FOCUS Telecom Technology and Services Group

Enterprise-Focused Telecom Technology Quarterly

Summer 2017 Report

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FOCUS

Investment Banking

Strategic, Personal, Dedicated

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

In this Issue

2 Introduction

2 Sub Sector Definitions

3 Summary Comments: Public Markets

4 Public Market Summary Charts 1-6

5 Summary Comments: M&A

5 M&A Summary Charts 1-2

6 M&A Announced Transactions

8 M&A Announced Transactions with Revenue Multiples

9 Sub Sector Analysis: Enterprise Networking Charts 1-6

11 Sub Sector Analysis: Industrial Networking and M2M Charts 1-6

12 Sub Sector Analysis: Network Management Charts 1-6

13 Sub Sector Analysis: Network Security Charts 1-6

15 Sub Sector Analysis: Unified Communications and Contact Center Charts 1-6

16 FOCUS Telecom Technology and Services Team

Enterprise-Focused Telecom Technology Quarterly

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

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 four professionals with a mix of backgrounds that include both C-level operating expertise and experience at leading middle market investment banks. 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 bankers with C-level operating experience in the telecom industry,
- 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, and
- 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 a strong performance in our spring report, the FOCUS Enterprise-Focused Telecom Technology Index (EFTTI) reversed course and dropped 2.8% in our summer reporting period. This was despite a favorable market backdrop where the S&P 500 gained 3.6% and the NAS-DAQ gained 5.0% over the corresponding time frame. Even after this period's losses, the EFTTI still has a solid year-over-year gain of 9.1%. However, this period's underperformance means that the EFTTI no longer outperforms the broader indices over the past 12 months. The S&P 500 was up 13.7% in the past year, while the NAS-DAQ was up more than 20% over the same time period. Sector multiples remain higher than they were a year ago. The EFTTI revenue multiple increased from 2.7x to 3.0x, while the EBITDA multiple increased from 11.3x to 12.4x.

Enterprise Networking

The Enterprise Networking sub sector went from being the EFTTI's top performing sub sector in our spring report to the worst performing sub sector in the current reporting period. The sub sector dropped 6.1% in the past three months. The sub sector's difficulties can largely be attributed to a 7.7% drop at Cisco, but A10 Networks, D-Link, and Unizyx also experienced meaningful losses. On the plus side, Aerohive Networks jumped more than 20%, and both Accton and Extreme Networks boasted double digit gains. Over the full-year period, the Enterprise Networking sub sector increased a modest 5.6%. Arista Networks and Extreme Networks were star performers for the full year, as both stocks more than doubled in value. Sub sector multiples are up slightly compared to this time last year. The sub sector revenue multiple ended the period at 2.6x (up from 2.4x a year ago) and the sub sector EBITDA multiple closed out at 9.1x (up from 8.8x a year ago).

Industrial and M2M

The Industrial and M2M sub sector gained 1.3% in the current reporting period. This was consistent with the 1.0% gain in our spring report. However, whereas the sub sector was our worst performing sub sector in the spring, this period's gain made it our second best performing sub sector for our summer reporting period. Netcomm Wireless was the strongest performer with a three-month gain of 23.2%, and CalAmp, Numerex and Sierra Wireless also delivered highly respectable returns. Even with the increases in the last two periods, the sub sector is still only up slightly less than 4% over the past year. Sub sector multiples are also down, dropping from 1.7x revenue and 12.7x EBITDA a year ago to 1.5x revenue and 11.8x EBITDA currently.

Network Management

The Network Management sub sector was our second worst performing sub sector for the period with a threemonth drop of 5.9%. All three stocks in the index were in the red over the past three months. The sub sector also is our worst performer for the full year with a return of negative 4.7%. Despite these drops, the sub sector revenue multiple held steady at 3.1x compared to the year-ago period. However, the sub sector EBITDA multiple dropped from 13.3x last year to 11.7x at the end of the current reporting period.

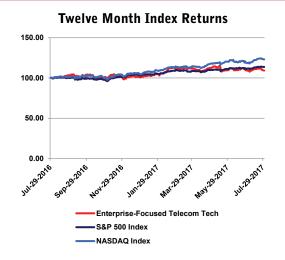
Network Security

The Network Security sub sector enjoyed a 5.3% gain in the past three months. This was good enough to make it the second best performing sub sector in the EFTTI this reporting period. Gains were broad-based as 13 of the 17 stocks in the index were in positive territory for the period. Sophos and SecureWorks led the way with gains of 33.5% and 26.5%, respectively. Other vendors with double digit gains included Barracuda Networks, FireEye, Guidance Software, Palo Alto Networks, Proofpoint, and Trend Micro. Sub sector performance also is strong for the fullyear period with a year-over-year gain of 22.0%. Sophos is once again the strongest performer in the 12-month period, with Symantec and Trend Micro also delivering exceptionally strong returns. Sub sector multiple continued to climb and closed out the period at 5.4x revenue and 41.5x EBITDA. This compares to year-ago multiples of 4.5x revenue and 35.3x EBITDA.

Unified Communications and the Contact Center

The Unified Communications and the Contact Center sub sector was our top performing sector in the summer reporting period with a three-month gain of 12.7%. Liveperson delivered the strongest return, nearly doubling in the past three months. Other contact center software vendors that delivered strong performances this period were eGain (up 23.3%) and Five9 (up 20.9%). Finally, we noted that both Mitel and Shoretel jumped up significantly in the wake of the announcement that the latter would be acquired by the former. Target Shoretel was up 13.7%, while acquirer Mitel was up an even higher 20.7%. The Unified Communications and the Contact Center sub sector is also the EFTTI's top performer over the 12-month period with a gain of 22.4%. Once again, Liveperson had the highest return with a gain in excess of 100%, but the Five9 return of nearly 75% also was extremely impressive. As one might expect, sub sector multiples are significantly higher than they were a year ago. The sub sector revenue multiple increased from 1.9x to 2.5x, while the sub sector EBITDA multiple expanded from 19.3x to 26.5x.

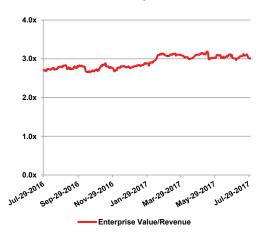
Enterprise-Focused Telecom Technology: Public Market Summary



Sector and Sub Sector Returns

	12 Month	3 Month
Enterprise-Focused Telecom Tech	9.1%	-2.8%
Enterprise Networking	5.6%	-6.1%
Industrial and M2M	3.9%	1.3%
Network Management	-4.7%	-5.9%
Network Security	22.0%	5.3%
Unified Comms & Contact Center	22.4%	12.7%
S&P 500	13.7%	3.6%
NASDAQ	23.0%	5.0%

Revenue Multiple Trends



Sector and Sub Sector Revenue Multiples

	7/31/2017	7/31/2016
Enterprise-Focused Telecom Tech	3.0x	2.7x
Enterprise Networking	2.6x	2.4x
Industrial and M2M	1.5x	1.7x
Network Management	3.1x	3.1x
Network Security	5.4x	4.5x
Unified Comms & Contact Center	2.5x	1.9x

EBITDA Multiple Trends



Sector and Sub Sector EBITDA Multiples

	7/31/2017	7/31/2016
Enterprise-Focused Telecom Tech	12.4x	11.3x
Enterprise Networking	9.1x	8.8x
Industrial and M2M	11.8x	12.7x
Network Management	11.7x	13.3x
Network Security	41.5x	35.3x
Unified Comms & Contact Center	26.5x	19.3x

Summary Comments

M&A

The trend of a high number of smaller deals continued this reporting period. We logged 38 total transactions with a relatively modest total announced dollar volume of just shy of \$1.7 billion. For the year, we now stand at 102 total transactions through the end of July. This puts the sector on pace to have its largest number of deals of any year of the past five. Conversely, with only \$4.4 billion in total announced dollar volume thus far this year, based on that metric this could be the sector's lightest year for M&A activity over that same five-year period. It remains to be seen if a few large deals in the back half of the year can help to reverse this trend.

Enterprise Networking

Activity in the Enterprise Networking sub sector remained relatively high with five transactions in the past three months. Software-defined networking was the key area of focus as AT&T acquired the Vyatta assets from Brocade, Pulse Secure acquired Brocade's virtual Application Delivery Controller assets, and Cisco acquired virtual WAN specialist Viptela. In addition, Expereo acquired routing optimization vendor Border6 while Belden acquired KVM video routing company Thinklogical from private equity group Riverside Partners.

Industrial and M2M

Industrial and M2M transaction activity slowed a bit with only two transactions in our summer reporting period. The first of these was the acquisition by ENGIE of Icomera, a company that specializes in Wi-Fi solutions for transportation operators. The second was Circa's acquisition of ruggedized telecommunications equipment manufacturer Guardian.

Network Management

The Network Management sub sector remained relatively tepid in terms of M&A activity with only three transactions this period. VMware came back to the deal table with its acquisition of performance monitoring company Apteligent, while SolarWinds beefed up its capabilities in the data center with the acquisition of Scout Server Monitoring. Finally, Kaseya International acquired IT asset management specialist Unigma.

Network Security

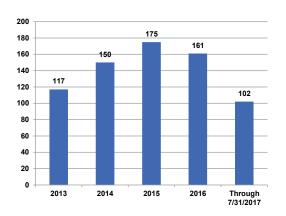
The number of transactions in the Network Security sub sector remained high with a total of 23 transactions for the period. The two largest in terms of announced dollar value were both by OpenText. The company first announced that it would acquire Covisint for \$103 million, then followed this up with the announcement that it would acquire Guidance Software for \$240 million. We also noted that both Cisco Systems and Microsoft made acquisitions in the security sub sector, while Symantec actually inked three deals in the space during the period.

Unified Communications and the Contact Center

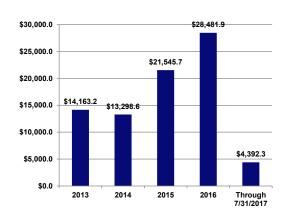
The Unified Communications and the Contact Center sub sector had a second straight period with five announced transactions. This included the period's largest transaction, the acquisition by Mitel of competitor ShoreTel for continued on page 6

Enterprise-Focused Telecom Technology: M&A Summary

M&A Activity: Number of Transactions



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



\$430 million. This was not Mitel's only acquisition for the period, as the company also acquired the unified communications business of Toshiba Networks. Other acquirers that were active in the space included software holding company Constellation Software (acquired collaboration software provider Magor Corporation), Freshdesk (acquired customer service SaaS vendor Gogetspeedy Technologies), and NetNordic Holding (which acquired contact center software company Intelecom Group).

Transactions with Announced Multiples

We counted five transactions with announced multiples this period, so we were once again fortunate to have a good number of transactions with information available. The period's largest transaction also had the lowest revenue multiple, as the Mitel acquisition of Shore Tel weighed in at 1.2x revenue. However, the EBITDA multiple was a much higher 42.4x. At the other end of the spectrum, the Belden acquisition of Thinklogical was done at 3.1x revenue and 9.3x EBITDA. The other three transactions fell in between these two extremes. In the other transaction with an announced multiple in the Unified Communications and the Contact Center sub sector, Constellation Software acquired Magor Corporation for a multiple of 1.6x revenue. Finally, OpenText's acquisitions of Guidance Software and Covisint were done at 2.1x revenue and 1.5x revenue, respectively.

Announced Transactions (05/01/16 - 07/31/17)

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
Consolidated Gems	Attofensive	Security	7/27/17	\$20.0	Develops autonomous penetration testing cyber security software.
Freshdesk	Gogetspeedy Technologies	Unified Comms & Contact Center	7/27/17	NA	Instant messaging customer service automation SaaS that enables businesses to chat with consumers.
Avast Software	Liberconnect	Security	7/27/17	NA	Provides VPN application and Internet privacy tools.
Mitel Networks	ShoreTel	Unified Comms & Contact Center	7/27/17	\$430.0	Internet protocol-based business communication solutions that integrate voice, video, data and mobile applications.
OpenText	Guidance Software	Security	7/26/17	\$238.8	Provides forensic security solutions including endpoint investigation solutions and security products.
SiteLock	Patchman	Security	7/25/17	NA	Web-based malware security protection SaaS for Web hosting providers.
Avast Software	Piriform	Security	7/19/17	NA	PC and Android mobile device anti-malware and optimization software and SaaS for consumers and businesses.
Rapid7	Komand	Security	7/18/17	NA	Security orchestration and automation system platform.
Circa	Guardian	Industrial and M2M	7/17/17	NA	Designer, manufacturer and supplier of hazardous and ruggedized high performance telecommunications equipment.
J2 Global	Simitu	Security	7/17/17	NA	Develops IT security solutions including anti-spam and antivirus.
Cisco Systems	Observable Networks	Security	7/13/17	NA	Provides endpoint security modeling SaaS that enables the monitoring of multiple devices on enterprise networks.
HyTrust	DataGravity	Security	7/11/17	NA	Data management platform that focuses on data visibility, security and availability for information technology professionals.
Symantec Corporation	Skycure	Security	7/11/17	NA	Mobile security SaaS for businesses that analyzes suspicious mobile apps and enforces company information security policies.
Symantec Corporation	Fireglass	Security	7/6/17	NA	Anti-malware managed security services that eliminate malware threats by containing potentially malicious content.
NetNordic Holding	Intelecom Group	Unified Comms & Contact Center	7/6/17	NA	Provides multichannel cloud contact center solutions to businesses.
Vision Solutions	Enforcive	Security	7/5/17	NA	Data security software and network security audit solutions for IBM i, AS/400, iSeries and mainframe computers.
Constellation Software	Magor Corporation	Unified Comms & Contact Center	6/28/17	\$2.1	Visual collaboration software platform that integrates personal computer collaboration, high definition video and wideband audio.
Expereo	Border6	Enterprise Networking	6/14/17	NA	Multi-home border gateway protocol internet routing and optimization software for corporations, businesses and ISPs.
Prevalent	Datum Security	Security	6/13/17	NA	Security risk and vulnerability assessment and remediation software for small-to-medium sized enterprises and vendors.
Honeywell	Nextnine	Security	6/12/17	NA	Operational technology and IT security management software and services to enable remote asset security for the industrial sector.

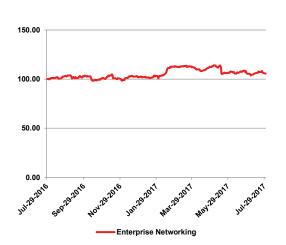
Announced Transactions (05/01/16 – 07/31/17) continued

Acquiror	Target	Sector	Date Announced	Purchase Price	Description
OpenText	Covisint	Security	6/5/17	\$103.0	Provides identity and access management SaaS and IoT application development SaaS for businesses.
Symantec Corporation	Watchful Software	Security	6/3/17	NA	Provides data identification, classification, loss prevention, analytics and digital rights management SaaS for businesses.
AT&T	Brocade Communications (Vyatta Assets)	Enterprise Networking	6/2/17	NA	Network routing, load balancing, address management, quality assurance and monitoring to manage physical and virtual networks
Pulse Secure	Brocade Communications (Virtual ADC Assets)	Enterprise Networking	6/1/17	NA	Provides on premise or cloud-based virtual controllers for businesses.
ENGIE	Icomera	Industrial and M2M	5/30/17	NA	Onboard communication multi-service Wi-Fi solutions for passengers and transportation operators.
Microsoft Corporation	Hexadite	Security	5/24/17	\$100.0	Automated incident response SaaS based on anti-virus, firewall and artificial intelligence reporting to mitigate cyberattacks
Insight Venture Partners	Resolve Systems	Security	5/24/17	NA	Unified incident response and automation software for security, IT and network operators.
RigNet	Cyphre	Security	5/22/17	NA	Encryption hardware and cloud-based, hosted and on-premise data security software for businesses.
SolarWinds	Scout Server Monitoring	Network Management	5/17/17	NA	SaaS software monitoring platform that ensures web apps and servers stay healthy.
Vmware	Apteligent	Network Management	5/15/17	NA	Performance monitoring SaaS for mobile app developers and IT organizations.
OPAQ Networks	Drawbridge Networks	Security	5/12/17	NA	Provides network security-as-a-service, unified threat management and remote access and control SaaS for businesses.
CyberArk Software	Conjur	Security	5/11/17	NA	Automated machine identity provisioning software that enables developers to identify and authorize specific users and jobs.
Mitel Networks	Toshiba (Unified Communications Business)	Unified Comms & Contact Center	5/11/17	NA	Cloud-based unified communications and collaboration software for enterprises.
Kaseya International	Unigma	Network Management	5/9/17	NA	Software enables IT asset management, remote access, systems monitoring, help desk and patch management.
Proximus Group	Davinsi Labs	Security	5/4/17	NA	Provides security event, vulnerability assessment management and user activity monitoring SaaS for enterprises.
Belden	Thinklogical	Enterprise Networking	5/4/17	\$160.0	Provides fiber-optic KVM video routers, extenders and switches for enterprise video teleconferencing networks.
BV TECH	Defenx	Security	5/3/17	NA	Provides a range of products for the mobile, PC and network security markets worldwide.
Cisco Systems	Viptela	Enterprise Networking	5/1/17	\$610.0	Cloud-based WAN virtualization software that enables businesses to build unified, carrier agnostic WAN and network infrastructures.

Announced Transactions with Revenue Multiples (08/01/16 – 07/31/17)

Acquiror	Target	Sector	Date Announced	Purchase Price	Revenue Multiple	EBITDA Multiple	Description
Mitel Networks	ShoreTel	Unified Comms & Contact Center	7/27/17	\$430.0	1.2 x	42.4 x	Internet protocol-based business communication solutions that integrate voice, video, data and mobile applications.
OpenText	Guidance Software	Security	7/26/17	\$238.8	2.1 x	NM	Provides forensic security solutions including endpoint investigation solutions and security products.
Constellation Software	Magor Corporation	Unified Comms & Contact Center	6/28/17	\$2.1	1.6 x	NM	Visual collaboration software platform that integrates personal computer collaboration, high definition video and wideband audio.
OpenText	Covisint	Security	6/5/17	\$103.0	1.5 x	NA	Provides identity and access management SaaS and IoT application development SaaS for businesses.
Belden	Thinklogical	Enterprise Networking	5/4/17	\$160.0	3.1 x	9.3 x	Provides fiber-optic KVM video routers, extenders and switches for enterprise video teleconferencing networks.
BICS	TeleSign	Security	4/25/17	\$230.0	2.3 x	NA	Cloud-based APIs and SDKs to help prevent registration fraud, reduce the risk of account takeover and authenticate end users.
Shearwater Group	SecurEnvoy	Security	4/20/17	\$25.7	6.4 x	9.6 x	Mobile phone based tokenless two-factor authentication solutions.
Extreme Networks	Brocade Communications (Data Center Switching Assets)	Enterprise Networking	3/29/17	\$55.0	0.2 x	NA	Switchers, routers and analytics SaaS for use in enterprise datacenters.
IMImobile	Infracast	Security	3/27/17	\$21.0	1.4 x	36.2 x	Develops and provides mobile communication, identity and security solutions.
Palo Alto Networks	LightCyber	Security	2/28/17	\$105.0	10.5 x	NA	Automated behavioral analytics capabilities to identify attacks based on behavioral anomalies inside the network.
NICS TECH CO.	Secuplus	Security	2/1/17	\$0.9	0.6 x	NA	Develops security software to counter cyber threats.
u-blox	SIMcom (Wireless Module Business)	Industrial and M2M	1/20/17	\$52.5	0.6 x	NA	2G, 3G and 4G wireless communication modules.
Nuri Telecom	Apivio Systems	Unified Comms & Contact Center	1/17/17	\$16.3	0.4 x	13.8 x	VoIP desktop telephones, wireless VoIP handset phones and an Android IP Phone.
Zhuhai Kaiteng Investment Partnership	Shenzhen ZTEWeLink Technology	Industrial and M2M	11/30/16	\$112.0	1.7 x	NA	Develops, manufactures and markets wireless communication modules, industry customized terminals and M2M solutions.
Broadcom	Brocade Communications	Enterprise Networking	11/2/16	\$5,936.2	2.6 x	12.1 x	Provides storage area networking and Internet protocol networking solutions for businesses and organizations.
Enghouse Systems	Presence Technology	Unified Comms & Contact Center	10/27/16	\$17.4	1.3 x	NA	Multi-channel contact center software solutions with a specific focus on Spanish speaking markets.
Vista Equity Partners	Infoblox	Network Management	9/19/16	\$1,254.3	3.5 x	NM	Offers tools for automated network discovery and the continuous secure operation of network services.
Genesys	Interactive Intelligence	Unified Comms & Contact Center	8/31/16	\$1,394.3	3.4 x	NM	Software and cloud services for customer engagement, communications and collaboration worldwide.

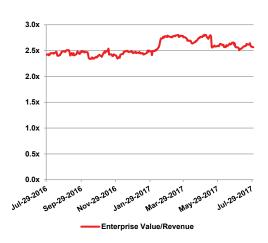
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Enterprise Networking Index	5.6%	-6.1%
A10 Networks	-9.6%	-12.7%
Accton	45.6%	17.5%
Aerohive Networks	-35.6%	21.7%
Arista Networks	109.5%	6.9%
Brocade	35.8%	0.5%
Cisco	3.0%	-7.7%
Citrix	-11.4%	-2.4%
D-Link	-8.6%	-11.2%
Extreme Networks	126.0%	12.5%
F5 Networks	-2.2%	-6.5%
NetGear	-6.9%	1.6%
Radware	40.7%	6.1%
Unizyx Holding (Zyxel)	-10.0%	-9.5%

Revenue Multiple Trends

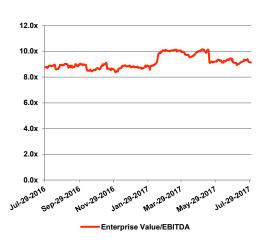


Company Revenue Multiples

	7/31/2017	7/31/2016
Enterprise Networking Index	2.6x	2.4x
A10 Networks	1.5x	1.8x
Accton	1.1x	0.9x
Aerohive Networks	1.2x	1.7x
Arista Networks	8.0x	4.3x
Brocade	2.3x	1.7x
Cisco	2.5x	2.4x
Citrix	3.5x	4.3x
D-Link	0.3x	0.3x
Extreme Networks	1.7x	0.7x
F5 Networks	3.2x	3.7x
NetGear	0.9x	1.0x
Radware	2.9x	1.6x
Unizyx Holding (Zyxel)	0.2x	0.3x

${\bf Sub\ Sector\ Analysis:\ Enterprise\ Networking\ } {\it continued}$

EBITDA Multiple Trends

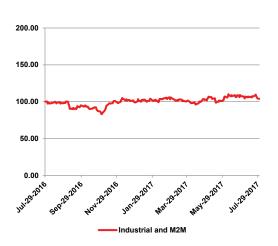


Company EBITDA Multiples

	7/31/2017	7/31/2016
Enterprise Networking Index	9.1x	8.8x
A10 Networks	NM	NM
Accton	12.6x	9.8x
Aerohive Networks	NM	NM
Arista Networks	34.0x	20.8x
Brocade	15.0x	6.8x
Cisco	8.1x	7.8x
Citrix	11.8x	14.9x
D-Link	NM	NM
Extreme Networks	27.8x	13.8x
F5 Networks	10.6x	12.6x
NetGear	9.2x	9.0x
Radware	924.1x	32.8x
Unizyx Holding (Zyxel)	6.9x	7.0x

Sub Sector Analysis: Industrial Networking and M2M

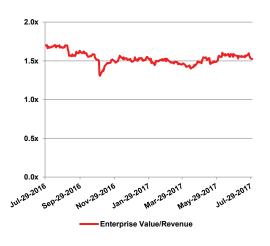
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Industrial and M2M Index	3.9%	1.3%
Belden	-1.7%	3.2%
CalAmp	34.5%	6.5%
Digi International	-5.9%	-15.7%
Inseego	NA	-44.9%
Netcomm Wireless	-42.4%	23.2%
Numerex	-37.9%	5.2%
Sierra Wireless	58.2%	6.3%
Telit Communications	2.5%	-26.6%

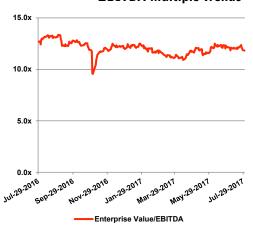
Revenue Multiple Trends



Company Revenue Multiples

	7/31/2017	7/31/2016
Industrial and M2M Index	1.5x	1.7x
Belden	1.6x	2.0x
CalAmp	2.1x	1.8x
Digi International	0.9x	0.8x
Inseego	0.7x	NA
Netcomm Wireless	2.5x	5.1x
Numerex	1.5x	2.0x
Sierra Wireless	1.7x	1.1x
Telit Communications	1.0x	0.9x

EBITDA Multiple Trends

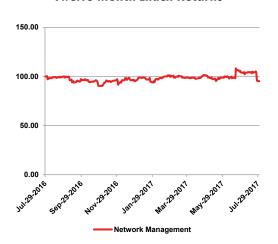


Company EBITDA Multiples

	7/31/2017	7/31/2016
Industrial and M2M Index	11.8x	12.7x
Belden	8.9x	11.9x
CalAmp	18.5x	13.5x
Digi International	9.9x	7.1x
InSeego	NM	NA
Netcomm Wireless	NM	134.8x
Numerex	NM	NM
Sierra Wireless	26.1x	23.2x
Telit Communications	11.5x	12.4x

Sub Sector Analysis: Network Management

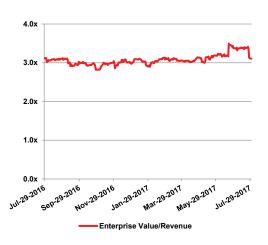
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Network Management Index	-4.7%	-5.9%
CA	-10.4%	-5.5%
Mobilelron	32.7%	-0.5%
NetScout	23.3%	-8.4%

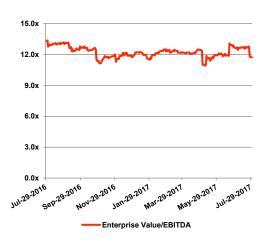
Revenue Multiple Trends



Company Revenue Multiples

	7/31/2017	7/31/2016
Network Management Index	3.1x	3.1x
CA	3.3x	3.4x
MobileIron	1.9x	1.3x
NetScout	2.7x	2.3x

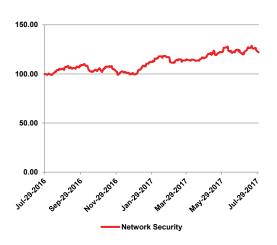
EBITDA Multiple Trends



Company EBITDA Multiples

	7/31/2017	7/31/2016
Network Management Index	11.7x	13.3x
CA	10.5x	11.2x
MobileIron	NM	NM
NetScout	14.7x	30.1x

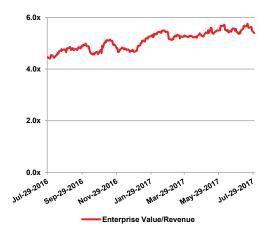
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Network Security Index	22.0%	5.3%
Barracuda Networks	1.8%	10.5%
Checkpoint	37.6%	1.7%
Cheetah Mobile	11.2%	4.7%
CyberArk	-26.1%	-21.2%
FireEye	-16.0%	16.9%
Fortinet	6.4%	-5.4%
Guidance Software	20.2%	16.9%
Imperva	-4.4%	1.3%
Palo Alto Networks	0.7%	21.6%
Proofpoint	12.4%	13.1%
Qualys	27.9%	4.6%
Rapid7	8.7%	-10.4%
Secure Works	-26.1%	26.5%
Sophos	81.3%	33.5%
Symantec	51.7%	-2.0%
Trend Micro	47.6%	12.7%
VASCO Data Security	-19.2%	0.0%

Revenue Multiple Trends

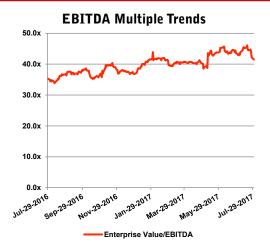


Source: Capital IQ

Company Revenue Multiples

	7/31/2017	7/31/2016
Network Security Index	5.4x	4.5x
Barracuda Networks	2.7x	3.0x
Checkpoint	8.7x	7.0x
Cheetah Mobile	0.3x	0.3x
CyberArk	5.1x	8.7x
FireEye	3.5x	3.9x
Fortinet	3.8x	4.3x
Guidance Software	1.8x	1.6x
Imperva	4.0x	5.0x
Palo Alto Networks	6.8x	8.8x
Proofpoint	8.4x	10.0x
Qualys	6.1x	4.9x
Rapid7	3.5x	3.8x
Secure Works	1.8x	2.8x
Sophos	4.4x	2.7x
Symantec	5.7x	2.5x
Trend Micro	4.6x	3.1x
VASCO Data Security	2.1x	2.5x

Sub Sector Analysis: Network Security continued

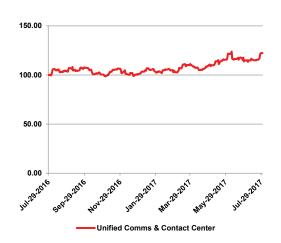


Company EBITDA Multiples

	7/31/2017	7/31/2016
Network Security Index	41.5x	35.3x
Barracuda Networks	26.8x	60.5x
Checkpoint	17.6x	13.8x
Cheetah Mobile	8.5x	4.0x
CyberArk	27.4x	42.9x
FireEye	NM	NM
Fortinet	37.0x	91.8x
Guidance Software	NM	NM
Imperva	NM	NM
Palo Alto Networks	NM	NM
Proofpoint	NM	NM
Qualys	25.4x	20.1x
Rapid7	NM	NM
Secure Works	NM	NM
Sophos	218.0x	46.3x
Symantec	31.5x	9.4x
Trend Micro	13.5x	10.0x
VASCO Data Security	40.6x	17.9x

Sub Sector Analysis: Unified Communications and Contact Center

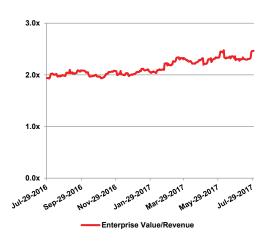
Twelve Month Index Returns



Company Returns

	12 Month	3 Month
Unified Comms & Contact Center Index	22.4%	12.7%
ClearOne	-20.4%	-6.3%
eGain	-25.4%	23.3%
Enghouse Systems	0.1%	-10.7%
Five9	74.9%	20.9%
Liveperson	103.0%	92.2%
Mitel	16.2%	20.7%
Shoretel	1.5%	13.7%
Verint	12.4%	0.9%

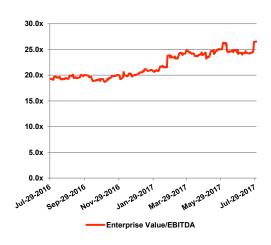
Revenue Multiple Trends



Company Revenue Multiples

	7/31/2017	7/31/2016
Unified Comms & Contact Center Index	2.5x	1.9x
ClearOne	1.5x	1.7x
eGain	1.0x	1.1x
Enghouse Systems	4.3x	4.5x
Five9	7.0x	4.4x
Liveperson	3.4x	1.4x
Mitel	1.3x	1.4x
Shoretel	1.1x	1.1x
Verint	2.7x	2.3x

EBITDA Multiple Trends



Company EBITDA Multiples

	7/31/2017	7/31/2016
Unified Comms & Contact Center Index	26.5x	19.3x
ClearOne	21.2x	8.0x
eGain	141.7x	NM
Enghouse Systems	17.0x	22.1x
Five9	414.5x	NM
Liveperson	91.2x	32.4x
Mitel	11.8x	11.0x
Shoretel	40.1x	19.7x
Verint	28.2x	21.3x

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