

AWS

Linux2

Comcast

VMware

Pure Storage

Google

Avere

ET

2017

“ ”

Fortinet

2018

CES

CheckPoint

SandBlast

NSS Labs

(TCO)

Infinity Total Protection

CoreOS

kubernetes

CNCF

Rook

Docker

LCOW

Docker

Linux

Windows

Bloomberg

Kubernetes

PowerfulSeal

OpenStack

Buoyant

Kubernetes

“ Conduit ”

linkD

VMware

github

Serverless

Dispatch

Open Whisper Systems Signal

Skype

E2E

Skygofree

Alphabet

Chronicle

Chrome 64

Spectre

4

8

Threatcare

1

140

Savage Security

FireEye

X15 Software Sumo Logic

FactorChain

Hackerone

Breaker 101

Anomali

Algosec

SOC

Arctic Wolf Networks

4000

3600

1600

1

1000

2018 2 2

+

1.	AWS	.....	1
1.1	AWS Linux2	.....	1
1.2	AWS	.....	2
1.3	Comcast AWS	.....	2
1.4		.....	2
2.	VMware	.....	2
2.1	Pure Storage VMware	.....	2
3.	GOOGLE	.....	3
3.1		.....	3
4.	Azure	.....	3
4.1	Avere	.....	3
4.2		.....	3
4.3	AI	.....	4
4.4	Azure	.....	4
5.		.....	4
5.1	BTV	.....	4
5.2		.....	5
5.3		.....	5
5.4	EHPC -	.....	6
5.5	CDN	.....	6
5.6	CodePipeline - -CodePipeline( )	.....	6
5.7		.....	6
5.8	-	.....	6
5.9		.....	7
5.10		.....	7
5.11	AI ET	.....	8
6.		.....	8
6.1		.....	8
6.2	CDN	.....	8
6.3	“ + ”	.....	8
6.4	TCE AI	.....	9
6.5	1	.....	9

7.	.....	10
7.1	.....	10
7.2	“ ”	10
1.	Openstack	11
1.1	Mirantis Ardrian Lonel CEO Openstack	11
2.	Easystack	11
2.1	AWS+EasyStack re:Invent	11
2.2	EasyStack OpenStack	11
3.	99CLOUD	11
3.1	“ ”	11
3.2	OpenStack	12
1.	.....	12
1.1	2017	12
1.2	Meltdown Spectre	12
2.	.....	13
2.1	Gartner IDPS	13
2.2	.....	13
3.	.....	13
3.1	“ ”	13
3.2	5G “ ”	14
3.3	.....	14
4.	.....	15
4.1	NIDS/NIPS “ ”	15
4.2	2017	15
5.	360	17
5.1	360	17
5.2	360	17
5.3	360	18
6.	.....	18
6.1	2017	18
6.2	“ ”	18
7.	.....	18
7.1	.....	18
7.2	Flyme “ ”	19
8.	Fortinet	19
8.1	Fortinet 2018 CES	19
9.	Checkpoint	20

9.1	Check Point Technologies	Infinity Total Protection	.....	20
9.2	Check Point SandBlast	NSS Labs		
	(TCO)	.....		20
1.	CoreOS	.....		21
2.	CNCF	-ROOK.....		21
3.	Docker	LCOW	Linux Containers on Windows	 22
4.	Bloomberg	Kubernetes	.....	23
5.	Buoyant	Kubernetes	“ Conduit”	 23
6.	VMware	github	Serverless	Dispatch..... 24
1.	Signal	Skype.....		25
2.		Skygofree	.....	25
3.	Alphabet	Chronicle		25
4.	Chrome 64	Spectre	.....	26
5.		.....		26
1.	.....			26
1.1	Threatcare	Savage Security	.....	26
1.2	FireEye	X15 Software	.....	26
1.3	Sumo Logic	FactorChain	.....	27
1.4	HackerOne	Breaker 101	.....	27
2.	.....			27
2.1	Algosec	3600	.....	27
2.2	Threatcare	140	.....	27
2.3	Arctic Wolf Networks	1600	C	 27
2.4	Cryptomove	600	A	 28
2.5	Anomali	4000	D	 28
2.6	Hysolate	800		28
2.7	Tigera	1000		28
2.8	Allure Security Technology	530		28

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1. AWS

1.1 AWS Linux2

1 3 AWS Linux

Linux2

Linux2

Linux 2

VMware Microsoft hyper-v

Oracle VM VirtualBox



Linux2

5

Bug

Linux2

1.2 AWS

1 10 AWS

1.3 Comcast AWS

1 16 AWS Comcast Cable AWS
Comcast Comcast
NBC Comcast XFINITY
XFINITY
NBC NBC Telemundo

1.4

1 17 Auto Scaling AWS

2. VMware

2.1 Pure Storage VMware



1 25 Pure Storage VMware VMware

Pure Storage

VMware vSphere® Metro Storage Cluster vSphere Virtual Volumes™ VMware Validated Design™

3. GOOGLE

3.1

1 16 AlphaBet 5 3

4. Azure

4.1 Avere

1 4 Avere Systems

Avere Systems 2008

Avere Systems Linux

Windows NFS SMB

Azure

Avere Systems

Avere Systems 8600

4.2

1 10

4.3

AI

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22

“

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AI

“

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4.4

Azure

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23

Monza Cloud

Azure

AzStudio

AzStudio

Microsoft Azure

40-60%



5.

5.1

BTV

1

4

IaaS

PaaS

SaaS

CDN

97.55

250

BTV

5.2

1 9

OSS NAS Plus

50



“

”

5.3

1 11

“

”

2017 2

“

+

”

“

”

“

”

2018

5.4 EHPC -

1 11 EHPC E-HPC
HPC

5.5 CDN

1 12
2017 12 31 104
70 CDN 147
CDN
CDN

5.6 CodePipeline - -CodePipeline()

1 15 CodePipeline CodePipeline
/ Jenkins Jenkins
SAAS CodePipeline

5.7

1 16

5.8 -

1 19 Cloud Call Center
IVR

5.9

1 19

+



5.10

1 19

(“ ”)

“ - ” (“ ”)

“

”

5.11

AI

ET

129

MDEC

DBKL

ET

281

- 1)
- 2)“ ”
- 3)

6.

6.1

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6.2

CDN

112

20171231104

70

CDN

147

CDN

CDN

6.3

“ + ”

119

“ +”

“ +”

6.4 TCE AI

1 22 TCE

AI



TCE IaaS PaaS SaaS

9 50

TCE

AI TCE AI

API SDK

AI

TCE PaaS Spring Cloud

Mysql TDSQL

6.5 1

CCI - CCI

Devmaster - Devmaster

DevOps

TGit

TGit

- TGit

Devmaster

TGit

- v1.0

-

CVM

API

1

2

3

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ID IP

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2

IP

7.

7.1

1 11

1. Openstack

1.1 **Mirantis** **Ardrian Lonel** **CEO** **Openstack**

1 25 Mirantis Ardrian Lonel CEO Mirantis

OpenStack CEO

Kubernetes

2. Easystack

2.1 **AWS+EasyStack** **re:Invent**

1 10 AWS re:Invent 2017 Recap EasyStack AWS

OpenStack+ AWS ESCloud Hybrid

OpenStack AWS

EasyStack + AWS

2.2 **EasyStack** **OpenStack**

1 12 OpenStack EasyStack

3. 99CLOUD

3.1 “ ”

1 4 • “

” OpenStack

Ceph

OpenStack Docker

CEPH SDN

500

3.2 OpenStack

1 25 ,

1.

1.1 2017

“ ” 2017 6 1

1.2 Meltdown Spectre

Google Project Zero Meltdown
CVE-2017-5754 Spectre CVE-2017-5753/CVE-2017-5715 CPU

CPU

2.

2.1 Gartner IDPS

Gartner IDPS Intrusion Detection and Prevention Systems
Gartner

Gartner

2.2

NGFW

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SMTP POP3

inbound outbound

3.

3.1 “ ”

2017 “ ” “ ”

OfficeScan

Deep Security

3.2

5G

“

”

IT

-
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-

3.3

CPU

4.

4.1 NIDS/NIPS “ ”

2018 1 Gartner IDPS(Intrusion Detection and Prevention Systems



SDN





5. 360

5.1 360

360				VMware
		360		VMware
360	VMware			VMwareReady™
360	VMware	vSphere	NSX®	
VMwarevSphere@5.0/5.1/5.5/6.0/6.5	NSX6.2.4/6.3.0		VMware	360
	vSphere	NSX		

5.2

360

360	360
360	

5.3 360

360 “ ”

CPU

6.

6.1 2017

1 17 2017

2017

3

“ ”

6.2 “ ”

“ ” “ ”

” “

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7.

7.1

“ ” Ω †

“

”

7.2 Flyme “ ”

8. Fortinet

8.1 Fortinet 2018 CES

Fortinet

Fortinet FortiOS R-Car H3 SoC

Fortinet Renesas CES

IPS DDoS

9. Checkpoint

9.1 Check Point Technologies Infinity Total Protection

CheckPoint

- APT
-
- SDN
- IOS Android
EMM
-
-

9.2 Check Point SandBlast NSS Labs (TCO)

“ ”

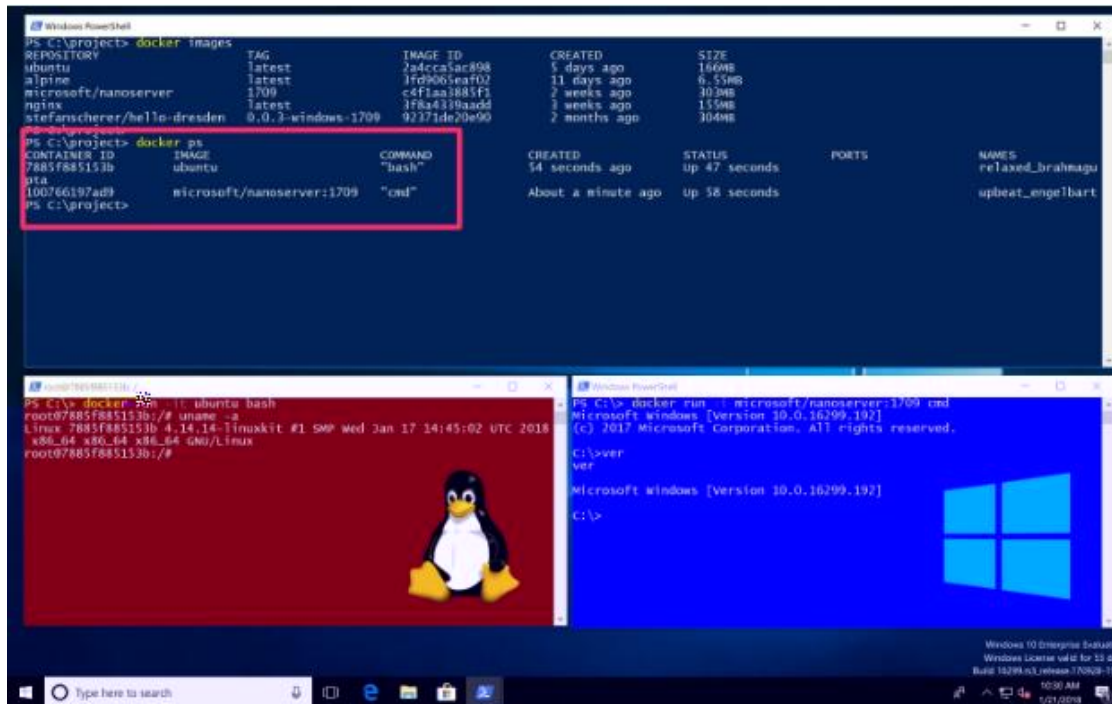
1. CoreOS



2. CNCF -ROOK

!

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4. Bloomberg Kubernetes

Austin	KubeCon	Bloomberg
“PowerfulSeal”	Kubernetes	Pods
PowerfulSeal	“ ”	Netflix Chaos Monkey
“ ”		
PowerfulSeal	Python	Kubernetes
OpenStack	PowerfulSeal	Python AbstractDriver

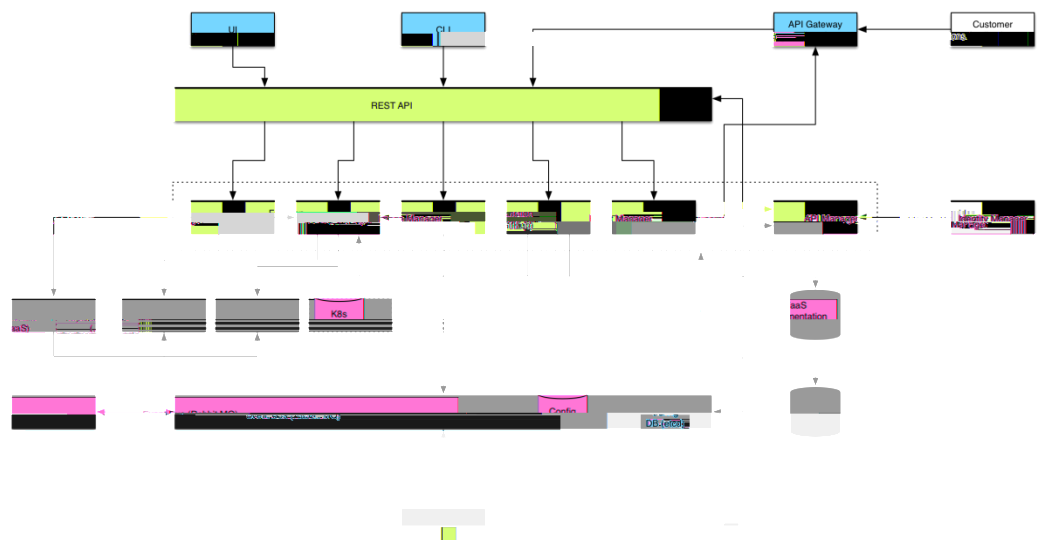
5. Buoyant Kubernetes “Conduit”

Linkerd	Buoyant	Kubernetes
“Conduit” Conduit	Rust	Go Conduit
Linkerd 2.0	Kubernetes	Buoyant
Linkerd		
Linkerd	Finagle Netty Scala JVM	

CPU Linkerd
 “ ” Kubernetes
 Conduit Buoyant “ ” Rust “ ”
 Go Conduit Conduit
 10M
 TLS Rust

6. VMware github Serverless Dispatch

VMware VMWorld 2017 Serverless
 Apache OpenWhisk FaaS FaaS
 Serverless VMware Serverless
 Dispatch VMware GitHub
 Dispatch Kubernetes
 Serverless Dispatch
 Kubernetes “ ” Serverless
 Dispatch Apache License 2.0



1. Signal Skype

Open Whisper Systems Signal
Skype E2E Skype
Skype
Signal Facebook WhatsApp Facebook Messenger
Google Allo
E2E Skype

2. Skygofree

2014 Skygofree
Android Accessibility
Services WhatsApp Wi-Fi
Skygofree
2015 Skygofree
Skygofree IT Skygofree
IT “ Negg ” “ Negg ”
Skygofree Skygofree exploit,
root Android
Skygofree shell C C

3. Alphabet

Chronicle

Google Alphabet
Chronicle 2016 X —Alphabet “ ”
“ ” Chronicle
· Stephen Gillet Chronicle

4. Chrome 64

Spectre

Windows Mac Linux Android Chrome 64 Chrome
 Meltdown Spectre
 Chrome 64 API CSS JavaScript ECMAScript
 Chrome V8 JavaScript Chrome 64

5.

WEF “
 ” - 48
 “ ” 2018
 /
 /

1.

1.1 Threatcare Savage Security

1 9 Threatcare Savage Security Threatcare
 Savage
 Security

1.2 FireEye X15 Software

1 11 FireEye X15 Software FireEye

Web Email

X15 Software

1.3 Sumo Logic FactorChain

1 23 Sumo Logic FactorChain Sumo Logic
FactorChain

1.4 HackerOne Breaker 101

1 24 Hackerone Breaker 101 HackerOne
Breaker 101
“ ”

2.

2.1 Algosec 3600

1 3 Algosec Claridge Israel 3600 AlgoSec

2.2 Threatcare 140

1 4 Threatcare Firebrand Ventures 2 140
Threatcare

2.3 Arctic Wolf Networks 1600 C

1 10 Arctic Wolf Networks Knollwood Investment Advisory 3
1600 C Arctic Wolf Networks SOC
“ ”
Arctic Wolf

2.4 Cryptomove 600 A

1 12 Cryptomove 408 Ventures 4 600 A
CryptoMove

2.5 Anomali 4000 D

1 17 Anomali Deutsche Telekom Capital Partners 7 4000
D Anomali

2.6 Hysolate 800

1 22 Hysolate Innovation Endeavors Team8 800 Hysolate

2.7 Tigera 1000

1 25 Tigera Madrona Venture Group 2 1000
Tigera

2.8 Allure Security Technology 530

1 25 Allure Security Technology Glasswing Ventures 3
530 Allure
Novo