+

2018 11

+

1.
1.1 Amazon S3 3
1.2 Amazon Inspector EC2 3
1.3 AWS Deep Learning AMI Chainer 5.0 3
1.4 Amazon API Gateway AWS WAF 4
1.5 Amazon RDS for Oracle 4
1.6 Amazon Inspector 4
1.7 AWS Secrets Manager CloudFormation 5
1.8 Amazon RDS for Oracle Oracle 12.2 5
1.9 Amazon ECS AWS Fargate 5
2.
2.1 VMware Kubernetes Heptio 6
3.
3.1 Google CEO 7
4.
4.1 8
5.
5.1 - 8
6.
6.1 8
6.2 , ... 9
7.
7.1 OpenStack 10

1.
1.1 2018 OpenStack 10
2.
2.1 Ceph EasyStack 13
2.2 EasyStack 2018 OpenStack 15

3.
3.1 15
3.2 StarlingX TSC 15

1.
1.1 16
1.2 IoT-VBox 50 16
1.3 2.0 18
1.4 CERNET 2018 19
2.
2.1 C-V2X 19
3.
3.1 GITC 2018 21
4.
4.1 21
5.
5.1 “2018 ” 21

1.
2.
3.
4.

1.1 Threat Stack Bluefyre 27
1.2 ForeScout Technologies SecurityMatters 27
1.3 SolarWinds 8MAN 28
1.4 BlackBerry Cylance 28

2.1 Shape Security 2600 E 28
2.2 Netskope 1.68 F 28
2.3 Automox 930 A 29
2.4 Duality 400 29
2.5 XM Cyber 2200 A 29
2.6 Alcide 700 A 29

AWS Amazon S3

Amazon API Gateway AWS WAF Amazon RDS for Oracle

Oracle 12.2 AWS Secrets Manager CloudFormation

AWS ECS AWS Fargate AWS Deep

Learning AMI Chainer 5.0 Amazon Inspector

EC2 VMware Kubernetes

Heptio Google CEO

-

,

OpenStack

OpenStack Summit 2018 OpenStack

Ceph EasyStack

EasyStack 2018 OpenStack

StarlingX TSC

50 2.0

C-V2X

GITC 2018

2018

Envoy

Aqua Security AWS

Azure Kubernetes AKS

Microsoft Azure Azure

Kubernetes AWS

Serverless microVM Firecracker

25

2018 Q3 Android

320 40% CPU

4 6

BlackBerry 14 Cylance

ForeScout Technologies 1.13

SecurityMatters 2

Netskope 1.68 F

Shape Security APT XM

Cyber 2600 E 2200 A

2018 11 30

+

1. AWS

1.1 Amazon S3

11 2 Amazon S3

S3

S3 S3

Amazon S3

99.999999999% Amazon S3

S3

1.2 Amazon Inspector EC2

11 5 Amazon Inspector

Amazon EC2 Amazon (AMI) ID Auto Scaling

IP DNS ID

AWS API CLI

Amazon Inspector

Amazon Inspector

EC2

1.3 AWS Deep Learning AMI Chainer 5.0

11 5 Ubuntu Amazon Linux AWS Deep Learning AMI

Python 3.6 iDeep 2.0 Chainer 5.0 Deep Learning AMI

Chainer 5.0 Amazon EC2 CPU GPU

AWS Deep Learning AMI TensorFlow PyTorch Apache MXNet

Amazon EC2

1.4 Amazon API Gateway AWS WAF

11 5 Amazon API Gateway API AWS WAF

API Web

AWS WAF Web

Web Web API

AWS WAF Amazon API Gateway API SQL

(XSS) IP /

Web HTTP

AWS Marketplace API

OWASP 10 (CVE)

1.5 Amazon RDS for Oracle

11 6 Amazon MAX_STRING_SIZE

EXTENDED Amazon RDS for Oracle

VARCHAR2 NVARCHAR2 RAW 32767

Oracle 12c

1.6 Amazon Inspector

11 8 Amazon Inspector

VPC Amazon EC2

Inspector AWS Internet

VPN Direct Connect VPC

Amazon Inspector AWS

EC2

AWS AWS

Amazon Virtual Private Cloud (VPC) (ACL)

AWS

EC2 Inspector

Inspector

(CVE) Amazon EC2

EC2

1.7 AWS Secrets Manager CloudFormation

11 12 AWS CloudFormation AWS Secrets Manager

AWS AWS

AWS Secrets Manager IT

AWS Secrets Manager AWS CloudFormation CloudFormation

IT

AWS Secrets Manager AWS CloudFormation

1.8 Amazon RDS for Oracle Oracle 12.2

11 13 Oracle 12.2 Amazon RDS for Oracle

AWS Oracle 12.2

12.2.0.1.ru-2018-10.rur-2018-10.r1

Oracle (RU)

(RUR) (PSU) RU RUR

1.9 Amazon ECS AWS Fargate

11 15 Amazon Elastic Container Service Amazon ECS AWS

Fargate

ECS

ECS API ECS

AWS Fargate ECS

EC2 ECS

ECS EC2

Amazon (ARN)

(ID) ARN ID

2. VMWare

2.1 VMware Kubernetes Heptio

11 8 VMware Heptio Heptio Kubernetes

Joe Beda Craig McLuckie Kubernetes

Beda McLuckie VMware

VMware

PitchBook Heptio 2017 2500 B 1.17

Lightspeed Accel Madrona

Heptio VMware Kubernetes

VMware VMware 50

7.5 Heptio

10

IBM 340 RedHat IBM

Heptio Kubernetes Kubernetes

VMware

Kubernetes

Kubernetes

VMware Paul Fazzone Heptio

VMware PKS Kubernetes

VMware Pivotal PKS Kubernetes

Heptio

Heptio Kubernetes

Heptio Craig McLuckie

VMware VMware Heptio

Crunchbase VMware 33

Kubernetes

VMware 2019

3. GOOGLE

3.1 Google CEO

11 17 - (Diane Greene)

- (Thomas Kurian) Kurian 11 26 Cloud

2019 CEO

2012 Alphabet

VMware Spotify Snap

Synergy Research Amazon Web Services

34% 15% IBM( )

( ) Alphabet

5G

6.2 ,

11 19 , ,

,

—— ,

, ,

,

,

,

,

7.

7.1 **OpenStack**

IT OpenStack

2017 3% 2018 8% Banco Multiva,

eBay Classifieds Group Progressive , SBAB

/ 2017 4% 2018 6 / 2017

3% 2018 4 OpenStack

z Kubernetes OpenStack

2018 61% Kubernetes OpenStack

PaaS BBVA CERN

Kubernetes 2016 OpenStack

OpenStack Kubernetes ——

Kubernetes 70%

- Kubernetes OpenStack

2018 OpenStack OpenStack Ironic

24% Ironic 2016 9% Ironic

OpenStack OpenStack OpenStack

Kubernetes Ironic 37% OpenStack Kubernetes

CNCF Magnum 16

- OpenStack OpenStack

OpenStack OpenStack

78% OpenStack 44%

AWS 28% Azure 24% Google

OpenStack 58

- OpenStack TOP3

2018 OpenStack OpenStack

OpenStack OpenStack

OpenStack

OpenStack

OpenStack EasyStack

OpenStack

2017 2018

OpenStack

OpenStack OpenStack

EasyStack

10 IBM 340

Github VMware Kubernetes Heptio

Dell EMC HPE 33% 29% 27%

IT OpenStack TOP3

2. Easystack

2.1 Ceph EasyStack

11 12 Linux Ceph Day Ceph

Ceph EasyStack 30

Ceph

Ceph Ceph

Ceph

Ceph

EasyStack Ceph

Ceph Ceph Ceph

Ceph EasyStack

Linux Jim Zemlin "Ceph

Linux Ceph

Ceph "

Ceph Sage Weil "Ceph

"

EasyStack CTO

EasyStack Ceph

EasyStack Ceph

2.2 EasyStack 2018 OpenStack

11 13 OpenStack Summit OpenStack 2018 OpenStack OpenStack 22% EasyStack OpenStack EasyStack OpenStack

OpenStack 11 OpenStack 2017 8 2018 8 1483 63 858 441 OpenStack 2018

OpenStack 75% OpenStack TOP3

1.

1.1

I

1.2 **IoT-VBox** **50**

+

IoT-VBox

+

IoT-VBox + Discover Protect

Visibility Control

Payload

1.3 **2.0**

2.0

2.0

1.4 CERNET 2018

CERNET HERNET

CERNET CERNET 2018

2.0

+

2.0

2.

2.1 C-V2X

LTE-V2X

C-V2X CC

Server V2X

3.

3.1 GITC 2018

2018 GITC 11

2018

1. Envoy

CNCF Envoy Kubernetes Prometheus

Envoy

Envoy ;

HTTP/2 gRPC MongoDB Redis Thrift API

250 Envoy InfoWorld 2018 Airbnb Booking.com eBay F5 IBM Lyft Medium Netflix Pinterest Salesforce Square Stripe Twilio Verizon VSCO 3000

2. Aqua Security AWS

Aqua Security AWS Marketplace for Containers AWS Marketplace Aqua Amazon

AWS Aqua

AWS Marketplace for Containers AWS Amazon Elastic Container Service Amazon ECS AWS Marketplace for Containers

- Aqua Container Security Platform

3. Azure Kubernetes

2018 11 13 Linux KubeCon + CloudNativeCon 2018 Kubernetes Brenda Burns Kubernetes Azure Kubernetes Service AKS Microsoft Azure

2016 4 Microsoft Azure Azure Container Service 2017 2 Kubernetes 11 Azure Kubernetes Service AKS Kubernetes

Kubernetes Azure Azure CLI Azure Terraform Kubernetes Azure

Azure AKS Azure Virtual Kubelet Azure Container Instance AKS

Kubernetes Azure Active Directory Kubernetes Azure Active Directory Kubernetes Kubernetes Key Vault Kubernetes Azure (CNI)

-
  Firecracker
-
- Firecracker

1. 25

MeriTalk 2018 11 20 11 19

25

2017 PESCO 17

17

PESCO

2.

3900 PHA

3.

SCALANCE

SCALANCE

S602 S612

S623 S627-2M V4.0.1.1 SCALANCE

Applied Risk

Web

Web Web

Applied Risk Nelson Berg

4.

Check Point

5. 2018 Q3 Android 320 40%

G DATA 2018 3 Android 320

2017 40%

Android 10 8

Android

11700 AndroidAndroid

80%

Android Android

6. CPU

CPU

CPU

CPU PortSmash CVE-2018-5407

Meltdown Spectre

7. Java Script

ZDNet Google

JavaScript Google Google JavaScript

JS

Google Play Google Play Protect

Google

Google

Google Pay Gmail

Google

1.

1.1 Threat Stack Bluefyre

11 8 Threat Stack Bluefyre Threat Stack

Bluefyre

Cloud Native

1.2 ForeScout Technologies SecurityMatters

11 8 ForeScout Technologies SecurityMatters 1.13

ForeScout Technologies 2000 4 San Jose

SecurityMatters

1.3 SolarWinds 8MAN

11 15 SolarWinds 8MAN SolarWinds

SolarWinds

8MAN

1.4 BlackBerry Cylance

11 16 BlackBerry Cylance 14

Cylance

2.

2.1 Shape Security 2600 E

11 1 Shape Security Baseline Ventures 8 2200

E Shape Security

2.2 Netskope 1.68 F

11 13 Netskope Accel 6 1.68 F Netskope

Cloud Access Security Broker, CASB Netskope

1. APP/SaaS

APP/SaaS 2.

SaaS

SaaS 3.

4.

5.

2.3 Automox 930 A

11 13 Automox Blue Note Ventures 3 930 A

Automox Windows Linux Mac

90

Automox

2.4 Duality 400

11 13 Duality Team8 400 Duality

Duality

2.5 XM Cyber 2200 A

11 13 XM Cyber Macquarie Capital 4 2200 A

XM Cyber APT

2.6 Alcide 700 A

11 19 Alcide CE Ventures (CEIIF) 2 700 A

Alcide

Alcide DevOps

Alcide