GOPS 2019
shenzhen
GOPS
GOPS 全球运维大会
2019
-AIOps 风向标
深圳站
指导单位：
主办单位：
大会时间：2019年4月12日-13日
大会地址：深圳市南山区圣淘沙大酒店（翡翠店）

Rock of Operations
“摇滚运维”

Cloud Management is the Future
未来-云计算管理

Steve Mushero –云做科技全球CTO

Clouds are Coming 云，已来

- Everywhere 无处不在
- Public 公有云
- Private 私有云
- Hybrids 混合云

Flexible & Powerful 灵活并强大

- Many Clouds 各种各样的云
- More & More Features 越来越多的功能
- More & More Complex 越来越复杂
- Business Moving Faster 业务发展迅速
- New Tech 新技术
  - Containers 容器
  - Serverless 微服务

Hard to Manage 难以管理

- Many Features 功能太多
- Many Ops Needs 运维诉求越发增加
- Many Tools 工具繁琐
- Many Clouds 太多的云

So Many Tools - Drowning in them 被工具淹灭

- Average 25 Ops Tools 管理系统，平均25套运维工具
- Many Monitoring 太多的监控
- Logs, CMDB, Security, etc.日志，CMDB，安全等等
- Cost, Rules, Configs 成本，策略，配置
- Automation, DevOps 自动化
- Containers & More 容器以及更多

Need Unified Cloud Management Platform
需要统一的云计算管理平台

- Unified System 统一的系统
- One Platform For All 一个平台集成所有工具
- Every Feature You Need 包含所需要的各种功能
- Every Level of Ops 涵盖运维的每个层级
- Multi-Cloud 多云管理
- Hybrid Clouds 混合云管理
- Physical IDC & Servers 物理机房和服务器的管理

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1 Design & Build 设计和搭建

2 Monitor & Logs 监控和日志

3 Governance 合规治理

4 Billing 成本管控

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1 Design & Build 设计和搭建

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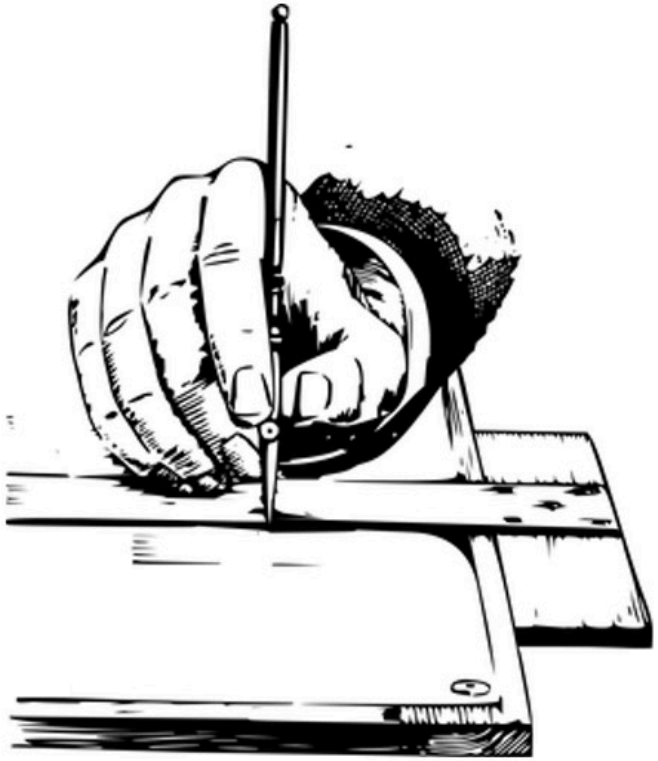
Designing Clouds 云系统的设计

- Many Ways 方法众多
  - Infrastructure-as-Code 直接代码部署
  - Visual 视图化操作
- Service Catalogs 服务目录
- Reverse Engineering 反向工程
- Multi-Cloud is Hard 多云有难度



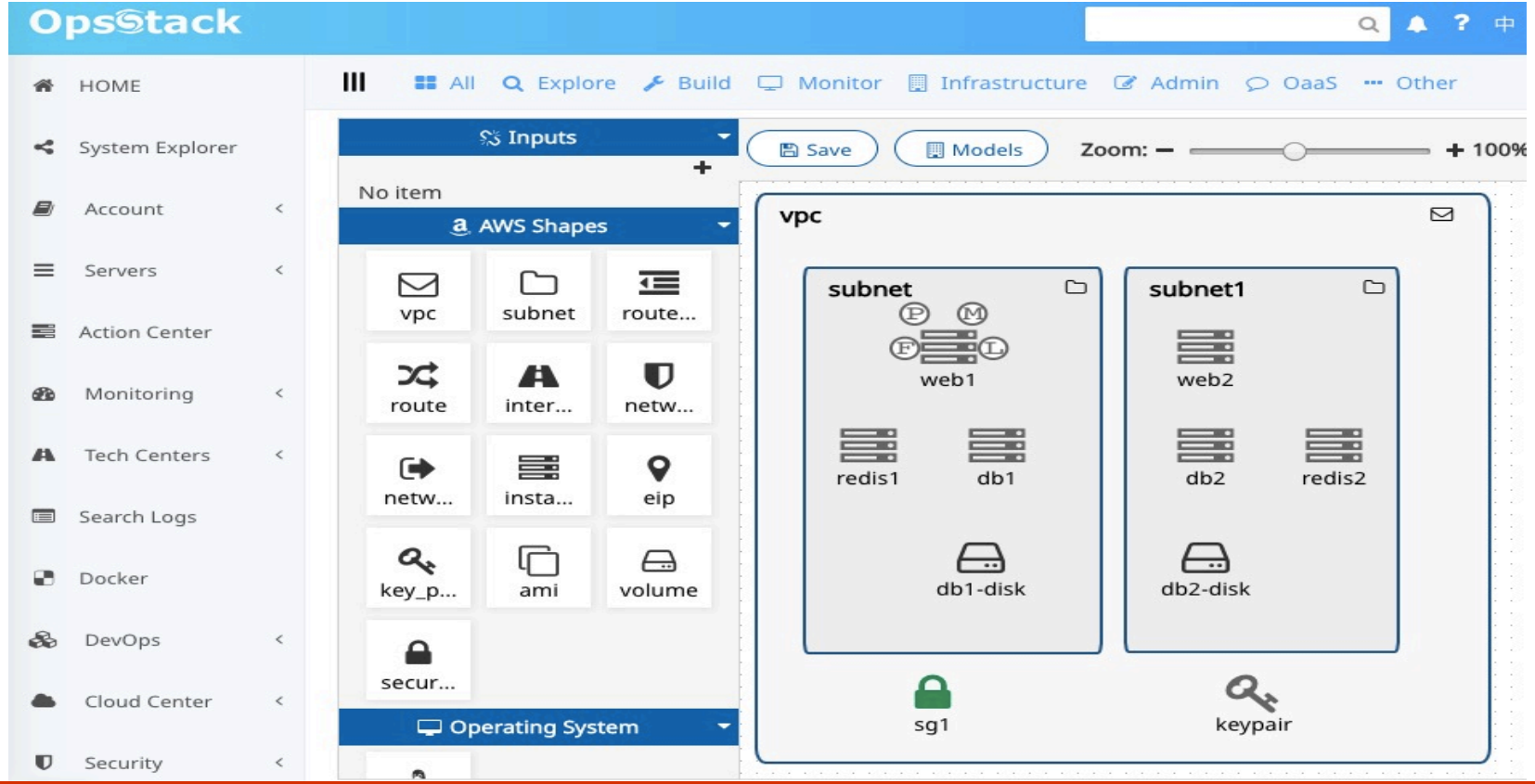
Designing Clouds - As Code 直接代码部署

- Terraform / CloudFormation
- In Version Control 版本控制
- Part of CI/CD Flow 隶属持续集成/部署流程
- Not Perfect 并不完美
  - Complex Systems 系统复杂
  - Diverse Systems 系统多样

Designing Clouds – Visual 视图化操作

- Easy to Use 容易操作
- Easy to See Architecture 方便架构
- Troubleshooting Help 便于排障

Designing Clouds – Visual 视图化操作



Designing Clouds - Service Catalogs 服务目录

- Pre-Approved Modules 预先审核的模块
- Pre-Approved Services 预先审核的服务
- Faster to Build & Deploy 快速搭建和部署

Designing Clouds - Reverse Engineering反向工程

- For Existing Systems 适用现有系统
- Import Existing Architecture 导入现有架构
- Allow Changes & Updates 允许改变和更新
- Really Hard to Do 做好太难了！

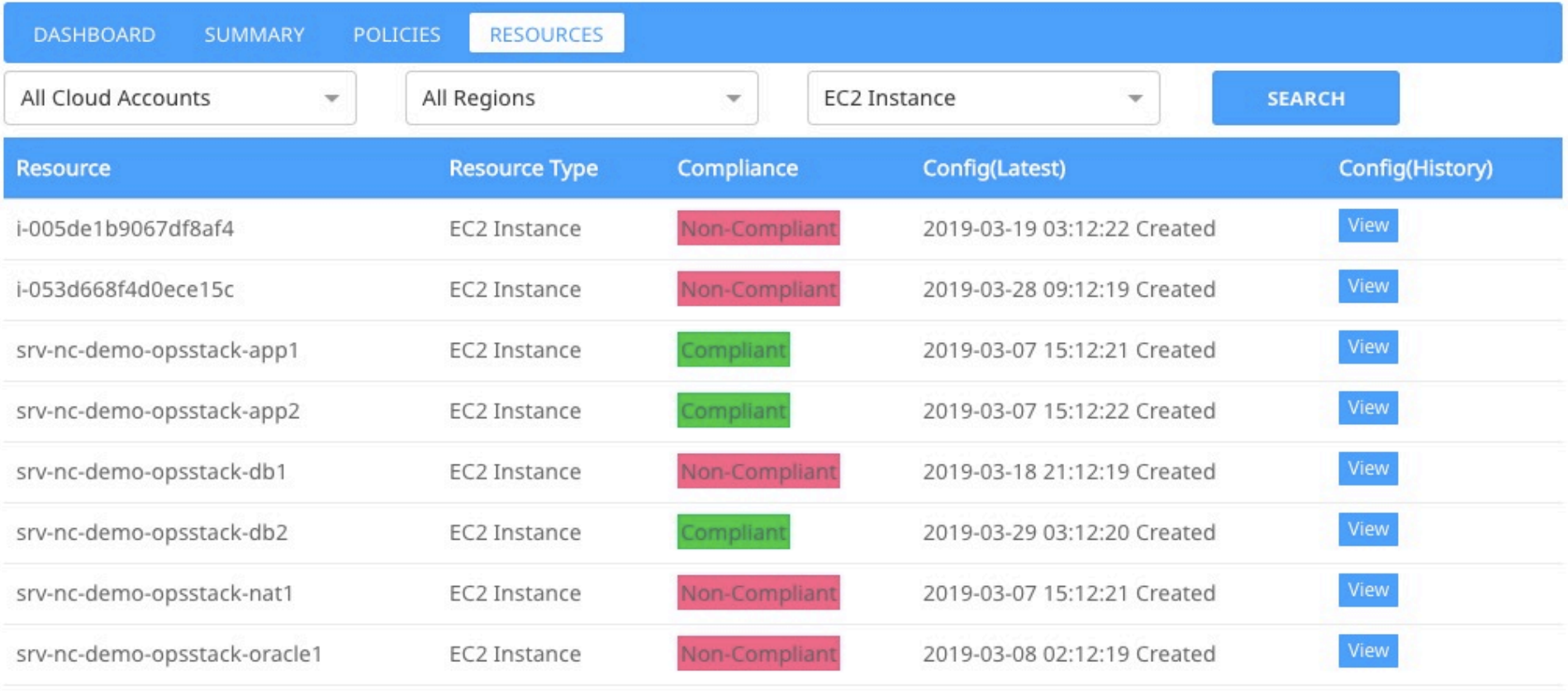
Building Clouds 云系统的搭建

- Deploy the Design 导入设计
- Via CloudFormation or Terraform

Cloud CMDB

- Every Net, VM, Service 每个网络，虚机，服务
- Every Relationship 每个关联
- Auto-Discovered 自动发现
- OS Details 操作系统细节
- VM Service Deep Configs 虚机服务的深度配置文件
- Cloud Service Deep Configs 云服务的深度配置文件

Cloud CMDB



Resource	Resource Type	Compliance	Config(Latest)	Config(History)
i-005de1b9067df8af4	EC2 Instance	Non-Compliant	2019-03-19 03:12:22 Created	View
i-053d668f4d0ece15c	EC2 Instance	Non-Compliant	2019-03-28 09:12:19 Created	View
srv-nc-demo-opsstack-app1	EC2 Instance	Compliant	2019-03-07 15:12:21 Created	View
srv-nc-demo-opsstack-app2	EC2 Instance	Compliant	2019-03-07 15:12:22 Created	View
srv-nc-demo-opsstack-db1	EC2 Instance	Non-Compliant	2019-03-18 21:12:19 Created	View
srv-nc-demo-opsstack-db2	EC2 Instance	Compliant	2019-03-29 03:12:20 Created	View
srv-nc-demo-opsstack-nat1	EC2 Instance	Non-Compliant	2019-03-07 15:12:21 Created	View
srv-nc-demo-opsstack-oracle1	EC2 Instance	Non-Compliant	2019-03-08 02:12:19 Created	View

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Monitoring Clouds 云监控

- Many Levels 许多层级
- CloudWatch
- OS - Linux/Windows
- VM Services - MySQL, Nginx
- Cloud Services - RDS, ELK
- Containers 容器
- Serverless – Lambda 无服务器服务

Cloud Logging 云日志

- Audit – CloudTrail 审计
- Services - ELB, RDS -> S3 云服务
- Serverless - -> Cloud Watch 无服务器服务
- OS Logs – Cron, Auth, Kernel 系统日志
- VM Service Logs - Nginx, etc.虚机服务日志
- Container 容器

Cloud Logging 云日志

LOGGING

SYSTEM: AWS System | SERVER: srv-nc-demo-opsstack-web1 | LOG TYPE: nginx_access

SEARCH FOR (INCLUDE) | SEARCH FOR (EXCLUDE) | QUICK TIME: LAST 1 DAY / LAST 7 DAYS / LAST 30 DAYS | FROM TIME: 2019-03-30 00:00:00 | TO TIME: 2019-03-30 23:59:59

AND / OR

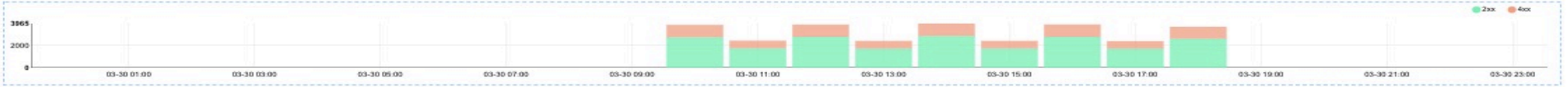
@version | Includes | Please entry text | SEARCH

Filter

Status Code: 2xx 3xx 4xx 5xx

Domain: demosys.chinanetcloud.com

Warning: Results may differ as search input is based on UTC timezone, where search output is based on the server's locally configured time.



Counts

Total: 28,902 | Average: 1,204.25 | Max: 3965 @03-30 14:00 | Min: 0 @Multiple times

2xx 20640 | 3xx 0 | 4xx 8262 | 5xx 0

RAW DATA | ANALYSIS

bytes	clientip	request	response	timestamp	verb	vhost_server_name
162		/wordpress/error	404	30/Mar/2019:10:56:38 +0000	GET	demosys.chinanetcloud.com
162		/wordpress/error	404	30/Mar/2019:10:56:37 +0000	GET	demosys.chinanetcloud.com
162		/wordpress/error	404	30/Mar/2019:10:56:37 +0000	GET	demosys.chinanetcloud.com
162		/wordpress/error	404	30/Mar/2019:10:56:37 +0000	GET	demosys.chinanetcloud.com
3862		/wordpress/	200	30/Mar/2019:10:56:36 +0000	GET	demosys.chinanetcloud.com

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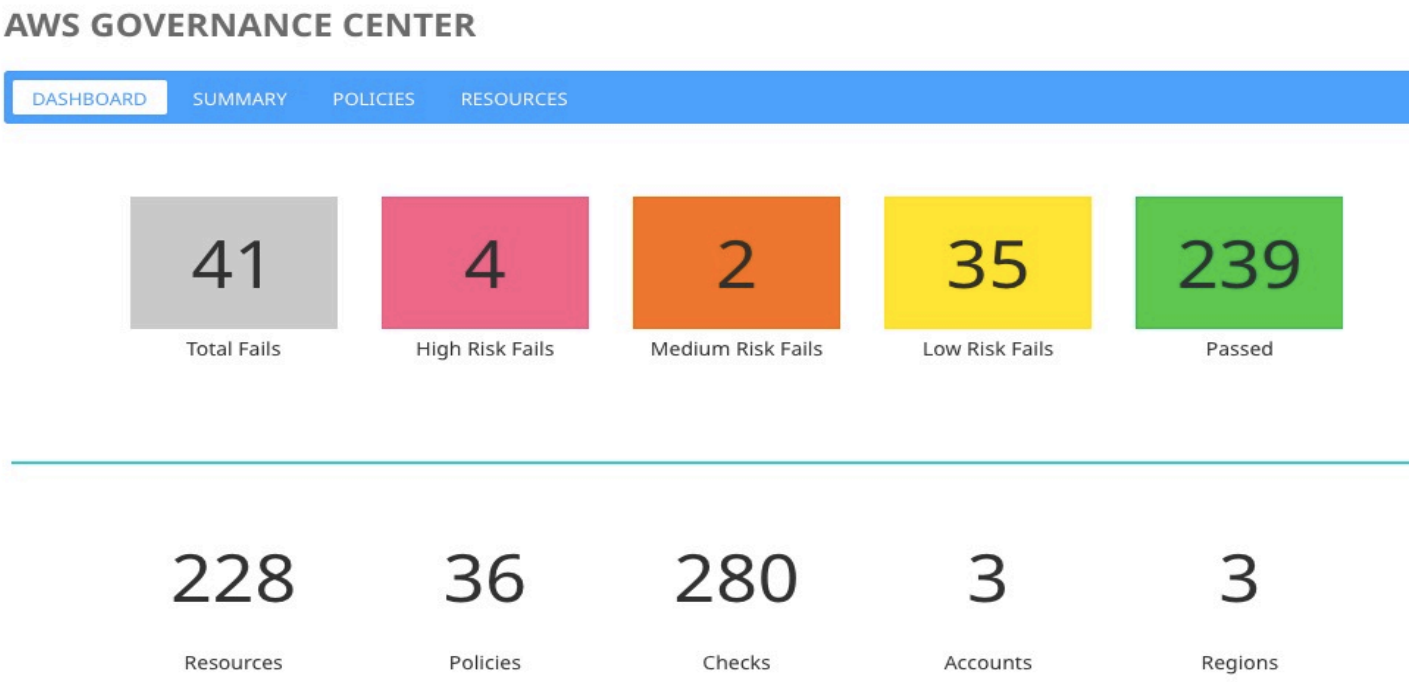
Cloud Governance - Control the Cloud
合规治理-管控云

- Guardrails 护栏
- Best Practice Policies 最佳实践策略
- Auto & Manual Healing 自动和手动修复
- Customizable 客制化

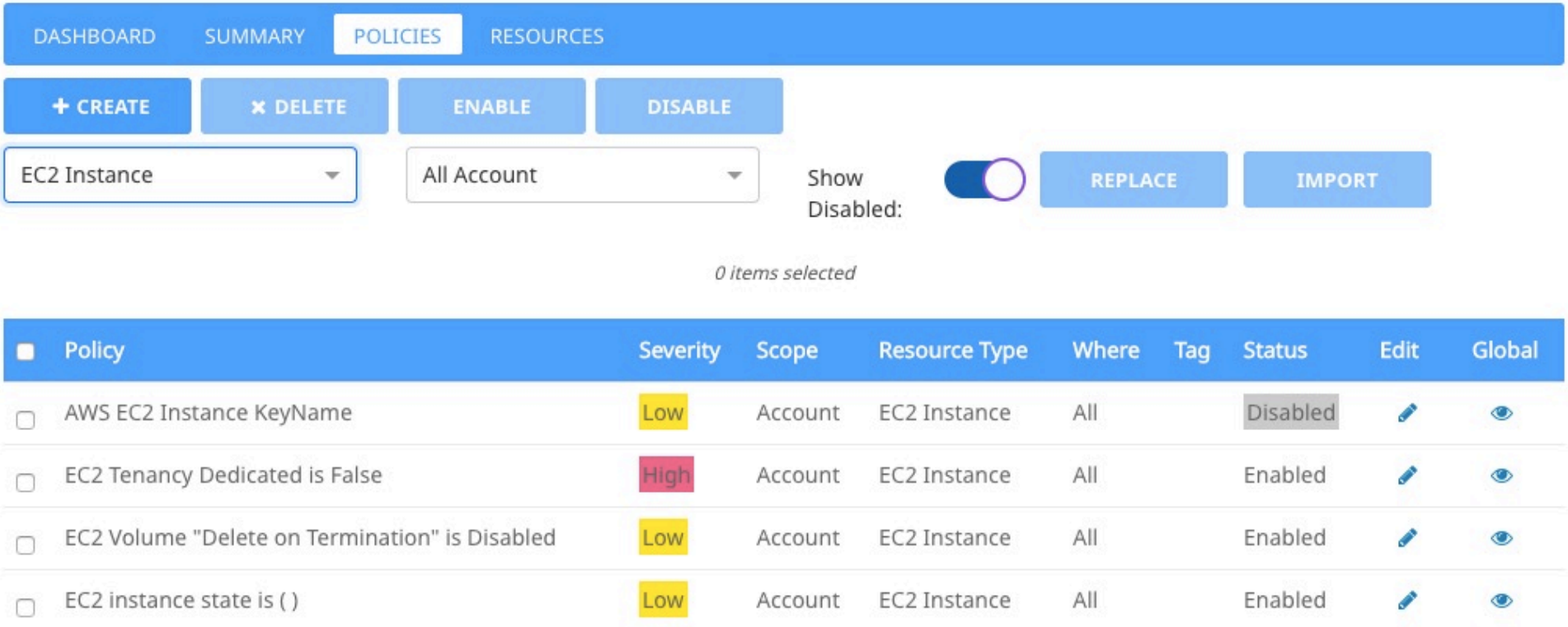
Cloud Governance - Control the Cloud
合规治理-管控云



Cloud Governance 云计算合规治理

- Data from AWS Config or APIs 数据来源
- Uses Policy Engine 利用策略引擎
- Version Control Everything 可视化控制面板
- History of Everything 记录所有历史操作

Cloud Governance 云计算合规治理



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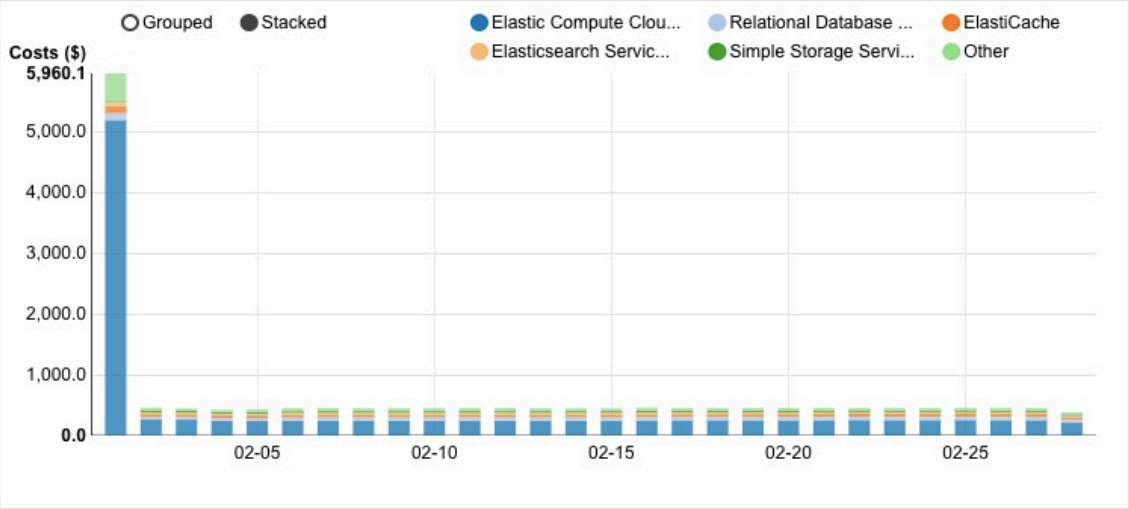
Cloud Billing - Control the Cost 成本管控

- Analyze Your Bill 分析账单
- By Region, Service, System 按区域，服务，系统区分
- Across Accounts & Environments 跨账户和环境
- Budgets & Projections 预算控制
- Visualizations 可视化

Cloud Billing - Control the Cost 成本管控

AWS BILLING

Global | 2019/02/01 - 2019/02/28 | Daily | Group By: Service



Filters | Apply | Clear

Payer Account: Select...

Linked Account: Select...

Region: Select...

Service: Select...

Service	02-01	02-02	02-03	02-04	02-05	02-06
Total	5960.11	457.43	445.38	423.03	429.34	448.08
Elastic Compute Cloud ($)	5188.09	260.14	259.47	240.81	237.89	243.00

Summary 总结

- Clouds are the Future 云计算是未来
- More Features Coming 更多功能会出现
- More Requirements Coming 伴随更多要求出现
- Too Many Tools 运维工具纷繁复杂
- Unified Platforms are the Future 统一的运维平台是未来
- Single-Pane-of-Glass is the Future 单一的运维平台是未来

See all this in our booth
更多内容，欢迎莅临我们的展位

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Thanks

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