ⵕ

Ɛ ʌ ⵢ ѽ Ɛ ⊦ ⵢ ˜ ض ⵑ Ţ Ḇ ⵛ

ӟ ⵣ Ɛ h ᴸ ŋ ═ Ь ‴ ƀ

ⵛ ӟ ǐ ⵑ Ɛ ⊦ ⵢ ˜ ⵛ ⊦ ᴸ ⵑ Ţ ѵ ~ Ɛ

ʌ Ψ ⵛ ʔ ضِ

ⵛ ᒪ ǐ ɜ Ɛ ⊦ ᴸ ⵢ ⵠ ŋ ŋ

ŋ ⵑ Ţ ⊦ ⵛ ŭ Ḥ Ⱨ ʔ

Ɛ

Ɛ ɢ Ŭ ǂ

Ɛ ˜

Ɛ ŋ ʌ ⵢ ⵔⵕ ŋ ʌ ⵢ ⵣ ɇ Ţ ⵔⵔ ɒ ʒ ʅ Ψ

˜ ⵑ Ţ ⵄ ⵣ ~ ⵥ Ḥ Ţ ⵔⵔ ⇔

Ɛ ⊦ ˜ ɜ ǂ Ɛ ═ ҽW ⵓ ΄E

Ψ ⵔⵔ ŋ ʌ ⵢ ⵥ ɢ ѵ Ɛ ŋ ⵄ ⵣ ˜ . W ɇ ŋ

W

ⵛ ŋ ⵛ ŋ ̀E˜ ǂ ⵓ ⵛ ŋ ˜ ǂ

ŋ ŭ № ϝ ɢ ŋ ض

ϑϱ ŭ ŋ ŋ ڜ غ ج ŭ

ŋ ش Δ ⇔ ŋ ̀Ẽ̃ ش ̃ Ь ´

̀Ẽ̃ ŋ ̀Ẽ̃

2017 8 31

ϑ ϵ ŋ

Ɛ ŋ˗ ṗ i

.....iii

ڔ ṗ Ɛ+ ŋ˗ ṗ 1

Ɛ ᴎ ڔ˗ 1

Ɛ ŋ˗

1.1 AWS ɣ ᴘ ƨ ᴍ ᴠ ˜ ᴝ CNCF

1.2 ˚ AWS Ⱶ ̀Ẽ̃

1.3 Ь Ɛ Ⱶ̤̈ ƀ ᴸ Ⱶ

1.4 ⁘ Ⱶ ᶎ ᶟ ᵒᵒ ᶎ

1.5 ˚ Ⱶ ᶎ Ḥ

Ɛ˗

2.1 Ɑ Ḥ ŋ Ɛ Ⱶ

2.2 Ɛ ₹ . Ⱶ

2.3 ᶹ Ḃ ṵ ᴸ

5.7 ɛ ŭ “ ”
5.8 ɛ
ʊ ɛ˺ 9
˩
1.1 ɢ ŭ
˩

6.1 ŋ ġ...
6.2 ... Ɛ ġ Ɛ

Ɲ ŋ °° ƈ ǐ˝ 18

ŭ Ḡ ο ʒ

ǂ ≠

Ω¯

Ţ ېږ “ ˆ ” ٧ h ضر ŭ “ Ƀˆ ”

ŭ ٦ ŋ°° ƈ

ŭ ĺ ↑ ŭ Ɗρ ض

Ғ ŭ ѽ ĺ ˆ G №

Ɛ ŋ Ηυ Ð 21

1. ŋ Ɛ˜ Respond Software SOC ¯. °° ƈ 1200 ˝Ḥ
2. ŋ Ɛ˜ Dragos A 1000 ˝Ḥ
3. ѽ ٧ ǂ ف SSL ʒ ⊢

϶ϳ ρ Ɛ + ŋ¯ ƥ

Ɛ ϰ ϳ¯

1. AWS Ɛ ŋ¯

1.1 AWS ɣ Ψ 2 ʍ ѵ ~ ϶ CNCF

˚ Ⱶ `E˜ AWS ч ϶ ضي ĵ شي ѽ `E ¨ Ɛ Ţ ѵ Ɛ ∤ Ǔ ғ

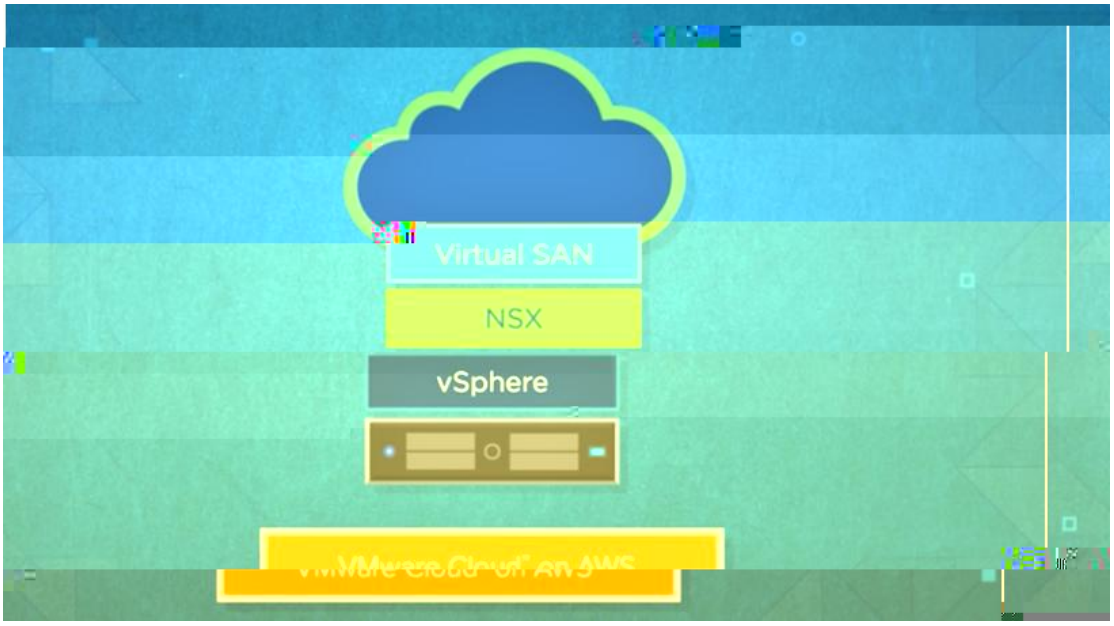
ɣ Ψ 2 ʍ ѵ ~ ϶ CNCF ƀ ч Ψ 2 № AWS Ɛ ◖

Adrian Cockcroft ѵ ~ CNCF ʜ Ψ AWS Ғ Arun Gupta ϒ

ė ƀ ¨ ƀ

╠˚ AWS Azure Ɛ ˜ IBM Bluemix ė Ɛ CNCF Ψ

2



ضي Ⱶ h AWS يج ضر ٧ ᴸ ɢ 2018 h ŋ VMware Cloud on AWS VMware Cloud Foundation ᴸ ¨Ḥ ą ɪ ıı VMware ί ὶ □ ≠ AWS ɒ ƛ ´ № IoT ŋ ˫ Ⱶ

1.4 AWS⁛ Amazon Macie Ⱶ ڪ ڍ ڤ ڄ

AWS ⁛ Amazon Macie—— Ⱶ ضي ≠ ڪ ڍ ᴸ ↑ ɣ ΐ Amazon S3 Ũ ضي AWS S3 ˜ Ţ Amazon Macie ≠ ᴸ ΰ № ≠ ɷ ᴍ Ḥ ɣ ΐ ƀ Ḥ ٧ Ḥ يج Macie Ⱶ ƀ ˫ ˫ h ŋ فج ΰ Amazon Macie ضي ˑ Ṝ ὶ AWS Ũ Ⱶ

1.5 ˚ AWS Ⱶ ڪ Ḥ

يج ˋĒ˜ ɪ ıı ৩ 180 ʁ ≠ ʁ ɷ Ḥ ˋĒ˜ ⁛ ʁ ≠ ʁ غ يج FBI Ḥ Ţ´ ƈ O ضر يخ ₣ № Ψ ŋ˝ غ №ά ˚ ´ ƈ ˑ غ ᴍ Ḥ ŋ ˋĒ˜ UpGuard ضي ˜ ὶ Ḡ ˚ Ⱶ AWS ⁛ ΰ ৩ № U Й ৩ ˑ ∞ ˑ Election Systems &Software ˋĒ˜ ˋĒ˜ ч 42 ɷ ᴸ غ Ⱶ

2. GOOGLE Ɛ˙

2.1 Ƣ Ḥ ŋ Titan Ɛ Ⱶ

Ƣ Titan ɐ Ɛ Ḥ ŋ ʒ Titan

ч Titan Ţ Ⱶ ڪ ɻ ١ Titan ɒ

Ḡ ɒ ŭ к v ˙ Ꮋ Titan ڪ Ƣ˙

↑ ˋE˜ ض Ɛ ش м ش ˋE˜ Gartner ╠ T

ش 500 ¨Ḥ

2.2 Ɛ ₣ . Ⱶ

₣ Ⱶ Ḃ Ь ▯ D ≠ Ь Ɛ D

ч ч ᴸ ˋE ˜ Ɛ Ⱶ ᴸ ڍ ₣ E ‰ Ḡ ٧ ২

33 Ⱶ № ч ২ “ ” ɻ “ ‰ ” Ң ≠ ˋi Ţ ˆ

D ‰ ↕ ч ˢ Ь E

২ ε ɻ ɳ ˋE˜ Cedexis ᴸ ч ২

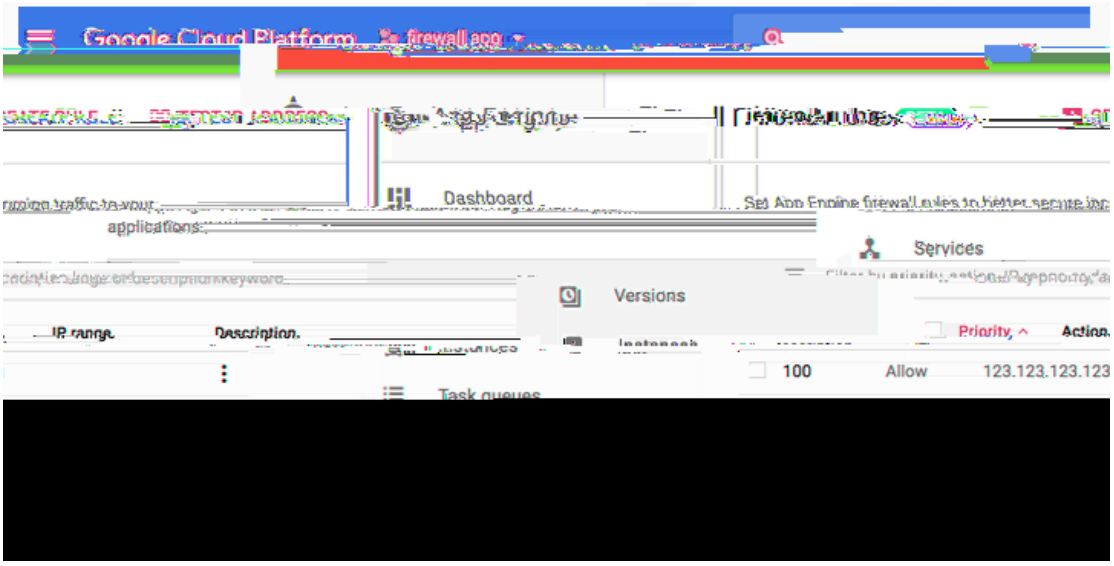
ɻ ‰ Ң ١ ≠ ض HTTP 50 № β ɻ ‰ ơ g

ɒ ơ g ч 5,401kbps ‰ ơ g ч 3223kbps

2.3 Google ٦ App Engine Ḃ ŭ ᒪ IP

ч ২ Ḃ ŭ ɻ 2 ١ Ș ↑ App Engine ᒪ Google ₣

২ ŋ ᴡ



ŭ ıˆ ɣ Ṣ ↑ App Engine ƨ API Ɛ ˜ Google Cloud Console gcloud ث ɒ ˊ ↕ ɣ ¨Ḥ IP ضي

↕ Й¸ ¨Ḥ p ƨˆ ɣ ƀ ₹

. ˋE˜ ṗ ƀ„ ƀ يج شي IP ˜

GAE ˋ ı p ´ IP ضي ɣ ˊ Ğ app Ь ˋ №

Ⱶ DDoS

Ь ỉ ɾ Azure Ɛ Ⱶ ỉ Ʇ´ Ⱶ DocumentDB ɣ ỉ ỉ ɾ Ⱶ (ᵖ

4.3 Ḥ ƀ Ɛ‴ ƀ ˜ ▯ ヿ Ţ ヿ ‴ Ɛ ﺵ

Ӣ ヿ Ḥ ƀ Ɛ ‴ ҽ ŭ ѱ ĭ ‴ ƀ ˜ ▯

ヿ Ţ ヿ ‴ Ɛ ﺵ ŭ ϡ Ɛ ‴ Ɛ й ‴

ʒ ɨ Ⱶ ʒ ɣ ĭ Ɛ ﺽ `E Ɛ Ⱬ ŭ ч o ʂ

L g, Ɛ

Ḥ : ⇔ ɢ ﺽ Ţ ېچ ѽ ϡ ヿ Ţ ヿ ĸ ヿ

. ɛ ɛ Ɛ Ţ ч ʂ L “ ŋ ” Ɛ

ϡ Ɛ Ⱶ ˜ ↑ o ʂ Ɛ ʒ ɨ ŭ ▯ `Ẽ

˩ Ɛ ېل ヿ Ɛ Ɛ Ɛ ˜ L ɾ ɜ ∫ ŋ β

Ⱶ ヿ Ţ ﺽ ヿ ʒ Ɛ Ⱶ L ﻱ

4.4 Ɛ ƀ ´ ˜ h “ ” Ī ¬

ɢ ŭ Ɛ ▯ ´ ˜ h “ ” Ī

¬

4.5 Ɛ ƀ ‴ ƀ

Ր ヿ ƀ Ӣ Ɛ `Ẽ ‴ ƀ

Ɛ Ʉ ʒ ч ヿ L ƀ Ⱶ ´ ˜

7 ˜ ŭ ƀ ´ ʊ ѵ ƀ ﻱ ʒ ˜ ▯ ƃ

4.6 Ɛ ₣ ѵ ▬

Ɛ ₣ ѵ ═ Ḡ ˜ ɣ ɾ Ⱬ ҁ

№≠ № ŭ D Ţ Ḡ ŋ β Ḡ ṗ

ŋ

Ɛ ѵ ═ ⁘ ѵ ѽ ﺽ ṗ

w ヿ ą ṗ Ӣ ∫ ﺽ ƌ Ӡ ѵ

ʉ ⁘ D № ŭ

5. Ɛ˗

5.1 Ɛ ŭ ŭ ⅞ ŭ

Ɛ ŭ №ˌ ˥ ŭ ŭ

ŭ ᴇ Ṿ ŭ ŭ ˜ ᵣ № ҂ ŭ

ɣ Ţ ο ʒ ˈ ӟ Ь □ “ ϖ ɣ ᵣ Ɛ Ⱶ ŭ ⱴ ˜

Ɛ Ⱶ ɣ ᵒᵒ ج w ϖ ˥ ش Ţ ο ʒ ˜ ↕ ض G

ɣ ڍ ʒ ⇔ ”

- Ɛ ﻝ Ạ ᵗ ʒ ⇔ ض
- Ɛ ˥ ŭ №ˌ ᴇ Ṿ g ŭ ˊ ˜
- Ɛ ⇔ ʒ ⇔ ʒ Ẽ ⇔ ʒ

5.2 Ɛ DevOps ŭ Ð

ɣ

5.7 ɛ ŭ “ ”

ɛ ₹ ŋ ŋ Ḡ ᴅ ɣ ŋ

ʒ ʟ ɣ ɣ ʐ ɾ ɯ ʃ ʁ

ŋ ات ɯ ṗ ⇔ Ũ ᴅ ą ġ ɷ

ƀ ŋ

ɣ ɣ ᴍ

w ɛ ŋ ŋ ʟ . ŋ

5.8 ɛ DDoS

ɛ ض ق ʙ

ض ї ƙ ʏ ℐ ρ

ƀ

d ɻ

Ũ ɸ ⌡ ɻ ˜ ɷ ضي ˜

Ð

ضي ↓ ʒ ɣ Ð

ч ˬ Ɥ Ð

ƀ

Ⱶ ʟ w ıı ą Ⱶ ƈ˜

ɣ ~ ˜ ɣ ƀ ففم

L

м Ⱶ ǐ̃ g L ɣ Ḃ ضي ǐ̃ ɾ

Ⱶ Ţ ˜

ǐ̃ ﻝ جغ ч ɷ Ψ ɾ

جف ضي ɔ ɷ L ضي Ţ ~

L L

غ جف ضِ ƀ ɣ U ҥ

ɾ Ð

ɷ ɻ ˝Ḥ

ضي Ţ “ cell ” ↑ L ضي

Ţ W ʟ ɷ ɻ ˝Ḥ جغ ч ɻ ɷ ɻ ˝Ḥ

2. Easystack˗

2.1 EasyStack ₹ ŋ ɷ AI Ɛ ˜

. ‹ ŭ ˋẼ˜ ₹ ŋ ɷ ▯ ė

¬ Ɛ ˜ Ɣ ʒ ○ ʒ

3. ˚ Ḥ

3.1 ˚ Ḥ ... ˜ ↑ ʒ Ŭ

˚ Ḥ ... ˜ ... ˜ ᒪ ĭ Ⱶ

ضي ᒪ ... ˜ ʒ ... ˚ Ḥ Ӟ ضي ... ʒ ᔓ Ŭ ʒ

... ᕒ ĭ №... ʒ ضي ≠ ᕒ ƀ

˚ Ḥ ⇔ ↑ ʒ ... ᵒᵒ ʒ h ĭ r. ŋ Ŭ

4.

4.1 ₹ Ɛ ŋ ▬

ضي 6 ŋ IP ظ SReXperts . ، ... ... ˚ ₹

ᔓ Ɛ ŋ ▬ ĭ ضي

... ƀ Ɛ ŋ ▬ . . ᕒ D ᵒᵒ ج . ч ... ŋ ʒ ɜ

ضي ŋ Ţ ~ ᔓ Nuage È˜ ˚ Nuage VSS ŋ Ⱶ

˜ ~ ŋ ٢ ٧

4.2 ɐW ́E **Techworld 2017** Ψ

2017 8 4 ́E Techworld 2017 Ψ ضي ، Ƃ ɐ

Ψ ᔓ ŋ Ŭ ᒐ ŋ ض

ʒ ضي Ţ ĵ ƀ ч ᒐ “

¬ ” ⇔ A ... Й ¬ ضي Й

Ψ Ţ ◖ ˜ ч ڪ ӟ غ Ⱶ Ꮋ Ɛ

˜ ˚

5. 360 ο ʒ ŋ

oS Ð Ð Ð Ð № Ð

1

Ð oS Ð Ð

8. Fortinet

8.1 Fortinet FortiGe . AWS VMware Cloud

Fortinet FortiGate AWS VMware Cloud FortiGate VMware AWS VMware Cloud FortiGate AWS VMware Cloud

8.2 Fortinet . №

Fortinet SaaS FortiCloud FortiCloud version 3.2 . SaaS Fortinet FortiGate FortiAP FortiSwitch Granular access controls application usage policies sandbox integration

1. NeuVector

VIC vSphere Integrated Containers VMware

NeuVector VIC VIC NeuVector VIC

- VIC
- 7

- ضي VIC Docker Ꮒ Docker ˜ ŋ
- ضي VIC Ţ ڪ
- ڪ ɣ Ꮒ ٦ ɣ ٱ ɾ˜
- ᒪ Ꮒ ŋ ɣ

2. Aqua

2.1 Manifesto ɷ ٨ ڤم

Manifesto ɢ ضي ڪ ˝E Ũ˝Ḥ Ί ˝Ḥ ˜ ƴ Ḡ ˜ Ð Ḥ

Ӟ˜ ƴ ą ˢ Ḥ ⇔ ˗ Ί h Kubernetes ѵ˝Ḥ

2.2 Kubetnetes Ί

ضي Kubernetes ˜ ŋ Ӟ Ч ο ʒ ˜ Ч

ˋE ⁞ ŋ ≠ CIS Center for Internet Security ضي ₣ ২

Kubernetes Benchmark ‰ ڪ ŋ ٨ ـد Aqua ƴ CIS ₣ K8s Benchmark ƀ Ч

₣ ২ ŋ Ί Kube-bench

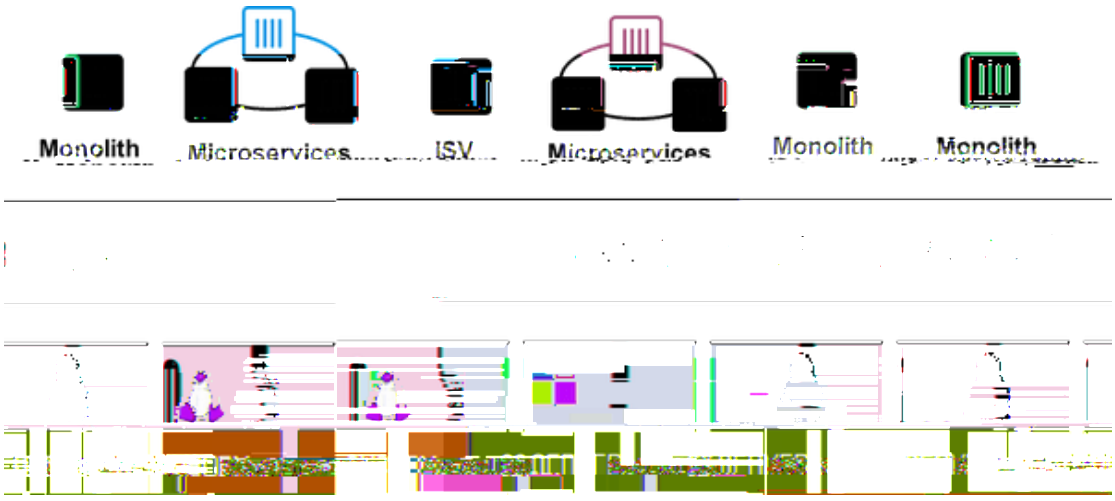
Aqua ¨ Liz Rice Ί ą Go Ð ↕ ˋl ɢ YAML

ٱ Ӟ JSON Ḃ ą ˵˵ ٱ ɾ ˗ Ί ضي

ĸ ⊢ U ২ ᑭ Ű Kubernetes ك˙ Ӟ Ψ ʒ ν ˎ

ᴅ K8ş ɷ ƀ ŋ ᒪ Ð

3. Docker Enterprise Edition Ű ο ʒ EE 17.06



Docker ο ʒ EE 17.06 ´ Ƈ ɢ Windows Linux ɣ Linux ﻗﻤ

CaaS ɦ ɲ ƛ ˜ ο ʒ ... Ţ ο ʒ ´ ɢ

Linux ɣ Windows ᴰ ɣ ⊦ ɢ x86 ⊦ ﻙ ﻗﻤ ɣ ̀E ¨ Ɛ Docker

EE ˢ ... ⌡ ˬ ˜ Ţ ˆ ʟ ɣ ʟ

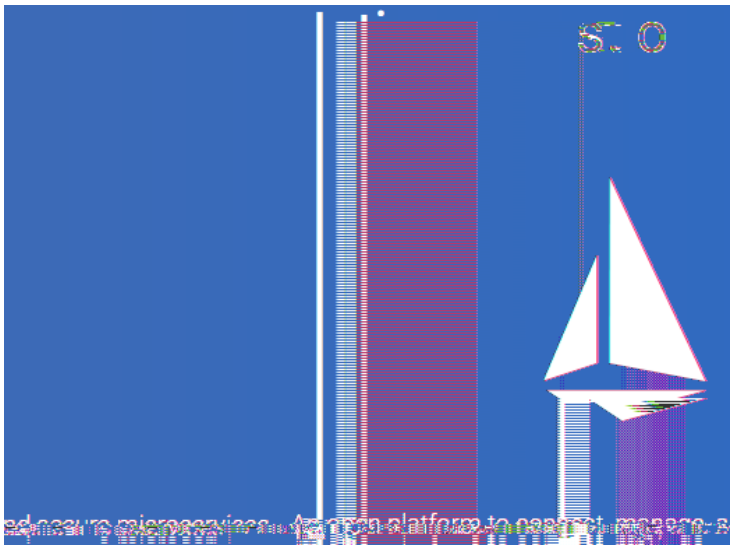
ɣ ʏ ĭ ˫ . ƀ ʟ

Docker EE ﺽ ﺿ ɣ Ɇ ; Windows Linux ɣ ﻗﻤ ɳ ۊ ═

ɳ ɦ ʍ ´

- Docker Windows ﻙ ﺙﺎ ´ يج ̋E overlay networking
- ą overlay networking Windows ɣ Linux ɾ ...
- ﺿ Windows Linux ɣ ﻗﻤ ...

4. Istio ⊦ ŋ



Istio ɷ ˜ ʟ ᴝ ɣ Ḡ ⊦ Istio

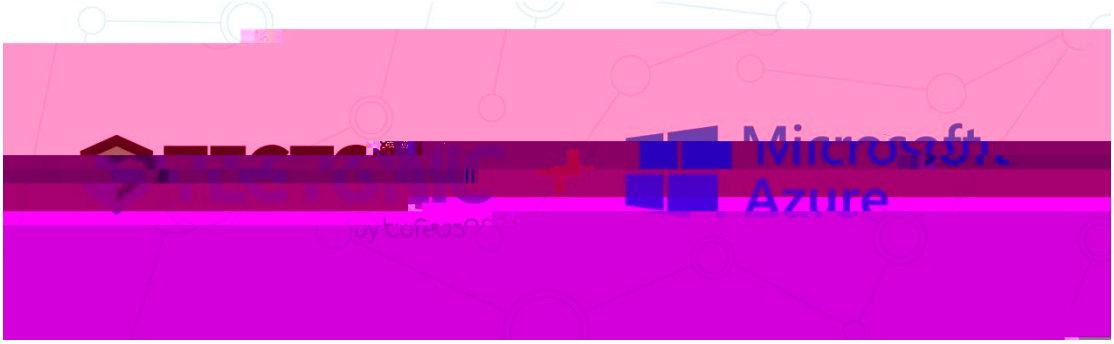
⊦ ɥ ɣ ... ˢ ƀ ⊦ ɳ

- HTTP gRPC ɣ TCP Ḥ ˫
- ą ɣ ↕ ɣ ˜ ɥ ʟ
- ɷ ˆ ɣ API ʟ ʟ ɣ
- ˫ ɣ ṗ ɣ ∓
- Ţ ⊦ ɥ ĭ ʍ Ḡ ⊦ ⌡ ⊦ ŋ ʍ

Istio ╠╕ Kubernetes ˜ ⅞ضي Ь ƙ Ɛ Mesos غ ˆi

ɾ ˜

5. CoreOS Tectonic 1.7.1 ضي Azure Kubernetes



Ɛ غ . ˆi ϶ ο ʒ IT ƀ Kubernetes

ч ج h L ˆí CoreOS غ ƀ ο ʒ Kubernetes

⎯ CoreOS Tectonic ⌠ Azure ˜ ץ ضي Ɛ ˜

Kubernetes ƀ

6. ₹ OpenShift ج ˜ 3.6 ∕ Ɛ Ḡ غ

6.1 ŋ غ..

- PCI DSS°° ج ↑ ˈ ˆi Ũ' D Ḥ ∨ ο ʒ ϶ PCI DSS ν ڏ OpenShift ج ˜ ▯ ϶ ɾ ا ضي ⎯ غج
- Secrets ∀ w غ ˝E O U˜ Ũ' Secrets ∀ OpenShift 3.6 ч ˜ ∀ ϶ O G Ţ يج ˝E ض Ḡ ضي ⁘ ƌ Ӟ
- ∨ Ь▯ ץ ˆï غ L U ∨ ضي ᴸ ⊢ ▯ ⎯ ⁘

6.2 .. Ɛ غ Ɛ

- ⊢ Ţ : Broker غ ⊢ ↑ ᴸ غ Ь ضي Ţ ˋE Ɛ ⊢ ɾ ا OpenShift
- OpenShift Ţ : ↑ ⊢ OpenShift

ϒ ﺽﻲ OpenShift Ţ ﺝﻛ ⊢

- Ansible Playbook Ţ : ˜Ḥ ą Ansible Playbook ﺽﻲ OpenShift

  ⊢ ﺽﻲ ⊢ OpenShift ṕ ỉ

  ϧ ﺽﺭ ᴅ ˋE Ɛ

- Gluster Ũ ∕ ﺝﻛ Ũ ч OpenShift ˝E ⊤ ᴸ Ũ ᴸ Ũ

  w ϒ ĭ ﺽﻲ OpenShift Δ ᴸ˜ ą ȷ Ũ

Ɲ ŋ ﺓﻩ ﺝ ĭ

1. VMWare ŭ Ḡ ο ʒ AppDefense ▁

VMWare ↨ ↨ ŭ ↻ AppDefense ﺽﻲ VMware vSphere ɨ Ɛ Ѝ

ᴸ Ḡ ═ 8 28 Palo Alto AppDefense ﺽﻲ Ţ

ŋ ═ ﻗﻤ Ḡ ο ʒ ỉ

ᴸ Đρ ~˜ ˆ ο ʒ AppDefense ᴸ ч ˫

ǯ Đρ VMWare AppDefense “ intent-based security ” h vShpere Ţ ˜

ᵭ Ɛ Ѝ “ ” ϒ ˆ ϒ ǯ App ч

ĥ˫ AppDefense ỉ ⌠ hypervisor Ḡ ɨ vSphere ь VMware NSX ↿ ᵭ

˫ ǯ ´ ο ʒ ! ŭ ɣ ﺵﺡ ═ ˆ ϛ ŋ ﻑﺡ ˆ

ɨ˫ ʐ ь ŭ ↿ ᵭ ˆ Ḡ ο ʒ ŋ

2. Google ₹ Android 8.0 ≠

8 21 ŭ Android 8.0 Oreo ≠ Δ ﻕﺽ м

ϒ ŭ ŭ ɳˆ ₇ ɷ “ O ” ﺽﻲ ↿

Ţ Android 4.4 ↿ 16% ᴅ CEO ѽ ɛ

↿ ↿ ﺽﻲ ˊE ŋ ŭ ψ˜ ѽ 86% IOS

⌠ IOS 10 ↻ ₇ 7% ↿ ⌠ Android 7.0

Android 8.0 ŭ U ᵩ ↿ ↻ Treble ⅞ ᴸ ﺝ ŭ

ᵭ ь ↿ № ﺝ № ᴸ ﺝ ŭ

≠ ˥ ẇ ẋ ẇ ᒪ Ụ˜ ≠ Ụ˜ β ẋ WiFi

ɳ ṗ ২ 60 emoji ২ γ

ض ŋ Ӟ ˥ ˆ γ ą APP We

Inteiiuen46(ce)-(60A)

20 ة . . Ò ٧ ؛؛ ؤ خش ŭ 4000 ة Ḥ ؤ

ً 300kbit ٹ خش ч 1.1kbps “ ً ” ٧

Ψ Ƃ ؛؛ ة . №ŭ يج ضي 2030 ٹ

Ḥ ؛؛ ∩ ضي Ḥ ؛؛ Ψ غج ч ضي Ḥ

Ѝ ₇ ⌠ к ᵥ ∩ ч ѵ Ḥ Ψ ˜ Ţ يج

⅞ ˜ Л ⅞ ҥ Ţ يج ضي ؛؛ 2 . Ţ يج 2015 ضي

؛؛ ˜ ⌠ ২ 1010 .

5. Cylance ŭ ٦ ٹ ج

Cylance شي ŭ ٦ ٹ ج Cylance PROTECT Home

ً ” Edition “ Ø

7. ESET

ESET Industroyer IDA Pro IDAPython OPC Data Access Havex RAT Win32/Industroyer

1. Respond Software SOC 1200

Respond Software 1200 SOC

3. SSL

DigiCert SSL 2018 Q3 9.5 30% Chrome 10 SSL SSL DigiCert SSL Comodo IdenTrust 14% 5.5% SSL DigiCert 2.2% 0.9% DigiCert IoT SSL

4. Flashpoint 2800

Flashpoint 2800 Flashpoint BRI Flashpoint Flashpoint

Geogian Partner Greycroft Partners

Bloomberge Beta Cisco Investments