

+

2019

3

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2.	VMWare		5
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1.	Openstack		19
2.	Easystack		20
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	AWS		AWS Elemental MediaPackage	
	Elemental MediaLive		HLS	VPC
License Manager			CPU	
	Amazon ECS		Elemental MediaConvert	
		S3	Amazon EKS	Kubernetes
API			AWS Direct Connect	500 Mbps
	VMware			Stadia
	Google			Azure Bot
	AI		Data Box Edge	5
				SaaS
			6	OpenStack
				PTL
EasyStack		OpenStack		
		2019		
				2019
CDM 3			RSA2019	EDR
AiLPHA		2019	SIEM	360
Gartner				

	Kubernetes1.14		windows	
	kubectrl		31	Istio1.1
CNCF	Kubernetes	Prometheus	Envoy	CoreDNS
containerd				
	App	9	App	
		Facebook		
	UC	(MITM)		
	W3C	WebAuthn		Web
ISACA	CASB	GDPR		
	Sandboxed API	Axonius		
		1	4	
Verizon		ProtectWise		
	eSentire	4700		
	CyberX			LogRocket
1800	1100			

+

1. AWS

1.1 AWS Elemental MediaPackage

3 4 AWS Elemental MediaPackage MediaPackage

MediaPackage

MediaPackage

AWS Elemental Media Services

1.2 Elemental MediaLive

HLS VPC

3 5 HLS AWS Elemental MediaLive MediaLive

#EXT-X-KEY

MediaLive

Amazon Virtual Private Cloud (Amazon VPC)

MediaLive

VPC

VPC

VPC

IP

RTP RTMP

AWS Elemental MediaLive

AWS Elemental Media Services

AWS

Elemental Media Services

1.3 Amazon ECS

3 7 Amazon Elastic Container Service (Amazon ECS)

AWS

Sidcar

ECS

1.4 License Manager

CPU

3 8 AWS

AWS License Manager

License Manager

License Manager

CPU

vCPU

vCPU

License Manager

1.5 Elemental MediaConvert

S3

3 13 AWS Elemental MediaConvert

Amazon CloudWatch

Amazon S3

MediaConvert

Amazon CloudWatch

10

10

MediaConvert

Amazon S3

Amazon S3

Amazon

S3 AWS Key Management Service (KMS)

AWS Elemental MediaConvert

MediaConvert

AWS Elemental Media Services

AWS Elemental Media Services

1.6 AWS Direct Connect 500 Mbps

3	19	AWS Direct Connect	AWS Direct Connect	AWS
		AWS Direct Connect	500 Mbps	
		AWS Direct Connect	1 2 5	10 Gbps
		AWS Direct Connect	AWS	
		AWS Direct Connect	AWS Direct Connect	
		AWS Direct Connect	AWS Direct	
		50 Mbps	500 Mbps	1 2 5 10 Gbps
			AWS	
		AWS Direct Connect	AWS	

1.7 Amazon EKS Kubernetes API

3	19	Kubernetes API	Amazon Elastic
Container Service for Kubernetes (EKS)		Kubernetes	
Kubectrl	EKS	Kubernetes API	
Amazon Virtual Private Cloud (VPC)		VPC	Kubernetes
	VPC	Kubernetes API	
VPC		IP	API
API			API
VPC		EKS	Kubernetes

2. VMWare

2.1 VMware

3	21	VMware
		VMware
		Cloud Foundation

VMware AWS

Amazon

VMware

1000

VMware

AWS

VMware

Ajay Patel

VMware Cloud Foundation

Dell EMC VxRail

VMware

VMware

60 IDC

Rick Villars

4

VMware

CloudHealth by VMware VMware

CloudHealth Technologies

VMware

Wavefront

CloudHealth

Joe Kinsella

CloudHealth

VMware

CloudHealth

80

40

API

Cloud Foundation 3.7

VMware Horizon 7

VMware

AWS

Cloud Foundation

13

VMware

4200

Patel

VMware

vCloud Director

9.7

VMware

VMware vCloud Availability 3.0
vCloud Director

3. GOOGLE

3.1 Stadia

3 20 CEO Sundar Pichai GDC Stadia

Phil Harrison YouTube YouTube

Chrome

Stadia Wi-Fi

YouTube Google Assistant

25Mbps 4K 60 fps, 8K 120
AMD GPU 10.7Teraflops Xbox One X PS4 Pro

Project Stream Chrome

Assassin's Creed Odyssey

1 Doom Eternal

Stadia 4K 60 HDR

3.2 Google

3 23

()

2015

(NLP)

Google

Google

Google

4. Azure

4.1 Azure Bot AI

3 16 Azure Bot

FUSE

Lili Cheng

-

Microsoft Bot Framework 4.6

Skype

Microsoft Teams Facebook Messenger Kik

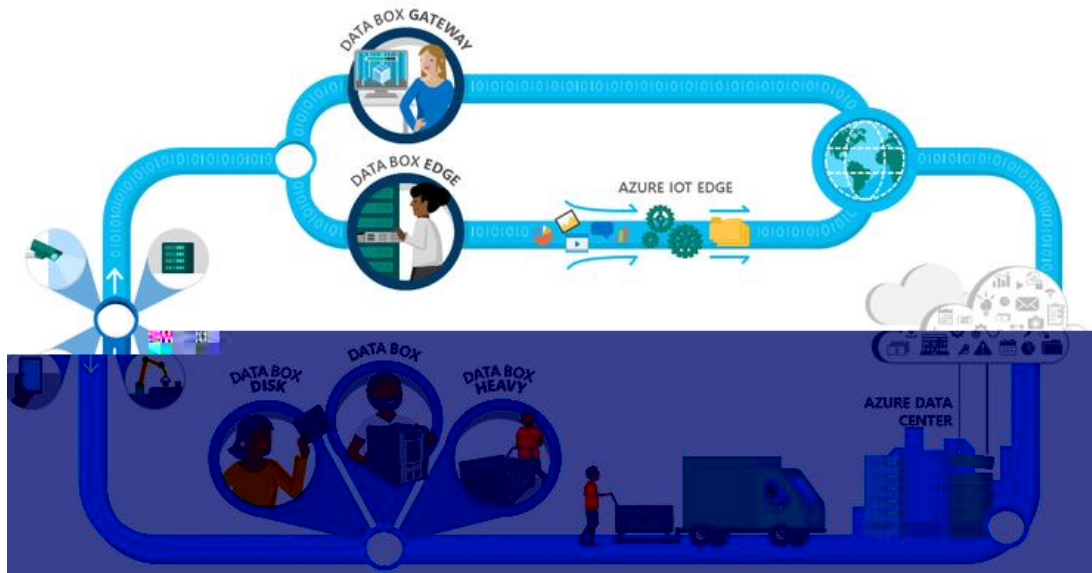
Azure Bot

(LUIS)

LUIS

4.2 Data Box Edge 5

3 27



Azure

5

5 Data Box

Data Box Edge Azure Data Box Gateway2

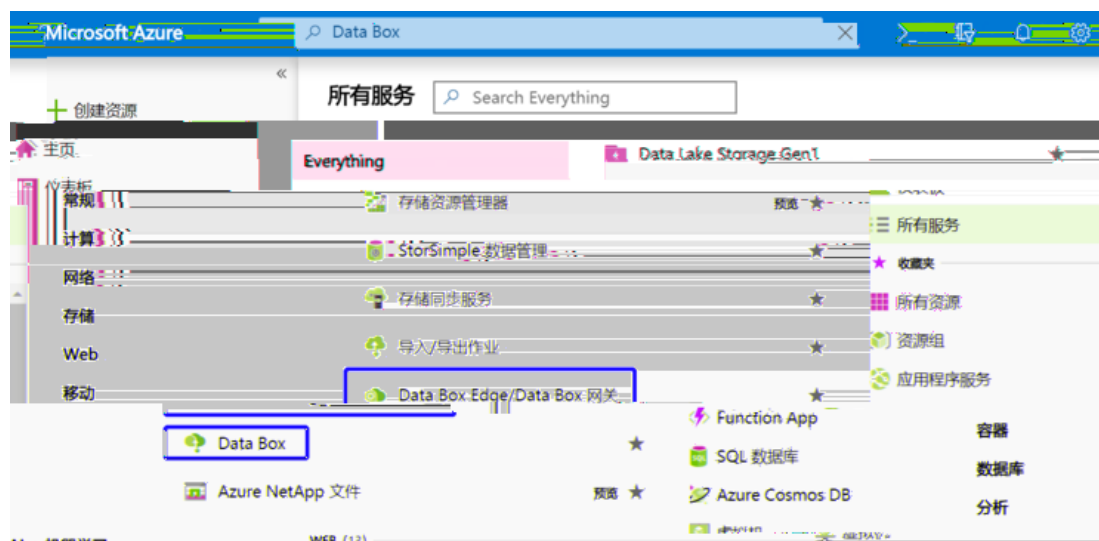
Data Box Data Box Disk Data Box Heavy Preview3

Azure Data Box

Dean Paron

Azure

Azure



Data Box Edge

Data Box Edge

Azure

Azure

Data Box Edge

Data Box Edge

IoT Edge

Azure



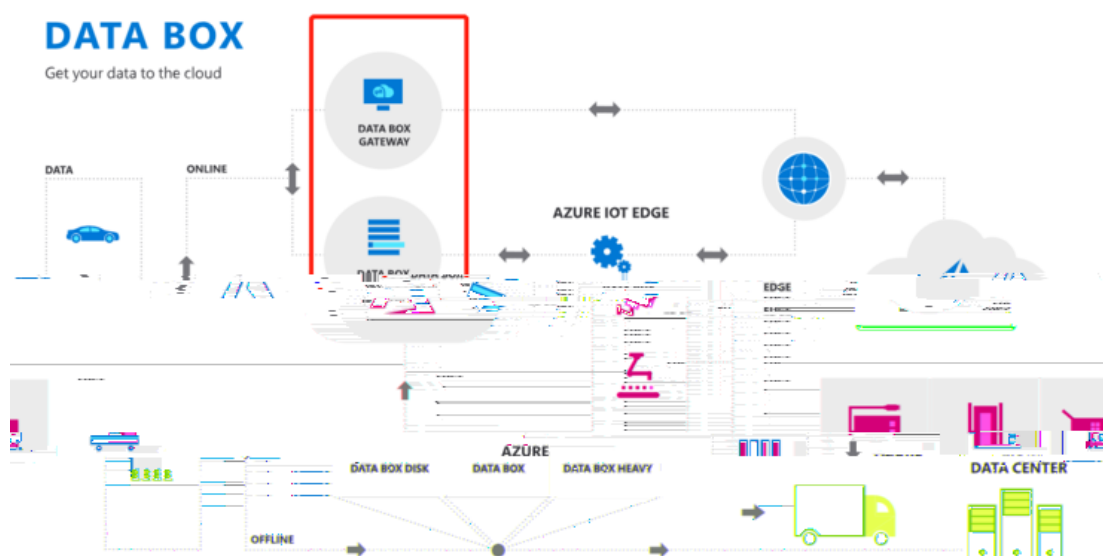
Data Box Edge

Data Box Edge

Data Box Edge

Data Box Edge

Azure



Data Box Edge

Data Box Edge

Azure

Data Box Edge

Arria 10 FPGA Azure

FPGA

Azure



SaaS

SaaS

SaaS

SaaS

SaaS

SaaS

SaaS

6.

6.1

3 21

AI

14000

1900

300

7.

7.1



Taurus

3

OBS() 11 9(99.99999999%)

Taurus

0

/

Taurus

MySQL 7 ;

Taurus

1/10

Taurus 1 15 /

CPU

Taurus

128TB

Taurus DBSS()

Taurus

MySQL 8.0

MySQL

Taurus

Gemini

Region	Gemini		Cloud Native		Serverless	
	NoSQL		NoSQL		NoSQL	
/	MongoDB	Cassandra	DynamoDB			
Gemini			3		Gemini	
Serverless						
Gemini			N-1			
					10	
	20					
Gemini						2

Gemini

7*24

Gemini

Region

DRS

?

?

?

DRS



DRS

RPO&RTO

DRS

DRS

0

DRS

VPN

VPC

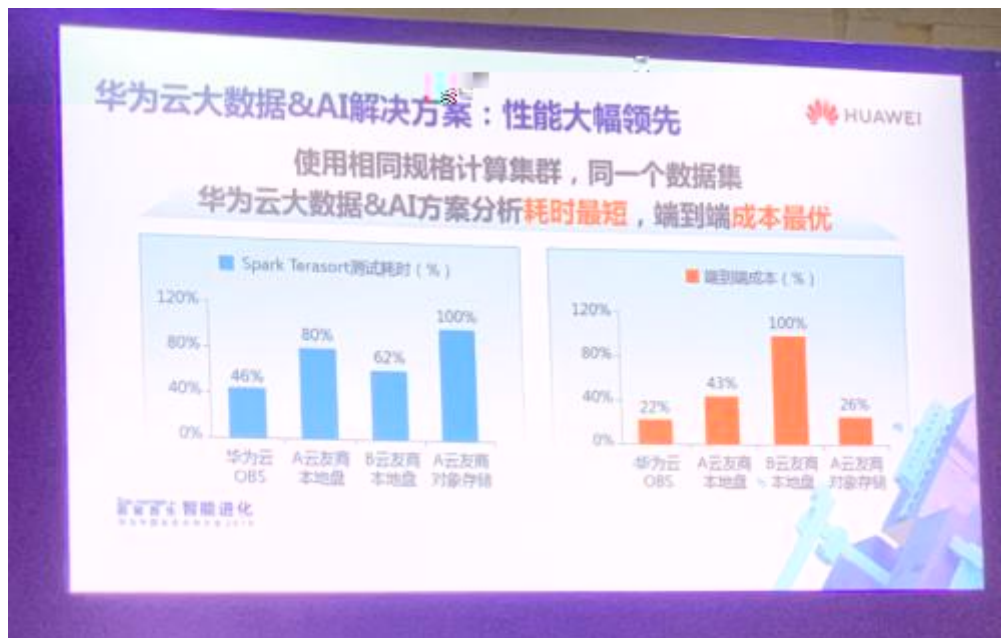
MySQL

SQL Server MongoDB PostgreSQL

7.2

3 27

OBS



AI

AI

；

；IT

；

AI

BMS

OBS

Spark Terasort

AI

AI

AI

CDN

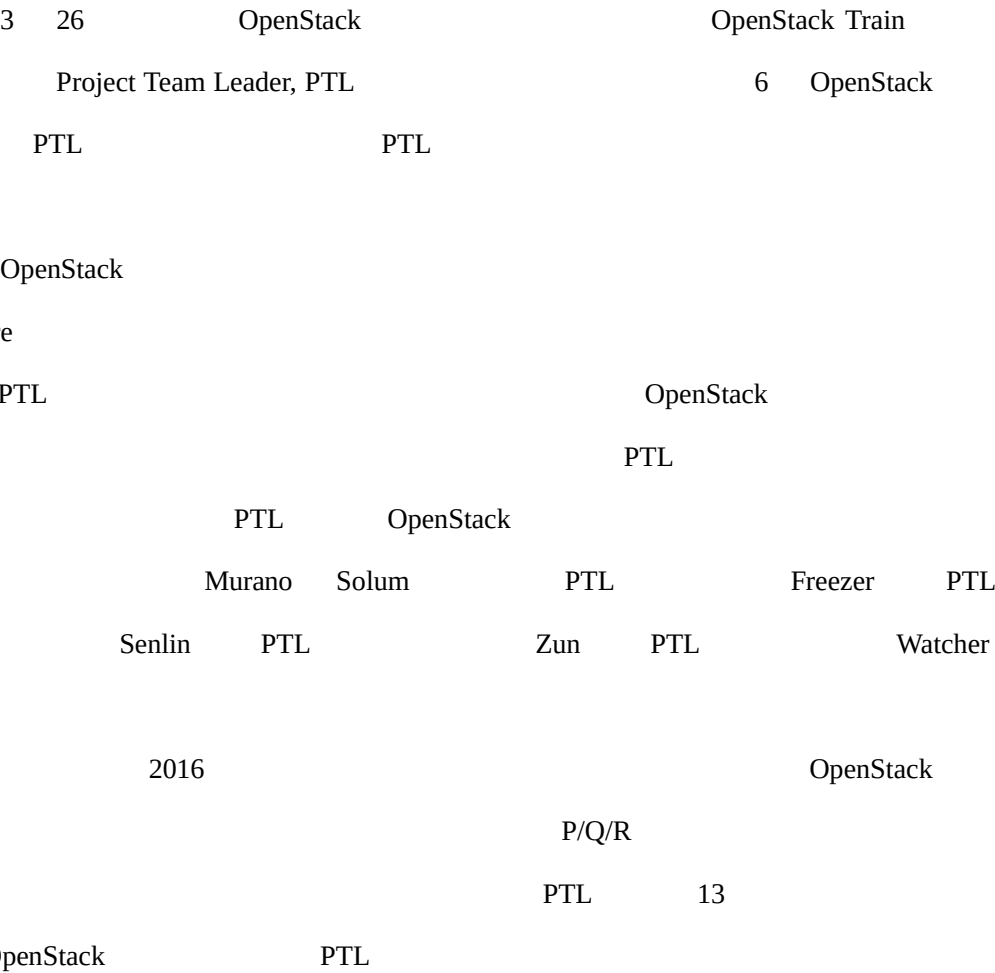
H.265

30%

AI

1. Openstack

1.1 OpenStack Train



2. Easystack

2.1 EasyStack

OpenStack

3 14

OpenStack

TC

EasyStack

OpenStack

OpenStack

OpenStack

3

1

2

3

+

2019

03

1

2018

2)

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2018

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3)

1.2 **2019**

3 21

2019

200



SDWAN NGFW

IT

1.3

IoT-VBox

IoT-VBox

+

2018

IoT-VBox



IoT-VBox

IoT-VBox

API

IoT-VBox

FW VPN WIFI

IoT-VBox

(V-UEBA)





2.

2.1

3 23

Winning World 2019

1200

+

HIS PACS

3.

3.1 2019 CDM 3

3 6 Cyber Defense Magazine

The Most Innovative Data Center Security for 2019 :

X10800

X10800

X10800

1Tbps

1000

4.8

400Gbps

IPS

IPv6

Breakout Cybersecurity Analytics for 2019 :

T

The Next Gen Cloud Protection for 2019 :

4.

RSA2019

RSA

3

4

700

42%

EDR

RSA

100% EDR

MSSP(

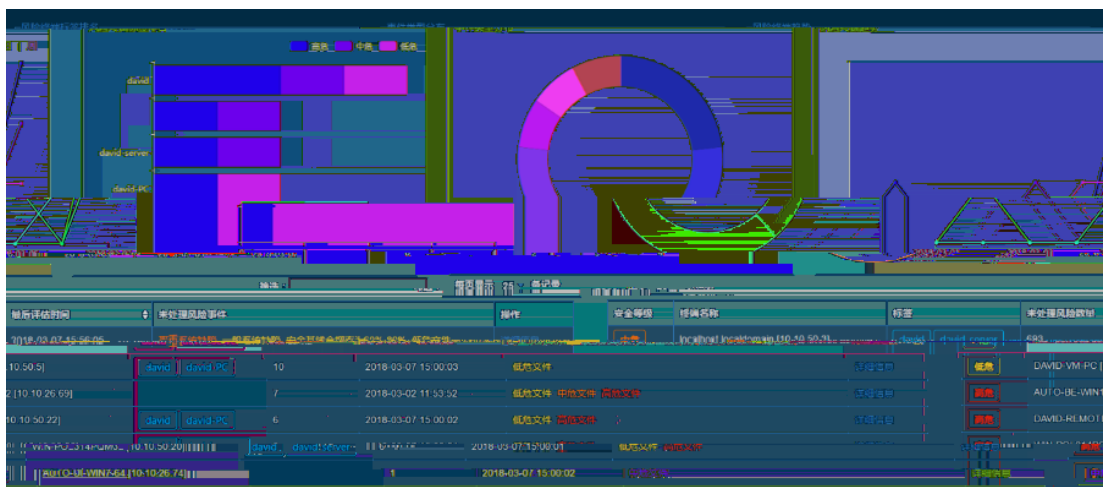
)

RSAC

MSSP

5.

5.1 EDR



APT

NSFOCUS Endpoint Detection and Response

NSFOCUS EDR

(EDR)

Gartner	2020	80%	25%	10%
EDR	EDR			

6.

6.1 AiLPHA 2019 SIEM

AiLPHA

Cyber Defense Magazine

CDM

Breakout Security Information Event Management (SIEM)

InfoSec Award for 2019

2019

SIEM

AiLPHA

AiLPHA

7. 360

7.1 360

360

Gartner

TrustSpace

360

Gartner

TrustSpace

BYOD

IT

360

Gartner

BYOD

COPE

360TrustSpace

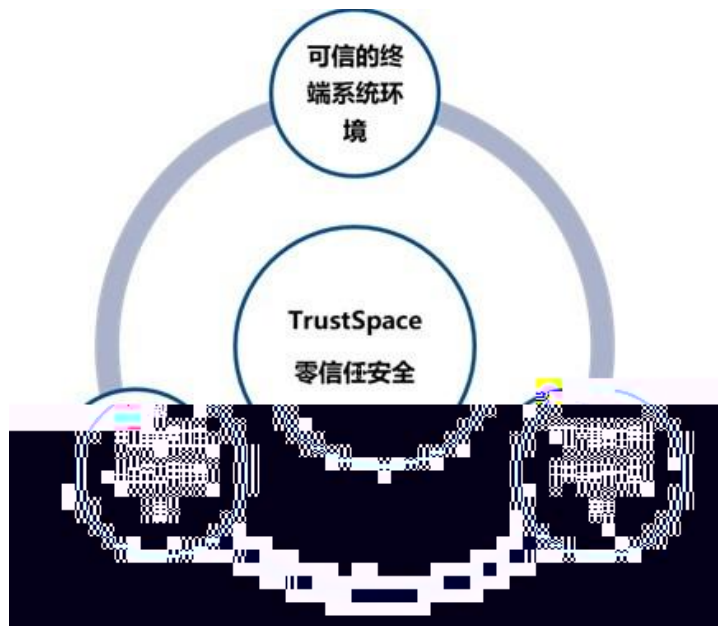
360

IT

TrustSpace

IT

BYOD



8.

8.1

2019 3 12

AV-Comparatives

Google Play

250

30%

Antiy

100%

85%

Test Results

Vendor	%	Vendor	%	Vendor	%
AhnLab		eScan		Alibaba	92.90%
Antiy		Ikarus		Tapi	92.40%
Avast		Quick Heal	99.80%	IntelliAV	91.80%
AVG		REVE		Panda	91.60%
AVIRA		Securion		Dr. Web	90.80%
Bitdefender		VIPRE		Privacy Lab	89.90%
BullGuard		Lookout	99.60%	Zoner	88.90%
Chili Security		Suprmobilesaf		APUS	
Emisoft		ESafe	99.32%	QAR Lab	
ESSET		Dr. Web	99.32%	Clean-Bocan	
ESRScan	99.0%	WebRebytes	99.40%	Formlabs	
F-Secure		CheckPoint	99.10%	Hypert Speed	
G Data		AV		IOG	97.80%
Gaspary Lab		Qihoo	98.00%	ONE App	
GenAler		Hi Security	98.50%	Phone Clean	
G Data		USM 1	98.40%	Power Tools	
Guyma		AgisLab	98.00%	Smooth Apps	
GTCPedia		Swinsong	97.70%	Super Cleaner	
Gymnet		Trabnet	97.40%	Super Security	
Tencent		Zenana	97.00%	Time Max & Appen	
Total Defense		Hawk App	97.00%		
Trend Micro		TrustGo	96.60%		
Trustware		Surgeon	94.00%		

2006

AVL SDK

863

9. Fortinet

10. Checkpoint

kubectl

:kubectl

kubectl

kubectl

porcelain

set-ns

SSD

PID**beta**

beta

Pod

PID

Pod

Pod

PID

node allocatable

Pod

PID

alpha

Pod

Pod

PID

Pod

Kubernetes

Pod

Pod

Pod

Pod Readiness Gates

Pod

RBAC

clusterrolebindings

API

CRD

2. Istio 1.1

<https://istio.io/docs/concepts/performance-and-scalability/>

Kubernetes

Galley

Galley

YAML

Galley

Kubernetes

3. containerd

containerd AWS Cloud Foundry Docker IBM
Rancher Labs
Kubernetes Prometheus Envoy CoreDNS
containerd

2014 containerd Docker Docker
2017 3 containerd
Docker OCI runc
containerd
[2] containerd
[3] CII 2018 9
1 CII [4]

containerd

- containerd
Containerd Linux Windows
- containerd
- containerd <https://github.com/containerd/containerd>

1. W3C WebAuthn Web

W3C Web API WebAuthn Web

[illegible]

2. Axonius

3 4 3 5 RSA 2019

Axonius

Axonius

100

Axonius

3. App

App

100 App

App

2019	1	12	App
------	---	----	-----

App

4. 9 App

9

1	PhotoLoop	20.4	7.9.0
2		1.0	2.2.0
3	Remember Everything-	1.1.0	-
-		1.0	Cuncaoxin Education
	1.1		1.0.6

5. ISACA

CASB

GDPR

ISACA

CASB

GDPR

IT

CASB

ISACA

CASB

CASB

ISACA

GDPR

6.

Sandboxed API

Sandboxed API

Sandboxed API

C

C++

Sandbox2

Linux

ISE

Sandboxed API

7. Facebook

KrebsOnSecurity

Facebook

Facebook

Facebook

Facebook Lite

Facebook

Instagram

Facebook Lite

Facebook

8. UC

(MITM)

UC

UC

HTTP

hook

UC

UC

UC

UC

1.

1.1 Verizon Communications

ProtectWise

3 1 Verizon Communications

ProtectWise

Verizon(VZ)

AT&T

ProtectWise

ProtectWise

2013 4

ProtectWise

ProtectWise Cloud Network DVR

ProtectWise

2.

2.1 eSentire 4700

3 4 eSentire Edison Partners 2 4700

eSentire

eSentire

2.2 LogRocket 1100 A

3 21 LogRocket Battery Ventures Matrix Partners 1100 A

LogRocket bug

2.3 Attivo Networks C

3 21 Attivo Networks Bain Capital 3 C

Attivo Networks

SCADA

2.4 CyberX 1800

3 25 CyberX Flint Capital 5 1800

CyberX