AWS

IoT MindSphere

AWS Google AI

AMD EPYC VMware

AI ET ET

ET AI CSA STAR Tech IaaS

OpenStack

OpenStack Kata Container Intel Google

Dell/EMC EasyStack 20

SOC Gartner

SIEM

360

Fortinet

IT

CloudPassage Docker

Openstack Kata

AWS Kubernetes AWS Fargate

Kubernetes Metaparticle

11 AWS re-Invent

Amazon GuardDuty

AWS AWS

PrivateLink SaaS

VPC IoT Services AWS IoT Device Management AWS IoT

Device Defender Amazon FreeRTOS

IoT

DNS Google Chrome 63

Strict Site Isolation

NIST NIST

Avast RetDec

7

Menlo Security 4000 C

12

neXus 2900

ShieldX Networks 2500 B

4

AI

2017 12 29

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1. AWS

1.1 1
1.2 1
1.3 1
1.4 2
1.5 AWS 49 2

2. VMware

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2.2 VMware 2

3. GOOGLE

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4. Azure

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4.2 Azure 3
4.3 Azure AMD EPYC 3
4.4 TomTom Azure LBS 4
4.5 SAP S/4HANA Azure AI 4

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2. Openstack Kata

3. AWS Kubernetes Fargate

4. Kubernetes Metaparticle

5. AWS

6. DNS

7. Chrome 63

8. NIST

9. Avast RetDec

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1. AWS

1.1

IoT MindSphere

AWS

MindSphere

PaaS

AWS MindSphere

1.2

AWS AWS

AWS 40%

AWS

AWS

1.3

(AWS)

AWS (IoT) Amazon FreeRTOS IoT

Amazon FreeRTOS

IoT AWS

Greengrass

Amazon FreeRTOS AWS

1.4

Expedia

NFL

1.5 **AWS** **49**

3

AWS 18 49 2018 4

2016 vFORUM VMware VMware vCloud AirNetwork (VMware Cloud Provider Program VCPP) VMware IT VMware VMware

VMware T4 VCPP

3. GOOGLE

3.1 AI

Google Cloud AI AI AI AI

4. Azure

4.1 Azure Bot

Azure Bot

Azure Bot bots

4.2 Azure

Azure

Azure 42 Azure

4.3 Azure AMD EPYC

AMD AMD EPYC

Azure AMD EPYC

L (VM) Lv2 AMD EPYC

4.4 TomTom Azure LBS

TomTom TOM2 Azure TomTom

Azure

Azure Azure TomTom API

4.5 SAP S/4HANA Azure AI

SAP SE

IaaS

5.

5.1 AI ET

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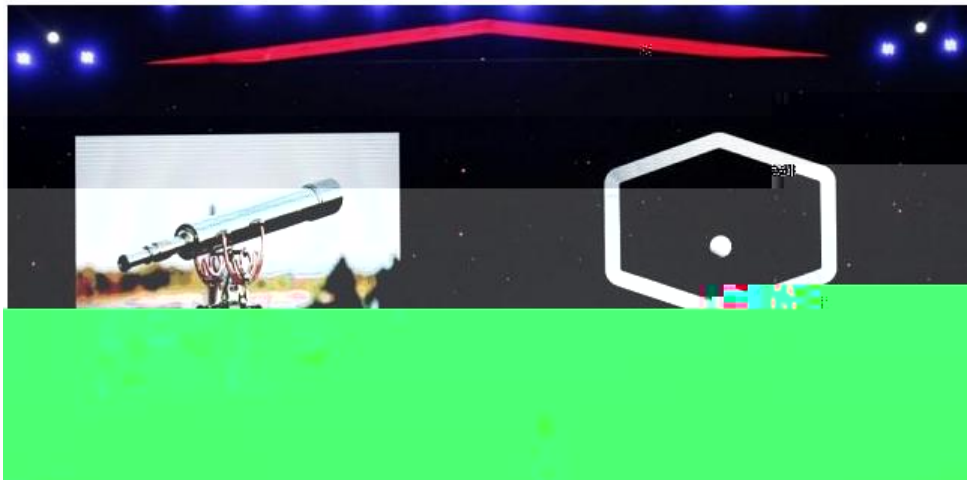

5.2 ET

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1700 5000

5.3

2018

BMW Link

Link Voice

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12000

584 3000

5.5

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5.6 ET APP

ET

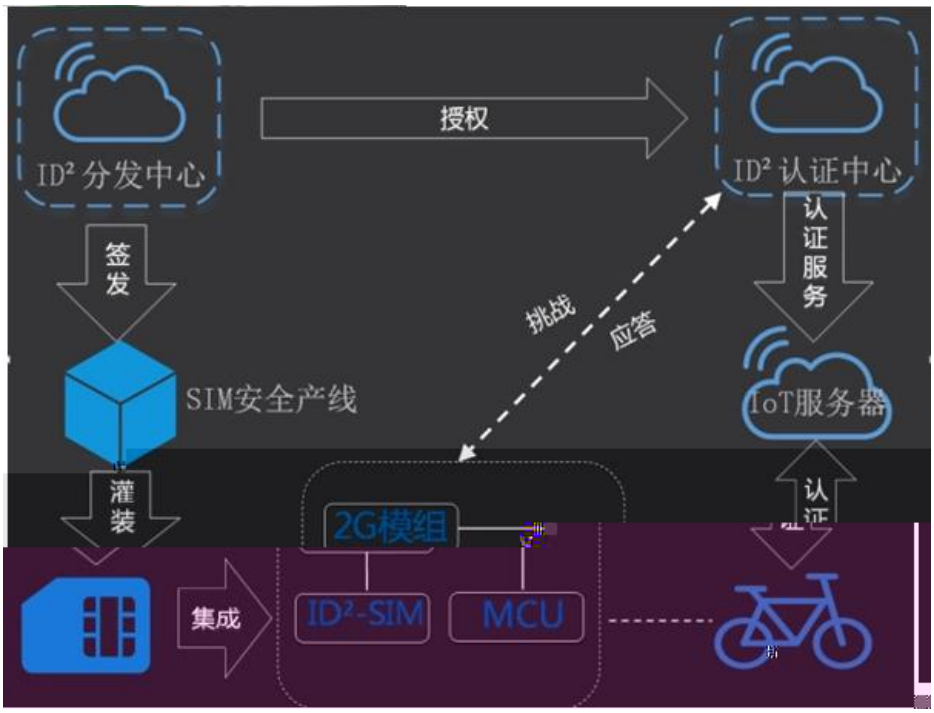
ET 310

APP

5.7

ID SIM

ID2 SIM



5.8 **AI**

ET

ET

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ET

ET

ET

1-2 ET

5.9 DDoS

DDoS

5.10 AI

( )

ET

6.

6.1 CSA STAR Tech IaaS

Cloud Security Alliance CSA

CSA STAR Tech Security,Trust & Assurance Registry Tech IaaS

CSA STAR Tech

CSA STAR Tech CSA OCF Open Certification Framework

IaaS PaaS SaaS

CSA

CSA STAR Tech

6.2

6.3

6.4

IDC

23 CMEG 2017

6.5 **TDinsight**

TDinsight

Spark Python R XGBoost

6.6

7.

7.1 OpenStack

OpenStack OpenStack

FusionSphere NFV SDN

SDN NFV

1. Openstack

1.1 OpenStack Kata Containers

InfoQ OpenStack Kata Containers

Clear Hyper runV Open Container Initiative(OCI)

Kubernetes Container Runtime Interface(CRI)

Kata Agent Runtime Proxy Shim Kernel QEMU 2.9

OpenStack

Clear Hyper runV Clear

VT Clear

Hyper runV OCI OCI

Hyper runV Xen KVM

Kata runV

2. Easystack

2.1 EasyStack Kata EKS CNCF

12 6 23 KubeCon+CloudNativeCon

EasyStack CNCFCertified Kubernetes EKS EasyStackKubernetes Service

OpenStack KataContainers

OpenStack Kata Containers VM

Kata Container OpenStack

Intel Google Dell/EMC EasyStack 20

KubeCon/CloudNativeCon CNCF 42 Certified Kubernetes Partner EKS CNCF EasyStack CNCF Certified Kubernetes

2.2 EasyStack

2017 12 6 EasyStack

3. 99CLOUD

3.1 Intel Hyper OpenStack Kata Containers

OpenStack KubeCon Apache 2.0 Kata Containers OpenStack OpenStack

Kata Containers

1.

1.1 SOC Gartner SIEM

IT Gartner 2017 SIEM

SOC

SIEM

Gartner SIEM

SIEM

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SIEM SIEM

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2016 17.8%

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+ 2017 12

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1. CloudPassage Docker

CloudPassage Container Secure Docker

/ Container Secure

DevOps

2. Openstack Kata

OpenStack Foundation Kata Containers

Workload Kata Containers

GitHub

Kata Containers Clear Hyper runV Open Container Initiative OCI Kubernetes Container Runtime Interface CRI

Clear VT

Clear

Hyper runV OCI OCI

Hyper runV runV Xen KVM

Kata 6 Agent Runtime Proxy Shim Kernel QEMU 2.9 OpenStack 99cloud AWcloud Canonical City Network CoreOS Dell/EMS EasyStack Fiberhome

5. AWS

11 AWS re-Invent

IoT

Amazon GuardDuty

AWS AWS CrowdStrike

Proofpoint Alert Logic Evident.io Palo

Alto Networks RedLock Rapid7 Sumo Logic Splunk Trend Micro

AWS PrivateLink SaaS

VPC CA Technologies Aqua Security Dynatrace Cisco SigOpt

IoT Services AWS IoT Device Management AWS IoT Device Defender

Amazon FreeRTOS IoT

AWS IoT 1-Click IoT Device Management IoT Device Defender IoT Analytics

Amazon FreeRTOS Greengrass ML Inference

6. DNS

- RT

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DNS

DNS DNS

DNS DNS

DNS DefecTor Tor

7. Chrome 63 Strict Site Isolation

Google Chrome 63 Strict Site Isolation

Chrome

Strict Site Isolation

8. NIST

NIST NIST NIST

2017 12 5 1.1

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2017 1

2017 5 NIST 2014

NIST

NIST

9. Avast RetDec

Avast RetDec

Botconf 2017 RetDec

- -

- C Avast LLVM RetDec

Apocalypse BadBlock Bart CrySiS TeslaCrypt

1.

2.

2.1 Alcide 520

12 6 Alcide Elron Intel 520 Alcide

Alcide

DevOps

Alcide

2.2 Menlo Security 4000 C

12 11 Menlo Security 7 4000 C

Menlo Security Web

Menlo Security

2.3 Tempered Networks 700

12 11 Tempered Networks 3 700

Tempered Networks

2.4 NuCypher 430

12 12 NuCypher 11 430

NuCypher

NuCypher

2.5 ShieldX Networks 2500 B

12 12 ShieldX Networks Ashar Aziz 5 2500 B

ShieldX

2.6 neXus 2900

12 20 neXus 2900 neXus

ID

2.7 SparkCongnition 70.6

12 20 SparkCognition 70.6 SparkCognition

IT OT IoT

SparkCognition