8.1%

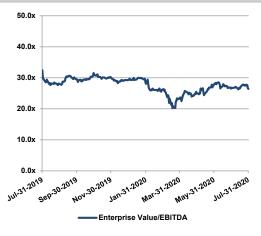
Revenue Multiple Trends



Company Revenue Multiples

	7/31/2020	7/31/2019
Network Management Index	4.9x	4.9x
MobileIron	3.0x	3.3x
NetScout	2.2x	2.3x
SolarWinds	7.7x	7.9x

EBITDA Multiple Trends



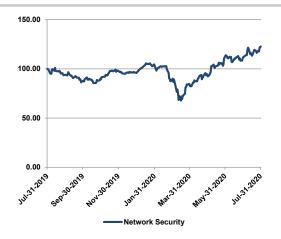
Company EBITDA Multiples

	7/31/2020	7/31/2019
Network Management Index	26.4x	32.4x
MobileIron	NM	NM
NetScout	13.7x	15.2x
SolarWinds	33.5x	32.5x



Sub Sector Analysis: Network Security

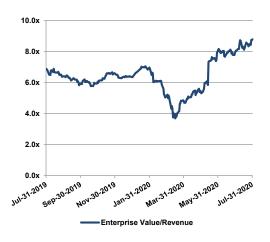
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Network Security Index	22.7%	30.5%
Checkpoint	12.0%	18.5%
Cheetah Mobile	-23.9%	21.0%
CrowdStrike	27.1%	67.3%
CyberArk	-15.1%	19.3%
FireEye	0.7%	31.2%
Fortinet	72.2%	28.4%
NortonLifeLock	-0.5%	0.8%
Palo Alto Networks	13.0%	30.2%
Ping Identity	NA	37.9%
Proofpoint	-8.3%	-5.0%
Qualys	42.7%	17.1%
Rapid7	-1.8%	30.8%
SecureWorks	0.2%	5.1%
Tenable	35.4%	30.2%
Trend Micro	32.6%	13.8%
Zscaler	54.1%	93.6%

Revenue Multiple Trends



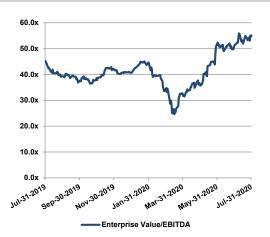
Company Revenue Multiples

	7/31/2020	7/31/2019
Network Security Index	8.8x	6.9x
Checkpoint	7.9x	7.9x
Cheetah Mobile	0.1x	0.1x
CrowdStrike	41.7x	51.9x
CyberArk	8.8x	12.2x
FireEye	3.8x	3.8x
Fortinet	8.9x	6.1x
NortonLifeLock	6.0x	6.3x
Palo Alto Networks	7.5x	7.0x
Ping Identity	10.9x	NA
Proofpoint	6.7x	8.7x
Qualys	13.2x	10.4x
Rapid7	8.2x	10.1x
SecureWorks	1.5x	1.7x
Tenable	8.1x	6.9x
Trend Micro	4.2x	3.1x
Zscaler	42.4x	33.8x



Sub Sector Analysis: Network Security (continued)

EBITDA Multiple Trends



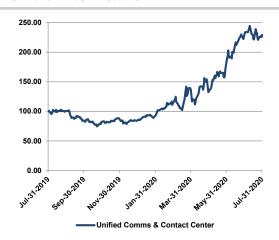
Company EBITDA Multiples

	7/31/2020	7/31/2019
Network Security Index	55.1x	45.3x
Checkpoint	17.7x	16.9x
Cheetah Mobile	NM	2.1x
CrowdStrike	NM	NM
CyberArk	86.6x	64.4x
FireEye	NM	NM
Fortinet	43.8x	35.8x
NortonLifeLock	18.3x	21.0x
Palo Alto Networks	666.5x	178.1x
Ping Identity	127.8x	NA
Proofpoint	NM	NM
Qualys	38.5x	34.1x
Rapid7	NM	NM
SecureWorks	NM	NM
Tenable	NM	NM
Trend Micro	12.9x	9.6x
Zscaler	NM	NM



Sub Sector Analysis: Unified Communications and the Contact Center

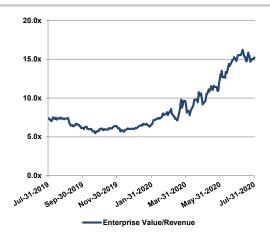
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Unified Comms & Contact Center Index	129.4%	73.7%
Avaya	5.1%	27.4%
ClearOne	8.3%	37.6%
eGain	28.0%	19.4%
Enghouse Systems	115.6%	50.9%
Five9	144.7%	30.4%
Liveperson	29.5%	79.5%
Verint	-22.4%	5.0%
Zoom	165.8%	87.8%

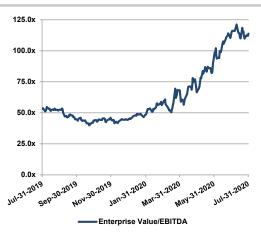
Revenue Multiple Trends



Company Revenue Multiples

	7/31/2020	7/31/2019
Unified Comms & Contact Center Index	15.2x	7.3x
Avaya	1.3x	1.3x
ClearOne	1.5x	1.2x
eGain	3.8x	3.0x
Enghouse Systems	9.1x	4.6x
Five9	20.8x	10.0x
Liveperson	8.9x	7.5x
Verint	2.7x	3.4x
Zoom	85.2x	54.6x

EBITDA Multiple Trends



Company EBITDA Multiples

	7/31/2020	7/31/2019
Unified Comms & Contact Center Index	113.8x	53.3x
Avaya	9.0x	8.9x
ClearOne	NM	NM
eGain	42.7x	32.2x
Enghouse Systems	33.3x	16.3x
Five9	754.9x	158.6x
Liveperson	NM	NM
Verint	23.2x	23.9x
Zoom	1124.3x	1278.7x

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